

The 16th Anniversary India-Japan Fest



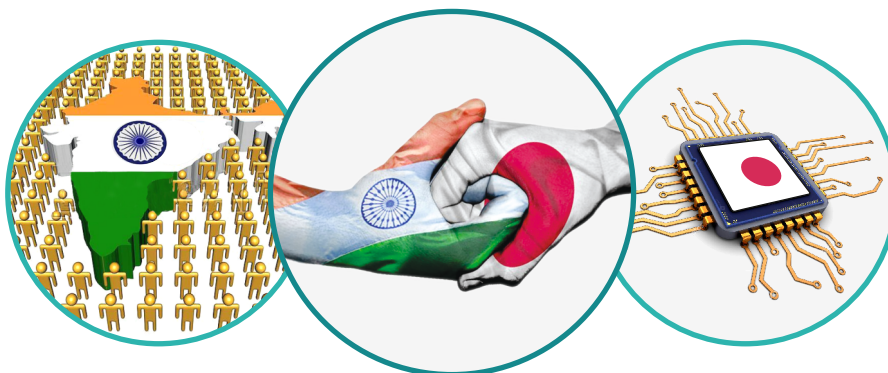
BICON 2021



Virtual International Conference on

Recreating Higher Education in the Post-Pandemic World

December 14-18, 2021



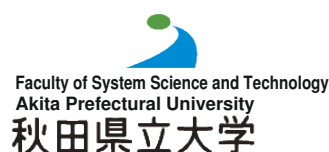
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BIYANI GROUP OF COLLEGES

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Sector No. 3, Vidhyadhar Nagar, Jaipur, Rajasthan (India)



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The 16th Anniversary of



BICON-2021



The E-Proceedings of Conference on

Recreating
Higher Education in the
Post-Pandemic World

December 14-18, 2021

ISBN: 978-93-83462-99-5

Organized by:



Biyani Group of Colleges
Jaipur, India

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All abstracts of the present e-proceeding were peer reviewed by reviewers. Acceptance was granted when reviewers's recommendation were positive.

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- Dr. Poonam Sharma
- Dr. Charanjeet Singh
- Ms. Jishu George
- Dr. Arti Gupta
- Dr. Amita Adhikari
- Ms. Malti Saxena
- Mr. Roshan Lal
- Mr. Rajesh Jakhotiya

Designed by:

- Mr. Nilesh Sharma
- Mr. Sunil Saini

Welcome to BICON-2021 Virtual Conference

This year we are celebrating the 16th Anniversary of India-Japan Fest at Biyani Group of Colleges, Jaipur. Since, the first conference in 2006, it has become an annual feature of our institution and has continued to grow. The institution is leaving no stone unturned in encouraging the spirit of research and innovations and strengthening the bilateral academic relationship between India and Japan. Every year, this event receives increasing number of participants from both the countries, India and Japan, and we continue to evolve, adapt and develop new collaborative programs between various institutions in India and Japan.

Biyani Group of Colleges is organizing this mega event in collaboration with partner institutes from Japan **Japan Advanced Institute of Science and Technology, Akita Prefectural University, Saitama University, Kyushu University, Well Group, Kyoto University and ISE Foods, Japan.**

The theme of **BICON-2021** is ‘**Recreating Higher Education in the Post-Pandemic World**’ guided by different departments including Science, Nursing, Pharmacy, Education, Physical Education, Commerce & Management, Information Technology, Humanities and Law based on ‘multidisciplinary-to-interdisciplinary’ approach. This is an initiative to introduce and promote role of multidisciplinary alliance to develop different approaches in higher education at the post-pandemic world among nations and identify the challenges hindering the same.

We are welcoming “WELL GROUP” and “ISE Foods” as the placement partner for Technical Internship Training Program (TITP).

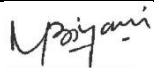
BICON-2021 has decided to call for Abstract of the paper to be published in the conference proceedings with ISBN numbers. There are 61 invited talks (16 International + 45 National) in BICON-2021.

We would also like to thank the Technical Program Committee and the reviewers for their excellent work in reviewing the abstracts as well as their valuable input and advice. We would also like to express our sincere thanks to all the dedicated BICON-Team members for their active role and support in all aspects of this conference.

Finally, we want to express our sincere thanks to all the invited speakers and all those who have joined us from India, Japan, USA, Ethiopia, Malaysia, Ireland and other countries, for taking out time from their busy schedule to participate in this conference.

We hope that this conference is intellectually stimulating, enjoyable, professionally satisfying and memorable for all the attendees.

With warmest regards,

	 Dr. Manish Biyani Organizing Chair • Res. Director, Biyani Group of Colleges, India • Res. Asso. Professor, JAIST, Japan		 Dr. Devika Agarwal Convener HoD, Commerce & Management, Biyani Girls College, Jaipur, India		 Dr. Tarun K. Kumawat Organizing Secretary Coordinator, Research & Development, Biyani Girls College, Jaipur, India
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CHIEF MINISTER
RAJASTHAN

Message

I am glad to learn that Biyani Group of Colleges is organizing the 16th India-Japan Bilateral Conference (BICON-2021) on 'Recreating the Post Pandemic Educational World' from December 14 to 18, 2021.

In the era of globalization and liberalization new areas are coming to the fore with various specialties of international standards. It is the need of the hour that the benefits of research, inventions and new trends reach to our new generation studying in the institutions of higher learning.

I am sure that the conference will provide a good platform for scholarly discussions among eminent academicians, research scholars and students and will further help in strengthening the India-Japan bilateral academic and cultural association.

I send my good wishes for the success of the 'BICON-2021'.

(Ashok Gehlot)

Dr. C.P. Joshi

SPEAKER
Rajasthan Legislative Assembly



Telefax (Office) : 0141-2744321
Phone (Office) : 0141-2744007



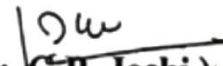
No. R-1004
Jaipur, dated: 19/12/2021

Message

I am indeed happy to know about the effort taken by Biyani Group of Colleges, Jaipur in organizing 16th India-Japan Bilateral conference (BICON-2021) from 14th to 18th December 2021.

International conference on recreating higher education in the post pandemic world could not have come at a more opportune time when the world is looking at solutions to various challenges associated with pandemic. This will provide an excellent platform for discussions and deliberations.

I wish great success to the conference.


(Dr. C.P. Joshi)

Dr. B. D. Kalla

Minister
Education (Elementary & Secondary)
Sanskrit Education,
Elementary Education (Panchayati Raj.)
Art & Culture & Archeology Department
Government of Rajasthan



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No. 260

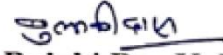
Date 12/12/2021

Message

I convey my warmest felicitations to Biyani Group of Colleges, Jaipur for organizing 16th India-Japan Bilateral conference (BICON-2021) from 14th to 18th December 2021.

New knowledge and findings cannot be generated without any research and development activities. These efforts will undoubtedly generate lots of innovative results.

I give my best wishes to all delegates and organizing committees to make this conference a grand success.


(Dr. Bulaki Das Kalla)

डॉ. सुभाष गर्ग

राज्य मंत्री

तकनीकी शिक्षा एवं संस्कृत शिक्षा (स्वतंत्र प्रभार),
चिकित्सा एवं स्वास्थ्य, आयुर्वेद और चिकित्सा,
चिकित्सा एवं स्वास्थ्य सेवाएं (ई.एस.आई.) एवं
सूचना एवं जनसम्पर्क विभाग, राजस्थान सरकार



Message

I am pleased to know that Biyani Group of Colleges, Jaipur is organizing 16th India-Japan Bilateral conference (BICON-2021) from 14th to 18th December 2021.

I am hopeful that the conference will provide a platform to exchange and expertise, experience of the fraternity to update their knowledge, skills and improving quality of higher education.

I wish the 16th India-Japan Bilateral conference (BICON-2021) on recreating higher education in post pandemic world a grand success.

(Dr. Subhash Garg)

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Krishna Poonia

Olympian / Arjuna Awardee
M.L.A., Sadulpur (Rajgarh)
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H.No. 297, Krishna Niwas, Ward No. 18
Sadulpur (Rajgarh) Churu



Sr.No. – Office/MLA/436

Dated – 15/12/2021

Message

I am pleased to know that Biyani Group of Colleges, Jaipur is organizing 16th India-Japan Bilateral conference (BICON-2021) from 14th to 18th December 2021.

I am hopeful that the conference will provide a platform to exchange and expertise, experience of the Fraternity to update their knowledge, skills and improving quality of higher education.

I wish the 16th India-Japan Bilateral conference (BICON-2021) on recreating higher education in post pandemic world a grand success.

Yours Faithfully

(Krishna Poonia)

MLA Sadulpur

Mob : 9799049999, 9799059999 | E-mail: kpoonia75@yahoo.com



प्रो. राजीव जैन
Prof. Rajeev Jain



कुलपति
Vice-Chancellor
राजस्थान विश्वविद्यालय, जयपुर
University of Rajasthan, Jaipur

MESSAGE

It is a matter of great pleasure that Biyani Group of Colleges is organizing 16th Indo – Japan Virtual Bilateral Conference (BICON 2021) from 14th – 18th December 2021 on “Recreating Higher Education in the Post-Pandemic world”.

I extend my heartiest congratulation and best wishes to the Biyani Group of Colleges and wish the very best to the organizers for its success.

I am certain that this virtual conference will be instrumental in enhancing the bilateral relations between India and Japan in the field of education and research. The conference will definitely provide substantial solutions and innovative ideas on recreating the higher education sector in the post pandemic world.

I wish the very best for the success of 16th Indo – Japan Bilateral Conference.

(Rajeev Jain)

प्रो. आर. ए. गुप्ता
कुलपति
Prof. R. A. Gupta
Vice Chancellor



राजस्थान तकनीकी विश्वविद्यालय, कोटा
RAJASTHAN TECHNICAL UNIVERSITY, KOTA

No:RTU/VCS/F(1)26/2021/

Date: 13-12-2021



MESSAGE

BICON-2021 an International virtual conference will be organized by Biyani Group of Colleges, Jaipur during 14-18 December 2021. It is a specialized conference on the theme "Recreating Higher Education in the Post-Pandemic World".

I am very happy to hear that the Biyani Group of College, Jaipur is organizing the 16th India Japan bilateral conference (BICON-2021) on "Recreating Higher Education in the Post-Pandemic World" to be held in Biyani Girls College, Jaipur from December 14-18, 2021.

I am confident that this conference will attract bilateral academic and research agreements and promote further stronger relationship between Japan (Advance Institute of Science and Technology, Akita Prefectural University, Saitama University, Kyoto University, Kyushu University and Well Group) and higher-level Indian institutes. Participation of the accomplished girls from Biyani College in this event shall foster women empowerment in our state.

I hope that the deliberations at the conference will come out with positive recommendations, to address these, and other important and pressing concerns.

Wish you all the success.


(Prof. R.A. Gupta)
Vice-Chancellor

Rawatbhata Road, Kota (Rajasthan) 324010, INDIA
website: www.rtu.ac.in Email: vc@rtu.ac.in, vcoffice@rtu.ac.in, vcoffice@rtu@yahoo.co.in
Phone No. 0744-2473001 FAX No. 0744-2473002



Prof. Naresh Dadhich
Former VC, VMOU, Kota

MESSAGE

COVID period has affected all aspects of human activities. It is a challenge to recoup normal activities in the social sphere in the post COVID time. Education is one such field that requires reorientation in many ways.

It is thus heartening to know that Biyani College is organizing a five-day international conference on the current status of higher education and about the required changes in rejuvenating this field.

I hope the conference will suggest some workable reforms that the higher education institutions and their working require. I wish all success to the conference and congratulate the organizer for organizing this timely conference.

(Prof. Naresh Dadhich)
Former VC, VMOU, Kota



Prof. Suresh Prasad Singh
Former Vice Chancellor
Himalayan University, Itanagar
Arunachal Pradesh

Res:- K-83 B (2nd Floor)
Kalkaji, New Delhi-19

Message

It gives me immense pleasure to know that 16th India – Japan bilateral conference (BICON-2021) on Recreating Higher Education in The Post Pandemic World is going to be organised from 14th to 18th December, 2021 under the auspices of Biyani Group of Colleges, Jaipur in collaboration with Kyoto University & Kyushu University, Japan. Several eminent scholar from nook and corner and from abroad are likely to deliver their discourses as resource persons.

The post pandemic scenario has created new strains and challenges for the academia. It is high time to come out of inertia and to realise that influx of digital technology into higher education has become a necessity.

The mainstream institutions are required to move to on line method to achieve targets of what is term as education 4.0.

Creating high quality digitise learning content must be contextualised and “byte-sized” to make learning interesting and engaging.

Despite the changed scenario off line conventional education models will survive. We require blended learning as the basic norm-we must blend the two methods judiciously according to context and content. Our universities will naturally need to collaborate with digital learning specialists to train our faculty and to redesign higher education in order to meet new challenges.

With warm regards

SP Singh
Delhi, 03/12/21



प्रो. एम.पी. पूनीया
उपाध्यक्ष
Prof. M.P. Poonia
Vice-Chairman

8th December, 2021



सत्यमेव जयते

अखिल भारतीय तकनीकी शिक्षा परिषद्

(भारत सरकार का एक सांविधिक निकाय)

(शिक्षा मंत्रालय, भारत सरकार)

नेल्सन मंडेला मार्ग, वसंत कुंज, नई दिल्ली-110070

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ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

(A STATUTORY BODY OF THE GOVT. OF INDIA)

(Ministry of Education, Govt. of India)

Nelson Mandela Marg, Vasant Kunj, New Delhi-110070

Phone : 011-26131495

E-mail : vcm@aicte-india.org



MESSAGE

The 16th India-Japan Bilateral Conference (BICON 2021) being organized by Biyani Group of Colleges, Jaipur & its partner Institutes of Japan on December 14, 2021, relevantly themed "Recreating Higher Education in the Post-Pandemic World". The covid pandemic descended the dreams and aspirations of many and it was inevitable. The paradigm of education with announcement of NEP 2020 with access, equity and inclusivity for all is a breakthrough in higher and technical education. BICON 2021 views the importance of the strong ties of two nations, India and Japan and hope this platform with great academicians and industrialists knowledge sharing will aid in creating a road map for the new normal.

I congratulate and appreciate the entire team of BICON 2021 for holding this bilateral international conference with all success for the same.

(Prof. M.P. Poonia)

8/12/21

Dr. Shribhan Singh Mudgal
Deputy Registrar (Academic & Research)
Rajasthan University of Health Sciences,
Jaipur (Rajasthan) INDIA
shribhanmudgal@yahoo.com
+91-94144 48850



Message

It gives me immense pleasure that Biyani Shikshan Samiti-Jaipur is organizing this International Conference **BICON-2021** on 'Recreating Higher Education in the Post-Pandemic World' through a virtual mode.

For the past one-year, higher education has faced considerable headwinds. The change came abruptly, as the pandemic demanded immediate responses and the institutions have been consumed with prioritizing safety, communication, and education continuity. To meet the realities of the post-pandemic world, universities and higher education institutions need to shift their focus on up skilling the students to make them job-ready, and every profession demands a digital skill attached to it. Secondly, digital learning, which was a compulsive requirement during the pandemic, will need to be leveraged in the post-pandemic world in the form of blended learning for an effective learning experience.

The conference will address the challenges of institutions and teachers as the domain becoming more competitive, digital transformation is now a must for survival as this new digital world requires educators to adapt and adopt digital technologies, methodologies, and mindsets. The various themes designed for different dates of the conference with a comprehensive approach are really a perfect combination of topics of discussions according to the need of hour.

It is my sincere wish that all the participants of this Conference will be benefited from the many academic and technical sessions, workshops, debates and symposia that have been planned by the esteemed organizers of BICON 2021. I extend my best wishes for the mega success of this conference and encourage all the members working across the globe in different higher education institutions to pool our expertise and "Prepare Together for a Better Future".

A handwritten signature in black ink, consisting of stylized, overlapping loops and lines.

(Dr. Shribhan Singh Mudgal)

डॉ. बजरंग लाल सैनी
निदेशक

राजस्थान
हिन्दी ग्रन्थ अकादमी



Message

I am delighted to know that Biyani College jaipur is organising International conference. The theme of conference is very important and relevant in present scenario. As we all know that Online teaching has become a necessity but it comes with its cost.

The teacher-student relation is jeopardised due to lack of physical contact and proximity. Moreover the education and literacy divide becomes deeper and stark as the have-nots and lesser capable have to compulsorily shun education in favor of eking out a living. Dissemination of education becomes widespread and easy and cheap. Saves a lot of human resources. Accessibility potential of education is remarkably enhanced leading to bigger generation of human resources.

I extend my best wishes for grand success of the conference.

(Dr B. L. Saini)

Director

Rajasthan Hindi Granth Acedmy
Jaipur

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• मो.: +91 9413313344 • E-mail : rajhindigranth@gmail.com • Website : www.rajhga.com



UNIVERSITY MAHARANI COLLEGE

RAM SINGH ROAD, JAIPUR-302 001



Phone : 0141-2373628

Telefax : 0141-2371918

MESSAGE

I am extremely delighted to know that Biyani Group of Colleges, Jaipur is organizing 16th Indo -Japan Conference (BICON 2021) in the virtual mode. The theme of the conference “Recreating Higher Education in the Post–Pandemic world” is immensely relevant to stimulate our thought process and channelize research in this field so that innovative outcomes may generate ground breaking solutions.

I congratulate the organizers and wish them very best for the success of the conference.

The conference will certainly attract bilateral academic and research agreement and promote stronger relationship between the two countries.

The conference will provide a platform to young researchers and scholars in showcasing their research and receiving review from experts.

I convey my warm wishers to Biyani Group of Colleges for great success of the event.

A handwritten signature in black ink, appearing to read 'Abha'.

Prof. (Dr.) Abha Jain Nagawat
Dean, Faculty of Commerce
Principal, University Maharani
College,
Head, Dept. of EAFM
University of Rajasthan
Jaipur (Raj.)



**MAHARAJ VINAYAK GLOBAL
UNIVERSITY**

University Campus:

Dhand, Amer, Jaipur-Delhi Highway

No. 11C, Jaipur-302028

Ph. : 01426-284175, 284175, 284407

www.mvgu.ac.in

**Dr. Yogesh Yadav
Registrar**



Date:06.12.2021

Message

I am extremely delighted to know that Biyani Group of Colleges Jaipur is organizing 16th India-Japan International Virtual Conference on **"Recreating the Post Pandemic Educational World"** from December 14th to 18th, 2021.

I am confident that the BICON-2021 Virtual Conference will provide the opportunity to gather leading Academicians, Scientists and Research Scholars to share their knowledge, construct strategies and new ideas as well as to discuss current developments in the respective field during COVID-19 Pandemic.

I extend my Best Wishes to the organizers of this International Virtual Conference for a great success.

Best Wishes.


**Dr. Yogesh Yadav
Registrar**

Administrative Office:

**S1-S2, P. No. 36-37, Daksh Apartment
Tagore Nagar, Ajmer Road, Jaipur-302021
Telefax : 0141-2352188, 2353964**

Regd. Office:

**M-80, Mahesh Colony, J.P. Phatak,
Jaipur-302015
Ph.: 0141-2590103, 2590104**



Retd. Justice J.K. Ranka

MESSAGE

I am extremely delighted to know that Biyani group of colleges, Jaipur is organizing 16th India-Japan bilateral conference BICON - 2021 on the theme "Recreation higher education in the post pandemic world " from 14th December to 18th December.

I am very sure this conference will be inspiring for the young generation and would certainly enhance the bilateral relations between India and Japan for academic and Research activities.

I wish Biyani group of colleges a great success for this conference.

With Warm Regards



TAI MP Unit

द टेक्सटाईल एसोसिएशन (इंडिया) - म.प्र. यूनिट

The Textile Association (India) - M.P. Unit

Save Textile Shape India

More Textile More Employment

Prof. P.N. Mishra

Dated: 12.05.2022

Chairman and Supannuated Professor of
Management and Former Director, Institute
Of Management Studies, and Head, School of Economics
Devi Ahilya University, Indore.

Message

‘Recreating Higher Education in Post- Pandemic World’ is a difficult and challenging task. Biyani College, Jaipur, has accepted this challenge and is going to organize a bi-national Indo-Japan conference on this theme. This conference, I am sure, will churn many serious issues to come out with approaches and strategies not only to face present pandemic, but also to fight with other future pandemics, if any. The theme of the conference has global significance and importance. The out-come of the conference, I hope, will not onle be useful for India and Japan, but also for the whole world.

Biyani College Jaipur and Biyani Group of Institutions are known for their proactive and futuristic vision. This conference will prove to be a milestone in the history of Biyani College, Jaipur.

I wish the conference a great success.

(P.N. Mishra)

Encourage Gift of Fabrics

Our Bank : Punjab National Bank, Branch- Kanchan Bagh, Indore,
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FROM THE CONVENER'S DESK

It gives us great pleasure to extend to you all a very warm welcome on behalf of Biyani Group of Colleges. We are grateful to all the speakers, delegates, organizers and guests, who have accepted our invitation to participate in the BICON 2021.

It is an opportune time to renew contacts and discuss opportunities of mutual interest with delegates across the globe.

It is gratifying to note that the agenda of the virtual conference covers a wide range of very interesting topics relating to higher education frontiers in India, Japan and other countries.

No matter how much we can do by ourselves on the national level, whether it be research or development, it is never enough. In a spirit of true cooperation, we in Asia, and particularly in Japan and India, are proud of nurturing past and present civilizations and cultures. We must join in an action-oriented effort to recognize and capitalize on the bilateral opportunities in the higher education sector in both countries.

The utter sincerity and dedication of the management, the teaching faculty, non-teaching staff and the students at Biyani Group of Colleges has brought this event to success. It is an outcome of the hard work and persistent efforts of all our colleagues. We hope that their efforts shine through, and all the delegates and participants have a fulfilling and rewarding experience here, that carries forward long after the event itself is over. Once again, a very warm welcome to you all.



Dr. Neha Pandey
Principal,
Biyani Girls College,
India



Dr. Dhyan Singh Gothwal
Dean-Administration
Biyani Group of Colleges,
India



Dr. Tarun Sharma
HOD (Science)



Dr. Charanjeet Singh
Principal (Pharmacy)



Ms. Jishu B. George
HOD (Nursing)



Dr. Shipra Gupta
HOD (Education)



Dr. Amita Adhikari
Vice Principal (Physical Education)



Dr. Poonam Sharma
HOD (IT)



Dr. Pawan Patodiya
Asso. Professor
(Commerce & Mgmt.)



Ms. Malti Saxena
HOD (Humanities)



Mr. Roshan Lal
HOD (Law)

Day- 1

Advanced Strategies and New Opportunities in Digital Education

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- Dr. Sujata Biyani (Asst. Director)
- Ms. Priyanka Biyani (Asst. Director)
- Dr. Madhu Biyani (Asst. Director)
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(Dean, Administration & Vice-Principal)
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- Ms. Jishu B George (HOD, Nursing)
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- Mr. Roshan Lal (HOD, Law)
- Ms. Malti Saxena (HOD, Humanities)
- Dr. Tarun K Kumawat (R&D Coordinator)
- Ms. Anju Bhatt (Skill Coordinator)

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- Dr. Vishnu Sharma
- Mr. Mayank Gupta
- Dr. Mukta Jain
- Ms. Neetu Khandelwal
- Ms. Mamta Kanwar Rathore
- Dr. Naveen Kumar
- Ms. Bhumika Shekhawat
- Ms. Sushil Kumar Saini

Programme Schedule

Date: Dec. 14, 2021; Tuesday (Day-1)

Theme: Advanced Strategies and New Opportunities in Digital Education

Standard Time IST	Schedule
Inaugural Session , 09:00 AM-10:00 AM IST (12:30-13:30 JST) Chair: Dr. Tarun Sharma	
09:00 AM-09:05 AM	Lighting of the Lamp
09:05 AM-09:15 AM	Welcome address by BICON-2021 Organizing Chair Dr. Manish Biyani Director (Research & Development), Biyani Group of Colleges, INDIA Professor (Research), JAIST, JAPAN
09:15 AM-09:20 AM	About the BICON-2021 by Convener Dr. Devika Agarwal Department Head, Commerce & Management, Biyani Institute of Science & Management, INDIA
09:20 AM-09:30 AM	Inaugural Address by Chief Guest Prof. M.P. Poonia Vice Chairman All India Council for Technical Education (AICTE), INDIA
09:30 AM-09:40 AM	Address by Guest of Honor Prof. R.A. Gupta Vice Chancellor, Rajasthan Technical University, INDIA
09:40 AM-09:50 AM	Address by Guest of Honor Prof. Suresh Prasad Singh Former Vice Chancellor, VKS University and Himalayan University, INDIA
09:50 AM-09:55 AM	Vote of Thanks Dr. Sanjay Biyani Director (Academics), Biyani Group of Colleges, INDIA
09:55 AM-10:00 AM	Closing remarks and Group Photo Dr. Neha Pandey Principal, Biyani Girls College, INDIA
Special Session , 10:00 AM-11:15 AM IST (13:30-14:45 JST) <i>Introduction of Nano Life Science Institute (NanoLSI), World Premier International Research Center (WPI), Kanazawa University, Japan</i> Chair: Dr. Manish Biyani	
10:00 AM-10:10 AM 13:30-13:40 JST	Dr. Hideki Ikemoto , Kanazawa University, JAPAN Title: Overview of Nano Life Science Institute
10:10 AM-10:25 AM 13:40-13:55 JST	Prof. Noriyuki Kodera , Kanazawa University, JAPAN Title: Direct Observation of Biological Macromolecules at Work by High-Speed Atomic Force Microscopy
10:25 AM-10:40 AM 13:55-14:10 JST	Dr. Holger Flechsig , Kanazawa University, JAPAN Title: Computational Microscope Towards Understanding Complex Protein Machinery in Biological Cells
10:40 AM-10:55 AM	Dr. Madhu Biyani , Kanazawa University, JAPAN

Recreating Higher Education in the Post-Pandemic World

14:10-14:25 JST	Title: Integration of a High-Speed Atomic Force Microscopy and a Computational Microscopy: From Selection Hits to Clinical Leads
10:55 AM-11:05 AM 14:25-14:35 JST [Young Researcher talk]	Ms. Radhika Biyani , JAIST, JAPAN Title: Imaging of the selective interaction between DNA aptamer and toxic conformer of β -amyloid 42 by Frequency Modulation Atomic Force Microscopy
11:05 AM-11:15 AM 14:35-14:45 JST	Q&A, Session closing remarks and Group Photo
Break 5 min	
Technical Session – I , 11:20 AM-12:00 PM IST (14:50-15:30 JST) <i>Smart Health Care Systems and Advanced Technologies for Future Generation</i> Chair: Dr. Tarun Sharma	
11:20 AM-11:35 AM	Prof. Dharmendra Tripathi , National Institute of Technology, INDIA Title: Mathematical Approach for SARS-Cov-2 Transport in Viscous Medium
11:35 AM-11:50 AM	Prof. Mohit D. Gupta , GB Pant Hospital, INDIA Title: Harmonizing Science and Spirituality
11:50 AM-12:00 PM	Q&A, Session closing remarks and Group Photo
Technical Session – II , 12:00 PM-12:40 PM IST (15:30-16:10 JST) <i>Ethical Issues and Challenges in Work from Home Culture in Education System</i> Chair: Dr. Vishnu Sharma	
12:00 PM-12:15 PM	Prof. Satish Kumar , Ex-Dean, Central University of Haryana; Ex-Chief Scientist & Group Leader, Centre for Cellular and Molecular Biology, INDIA Title: Meeting the Ethical Challenges in Online Education
12:15 PM-12:30 PM	Prof. Mahendra Parihar , SVKM's NMIMS University, Maharashtra, INDIA Title: Work from Home: Issues and Challenges in Education
12:30 PM-12:40 PM	Q&A, Session closing remarks and Group Photo
Break 5 min	
Technical Session – III , 12:45 PM-01:25 PM IST (16:15-16:55 JST) <i>Sustainable Development in Science and Technology: New Opportunities and Challenges</i> Chair: Dr. Neha Pandey	
12:45 PM-01:00 PM	Prof. Praveen Agarwal , Anand International College of Engineering, Rajasthan, INDIA Title: Extended Fractional Derivative Operators and Special Functions
01:00 PM-01:15 PM	Prof. Rajinder Singh Chauhan , Dean (Research & Consultancy), Bennett University, Uttar Pradesh, INDIA Title: Challenges & Opportunities in Sustainable Utilization of Himalayan Herbs
01:15 PM-01:25 PM	Q&A, Session closing remarks and Group Photo
Technical Session – IV , 01:25 PM-02:05 PM IST (16:55-17:35 JST) <i>Opportunities and Challenges in Biomedical Science: New Horizon due to COVID-19</i> Chair: Dr. Tarun K. Kumawat	
01:25 PM-01:40 PM 11:55 PM-12:10 AM Boston local time	Dr. Pushpanathan Muthuirulan , Harvard University, USA Title: Uncovering the Genetic Mechanisms Underpinning Human Skeletal Disorders Using Functional Genomics Approaches
01:40 PM-01:55 PM	Prof. Gireesh Babu K , Head, Department of Life Sciences, Parul University, Gujrat, INDIA

Recreating Higher Education in the Post-Pandemic World

	Title: The Role of Biomedical Science in Combating the COVID-19 Pandemic: Current Status and Future Prospects
01:55 PM-02:05 PM	Q&A, Session closing remarks and Group Photo
Lunch Break 25 min	
Technical Session – V, 02:30 PM-03:10 PM IST (18:00-18:40 JST) Virtual Laboratory: A boon to the Science Education Chair: Dr. Poonam Sharma	
02:30 PM-02:45 PM	Prof. Abhijeet Singh , Head, Dept. of Biosciences, Manipal University Jaipur, Rajasthan, INDIA Title: PLGA Nanoparticles as Drug Delivery tool for the Treatment of Neuroinflammation
02:45 PM-03:00 PM	Prof. Meenakshi Samartha , RKDF University, Madhya Pradesh, INDIA Title: Virtual Laboratory Work and Its Challenges after COVID 19
03:00 PM-03:10 PM	Q&A, Session closing remarks and Group Photo
Technical Session – VI, 03:10 PM-03:50 PM IST (18:40-19:20 JST) National Education Policy: New Opportunities in Higher Education Chair: Dr. Devika Agarwal	
03:10 PM-03:25 PM	Prof. Manoj Kumar Mishra , Salale University, Fiche, ETHIOPIA Title: Blended Learning for Higher Education in Post Pandemic Period
03:25 PM-03:40 PM	Dr. M.K. Singh , Scientist, Dr. Rajendra Prasad Central Agricultural University, Pusa, Bihar, INDIA Title: Mode of Education in the Pandemic Era
03:40 PM-03:50 PM	Q &A, Session closing remarks and Group Photo
Virtual Oral Presentations, 03:50 PM-04:20 PM IST (19:20-19:50 JST) Chair: Dr. Shilpa Bhargava	
03:50 PM-04:20 PM	Oral Presentations
04:20 PM-04:25 PM	Award Ceremony
04:25 PM-04:30 PM	Day-1 Closing remarks and Group Photo Dr. Tarun Sharma HOD, Department of Science, Biyani Girls College, INDIA

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INVITED LECTURE- 1

Overview of Nano Life Science Institute



Hideki Ikemoto

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Research Interest:

Please mention field of your major research areas

Education & Professional Career:

2006-2008 Master in Bio and Food Technology, Lund University, Sweden
2008-2011 Ph.D. Technical University of Denmark, Denmark
2013-2016 Research fellow in University of Tartu, Estonia
2016-2018 Researcher at SENTAN Pharma Inc.
2018- Research Administrator at WPI-NanoLSI, Kanazawa University

Major Publications:

1. Improvement of photobleaching of Monascus pigments using novel nanoencapsulation technology. Matsuo, Takeru, Hara, Toshio, Ikemoto, Hideki, Jacques, Kazuyo, Kasai, Shingo, Kinjo, Ayano, Ogata, Mika, Fukuda, Kotaro, Tachibana, Shinjiro. The Science Bulletin of the Faculty Of Agriculture University Of The Ryukyus, 65 83-89, Dec, 2018.
2. Hyaluronan-binding peptide for targeting peritoneal carcinomatosis Hideki Ikemoto, Prakash Lingasamy, Anne-Mari Anton Willmore, Hedi Hunt, Kaarel Kurm, Olav Tammik, Pablo Scodeller, Lorena Simon-Gracia, Venkata Ramana Kotamraju, Andrew M. Lowy, Kazuki N. Sugahara, Tambet Teesalu. Tumor Biology, 39(5), May, 2017.
3. Probing structural and catalytic characteristics of galactose oxidase confined in nanoscale chemical environments Hideki Ikemoto, Susanne L. Mossin, Jens Ulstrup, Qijin Chi. Rsc Advances, 4(42) 21939-21950, 2014.
4. Nanoscale Confinement and Fluorescence Effects of Bacterial Light Harvesting Complex LH2 in Mesoporous Silicas. Hideki Ikemoto, Sumera Tubasum, Tonu Pullerits, Jens Ulstrup, Qijin Chi. Journal of Physical Chemistry C, 117(6) 2868-2878, Feb, 2013.
5. Stability and Catalytic Kinetics of Horseradish Peroxidase Confined in Nanoporous SBA-15 Hideki Ikemoto, Qijin Chi, Jens Ulstrup. Journal of Physical Chemistry C, 114(39) 16174-16180, Oct, 2010.

Abstract

Overview of Nano Life Science Institute

Hideki Ikemoto

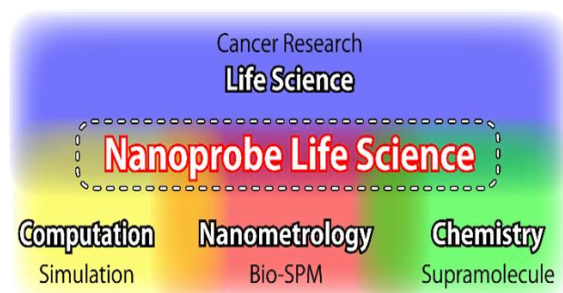
WPI Nano Life Science Institute, Kanazawa University

Abstract:

Nano Life Science Institute (NanoLSI) has been established since 2017 as one of the centers of World Premier International Research Center Initiative (WPI), financially supported by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). The initiative started in 2007 and now has 14 centers in total. The current WPI missions are “World-Leading Scientific Excellence and Recognition”, “Global Research Environment and System Reform”, and “Values for the Future”.

NanoLSI has totally 83 researchers that include 16 PIs (4 PIs from overseas), associate professors, assistant professors and post docs. More than 30% of researchers is from abroad. A new building of NanoLSI was completed in September 2020 and all the researchers relocated to the building in December 2020. The building houses 65 Bio-SPMs and 6 electron microscopies and allows collaborative work under one roof. Master and doctoral course students that belong to the Division of Nano Life Science in the Graduate School of Frontier Science Initiative also do their laboratory work in the new building.

In the life sciences, the dynamics of proteins, metabolites, nucleic acids, and other components in a cell is a key step for fundamentally understanding the mechanisms of various life phenomena, such as development, disease and aging. However, we lack a detailed grasp of these dynamics. Our institute is exploring these uncharted realms with the aim of elucidating the mechanisms of biological phenomena at the atomic and molecular levels (nanoscale). Researchers at NanoLSI have engaged in the pioneering development of original Biological Scanning Probe Microscopy (Bio-SPM) technologies, such as high-resolution atomic force microscopy (AFM) (FM-AFM/3D-AFM), high-speed AFM, and scanning ion conductance microscopy (SICM), and applied them to the life sciences. To explore the surface and/or the inside of the living cell, we combine our scanning probe microscopies with researchers specializing in oncology, supramolecular chemists with expertise in molecular sensor-based nanoanalyses and nanomanipulation, and mathematical/computational scientists who can perform multiscale simulations. Through such efforts, we are establishing a new field of study called “Nanoprobe Life Science”.

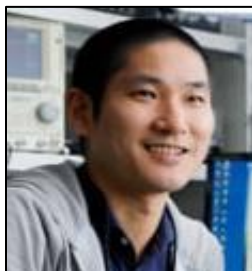


Keywords: WPI, Bio-SPM, Nanoprobe Life Science.

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INVITED LECTURE- 2

Direct observation of biological macromolecules at work by high-speed atomic force microscopy



Noriyuki Koderu

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Research Interest:

Biophysics, Single-molecule measurement, Atomic force microscopy

Education & Professional Career:

2001-2005 M.S. and Ph.D. Kanazawa University (Department of Physics)

2010-2011 Assist. Prof. in Kanazawa University

2011-2018 Assoc. Prof. in Kanazawa University

2018- Prof. in Kanazawa University

Major Publications:

1. K. Umeda, C. Okamoto, M. Shimizu, S. Watanabe, T. Ando, & N. Koderu, Architecture of zero-latency ultrafast amplitude detector for high-speed atomic force microscopy. *Appl. Phys. Lett.*119, 181602-181602 (2021)
2. N. Koderu, D. Noshiro, S. K. Dora, T. Mori, J. Habchi, D. Blocquel, A. Gruet, M. Dosnon, E. Salladini, C. Bignon, Y. Fujioka, T. Oda, N. N. Noda, M. Sato, M. Lotti, M. Mizuguchi, S. Longhi, & T. Ando, Structural and dynamics analysis of intrinsically disordered proteins by high-speed atomic force microscopy. *Nature Nanotechnology*16, 181-189 (2021).
3. H. Imai, T. Uchiumi, & N. Koderu, Direct visualization of translational GTPase factor pool formed around the archaeal ribosomal P-stalk by high-speed AFM. *PNAS*117, 32386-32394 (2020).
4. N. Terahara, N. Koderu, T. Uchihashi, T. Ando, K. Namba, & T. Minamino, Na⁺-induced structural transition of MotPS for stator assembly of the *Bacillus* flagellar motor. *Science Advances*3, eaao4119 (2017).

5. M. Shibata, H. Nishimasu, N. Koder, S. Hirano, T. Ando, T. Uchihashi, O. Nureki, Real-space and real-time dynamics of CRISPR-Cas9 visualized by high-speed atomic force microscopy. *Nature Communications*8, 1430 (2017)
6. N. Koder, D. Yamamoto, R. Ishikawa, & T. Ando, Video imaging of walking myosin V by high-speed atomic force microscopy. *Nature*468, 72-76 (2010).

Abstract

Direct observation of biological macromolecules at work by high-speed atomic force microscopy

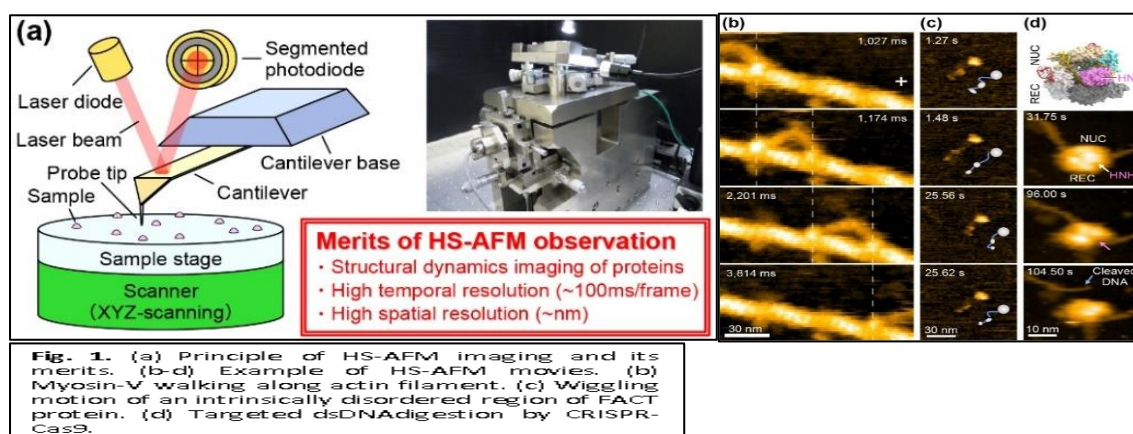
Noriyuki Koder

WPI Nano Life Science Institute (WPI-NanoLSI), Kanazawa University, Kakuma-machi, Kanazawa 920-1192, Japan

Abstract:

We have been developing a high-speed atomic force microscopy (HS-AFM) that can directly observe biological macromolecules in action at nanometer spatial and sub-second temporal resolution (Fig.1a). The unique performance of HS-AFM has been demonstrated by direct observations of proteins, protein-protein complexes (Fig.1b), protein-nucleic acid complexes (Fig.1d), and cellular surface. Importantly, HS-AFM can even resolve thin and flexible features of intrinsically disordered regions (IDRs), single polypeptide chains with height of ~ 0.5 nm, in a protein that could not be analyzed by any techniques at single molecule level (Fig.1c). The obtained movies showing biological macromolecules at work can provide information inaccessible with other techniques, giving great insights into how they function.

In this presentation, I will overview the principle of HS-AFM and show typical HS-AFM movies showing biological macromolecules at work.



Keywords: Biophysics, proteins, nucleic acids, single-molecule imaging, atomic force microscopy.

□□□

INVITED LECTURE-3

Computational microscope towards understanding complex protein machinery in biological cells



Holger Flechsig

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Research Interest:

Theoretical and Computational Biophysics

Education & Professional Career:

2007-2011- Ph.D. @ Fritz Haber Institute (FHI) of the Max Planck Society (Physics)
2011-2015- Post Doc @ FHI Berlin & Hiroshima University, Japan
2015-2017 - Assist. Prof. @ Hiroshima University
since 2018 - Assist. Prof. @ NanoLSI, Kanazawa University

Major Publications:

1. H. Flechsig, A.S. Mikhailov. *Tracing entire operation cycles of molecular motor hepatitis C virus helicase in structurally resolved dynamical simulation.***Proc. Natl. Acad. Sci. USA** 107, 20875 (2010)
2. H. Flechsig. *Design of elastic networks with evolutionary optimized long-range communication as mechanical models of allosteric proteins.***Biophys. J.** 113, 558 (2017)
3. H. Flechsig, A.S. Mikhailov. *Simple mechanics of protein machines.***J. Roy. Soc. Interface** 16, 20190244 (2019)
4. D. Loutchko, H. Flechsig. *Allosteric communication in molecular machines via information exchange: what can be learned from dynamical modeling.***Biophys. Rev.** 12,443 (2020)
5. R. Amyot, H. Flechsig. *BioAFMviewer: an interactive interface for simulated AFM scanning of biomolecular structures and dynamics.***PLoS Comput. Biol.** 16, e1008444 (2020).

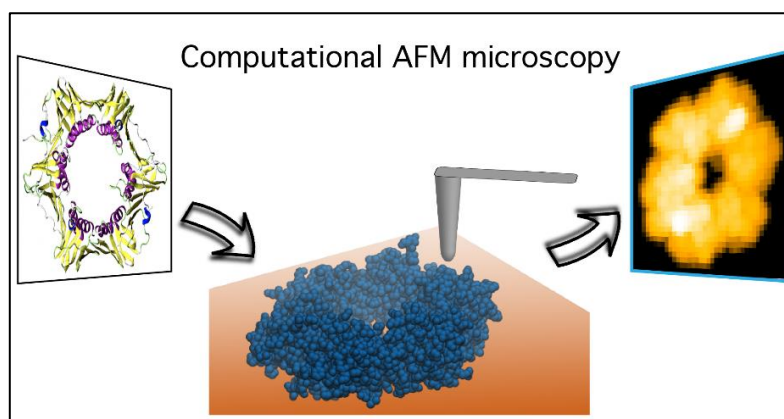
Abstract

Computational microscope towards understanding complex protein machinery in biological cells

Holger Flechsig

Nano Life Science Institute (NanoLSI), Kanazawa University

Basic functions of the biological cell rely on the operation of proteins and other bio- molecules within a complex interaction network. Understanding their mechanisms is essential for molecular biology and prospective biotechnology applications. Nowadays nanotechnology allows to directly watch proteins while they execute specific functions. Nonetheless, intrinsic limitations in the spatio-temporal resolution of nanoscale experiments make the interpretation of observed phenomena generally difficult, thus preventing sufficient understanding from experimental studies alone. On the other hand, multi-scale mathematical modelling allows to compute the dynamics of proteins in molecular simulations, using high-performance computer architectures. The enormous contribution in understanding important aspects of biological function shows that, rather than just being computational tools, one may regard the plethora of established methods reminiscent of a *computational microscope*. In my talk I discuss the impact of computational modelling to facilitate the understanding of experimental observations. The focus is on collaboration projects at the Nano Life Science Institute (Kanazawa University), where world-leading high-speed atomic force microscopy experiments of biological matter are performed. The presentation style will be of conceptual kind and does not require sophisticated knowledge.



Keywords: biophysics, computational biology, molecular dynamics, proteins, molecular motors

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INVITED LECTURE-4

Integration of a high-speed atomic force microscopy and a computational microscopy: from selection hits to clinical leads



Madhu Biyani

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Research Interest:

Life Sciences, Functional aptamers for disease diagnosis and treatment, Biosensors

Education & Professional Career:

2007-2011	Ph.D. Saitama University (Dept. of Functional Material Science)
2014- 2015	Post-doc Researcher in JAIST
2015-2019	Researcher in Bio Device Co. Ltd.
2019-2020	Post-doc Researcher in Toyama Prefecture University
2020- present	Assist. Prof. in Kanazawa University

Major Publications:

Madhu Biyani, Masae Futakami, Koichiro Kitamura, Miho Suzuki, Tomoyo Kawakubo, Kenji Yamamoto and Koichi Nishigaki. In vitro selection of cathepsin E-activity-enhancing peptide aptamers at neutral pH. International Journal of Peptides 2011.

Madhu Biyani, Radhika Biyani, Hiromi Ushijima, M. Saito, Yuzuru Takamura, Eiichi Tamiya, Manish Biyani. “Instant enumeration of total viable bacterial counts for food quality assurance using ‘DEP-On-Go’ sensor”. Anal. Methods 2018: 10, 1579-1664. (Selected for cover page)

Radhika Biyani, Kirti Sharma, Kenji Kojima, Madhu Biyani, Vishnu Sharma, Tarun Kumawat, Kevin, Manish Biyani, “Development of robust isothermal RNA amplification assay for lab-free testing of RNA viruses”, Scientific reports, 11(1) 15997-15997, Aug 6, 2021.

Abstract**Integration of a high-speed atomic force microscopy and a computational microscopy: from selection hits to clinical leads****Madhu Biyani*, Yasuhiro Isogai, Holger Flechsig, Noriyuki Kodera, Miki Nakajima, Manish Biyani****WPI Nano Life Science Institute (WPI-NanoLSI), Drug Metabolism and Toxicology Laboratory, Kanazawa University.***Abstract:**

Aptamers are single stranded RNA or DNA oligonucleotides that bind to specific target molecules with high affinity and specificity using their three-dimensional architectures. Aptamer technology has gained lots of potential for disease diagnosis and treatment because of their low molecular weight, low/no immunogenicity, versatility to manipulation for improved stability and target efficacy. We recently discovered a DNA aptamer molecule that could specifically bind and inhibit the overexpression of CYP24A1, an enzyme which has been linked to diminished vitamin D3 anti-cancer actions in cancer cells. A greater understanding of conformational dynamics and the quest for the most atomistic stable aptamer-CYP24A1 complexes are required as a next step in developing the aptamer as a lead candidate for targeted drug designs in cancer. For this purpose, we exploited the power of high-speed atomic force microscopy (HS-AFM) and cooperatively linked it with molecular docking method to directly visualize and evaluate the aptamer-CYP24A1 binding mechanism.

In this presentation, I will demonstrate our findings for visualizing CYP24A1-aptamer complex dynamics at molecular-level by HS-AFM and correlating with atomic-level resolution by molecular docking.

Keywords: HS-AFM, molecular docking, aptamer, CYP24A1, vitamin D3.

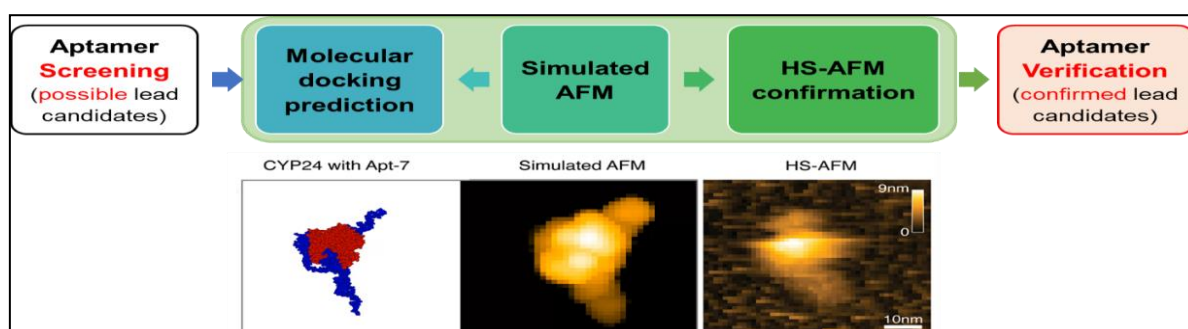


Fig. 1. Application of an integrated platform of HS-AFM and computational microscopy: from selection hits to clinical leads.

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INVITED LECTURE 5

VIRTUAL REALITY FOR VIRUS-X



Radhika Biyani

Affiliation & Contact:

Bioscience and Biotechnology, Material Science
Graduate School of Advanced Science and Technology
Japan Advanced Institute of Science and Technology
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Research Interest:

Virtual reality, Alzheimer's Disease, Aptamer, *in-vitro* and *in-silico* selection

Educational Career:

2015-2018 Bachelor of Science in Biotechnology, University of Rajasthan
2018-2020 Master's Degree of Material Science, JAIST
2020-present Ph.D., JAIST

Major Publications

1. Keiko Ishizuka, Yuto Tsutsumi, Misato Baba, Radhika Biyani, Chen Wei Meng, Manish Biyani, Masahiro Takagi, Kiyoshi Yasukawa, et al. "Inhibition of HIV-1 reverse Transcriptase Activity by the Extracts of Indian Plants." Journal of Biological Macromolecules 2019: 生物高分子, 20(1), 17-22
2. Rathore, Himankshi, Radhika Biyani, Hiroto Kato, Yuzuru Takamura, and Manish Biyani. "Palm-size and one-inch gel electrophoretic device for reliable and field-applicable analysis of recombinase polymerase amplification." Analytical Methods 2019: 39, 4969-4976.
3. Radhika Biyani, Arpita Vaishnav, and Manish Biyani. "Handheld monitoring of lead level in drinking water in Rajasthan." International Journal of Innovations in Engineering and Technology (2018)
4. Biyani, Madhu, Radhika Biyani, Hiromi Ushijima, Masato Saito, Yuzuru Takamura, Eiichi Tamiya, and Manish Biyani. "Instant enumeration of total viable bacterial counts for food quality assurance using 'DEP-On-Go' sensor." Analytical Methods 10, no. 14 (2018): 1585-1592.
5. Biyani, Madhu, Radhika Biyani, Tomoko Tsuchihashi, Yuzuru Takamura, Hiromi Ushijima, Eiichi Tamiya, and Manish Biyani. "DEP-On-Go for simultaneous sensing of multiple heavy metals pollutants in environmental samples." Sensors 17, no. 1 (2017): 4

Abstract

VIRTUAL REALITY FOR VIRUS-X

Radhika Biyani, Manish Biyani, Masahiro Takagi

Graduate School of Advanced Science and Technology, JAIST, Japan

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Abstract:

Today we are in a virtual world and after the emergence of new Corona virus we have went way deeper into this virtually real world. We must be prepared to face any 'Smart Virus-X like SARS-CoV-2' that may knock our doors anytime and anywhere from now, because this is the new normal.

Until now we have suffered from many virus diseases like Influenza, COVID-19, and finding a solution using wet-ware technologies requires a period of years. This long time can alone convert a virus into endemic and then pandemic. So, to simply sit and wait before we meet Virus-X makes no sense. The idea is when everything around us is being emphasized on becoming virtual and can just take place by a click on the computer than why can't computers provide a possible solution instantly for an unpredictable Virus-X in the future?

In my talk, I will propose the idea to utilize the power of AI (Artificial Intelligence), IoT (Internet of Things) and Super computers to establish a 'dry system' to identify a 'Super-Smart Solution' for controlling the 'Smart Virus-X'. The specific interest is in bio-medicinal compounds, called 'Aptamers' that can be used as anti-virus agents. At present, aptamers are screened in a wet laboratory from a pool of millions of billions of candidates and then a hit molecule is evaluated for its specificity, selectivity, and function to control targeted protein of virus. Laboratory experiments takes years of time and we aim to transform this time period from years-to-days by a cooperative integration of knowledge between wet and dry-laboratory that can make selection process easier.

Keywords: Virtual Reality, Virus-X, DNA Aptamer, Dry-system

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INVITED LECTURE 6

Mathematical Approach for SARS-Cov-2 Transport in Viscous Medium



Dr. Dharmendra Tripathi

Affiliation & Contact:

Department of Mathematics,
National Institute of Technology, Uttarakhand
Srinagar (Garhwal)-246174, Uttarakhand, India.
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Research Interest:

Mathematical modelling and simulation of biological flows in deformable domains, Peristaltic flow of Newtonian and non-Newtonian fluids, Dynamics of various infectious diseases; microfluidics; CFD, Biomechanics; Heat Transfer; Nanofluids; Energy Systems; Numerical methods.

Education & Professional Career:

- Ph.D. (2009), Applied Mathematics, Indian Institute of Technology BHU, Varanasi
- M.Sc. (2004), Mathematics, Banaras Hindu University, Varanasi
- B.Sc. (2002), Math., Phys., Chemistry, VBS Purvanchal University, Jaunpur
- Associate Professor, National Institute of Technology, Uttarakhand, 26th June 2018- Continue
- Associate Professor, Manipal University Jaipur, 02 February 2015- 25th June 2018
- Assistant Professor, NIT Delhi, 28 August 2012- 31 January 2015
- Visiting Faculty, IIT Ropar, Punjab, India, 01 August 2011- 27 August 2012

Major Publications:

1. D.S. Bhandari, D. Tripathi and Insight into Newtonian fluid flow and heat transfer in vertical microchannel subject to rhythmic membrane contraction due to pressure gradient and buoyancy forces, *International Journal of Heat and Mass Transfer*, In Press (2021) [IF: 5.584]
2. D. Tripathi, J. Prakash, M.G. Reddy and J.C. Misra, Numerical Simulation of Double Diffusive Convection and Electroosmosis during Peristaltic Transport of a Micropolar Nanofluid on an Asymmetric Microchannel, *Journal of Thermal Analysis and Calorimetry* 143 (3), 2499-2514 (2021). [IF: 4.626]

3. D. Tripathi, J. Prakash, A. K. Tiwari and Rahmat Ellahi, Thermal, microrotation, electromagnetic field and nanoparticle shape effects on Cu-CuO/ blood flow in microvascular vessels, *Microvascular Research* 132 (2020): 104065.[IF: 2.730].
4. Dharmendra Tripathi, V. K. Narla, and Yasser Aboelkassem, Electrokinetic Membrane Pumping Flow Model in a Microchannel, *Physics of Fluids* 32, no. 8 (2020): 082004.[IF: 3.514].
5. D.S. Bhandari, D. Tripathi and V.K. Narla, Pumping flow model for couple stress fluids with a propagative membrane contraction, *International Journal of Mechanical Sciences* 188 (2020): 105949.[IF: 4.631].
6. K. Ramesh, D. Tripathi, M. M. Bhatti, and C.M. Khalique, Electro-Osmotic Flow of Hydromagnetic Dusty Viscoelastic Fluids in a Microchannel Propagated by Peristalsis, *Journal of Molecular Liquids* 314 (2020): 113568.[IF: 4.561].

Abstract

Mathematical Approach for SARS-Cov-2 Transport in Viscous Medium

Dharmendra Tripathi

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Abstract:

The Spread of SARS-Cov-2 from person to person was one of the challenging problems for the country as well world. Many mathematical and dynamical models have been presented to see the dynamics of the spread of the SARS-COV-2 and data analysis as per data available like no- of infected persons, Recovery rate, no of deaths, etc. Based on the dynamics of SARS-COV-2, various type mediums like solid surfaces, air medium, and viscous medium are modes for the transmission of the viruses. A mathematical approach to examine the movement of the viruses (SARS-Cov-2, Influenza A, Influenza B, and Swine Influenza) in viscous medium will be discussed in my talk. For the movement of viruses, a well-known Lagrangian hypothesis is employed and Basset-Boussinesq-Oseen (BBO) equation is formulated. The effects of various forces (applicable to spread of viruses) gravity, virtual mass, basset force, and drag forces on velocity field vectors, axial and transverse velocities will also be discussed. A comparative analysis for all types of viruses will also be presented. This model may define the importance of the fluid dynamics in prevention of the SARS-COV-2 spread and other similar viruses. Future works may focus on the various non-Newtonian fluids model to see the rheological effects on transmission of virus.

Keywords: SARS-Cov-2; Unsteady flow; BBO equation; Stream lines; Particle velocities.

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INVITED LECTURE 7

Meeting the Ethical Challenges in Online Education



Prof. Satish Kumar

Affiliation & Contact:

- Ex-Chief Scientist and Group Leader,
National Facility for Transgenic and Gene Knockout Mice
Centre for Cellular and Molecular Biology, Hyderabad- 50007
Phone: 9052456653, Email: satishk.scientist@gmail.com
- Ex-Head, Department of Biotechnology,
Ex-Dean Dean of School of Applied and Interdisciplinary Sciences
Ex-Dean-Research and Ex-Provost, Central University of Haryana
Mahendergarh-123029

Research Interest:

Animal Biotechnology- Genome Manipulation and Biodiversity Analysis

Education & Professional Career:

- 1979 Masters of Science (Animal Genetics and Breeding), National Dairy Research University, Kurukshetra University, Kurukshetra, Haryana, India
- 1994 Doctor of Philosophy (Molecular Genetics), Roslin Institute, University of Edinburgh, Edinburgh (UK)
- 2018- 2021 Prof & Dean, Central University of Haryana, Madendergarh
- 2014- 2018 Chief Scientist and Group Leader, Centre for Cellular and Molecular Biology, Hyderabad, India
- 2013- 2014 Scientist H & Dean, National Institute of Animal Biotechnology, Hyderabad
- 1999- 2013 Principal Scientist, Chief Scientist and Group Leader, National Facility for Transgenic and Gene Knockout Mice, Centre for Cellular and Molecular Biology, Hyderabad, India
- 1982- 1999 Scientist and Senior Scientist, ICAR-Central Sheep and Wool Research Institute, Avikanagar and National Bureau of Animal Genetic Resources, Karnal, India

Major Publications:

- 2020: Whole genome analysis of water buffalo and global cattle breeds highlights convergent signatures of domestication. **Nature Communications** 11, 4739 doi.org/10.1038/s41467-020-18550-1
- 2015: Mitochondrial DNA Variability of Domestic River Buffalo (*Bubalus bubalis*) Populations: Genetic Evidence for Domestication of River Buffalo in Indian Subcontinent. **Genome Biology and Evolution**. doi: 10.1093/gbe/evv067
- 2015: Genetic deletion of *Wdr13* improves metabolic phenotype of *Leprdb/db* mice by modulating AP1 and PPAR γ target genes. **Diabetologia** 58: 384-392
- 2006: *k*-Casein deficient mice fail to lactate. **Proceedings of National Academy of Sciences, USA** 103: 8000-8005
- 2006: Genetic variation and relationships among eight Indian riverine buffalo breeds. **Molecular Ecology** 15: 593-600.
- 1994: Milk composition and lactation of β -casein-deficient mice. **Proceedings of National Academy of Sciences, USA** 103: 8000-8005.

Abstract

Meeting the Ethical Challenges in Online Education

Prof. Satish Kumar

Ex-Chief Scientist, Centre for Cellular and Molecular Biology, Hyderabad, India

Ex-Dean, Central University of Haryana, Mahendergarh, India

Abstract:

The concept and practice of distance education has been around in the academic world for several decades and reasonably served the student community having constraints in accessing the conventional education through attending institutions of higher learning. With the progress in the electronic communication and world-wide-web during the last two decades the distance education mode was enriched and made much more efficient. However, the recent Covid-19 pandemic created unprecedented challenges for the academic world. Fortunately, the mankind has been having reasonable recourses for switching to online mode of teaching and imparting instructions to the student community as a substitute to conventional education in physical mode. But online education has its own limitations including newer ethical challenges. During the last two years, we have now enough experiences of dealing with such difficulties pertaining to the availability, access, equity and diversity in online education mode. While online education can never be a complete substitute to the conventional education system but we are able to deal with the challenges of online mode it is very likely to complement and enrich the physical mode of education beyond the current pandemic. In this talk I shall deal with some of the approaches and measures we may take to mitigate the limitations, particularly pertaining to ethical aspects to make the online education more rewarding experience, for students and teachers and outlining some of the responsibilities and policy changes to be undertaken by educational institutions and governmental regulatory authorities.

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INVITED LECTURE 8

Ethical Issues and Challenges in Work from Home Culture in Education System



Dr. Mahendra Parihar

Affiliation & Contact:

Associate professor, Technology Management Department,
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Mehta Marg, Opp. Mithibai College, Vile Parle (West), Mumbai-400056
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Research Interest:

Transport Economics, Industrial Economics, Development Economics and Public Policy.

Education & Professional Career:

2002-04	M A Economics (Department of Economics, University of Mumbai)
2006-11	PhD. Economics (Department of Economics, University of Mumbai)
2004-14	Assistant Professor- University of Mumbai
2014-19	Associate Professor, Dept. of Economics, Manipal University Jaipur
2019- Present	Associate professor, NMIMS University Mumbai.

Major Publications

1. Paper on “Intelligent Infrastructure and Transportation: A case of Passenger Transportation system in Jaipur city of Rajasthan” presented and published in **Scopus Indexed Springer Book Series Smart Innovation, Systems and Technologies, Volume 235, ISBN:978-981-16-2876-4**, at 3rd International Conference on Smart Systems: Innovations and Computing being organized by Manipal University Jaipur during 22-23 January, 2021.
2. Paper on “Economic Analysis of Energy Efficient Transportation in India with Special Reference to the Passenger Movement” presented and published in **Scopus Indexed Springer Book Series Smart Innovation, Systems and Technologies, Volume 235, ISBN:978-981-16-2876-4**, at 3rd International Conference on Smart Systems: Innovations and Computing being organized by Manipal University Jaipur during 22-23 January, 2021.
3. Paper on “Smart City Solution: Enhancing Capacity Utilization of Mass Rapid Transit System (MRTS)

for Economic Viability with Special Reference to Jaipur Metro Rail Network” presented and published in **Scopus Indexed Springer Book Series Smart Innovation, Systems and Technologies, Volume 235, ISBN: 978-981-16-2876-4**, at 3rd International Conference on Smart Systems: Innovations and Computing being organized by Manipal University Jaipur during 22-23 January, 2021.

4. Paper on “Using Intelligent Communication System (ICT) to Solve a Problem of Enroute Confirmation of Wait listed Tickets in Indian Railways” presented and published in **IEEE Xplore Digital Library** (IEEE Conference Record Number 46177 and ISBN: 978-1-7281-1712-6. The conference publication is **indexed in Scopus**, DBLP, Google Scholar) at Second International Conference on Intelligent Communication and Computational Techniques (ICCT 2019) being organized by Manipal University Jaipur, Jaipur-India during September 28-29, 2019, DOI: [10.1109/ICCT46177.2019.8969018](https://doi.org/10.1109/ICCT46177.2019.8969018), **Date Added to IEEE Xplore:** 27 January 2020.
5. Paper on “Efficiency Analysis of Online Ticket Reservation System in Rajasthan State Road Transport Corporation (RSRTC) Using ITS & ICT Enabled Services” presented and published in **IEEE Xplore Digital Library** (IEEE Conference Record Number 46177 and ISBN: 978-1-7281-1712-6. The conference publication is **indexed in Scopus**, DBLP, Google Scholar) at Second International Conference on Intelligent Communication and Computational Techniques (ICCT 2019) being organized by Manipal University Jaipur, Jaipur-India during September 28-29, 2019, DOI: [10.1109/ICCT46177.2019.8969050](https://doi.org/10.1109/ICCT46177.2019.8969050), **Date Added to IEEE Xplore:** 27 January 2020.
6. Paper on “An Economic Analysis of Mass Rapid Transit System (MRTS) in India with Special Reference to Jaipur Metro Rail in Rajasthan” accepted for presentation and publication in **IEEE Xplore Digital Library** (IEEE Conference Record Number 46823 and ISBN: 978-1-7281-1712-6. The conference publication is **indexed in Scopus**) at International Conference on Computation, Automation and Knowledge Management (ICCAKM-2020) being organized by Amity University, Dubai during 9-11 January, 2020, DOI: [10.1109/ICCAKM46823.2020.9051472](https://doi.org/10.1109/ICCAKM46823.2020.9051472), **Date Added to IEEE Xplore:** 02 April 2020.

Abstract

Ethical Issues and Challenges in Work from Home Culture in Education System

Dr. Mahendra Parihar

Mukesh Patel School of Technology Management and Engineering, NMIMS University Mumbai.

Abstract:

Covid-19 Pandemic has resulted in shift of working habits. In this connection, along with other sectors, the delivery system in education sector also got change with comprehensive use of digital technology. This move is just to control the spread of Covid-19 Pandemic because education centers normally have huge gathering at one place. Further, starting the concept of concept of Work From Home (WFH) in education sector is one of the correct move in the time of pandemic. As suggested that Online and Offline teaching-

learning have their own implication as well as application given the particular situation, simultaneously both of the systems has their own pros and cons too.

However, having look at WFH system in education sector, along with its various advantages or benefits, it has certain ethical issues and challenges. Thus, having observed that not taken into consideration the issues and challenges of WFH system, we may not be able to achieve the target of Outcome Based Education (OBE). This is because having not followed the proper methods and mechanism of WFH culture, the delivery system gets affected and desirable outcome cannot be achieved. Therefore, it is the responsibility of all the stakeholders in education system (for example Educational Institutions, Teachers, Students, Parents, Regulatory Bodies, Technology Providers, etc.) to follow the suit. Moreover, having categorized ethical issues and challenges in broader ways, ethical issues may include time management, sincerity and discipline, following regulatory norms, teacher-student connect, technological support, etc., whereas challenges include economic challenges, organizational challenges, social challenges, health challenges, etc.

Keywords: Education, WFH, OBE, Covid-19, Digital Technology.



INVITED LECTURE 9

Extended fractional derivative operators and special functions



Prof. Praveen Agarwal

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Email: goyal.praveen2011@gmail.com

Research Interest:

Special Functions & Fractional Calculus

Education & Professional Career:

PhD-University of Rajasthan

Major Publications:

1. Salahshour, S., Ahmadian, A., Senu, N., Baleanu, D., & Agarwal, P. (2015). On analytical solutions of the fractional differential equation with uncertainty: application to the Basset problem. *Entropy*, 17(2), 885-902.
2. Agarwal, P., Baltaeva, U., & Alikulov, Y. (2020). Solvability of the boundary-value problem for a linear loaded integro-differential equation in an infinite three-dimensional domain. *Chaos, Solitons & Fractals*, 140, 110108.
3. El-Sayed, A. A., & Agarwal, P. (2019). Numerical solution of multiterm variable-order fractional differential equations via shifted Legendre polynomials. *Mathematical Methods in the Applied Sciences*, 42(11), 3978-3991.
4. Agarwal, P., Al-Mdallal, Q., Cho, Y. J., & Jain, S. (2018). Fractional differential equations for the generalized Mittag-Leffler function. *Advances in Difference Equations*, 2018(1), 1-8.
5. Agarwal, P. (2017). Some inequalities involving Hadamard-type k -fractional integral operators. *Mathematical methods in the applied sciences*, 40(11), 3882-3891.

Abstract

Extended fractional derivative operators and special functions

Praveen Agarwal

Department of Mathematics, Anand International College of Engineering, Jaipur, India

Abstract:

In this talk, we aim to study extended fractional differential operators (such as the Riemann-Liouville and Caputo type fractional operators) involving extended hypergeometric functions introduced recently and their properties.

Keywords: Fractional calculus, special functions



INVITED LECTURE 10

Challenges & Opportunities in Sustainable Utilization of Himalayan Herbs



Prof. Rajinder S. Chauhan

Affiliation & Contact:

Dean (Research & Consultancy) & Head, Biotechnology, Bennett University (Times of India Group), Greater Noida 201310, UP, India.

Research Interest:

- Genomics-assisted biosynthetic pathway discovery in medicinal herbs.
- Metabolic engineering for production of industrial phytochemicals

Education & Professional Career:

- DBT Overseas Associateship in Genomics (1997-2004), University of Wisconsin, Madison, USA
- Ph.D. Agriculture Biotechnology (1991), HP Agriculture University, Palampur
- MSc Mycology & Plant Pathology (1988), HP Agriculture University, Palampur

Major Publication:

1. Bansal A., Tiratha Raj Singh and Rajinder S. Chauhan. 2018. A novel miRNA analysis framework to analyze differential biological networks. *Scientific Reports* 8: 2584.
2. Vashisht I., T. Pal, A. Bansal and RS Chauhan. 2018. Uncovering interconnections between kinases vis-à-vis physiological and biochemical processes contributing to picroside-I biosynthesis in a medicinal herb, *Picrorhiza kurroa* Royle ex. Benth. *Acta Physiologiae Plantarum* DOI : 10.1007/s11738-018-2689-5.
3. Kumar V, Bansal A and Chauhan RS. 2017. Modular Design of Picroside-II Biosynthesis Deciphered through NGS Transcriptomes and Metabolic Intermediates Analysis in Naturally Variant Chemotypes of a Medicinal Herb, *Picrorhiza kurroa*. *Front. Plant Sci.* 8:564. doi: 10.3389/fpls.2017.00564.
4. Kumar V, N Sharma, H Sood, RS Chauhan (2016). Exogenous feeding of immediate precursors reveals synergistic effect on picroside-I biosynthesis in shoot cultures of *Picrorhiza kurroa* Royle ex Benth. *Scientific Reports* 6:29750.

5. Pal T, V Jaiswal, RS Chauhan (2016). DRPPP: A machine learning based tool for prediction of disease resistance proteins in plants. *Comput Biol Med* 78:42-48.
6. Sharma T, RS Chauhan (2016). Comparative transcriptomics reveals molecular components associated with differential lipid accumulation between microalgal sp., *Scenedesmus dimorphus* and *Scenedesmus quadricauda*. *Algal Res* 19:109-122.

Abstract

Challenges & Opportunities in Sustainable Utilization of Himalayan Herbs

Prof. Rajinder S. Chauhan

Dean (Research & Consultancy) & Head, Biotechnology, Bennett University (Times of India Group), Greater Noida 201310, UP, India

The Indian Himalayas are rich in biological wealth, particularly medicinal and aromatic plants, which provide raw material for various herbal drug formulations as well as high value phytochemicals of medicinal, nutraceutical and cosmetic value. The herbal product market is estimated at USD 80 billion with 7% annual growth rate, reaching USD6 trillion by 2050. However, around 90% of the medicinal plants used by the Ayurvedic and Pharmaceutical industries are collected from the wild sources, thus resulting in loss of genetic diversity, endangered status and above all destruction of natural habitats. The endangered status of several medicinal herbs has resulted in imposition of legal restrictions on collection of herbal material from natural habitats, which has not only caused shortage of authentic material to pharmaceutical and herbal drug industries but also economic constraints to the local communities, whose day-to-day livelihoods depend on those medicinal herbs. As a result the short supply of herbal material has resulted in adulteration, thereby affecting the efficacy and potency of herbal drug formulations. Therefore, to overcome those challenges, a practical solution would be to undertake commercial cultivation of elite material of high value medicinal herbs to counter the multi-faceted problems of endangered status, non-availability of sufficient and high quality material to industries and more importantly not depriving rural communities from their revenue generating avenues. My talk will focus on how the Himalayan ecosystem is being damaged, posing challenges how protect and sustainably utilize its biological resources through S&T interventions.

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INVITED LECTURE 11

UNCOVERING THE GENETIC MECHANISMS UNDERPINNING HUMAN SKELETAL DISORDERS USING FUNCTIONAL GENOMICS APPROACHES



Dr. Pushpanathan Muthuirulan

Affiliation & Contact:

1. GSK Investigator-LGR Functional Genomics, FxG Laboratory of Genomics
Research, R&D Pharm GSK
Nov 2021 - Present 2 months
San Francisco, California, United State
2. Research Associate
Harvard University Graphic
Harvard University

Oct 2017 - Nov 2021- 4 years 2 months
Cambridge, MA

Research Interest:

Clinical genomics, Genetics, OMICS, Molecular and Cell Biology, Infectious diseases, Developmental biology, and Neuroscience.

Technical expertise:

ATAC-sequencing, ChIP-sequencing, RNA-sequencing, Microbiome analysis, CRISPR, flow cytometry, Mass spectrometry, Confocal & Super resolution Microscopy, CD spectroscopy, FPLC/HPLC, Cell culture, rDNA technology, Protein purification, etc.

Education & Professional Career:

Harvard University, Harvard University Graphic

Harvard University

FAS Bioinformatics Nano course Bioinformatics, and Computational Biology

2019 - Present

Activities and Societies: Introduction to R, Introduction to python, Introduction to Sequencing Data analysis, Population Genetics, RNA-seq Analysis, Single cell RNA-seq analysis

Madurai Kamaraj University

Doctor of Philosophy (Ph.D.) Microbiology

2010 - 2014

Activities and Societies: Actively Involved in conducting scientific research, teaching and mentoring. Received financial support from different funding agencies such as (a) Department of Biotechnology (DBT), Government of India, New Delhi, India (2009-2012); (b) University Grant Commission (UGC), New Delhi, India (2012) and (c) Lady Tata Memorial Trust (LTMT), Mumbai, India (2012-2014) pertaining towards fulfillment of my Ph.D. research Ph.D.

National Institutes of Health (NIH)- FAES

Advance Studies in Bioinformatics and Data Science Grade A

2017 - 2017

Activities and Societies: Introduction to Perl-Online (BIOF312), Bioinformatics for Analysis of Data Generated by Next-Generation Sequencing (BIOF521), Statistics for Biomedical Scientists-I (STAT500-0), International Strategic Partnering and Business Development (TECH 567), International Research & Development & Innovation (TECH 586)

The American College

Master's Degree Zoology (spl. Biotechnology) First Class Distinction (Gold Medalist)- GPA (9.3/10)

2006 - 2008

Activities and Societies: Member in Academic Council and PG Zoology Association Secretary, The American college, Madurai (2007-2008) Master degree

The American College

Bachelor's degree, Zoology (spl. Biotechnology) First Class with Distinction

2003 - 2006

Activities and Societies: Academic Council and PG Zoology Association Secretary Bachelors

Major Publication:

1. Pushpanathan, M., Gunasekaran, P. and Rajendhran, J., 2013. Antimicrobial peptides: versatile biological properties. *International journal of peptides*, 2013.
2. Dinakaran V, Rathinavel A, Pushpanathan M, Sivakumar R, Gunasekaran P, Rajendhran J (2014) Elevated Levels of Circulating DNA in Cardiovascular Disease Patients: Metagenomic Profiling of Microbiome in the Circulation. PLoS ONE 9(8): e105221. <https://doi.org/10.1371/journal.pone.0105221>.
3. Velmurugan, G., Ramprasath, T., Swaminathan, K. et al. Gut microbial degradation of organophosphate insecticides induces glucose intolerance via gluconeogenesis. *Genome Biol* 18, 8 (2017). <https://doi.org/10.1186/s13059-016-1134-6>.
4. Jayashree, S., Pooja, S., Pushpanathan, M. et al. Identification and Characterization of Bile Salt Hydrolase Genes from the Genome of *Lactobacillus fermentum* MTCC 8711. *Appl Biochem Biotechnol* 174, 855–866 (2014). <https://doi.org/10.1007/s12010-014-1118-5>

Uncovering the Genetic Mechanisms underpinning Human Skeletal Disorders using Functional Genomics Approaches

Pushpanathan Muthuirulan

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Abstract:

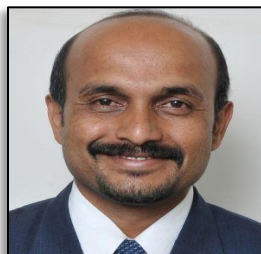
For many complex diseases, the genetic signals for risk span large swaths of non-coding sequence whose precise roles in pathomechanism remain unknown. Given the pleiotropic nature of coding sequences and that many loci have associations with more than one disease, it is within non-coding regulatory sequence that disease-specificity should be located, albeit well-studied examples are generally lacking. Here, we focused on joint disorders, the most common of the musculoskeletal diseases, finding among replicated loci, that *GDF5* exhibits over twenty distinct associations. We sought to identify causal variants at *GDF5* for two of its strongest associations, developmental dysplasia of the hip (DDH) and knee osteoarthritis (OA), the most prevalent joint diseases of the young and old, respectively. By mapping regulatory regions in joint chondrocytes from human samples, we pinpointed two variants (rs4911178 and rs6060369), present on the same risk haplotype, but which reside in anatomical site-specific enhancers. We show that both variants have high clinical relevance, impacting patient disease risk by altering joint morphology via decreases in *GDF5* expression. Importantly, by modeling each variant in separate humanized mice, we observed joint-specific response, correlated to reduction in *GDF5* expression. Overall, we discovered separate regulatory variants on a common risk haplotype that causes joint-specific disease, providing direct *in vivo* evidence for the importance of finely dissecting regulatory variants in proper anatomical contexts. This approach also opens new opportunities for development of personalized treatments and risk screening tools at *GDF5*.

Keywords: Functional genomics, Genetic disease, Skeletal disorder, Disease biology, Personalized medicine.

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INVITED LECTURE 12

Opportunities and Challenges in Biomedical Science: New Horizon due to Covid-19



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Research Interest:

Molecular biology, Enzymology and Polyclonal antibodies

Education & Professional Career:

1999-2001	M.Sc. (Biotechnology) Gulbarga University
2002-2007	Ph.D. Gulbarga University (Biotechnology)
2007-2016	Asst. Prof in PC Jabin Autonomous College, Hubli, Karnataka
2016-2016	Project Coordinator, Premas Biotech, Gurgaon, Haryana
2017-2019	Asso. Prof. in PC Jabin Autonomous College, Hubli, Karnataka
2019-2020	Head, Business Development, Genei Laboratories, Bengaluru
2020-21	Research Scientist, VRDL, District Hospital Haveri, Karnataka
2021- till now	Professor & Head, Dept. Life Sciences, Parul University

Major Publications:

1. S.Virupakshi, Gireesh Babu K and Gajanan R. Naik (2005) Partial purification and characterization of thermostable alkaline β -mannanase from *Bacillus* sp. JB-99 suitable for the pulp bleaching. *Journal of Microbiology and Biotechnology*.15(4):689-693.
2. S.Virupakshi, Gireesh Babu K, Satish R. Gaikwad and Gajanan R. Naik (2005) Production of xylanolytic enzyme by a thermo alkaliphilic *Bacillus* sp. JB-99 in solid state fermentation, *Process Biochemistry* 40:431-435.

Abstract

Opportunities and Challenges in Biomedical Science: New Horizon due to Covid-19

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Abstract:

It has been almost 24 months, the world has not remained same. The Covid pandemic had an impact over every sector of modern human life, same for the biomedical science. The scientific world was not ready for the Covid challenge and the sudden necessity has brought in many significant changes in biomedical research.

The immediate necessity of diagnostic technique was well addressed and successful development of vaccines in very short time was an answer to be remembered always and may need to be practiced in coming years, again. The fastest genome reorganizations of pathogens had never posed such critical situation for the human race to win over and this proved possibility opens a whole new world of critical challenges for the researchers. The uncertainty of pandemic situations demands the scientific world to be on their fastest track ever with all the possible imaginary situations to handle scientifically.

This never could be simple as the whole core scientific and supporting world need to re-evaluate and modulate their mode of act. The genomics turns much deeper relevant subject of research and the pace of our understanding of it seems quite slow. The genome sequencing has become quite routine but the scale rather has to be aggressively widened. The biocomputational tools have to grow equally supportive. The bioinformatics would play a major role in understanding the complexities of evolution, existence and organization of the genomes. The ever changing genomes would lead to the diversification of antigenic proteins thereby the immunological reactions. The development of new diagnostic tools/techniques or sensitization of the existing ones would be the demand of the time. The discoveries pertaining to aids of preventing the deeper penetration of the pathogen among the masses would gain the prime importance. The personal protection equipment, vaccines, biomedical equipment for the life support of the patients in hospitals, newer prophylactic practices, drug discovery may need to switch as per the need. These have to be achieved within a challenging time, and we may need to think over again on the conventional methods efficiency and have to find newer paths of emergency scientific discovery. This would never be possible without the preliminary data. The diversified basic pathogenic research has to be initiated deeply and the data should be made accessible to all in such endeavour. The intellectual protection practices need to be reshaped to make patents accessible upon need with justification.

The biomedical researchers can bring in the changes only by the support of governments. The policies of the governance should be oriented towards collective efforts to prepare the population for any kind of emergency and the scientific world would be able to handle the situation with the supporting administration. The Covid has taught us to look at the mode of civilization we all had been practicing since ages and the drastic changes are meant to be practiced. The biomedical field needs to be supported in all the ways so that the able community can stand up to the situation to save the human race against the deadly intelligence of pathogens.

Keywords: Covid, diagnostics, Genomics



INVITED LECTURE 13

PLGA Nanoparticles as Drug Delivery tool for the Treatment of Neuroinflammation



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Research Interest:

Bio-nanotechnology, Molecular Biology

Education & Professional Career:

2012	Ph.D, University of Rajasthan (Molecular Biology)
2010- 2013	Application Scientist, Life Technologies, Bengaluru
2013-2015	Assistant Professor, Department of Biosciences, Manipal University Jaipur
2015-2020	Associate Professor, Department of Biosciences, Manipal University Jaipur
2020- Continue	Professor, Department of Biosciences, Manipal University Jaipur

Major Publications:

1. Garg, K. K., Jain, D., Rajprohit, D., Kushwaha, H. S., Daima, H. K., Stephen, B. J., ... & Mohanty, S. R. (2021). Agricultural Significance of Silica Nanoparticles Synthesized from a Silica Solubilizing Bacteria. *Comments on Inorganic Chemistry*, 1-17.
2. Stephen, B. J., Sharma, M. M., Jain, D., Dhaliwal, H., Sharma, V., & Singh, A. (2021). Exploring Therapeutic Advancement and Strategies Associated with Drug Delivery in Brain-Tumor Targeting. *Critical Reviews™ in Therapeutic Drug Carrier Systems*, 38(2).
3. Jain, D., Bhojiya, A. A., Singh, H., Daima, H. K., Singh, M., Mohanty, S. R., ... & Singh, A. (2020). Microbial fabrication of zinc oxide nanoparticles and evaluation of their antimicrobial and photocatalytic properties. *Frontiers in chemistry*, 8, 778.
4. Jain, D., Kour, R., Bhojiya, A. A., Meena, R. H., Singh, A., Mohanty, S. R., ... & Ameta, K. D. (2020).

Zinc tolerant plant growth promoting bacteria alleviates phytotoxic effects of zinc on maize through zinc immobilization. *Scientific reports*, 10(1), 1-13.

5. Singh, A., Chokriwal, A., Sharma, M. M., Jain, D., Saxena, J., & Stephen, B. J. (2017). Therapeutic role and drug delivery potential of neuroinflammation as a target in neurodegenerative disorders. *ACS chemical neuroscience*, 8(8), 1645-1655.

Abstract

PLGA Nanoparticles as Drug Delivery tool for the Treatment of Neuroinflammation

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Abstract:

Neuroinflammation has gained worldwide interest as one of the leading contributors to a broad range of neurological disorders. Its role in disorders such as Parkinson's and Alzheimer Disease has gained light over the years. Epidemiological and genetic linkage data links neuroinflammation to neurodegenerative disorder further strengthens its role.

Currently, numerous anti-inflammatory drugs have proven their ability to modulate neuroinflammation. Out of which dexamethasone, a synthetic adrenal corticosteroid has shown strong role in lowering neuroinflammation. It already has a wide application in various autoimmune, inflammatory, and allergic disorders such as arthritis, asthma, kidney problems, skin conditions and multiple sclerosis. Dexamethasone is known to inhibit inflammatory response, the severe side effects associated with high dose of glucocorticoids required to reach therapeutic value, is one of the main reasons for not using dexamethasone as a neuroprotective agent. This is caused due to the presence of the Blood Brain Barrier (BBB). The BBB is a lining of endothelial cells that are highly selective by preventing most molecules from entering the CNS. Nanotechnology offers a suitable alternative route in drug delivery. In particular, the rationale of using nanoparticle (NPs) for brain drug delivery is that proper surface multifunctionalization may promote their targeting of the BBB and the enhancement of its crossing. Poly lactic-co-glycolic acid (PLGA) is the most studied and best defined polymer, approved by the Food and Drug Administration of USA (FDA) for drug delivery and pharmacological studies. Encapsulating dexamethasone in PLGA nanoparticles have been associated to overcome the limitation posed by the BBB. In this study we determine the most efficient method for the synthesis of dexamethasone loaded PLGA nanoparticles and its role in drug delivery.

Keywords: Blood Brain Barrier, Dexamethasone, Nanoparticles, Neuroinflammation, PLGA

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INVITED LECTURE 14

The title of your Talk



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Research Interest:

Cancer Biology, Cytogenetics, Biochemistry, Haematology

Education & Professional Career:

2006 PhD - Rajasthan University (Cancer Biology)

2015 Asst. Prof in RKDF University, Bhopal

2018-till date Associate Prof. in RKDF University, Bhopal

Major Publications:

1. **M Panwar**, M Kumar, R Samarth, A Kumar 2005: [Evaluation of chemopreventive action and antimutagenic effect of the standardized panax ginseng extract, EFLA400, in swiss albino mice](#). Phytotherapy Research 19 (1), 65-71.
2. **M Panwar**, R Samarth, M Kumar, WJ Yoon, A Kumar 2005: [Inhibition of benzo \(a\) pyrene induced lung adenoma by Panax ginseng extract, EFLA400, in Swiss albino mice](#). Biological and Pharmaceutical Bulletin 28 (11), 2063-2067.
3. A Kumar, M Kumar, **M Panwar**, RM Samarth, TY Park, MH Park, H Kimura 2006: [Evaluation of chemopreventive action of Ginsenoside Rp1](#). Biofactors 26 (1), 29-43.
4. Ravindra M Samarth, **Meenakshi Samarth**, Yoshihisa Matsumoto 2015: Utilization of cytogenetic biomarkers as a tool for assessment of radiation injury and evaluation of radiomodulatory effects of various medicinal plants-a review. Drug Design, Development and Therapy. 5355-5372.
5. Ravindra M Samarth, **Meenakshi Samarth** and Yoshihisa Matsumoto 2017: Medicinally important aromatic plants with radioprotection activity. Future Science OA

ABSTRACTS

An overview on recent perspectives Inmolecular Devices

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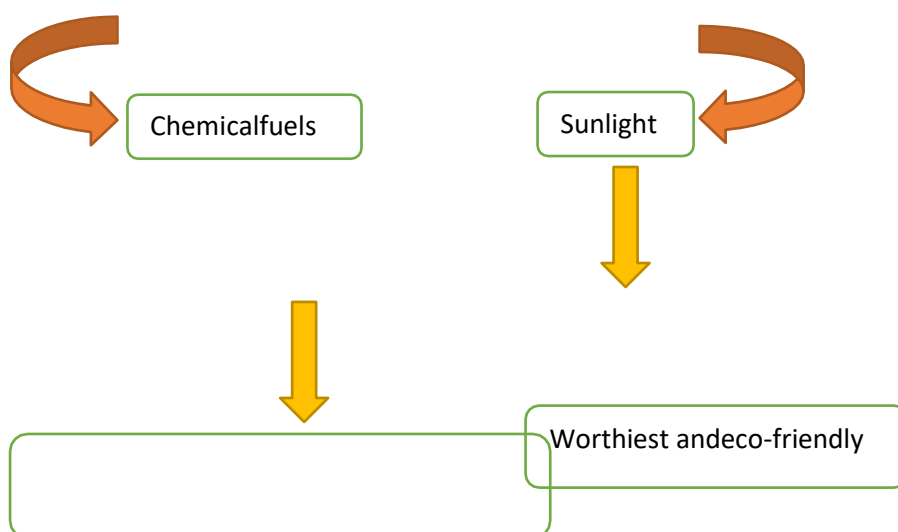
Abstract:

Molecules or molecular assemblies that can execute activities including linear or rotational movement, switching, and trapping are known as molecular devices. These devices are found at the intersection of supramolecular chemistry and nanotechnology. Recognition and transformation feature of molecular devices are analysed on the basis of their operations *via* photons, electrons or ions. These devices use intermolecular interactions between two or more chemical species to execute specific activities. Energy and signals are required for molecular-level devices and machineries to function and communicate with the operator. Due to a lack of chemical fuels and rising environmental concerns, the best primary energy source is sunshine, and the most worthwhile operations are those that do not produce waste.

Chemical reactions provide driving force for molecular devices and machines as they are chemical systems.



They need energy to operate and signals to communicate with the operator:



Keywords: Recognition, Molecular-level devices, Chemical fuels, Signals.



Biomedical Sciences and Covid-19 Outbreak

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Abstract:

The COVID-19 global pandemic, which is result of infection by the SARS-CoV-2, broke out at the year end of 2019, causing a global financial and human health disaster. COVID-19 has been the focus of research throughout the globe. COVID-19 has been combated using a blend of protection, medication, and cure. On account of the particular obstacles posed by the corona virus, biomedical research has been suggested as an encouraging field for battling SARS-CoV-2. Due to aggressive propagation of the virus, medical equipment's and medicines is required to control the influx of patients to the hospitals. Scientists and global businesses have shifted their priority or processing lines to develop products that satisfy the requirements of medical professionals and service users or patients who are compelled by the COVID-19 emergency, and also handle the pressure for essential medicines and critical care equipment, with a particular emphasis on personal protective equipment. Adaptive, cooperative, interdisciplinary, and advanced research activities undertaken by colleges and universities to tackle the needs that continuously emerge, along with the existing, unexpected COVID-19 outbreak, have resulted in significant improvements in human communities and society over the past few years. For instance, efficient and appropriate surveillance, diagnosis, and control of viral epidemics, and also the creation of therapies and vaccinations, have all been established; this significant achievement has allowed countless lives to be saved. The purpose of this research is to discuss the current state of biomedical science and its future prospects in the context of COVID-19 and to explore the current effect of biological science in healthcare for COVID-19 management.

Keywords: COVID-19, Biomedical Sciences, Critical Care Equipments, Surveillance, Medications

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Virtual Laboratories during Pandemic Situation : Coronavirus (Covid -19)

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Abstract:

Due to COVID-19 pandemic situation many challenges have arises in educational sector like skilling methods, and training practices among teachers and educational hubs. The involvement of virtual laboratories within classroom makes positive changes in teaching laboratory courses. In Virtual laboratory students interact with an experimental apparatus or other activity via a computer system. A Virtual laboratory is an on-screen simulator or calculator that helps test ideas and observe result. It has a prominent

role in inquiry based and self- guided education. The virtual laboratory may help the students overcome the problems faced by them in the physical laboratory. It is an interactive environment for creating and conducting simulated experiment. The Virtual laboratory were integrated as training platforms for complementing learning objective in laboratory education especially during the pandemic imposed shutdown. Higher studies in the field of biochemistry and molecular biology are significantly hampered due laboratory closures in lockdown. In COVID-19 situation, students can perform the experiments online without any time boundation, they can receive instant feedback, repeat the experiment and generate result and data for their evaluation. Virtual laboratories can provide a platform for undergraduates and postgraduates students during COVID-19 pandemic. Students can perform their practical studies online at home without any interference.

Keywords: Virtual laboratories, COVID-19, online studies

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Evaluation of Phytochemical, Antibacterial and Antioxidant Properties of some Green Grasses for Sustainable Development

Anita Mishra

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Abstract:

The present study was conducted to evaluate the phytochemical profile of barley grass and wheat grass. Green grasses were procured from freshly grown seedlings of wheat and barley in Biyani Girls College, Jaipur. These grasses were 7-9 days grown young grasses of wheat and barley plant. These grasses were dried to convert them in powdered form. .Aqueous extracts for both the grasses were prepared by two methods-one is from soxhlet apparatus and other is from rotatory shaker. Then extract was converted into crude form. All the phytochemical parameters were determined through standard methods with slight modifications. Phytochemical compounds identification both qualitative and quantitative (flavanoids and phenolic acids content), antioxidant activity (DPPH activity) was done on aqueous extract obtained using soxhlet apparatus and rotatory shaker. The results showed presence of alkaloids, flavanoids, phenols, saponins, tannins, glycosides in wheat grass and barley grass. The antioxidant activity of wheat grass was higher than barley grass in case of aqueous extract obtained by soxhlet apparatus whereas in case of aqueous extract obtained by rotatory shaker, antioxidant activity of barley grass was higher than wheat grass. Antibacterial activity of both type of crude aqueous extract was tested on *Escherichia coli* and *Staphylococcus aureus*. Both grasses were found to have antioxidant activity against *Escherichia coli* and *Staphylococcus aureus*. The present study indicates the overall nutritional values of green grasses.

Keywords: Wheat Grass, Barley Grass, Phytochemical, Antioxidant, Antibacterial.

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Digital Education: Opportunities, Threats, and Challenges

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Abstract:

Digital education is a new initiative in the last few decades, although it has existed in various forms before. In the near future, areas of the education system are expected to reduce the unpredictable natural epidemic such as Covid-19 by 2020 with significant changes associated with the digitalization of part of the system. Digital education is largely a result of the last few years, although it has already existed a little earlier in various ways. Obviously; however, that modern materials and means of transmitting information are essential to its development. Thus, without the rapid development of computers and the Internet, this kind of education would not be possible. Three things related to education are made possible through digital technology: teaching without physical contact, immersion practice, and local communication.

This article aims to provide valuable insights into ICT and digital education on its future benefits, risks, and challenges of adopting the latest technology in the digital age, as well as many online courses. We have explored significant changes in the way we interact and produce lessons with the advent of internet technology. Globally, digital transformation has sought open access to information. Classes today have a wide range of ICT resources and almost all teachers have made great strides in integrating digital technology to increase access to information and collaborative activities for students.

Keywords: Digital Education; ICT; Online; E-Learning; Visual Reading



National Education Policy: New Opportunities in Higher Education

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Abstract:

The Prime Minister of India 'Indira Gandhi' announced the first national policy on education in 1968, which aimed for a radical restructuring and proposed equal educational opportunities in order to achieve national integration. The second education policy introduced in year 1986. The Union Cabinet of India provided the new vision of new education system of India. The previous national policy was replaced by new education policy. The policy is a basic fundamental step for basic education and higher education and for professional training in both rural and urban India. National education policy focuses on basically five points and they are affordability, accessibility, quality, equity, and accountability to ensure continual learning. Students have large amount of freedom in choosing their individual and interesting subject, skill and capacities. The aim of national education policy 2020 is to increase the gross enrollment ratio in higher education. A huge number

of new seats will be added to higher education institutions. The policy visualizes the bases of multidisciplinary under graduate education with flexible syllabus and creative combination of subject, integration of vocational education and multiple entry and exit point which appropriate certification. Hence the national education policy helps the students to enhance their knowledge and skill. It will help then to decide their capabilities and will help in shaping their career through enrollment in diverse higher education programmers.

Keyword: Holistic Development, Vocational Education, Affordability, Accessibility, Equity

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Sustainable Development for securing the future of Science & Technology

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Abstract:

Technological advancements have accelerated in recent years, contributing greatly to economic progress and expansion. Development that meets current needs without compromising future generations' demands is called sustainable development. Environmental pollution can be reduced by incorporating science and technology into a sustainable development plan. In terms of pollution, renewable energy created from trash like bio-waste is the best example, as it produces less of it than conventional energy sources like fossil fuels. As a large research-oriented business, biofuels from biomass are one of the most promising alternatives to gasoline and oil, derived from organic waste products that originate in the agricultural, forestry, and other industries. Biofuel is becoming more commercially beneficial and more inexpensive because of new technological advancements. Consequently, science and technology will be a gift to society when combined with long-term planning.

Keywords: Sustainable Development, Renewable Energy, Fuels, Biofuels.

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Integration of Healthcare and Quality Education to Achieve Sustainable Development Goals

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Abstract:

The Sustainable Development Goals (SDGs) are a set of worldwide objectives for equitable and long-term health at every level, from the planet's biosphere to the local community. The contemporary emphasis on targets, benchmarks and indicators in education programmes and health care around the entire globe is discussed in this section. Its goal is to increase awareness of potential strategies for achieving the third and fourth United Nations Sustainable Development Goals (SDG 3 and 4), which aim for healthy living and quality education. The SDGs include quantitative targets for reproductive health, mortality and education for all girls by 2030, all of these factors will have a direct and indirect impact on future demographic patterns. Quality education (SDG-4) is the 4th goal of the SDGs of Agenda 2030 demonstrating the relationship of education with Sustainable Development and, as a result, with the promotion of the Smart City concept. Digitalization is likely the most prominent trend in all aspects of life, all over the world, and it has been fitted to all aspects of our everyday lives in order to attain faster growth rates. Since the 1918 influenza pandemic, the COVID-19 pandemic has been the biggest threat to civilization. The epidemic also poses a significant obstacle to achieving the Sustainable Development Goals (SDGs).

Keywords: Sustainable Development Goals (SDGs), COVID-19, Education, Health.



Online Education as A Catalyst for Reforming Education

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Abstract:

Education is the way towards encouraging learning or procurement of information, aptitude values and ethics and all this learning process occurred in the classrooms but covid 19 outbreak compelled to shift it to online platform. Today we have several ongoing processes to study the factor affecting and enhancing the learning capacity of students. Despite this progress the online learning policy has been highlighted as a need for further action in several areas. Online education can give a vast variety of unique and critical

affordances. India is a developing nation and around 3/4th of population of India is middle class. Several students are still devoid of the basic necessities of education. For them online education act as boon and several education institutions are using latest technology in their teaching methods. Online education acts as a catalyst, since it prepares you for the future. It stimulates learning that can transform how education is perceived. The visual and audio-noise activities help students to get fully involved in whatever they learning rather than simply mugging up from books and also encourage them to explore more on internet as it offers more than any particular book will. It is not more contemplating on the web; online establishments should meet with similar quality necessities as physical foundation.

Keywords: Online Education, Technology, COVID 19



Sustainable Development in Science and Technology: New Opportunities and Challenges

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Abstract:

Sustainable development and technology are considered amongst the most effective means to enhance growth and socio-economic development of Nations. Sustainable development should be a criterion to evaluate the objectives and outcomes for any project in any field of life. Technological development has a profound and a long-term impact on income, distribution, economic growth, employment, and environment. The importance of science and technology to modern societies and the role of technologically educated population social and economic concern, has been long un recognized. The majority of products used so frequently in all aspects of modern aspects of modern life today are products of service, technology and engineering. Most of their originate from metals and material extraction and processing industry despite this, confusion again exists in the preparation of the society about the general role of science, technology and engineering on sustainable development science and technology in sometimes not even considered as a solution providing for sustainable development. The role of science and technology, authority and management and education and society are analyzed as they are pillars of sustainability. It is concluded that the winning formula is a close and strong cooperation between them in equal level and act as equal partners if science and technology is kept first word as in diagnose and the last word as in solving related to long term sustainable development.

Keywords: Science, Technology, Sustainable Development, Environment



National Education Policy

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Abstract:

Education is a very important foundation for the present and the future of the society. The education system should be designed with a proper strong structure and the utmost care. It is very good for development of society on various aspects. The policy is primarily radical before education sector was not so strong but now it implies change in everything the way we know it. It was the dream of every child or student who has long been fed up with the ongoing restarted education system. Students can catch their dreams not with burdened wings but elevated flights that will surely change the fate of millions of students and eventually the fate of nation also. Because of this student can choose a right career for themselves. Higher education plays an important role in the progress of country's financial and technological status and an appropriate behavior of individual. The main function of national education policy (NEP) is to guide the development of education. The need for a education NEP policy was first felt in 1964 when M P Siddheshwar Prasad criticized then government for loophole in vision and philosophy for education. This year 17 members education commission headed for betterment of children's by then UGC chairperson DS Kothari, was constituted to draft a national and set a meeting on education then parliament passed the 1st education policy in 1968. The aim of NEP are opening of Indian higher education to foreign universities, dismantling of the UGC and India council for technical education (AICTE). These all changes are some reasons of our developing nation in higher education department.

Keywords: Higher, Education, Policy



Comparative Analysis of Mach and Reynolds Number and their Physical Significance

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Abstract:

Fluid mechanics has various flow governing parameters that characteristics the fluid velocity, temperature, shear stress, viscosity, diffusivity, compressibility, heat transfer rate, ratio of two different forces such as inertia force to viscous force (Reynolds number) etc. The analysis of Reynolds number plays a vital role to determine the flow patterns such as laminar flow for $Re < 2000$ (smooth straight-line motion, like fluid flow through small channel, and pipe etc.), turbulent flow for $Re > 4000$ (zig zag motion, like flow through

irregular channel), and transition state of flow ($2000 < Re < 4000$). It is used to prepare the prototype of wind tunnel in the fluid mechanics. Mach number is also an important non-dimensional parameter in aerodynamics, which is similar to Reynolds number. Mach number is the ratio of velocity of object to velocity of sound, and explains the speed of moving objects (aircrafts and missile etc) like subsonic ($M < 1$), transonic ($M = 1$), supersonic ($M > 1$), and hypersonic ($M > 5$) etc. These two non-dimensional parameters have important significance in the fluid mechanics as well as in aerodynamics due to practical and industrial use such as aircraft modelling, wind tunnel, and channel flow etc.

Keywords: Mach number, Reynolds number, Laminar flow, Turbulent flow, Viscosity.

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Sustainable Development in Science and Technology: New Opportunities and Challenges

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Abstract:

Progress in science, technology and innovation (STI) continues to accelerate, promising significant benefits but also risks to the 2030 Agenda for Sustainable Development. Science, technology and innovation will continue to have broad impacts on the economy, society and environment. It is important to ensure that new technology and science should benefit all, in line with the ambitions of the SDGs. Integrated science is essential to strengthen water management, sustainably use the oceans either by providing Ocean thermal energy, or potable water, sustainable development approach is to develop a scientific cooperation between and within societies, combining global sustainability and local actions and knowledge. Technology can accelerate progress on the Sustainable Development Goals – or exacerbate inequalities. Technology can accelerate progress on all of the Sustainable Development Goals (SDGs). It can allow more people to access education, pandemic or not. Blockchain can create greater transparency, security and efficiency in supply chains. Artificial Intelligence (AI) and data analytics can help us better prepare for and respond to pandemics - and better screen for, diagnose and treat disease. Biggest challenge towards sustainable development is that More work needs to be done to provide universal and affordable access to the internet and reduce the digital skills gap. This can be possible by consistent efforts and practical approach.

Keywords: Artificial Intelligence, Pandemic, Innovation, Ocean Thermal Energy

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A reviewing the Sustainability of Natural Dye and their applications to Textiles

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Abstract:

The advancement of society and technology, the awareness towards the environmental protection and health safely is increased. So, the natural dyes gain the attention of industries towards because of having eco – friendly nature. Natural dyes are also known as Natural pigments because they are mainly gained from plants roots, stem, leaves, flowers, fruits, animals and natural-colored ores. Natural dyes are purely derived from renewable products which are easily dissolved in environment and make environment pollution free. Except in textiles these dyes are also utilized to provide color in foods, medicines, handicraft it demands so many cosmetic products. Clothing dye by Natural dyes make to feel nature that is not seen in synthetic dye. It is good for human health and don't show allergic properties due to having non-toxic and non-allergic properties. These are also good for baby skin. Natural dyes protect body from UV rays and harmful radiation. Due to its poor bonding some mordants are used which are not ecofriendly to environment mordants mostly contain heavy metals. So, we are searching other method to fixation of natural dye by don't using mordants.

Keywords: Natural dye, Sustainability, Textile industry, Biodegradable, Environment



Prominence of Online Education in Automated World

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Abstract:

The major reason for the phenomenal growth in online education is MOOCs (Massive Open online courses), the online courses which are aimed at unlimited participation and offer open access through the web. Over 800 universities around the world have launched at least one MOOC till date. According to report by Class Central, there were 83 million students who had registered for MOOCs by December, 2017. The list of top five MOOC provider by registered users include Coursera, edX, Xuetang X, Udacity and Future Learn.

The advancements in technology, accessibility of low-priced smart gadgets signs both opportunities and challenges for learning organizations and their faculty and students. Digital Education has potential that can produce knowledgeable workers. The government has analyzed that ICT sector has important role in

education due to that many programmes such as NEOR, NMEICT, NKN, Eklavya, NPTEL, and NROER that has been launched.

The accessibility of online education globally saving time, money and efforts are advantages of online learning. In teaching the lecture's recording is one advantage of online learning when students ask teachers to record classes, the teachers are reviewing and prepare well for recording, which certainly improves.

Digital Education has bring success in the field of education but still there are number of challenges in most of Indian institutes like shortage of quality teachers, deprived quality of research, and deprived quality of training etc. Digital Education is overall very beneficial for the students of country like India.

Keywords: Digital Education, Prominence, Online Education, Technology

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Extraction of Essential Oil from Lemon Peel

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Abstract:

Sustainable development is an organizing principle which broadly focuses on the human development goals along with the capability to sustain the ecosystem on which the society as well as economy depends. Recycling is a mode to obtain profit in sustainable way. The vaporization of organic residue can extract the essential oil from plant parts such as leaves, petals, peels, barks, seeds and so on. In this investigation, lemon peel is used for extracting essential oil. Lemon contains several beneficial impacts on human health. After consumption of juice, lemon peel cast into environment and considered as agro waste. This study centers the extraction of essential oil by steam distillation where the zest of lemon is separated since it contains oil bearing glands that enclose vital amount of essential oil. Essential oils, are volatile concentrated compounds extracted from plants, which used in food flavoring agents, cosmetics, aromatherapy, antibacterial, anti-inflammatory, and have many therapeutic advantages. The main constituents of lemon peel essential oil are γ-terpinene, terpinolene, d-limonene, and citral which has numerous applications. After the extraction of essential oil, the residue of peel is used as vermicompost.

Keywords: Essential Oil, Sustainable Development, Steam Distillation, Zest, Vermicompost

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Design and Analysis of Optical Filter based on 2-D Photonic Crystal

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Abstract:

Photonic crystals (PhCs) are a promising candidate as a platform on which to design devices with dimensions of a few wavelengths of light for future photonic integrated circuits (PICs). The existence of photonic band gap (PBG) in PhC structures led to many prominent applications such as filters, logic gates, decoder etc. In all of these all optical filters are considered as essential components in future photonic integrated circuits.

In this paper, two compact integrated optical filters are presented. The first optical filter is based on 2D- PhC with square lattice whereas second optical filter is based on 2D-PhC with hexagonal lattice. Using numerical methods such as PWE and FDTD methods we obtained the optical properties of our proposed structure. It is found in our investigation that hexagonal lattice based optical filter is good in terms of photonic band gap and quality factor respect to square lattice based optical filter. The total footprint of the filter is less than $114 \mu m^2$, this shows that our filter is compact enough to be used in all optical integrated circuits. Simplicity of design is the other advantage of our proposed structure.

Keywords: Photonic Crystal, Optical filter



Sustainable Development in Science and Technology: New Opportunities and Challenges

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Abstract:

Sustainable development is the optimum use of resources available on earth in such a way that it meets all the requirements of human beings at present without interfering future generations for the same resources. There are three key elements of sustainable development - environment, economy, and society. Sustainability encourage the fair distribution of resources and opportunities, promotes economic welfare, enhances the more and more consumption of renewable energy sources (such as solar energy, wind energy, geothermal energy, etc.), protect and restore natural sources. Science and technology always plays a key role

in the progress and development of a nation by improving the quality status of life and uplift the social and economic development. Sustainable development is important to protect resource technology, sustain biodiversity. Sustainability prevents nature from being used it as an inexhaustible resource and ensures it's protection by investment in renewable energies, environmental conservation, saving water, supporting sustainable mobility contributing to achieve sustainable development goals. Challenges faced in sustainability are poor project planning, inadequate management skills, risks managing strategies, poor efforts and discipline. Deadly and constructive procedure can provide a principle to face all these challenges.

Keywords: sustainable development, resources, mobility, management skills.



Virtual Laboratories: The coming Era of Digital Education

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Abstract:

The current COVID-19 pandemic has created much consternation in research and education. Even with online theoretical instruction, educational institutions continued to struggle to provide laboratory sessions, which were an essential component of trained education. It causes academic stress and worries between learners and teachers. As a result of these developments, educational institutions are expressing an increased interest in virtual laboratories, a relatively new technology. Virtual laboratories provide students with a new way to study and conduct experiments from the convenience of their own homes. Virtual laboratories were integrated as training platforms to enhance laboratory education's learning objectives, notably during the pandemic-induced closure. These virtual studies reveal how physical experiments can be complemented with animations, models, and remote laboratory sets to deliver skill training to learners. Additionally, virtual laboratories provide a fantastic chance for graduate and professional researchers to gain lab experience related to establishment of virtual experiments and evaluation of reports. Further, this is a once-in-a-lifetime opportunity to work in highly diverse teams with academics and graphic designers. The findings indicate that virtual labs may play a key role in inquiry-based and self-guided education, which may be crucial for enhancing practice abilities and building online tools for post-COVID-19 education-learning situations. The virtual modules generate terrific opportunities to engage youngsters with technology while also preventing unanticipated disruptions like the current pandemic.

Keywords: COVID 19 pandemic, Virtual laboratories, Biosciences disciplines, Educational institutes, Postdoctoral researchers.



Next Future Generation Technologies for Smart Healthcare: Concept, Application, Challenges, Key Technologies, Vision and Trends

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Abstract:

With the development of information technology, big data and cloud computing, the concept of smart healthcare has gradually become more and more important. Compare with a traditional healthcare service, the new modal health service platform is becoming increasingly popular and convenient. The concept of smart healthcare as gradually come to the fore. Smart healthcare uses a new generation of information technologies. These technologies are widely used in all aspects from the perspective of patents, doctors, hospitals and scientific research institutions. With the application of technologies such as artificial intelligence, surgical robots and mixed reality, the diagnosis and treatment of disease has become more intelligent. Based on smart diagnosis, the patient's condition and disease status are more accurately described, which help to develop a personalized treatment plan and the program has been affirmed by experts. Smart home provide home assistance to the elderly and the disabled. Virtual assistance can greatly save manpower and material resources and respond to the need of all parties more efficiently. In sum, the prospects for smart healthcare are vast. However, there are still some problems in the development process. The solution to these problems depends not only on technological progress but also the joint effort of patients, doctors, health institutions and technology companies.

Keywords: Smart Healthcare, Information Technologies, Artificial Intelligence, Virtual



Study the Photonic Band Gap of 2-D Photonic Crystal

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Abstract:

Recently, the photonic crystals (PhCs) have provided a potential platform for a wide range of applications in numerous domains. A photonic crystal (PhC) is the optical analogy to a crystal lattice, where atoms or molecules are periodically arranged and the periodic potential introduces gaps into the energy band structure of the crystal. Similarly, PhCs are periodic structures, mostly composed of two different materials with high and low refractive index. The periodicity in refractive index results in a wavelength band at which no electromagnetic wave is allowed to propagate inside the PhC. This wavelength band is called as photonic

band gap (PBG). The understanding of the PBG characteristics and its manipulation has been exploited in designing of different optical components/devices in a wide range.

In this paper, the PBG of two compact PhC structures has been studied. The first structure is based on a square lattice whereas the second structure is based on a hexagonal lattice. Using numerical methods such as PWE method dispersion diagrams (PBG) of 2D-PhC structure investigated. The investigated result shows that hexagonal lattice-based structure is good in terms of photonic band gap with respect to square lattice-based structure. Wide PBG has many potential applications in designing PhC based optical devices and dispersion engineering.

Keywords: Photonic Crystal, Photonic Band Gap

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Ethical issues faced by students in E-learning during Pandemic Era

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Abstract:

This pandemic had effected the whole world in every aspect. Due to this pandemic the schooling habitat of almost all the students was changed. To stop the spread of Covid-19 the lockdown is imposed in many countries which have hampered the daily routine of many children, most of students started taking virtual classes. Digital learning have several advantages but there are many challenges faced by the higher education institutions to run the virtual classes. But the online study is important in this pandemic period to minimize the spread of virus among the population. In addition to this, it also help in tackling climate changes which was caused by the daily traffic. But on other hand the online learning is the biggest disadvantage for middle and high school students, as they need a one-on-one support which they only get in real classroom. Sometimes due to poor network connections students are not able to take part in conference. Beside all these issues the radiations form laptops, mobile phone cause a severe impact on mental and physical health of students, radiations cause some severe inflammations in eyes of students. And the physical activities is also decreasing among students, they are getting more and more addicted to technology, and this addiction cause many disease in children such as obesity, hypertension, diabetes. It also cause many psychological issues and effect the mindset of many students.

Keywords: Students, Pandemic, COVID-19, Virtual Classes, Lockdown.

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Effectiveness of Virtual Laboratories in terms of Achievement, Attitudes and Learning Environment among Students

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Abstract:

The virtual lab and the internet have the potential to provide a highly interactive and powerful learning environment for science disciplines. Many academic courses that teach science subjects have already begun incorporating virtual instruments as teaching and measuring tools for students use. Education has been integrated into the globalization process supported by technological advances such as e-learning. The sustainability of the universities is one of the key points of the universities survival and they strongly depend on the number of students that can enroll in them. Thus, many of the educational institutions have had to develop their curricular based on the used new technologies. Without doubt virtual laboratories are the latest technology in this regard. Practical laboratory courses are an essential part of science education. However, they can be costly and time-consuming. They also require physical presence of the teacher and the students and access to well-equipped laboratories, which can be hindered due to equipment cost or a pandemic lockdown, Virtual laboratories are digital tools that become very useful in these situations. Furthermore, research has shown that the technological aspect is not the only contributing factor for the design of effective virtual learning environments. In some cases, the technological design can even be inhibiting for cognitive learning processes if not optimally designed. However, it can be effectively said that Virtual laboratories, with all their advantages, are yet to be completely integrated into the technical education system. The concept is highly appreciated and accepted, although a complete transformation to virtual experiments is generally not encouraged. The coming years will witness larger number of institutes adopting virtual instruments.

Keywords: Virtual Lab, Internet, Globalization, Education, Technology, Digital Tool

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Virtual Laboratory: A Boon to the Science Education

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Abstract:

The engineering students understand the engineering concepts effectively when they conduct the experiments in the laboratory. Hence, laboratory is as important as theory; however, the ill-equipped laboratory facilities affect the students' learnability. The virtual laboratories may help the students overcome the problems faced by them in the conventional laboratory. In India, educational activities during the middle of the semester were affected due to lockdown related to COVID-19. However, the theory classes were conducted online, and educational institutions are finding it difficult to complete the laboratory experiments due to closure of

colleges for the students due to COVID-19 pandemic. Hence, we have conducted a faculty development programme for the engineering college faculty members on mechanical engineering virtual laboratories. Similarly, we have trained the mechanical engineering students on fluid mechanics virtual laboratory. We have taken feedback from the participants of these virtual laboratory training programme and analysed it. From the analysis we have observed that more than 90 per cent of the participants were happy about the virtual laboratory and they expressed that their learning process improved with virtual laboratory experiments. Also, they felt that the virtual laboratories can be used till the COVID-19 pandemic issues are solved. Since the vaccine for COVID-19 is not available yet, the virtual laboratories will help the mechanical engineering students to conduct the laboratory experiments for the academic year 2020–2021. The Science students understand the Science concepts effectively when they conduct the experiments in the laboratory. Hence, laboratory is as important as theory; however, the ill-equipped laboratory facilities affect the students' learnability. The virtual laboratories may help the students overcome the problems faced by them in the conventional laboratory. In India, educational activities during the middle of the semester were affected due to lockdown related to COVID-19. However, the theory classes were conducted online, and educational institutions are finding it difficult to complete the laboratory experiments due to closure of colleges for the students due to COVID-19 pandemic. Hence, we have conducted a faculty development programme for the Science faculty members on science virtual laboratories. Similarly, we have trained the Science students on fluid mechanics virtual laboratory. We have taken feedback from the participants of this virtual laboratory training programme and analyzed it. From the analysis we have observed that more than 90 per cent of the participants were happy about the virtual laboratory and they expressed that their learning process improved with virtual laboratory experiments. The virtual laboratories will help the Science students to conduct the laboratory experiments for the academic years.

Keywords: Science Students, Learning, Conventional Laboratory, Virtual Laboratory

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Advanced Strategies and New Opportunities in Digital Education

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Abstract:

Beyond the staggering on human life, COVID-19 has greatly disturbed access to education in India with 247 million primary and secondary school students out of school. So, the COVID-19 pandemic created a situation or in other words we can say that force the students to adopt online learning. The virus has brought new ways to learning; there was a sudden change from traditional education to online education. Working from home during COVID is the first initiative step which is directed towards at minimizing the spread of the virus.

Digital education system has a major impact on education of children and has also opened new opportunities for students as well as for teachers. Digital learning provides a new platform for education and also taught the new criteria of advanced strategies which can enhance the education system in a better way.

Benefits of online education or new opportunities:

- **Recorded Classes:** The teaching can be recorded and kept in the system for further references. The students can have easy access to the study material in the time they require.
- **Reduce travelling time:** A lot of time was saved by not travelling; moreover, the online education can be attended from anywhere as there is no geographical border.
- **Cost effective:** Cheap and affordable by middle class family also.
- **Accessible:** Online apps are available all the time. Whenever you want to study you can.
- **Increased student interaction:** Students can also solve their problems and clear their doubts easily.
- Online education is deeply routed in adequate planning and designs of instructions with several available theories and models.

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Role of Medical Science in Covid-19 Pandemic

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Abstract:

The recent novel Corona Virus disease (COVID-19) which was caused by severe acute Respiratory Syndrome Corona Virus 2 (SARS-CoV-2) has driven the world into the worst time due to its huge impost on life by affecting people around the world and has been considered as pandemic by WHO on 12 march 2020. Biomedical science has been an area which had potential to fight against the SARS-CoV-2 virus including COVID-19 survival, symptoms, protein surface composition and infection mechanism as being suggested by immunologist, epidemiologist and medical doctors. Various types of biomedical approaches which include new and old approaches has been evolved and tested. Several diagnostic tools that are available for detection includes isothermal nucleic acid amplification, CRISPR, immunochromatography but from all available tests reverse transcriptase PCR had been used mostly but available diagnostic tools had challenges with it like it is time consuming, limited in developing countries, had been tiresome, highly dependent on skilled person to use it, involves large, high throughout and automated equipment due to this it had risen the need for point of care devices, biosensors and chip based devices for onsite detection which are typically rapid, portable, cost effective, user friendly, eliminates need for storage units and incorporate portable power source which could help in rapid detection of active cases and could reduce testing load on central hospitals. Future impact of biomedical science for COVID- 19 includes use of nanotechnology, diagnostic therapy and monitoring and vaccine engineering.

Keywords: COVID-19, Diagnosis Tools, Biomedical Science, Pandemic.

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Role of Smart Digital Approaches to Combat Pandemic Outbreak

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Abstract:

A pandemic outbreak is an unexpected global outbreak of infectious diseases that significantly increases illness and death across a large geographic area and causes economic, social, and political disruption. To counteract pandemics, various health programs are establishing new routes for global health promotion. There is digital health technology, for example, that can be used to prevent pandemic situations. Artificial intelligence (AI), telehealth, surveillance systems, and sensor technology are all prevalent digital approaches.

Several worldwide governing bodies have promoted the creation and usage of digital applications to enhance in the awareness of the spread and trace of COVID-19: Australia's COVIDSafe; Singapore's Blue Trace; China's Alipay and WeChat; Germany's Corona-Warn; and Nepal's COVIRA, among others. In India, the Ministry of Electronics and Information Technology established Aarogya Setu, MyGov, and CoWin to track syndromic mapping and immunizations. These digital health technologies are mostly used for early detection, reporting, isolation, treatment, information exchange, remote consulting, and minimizing hospital overcrowding. Recent advancements and unique techniques have been shown to be effective in reducing the likelihood of an outbreak.

Keywords: Digital technology, Artificial Intelligence, Aarogya Setu, CoWin



Smart Health Care System and Advanced Technologies for Future Generation

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Abstract:

The development of information technology has contributed in smart healthcare system. Modern industrial technologies may include internet of things (IoT), cloud, 5G, artificial intelligence (AI), machine learning (ML), or blockchain. In now days, a part of research for the new industrial era is growing to improve healthcare services. Smart health care system checks a patient's health data through a medical decision support system. This system is available on very low-cost for the people of remote areas and they can use it to find out whether they have any health issue and can cure it accordingly by contacting nearby doctors and hospitals. In Health care sector due to technological developments, the method of treatment is also changed, from anesthetics and antibiotics to magnetic resonance imaging scanners and radiation therapy. Future

innovation techniques are going on to keep update healthcare, like new drugs and treatments, devices, support system for healthcare, etc. Human will remain one of the stable limitation's factors. Digital technology could help transform unsustainable healthcare systems into sustainable ones, it equalizes the relationship between doctors and patients, provide cheaper, faster and more effective solutions for diseases. These technologies are very helpful against diseases such as cancer, AIDS or Ebola. The new health care system can help to live healthier individuals in healthier communities.

Keywords: Health Care, Medicine, Technologies

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Physiochemical Properties of Sars Cov-2 in Proliferation of Covid-19

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Abstract:

The novel corona virus disease 2019 (Covid-19), caused by SARS-CoV-2, is a potential factor for fatal illness and a tremendous concern for global public health. Earlier studies shows that SARS CoV-2 and the corona virus (from a pangolin) in Malaysia has genetic similarity. The gene similarity between these two viruses in terms of spike (S), envelope (E), membrane (M) and nucleocapsid (N) is 100%, 98.6%, 97.9% and 90.7% respectively, suggesting the potential for pangolins to be the intermediate host. The SARS CoV-2 S protein is made up of 1,273 amino acids. The similarities and differences between SARS CoV-1 and SARS CoV-2 leads to easy understanding of the nature of SARS CoV-2. It is unusually stable but sensitive at its lipophilic membranes. Due to corona a challenging situation raised which was reported by epidemiologists, immunologists and medical doctors, including Covid-19's survival, symptoms, protein surface, composition and infection mechanisms. Mature technologies such as PCR and immuno-assays continue to provide reliable tests for the rapidly spreading disease. This information is also valuable for the formulation of vaccine, treatment and chemical disinfectants. This information helps in the control and inactivation of SARS CoV-2 with the help of different chemicals like ethanol (75%), 2-propanol (70%-100%), etc. These new approaches are beneficial in the diagnostic development of SARS CoV-2.

Keywords: Spike, envelope, membrane, nucleocapsid, PCR

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Role of *Spirulina* in Bioremediation of Heavy Metal Toxicity in Wastewater

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Abstract:

Among different remediation methods Phycoremediation could be an advantageous method using *Chlorella*, *Chlamydomonas*, *Nostoc* etc. *Spirulina*, long been consumed as food and forage, can be used in waste water bioremediation and heavy metal bio-absorption. Heavy metals (Pb, As, Hg, Cd, Zn, Cu and Cr) are continuously disposed in water in industries, sewage and agriculture. This is a serious problem on aquatic life, results in bioaccumulation and biomagnifications and can cause even death. This type of toxicity in aquatic organisms can induces stress condition (ROS), lead to structural and inherited damage. BGA and other small algal species have hyper-accumulative tendencies for heavy metals. *Spirulina* is one of such algae known for its internal antioxidant properties, and could be used in phyco-remediation and detoxification processes. Heavy metals are absorbed by the plasma membrane and entered in the cell. Amount of heavy metal absorbed and the number of polyphosphate bodies present in each algal cell show positive correlation. This review emphasizes on the use of *Spirulina* in bioremediation of heavy metal in water bodies and could be a good option for research in bioremediation.

Keywords: Phycoremediation, Biomagnifications, *Spirulina*, Detoxification, Heavy metal

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Molecular Recognition as Sustainability aspect in Science & Technology

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Abstract:

Chemistry plays attention and innovations in various fields like agricultural, medicinal, energy storage for economic growth. To achieve the sustainability, practices are being carried out in environmental chemistry, green chemistry, computational chemistry, sensors development, supramolecular chemistry, molecular imprinting etc. Molecular recognition and specific interactions are reliable and versatile routes for site-specific and well-oriented immobilization of functional biomolecules on surfaces. It uses non-covalent interaction as compared to covalent interactions with several advantages [Fig. 1]. Sensors have the ability to visualize the recognition phenomena and provide quantitative information on an analyte. However, developing chemical sensors that fully meet the requirements for practical application is still challenging. Recent technological innovations have allowed companies to reduce inefficiencies w.r.t. energy consumption, waste generation etc. and unit costs while meeting increasingly stringent environmental safety,

and health regulations. One sustainable approach is to incorporate green chemistry having the capability to design the chemical products and to reduce or eliminate the generation of hazardous substances.

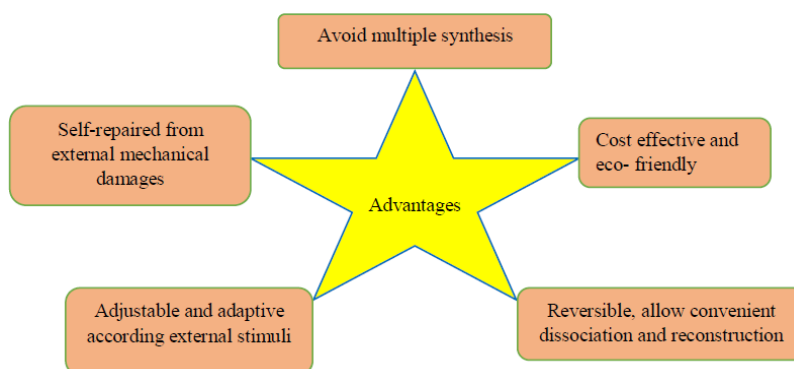


Fig.1: Advantages of non-covalent interactions over covalent interactions.

Molecular imprinting technology (MIT) is based upon the molecular lock and key concept model leads to create molecularly imprinted polymers (MIPs) with tailor-made binding sites complementary to the template molecules in shape, size and functional groups. A template, a functional monomer, a cross-linker and a polymerization initiator are required for MIP synthesis [Fig. 2]. Sensitivity and selectivity for the recognition of variety of analytes from small molecules to macromolecules combines MI with nanotechnology.

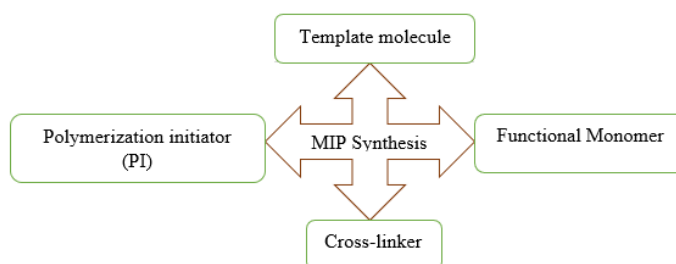


Fig. 2: Elements of Molecular Imprinting.

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Sustainable Methods for Treating Water Pollution

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Abstract :

Limnology is a branch of science that studies and categorises lakes and rivers. These are the one of the most important sources for studying ecological systems, chemical and biological relationships between processes, and aquatic species' interactions with organisms on land and in the air. All three ecosystems (land, air, and

water) are interconnected; some lakes are salty due to evaporation of groundwater inputs. It is also a key source for a variety of purposes such as irrigation, aquaculture, water supply, and even industry. The state of Rajasthan is water-scarce and partly desert, it is rich in traditional water wisdom that attempts to conserve every drop of water from the few rains that it receives during the year. This research study looks at the state of Rajasthan's water situation as well as some of its water traditions. It examines Rajasthan's main water difficulties and challenges and suggests appropriate solutions that can help the state become water self-sufficient, allowing it to fully exploit its water potential and focus on long-term development. This study examines the state's water policy. It recommends reforming the water sector by introducing improved technologies and techniques for maximum agriculture output, reviving traditional water gathering methods, raising awareness, and developing infrastructure through community. This article summarises key findings from earlier studies and discusses lake water management measures that have been implemented. The impact of environmental changes on physico-chemical parameters as, Dissolved oxygen, BOD, Alkalinity, Acidity and pH factor has been visually recreated.

Keywords: Water pollution, Alkalinity, Acidity, Water Management, Sustainable



Blockchain Technology: A New Way of Smart Health Care Systems

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Abstract:

Counterfeiting and piracy is a global problem of enormous scale, impacting virtually every industry sector around the world. India is no exception, suffering significant economic and health and safety consequences as a result of widespread counterfeiting, piracy and smuggling in the country. It is affecting both health and wealth. If we analyze the problem of counterfeiting, then it is seen that if we could somehow make supply chain transparent in such a way that each product can be traced from origin of raw material, from manufacturer, to distributor, to freight and transport, to customs and finally to the retailer, with each step along the way contributing data to a network that can prove the origin of the product, trace its ownership, and provide authentication then we must be able to reduce counterfeiting.

Block chain technology is based on storing data on distributed network, so that there will not any central authority to administer it and so we need not to rely upon a single entity. It provides decentralized storage of data, while preserving privacy, availability and secure sharing. It has changed the traditional supply chain method to a new robust, automated, secure, audible and transparent way. It ensures that the entire supply chain process is fool proof and prevents fake drugs from entering the system completely.

Keywords: Blockchain Technology, Counterfeiting, Authentication, Availability, Privacy



Smart Healthcare System and Advanced Technologies for Future Generation

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Abstract:

Smart health system is the self-directed, motivated, adaptive, resource- enriched. Cloud based healthcare service promote patients monitoring and good healthcare delivery which are important to the 21st century healthcare service. The advantages include good communication system in healthcare and technology improving healthcare in hospitals. While the disadvantages include Increased cost of the treatment of the patient, Lack of information of the patients. Smart healthcare consists of multiple several participants include doctor, patient, research institution and hospitals. Certain research can definitely improve the direction of patients healthcare system. Providing an affordable, efficient, secure and reliable healthcare in term of computer and medical service. The advantages include saves time, better learning techniques. While the disadvantages include technology reduces the creative talent of people, Technology cause environmental problems. The future of healthcare include technology seamlessly combines data on a patient medical history, insurance coverage, real-time health, financial information all to support provider decision making, improve patient health and reduce cost. The benefits of technology in healthcare is improve care coordination, population health management, patient education. Smart application that incorporate data-driven, actionable insight into the use experience.

Keywords: Smart, Healthcare, Monitoring, Communication, Affordable.

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Development of Biodegradable Plastics for Promoting Sustainable Life

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Abstract:

Biodegradable plastics are a revolution for the next generation where unique feature of biodegradability make them more compatible as compared to conventional plastics. The demand for sustainable and eco-friendly products has improved due to threatening issues such as global warming and environmental degradation. To overcome these issues, biodegradable plastics are considered as a sustainable and healthy solution. They do not cause any type of pollution in the environment. Biodegradable plastics are destructible products and used in the food service, catering sectors etc. as a packaging material because they do not cause any negative impact on food materials stored in them. Their significance has been recognized by many commercial industries & institutions and has initiated the synthesis of these eco-friendly products. These materials possess poor mechanical properties so they are mixed with other polymers to increase their

qualities. Many scientists and researchers are focusing and working in this sector for the synthesis of these sustainable alternatives to increase their quality and economic viability so that these materials can be used by the people more effectively in their daily life.

Keywords: Biodegradable plastics, Eco-friendly, Sustainable alternative, Biodegradability, Economic viability

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Smart Healthcare Systems and Advance Technologies for Future Generation

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Abstract:

Modern industry employs technologies for automation that may include Internet of Things (IoT), Cloud and/or Fog Computing, 5G as well as Artificial Intelligence (AI), Machine Learning (ML), or Blockchain. Currently, a part of research for the new industrial era is in the direction of improving healthcare services. This work throws light on some of the major challenges in providing affordable, efficient, secure and reliable healthcare from the viewpoint of computer and medical sciences. We describe a vision of how a holistic model can fulfill the growing demands of healthcare industry, and explain a conceptual model that can provide a complete solution for these increasing demands. In our model, we elucidate the components and their interaction at different levels, leveraging state-of-the art technologies in IoT, Fog computing, AI, ML and Blockchain. We finally describe current trends in this field and propose future directions to explore emerging paradigms and technologies on evolution of healthcare leveraging next generation computing systems.

Keywords: Healthcare, Internet of Things, Fog Computing, Cloud computing and Artificial Intelligence

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Ethical issues and Challenges in Work from Home Culture in Education System

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Abstract:

Due to COVID-19 pandemic disease, almost all sectorial activities around the world has been affected. Higher education institutions are one of the sectors in which most activities are affected since conducting face-to-face class and activities would require physical interactions. Once it is recognized that the virus is transmitted by

direct contact and surfaces in the immediate environment with infected person or with objects used by the infected person higher institutions are forced to suspend face-to-face classes. Consequently, most of higher institutions have rushed to remote teaching and online classes. This does however create unprecedented challenges in terms of getting used the technologies and in accessing essential facilities. Since there were no clear policy and guidelines in most of higher institutions on online teaching, several questions such as what to teach, how to teach, what should be the duties of the teacher and the student, the workload of the teacher, the teaching environment, and the implications for education equity, etc., were not clear. Problems such as the infrastructure, teachers' and students' experience on online teaching, the change on working time due to COVID-19 for some part-time teachers, and the inconvenience of working at home are additional challenges of remote teaching. The existing and inherent remote teaching problems superimposed with the current and unprecedented problems, i.e., unavailability of policies, guidelines, enough infrastructure and experiences of teachers and students make the challenge more difficult. The other challenge related to COVID-19 is assessing students remotely. The objectives of assessment are directly linked with the achievement of the learning outcomes both by supporting the learning process and measuring the degree of learning.

Uninterrupted education relies on the availability of and access to digital infrastructure including the Internet, laptops and phones. While students in urban colleges tend to have better access than those in rural colleges, inequalities across class and gender still impact who can and can't use these tools. What's more, access issues are further compounded by other constraints such as unreliable electricity supplies, home environments and study spaces, etc. Resuming in-person learning has been delayed multiple times since the start of the pandemic as the government continues to respond to multiple waves of Covid-19 and as immunization efforts continue. The grading system and the logistics of conducting examinations for students finishing their higher education has been considered multiple times, but this unprecedented situation has delayed the process in formalizing a country-wide procedure for allowing students to take their final exams. Consequently, many students haven't officially completed their high school curriculum and have lost time as they seek to pursue higher education. Education for children orphaned in Covid-19. Though Covid-19 has disrupted the education ecosystem, we can look at this moment as an opportunity for change. If public and private sector organizations work together with the government of India to adopt new ways of teaching and learning and ensure that all students have access to the related tools and infrastructure, India will empower future generations for better education and fulfilling lives.

Some suggestions for improvement of e-learning are-

Learning efficiency is usually assessed by the amount of money, time, and resources required to achieve desired objectives. This indicates that if there are fewer costs and time commitments, the learning process will be improved. The goal here is to come up with a strategy that will boost both production and efficiency. To have a good impact on the overall manner of learning, this strategy should be applied to every component of online education: curriculum, theory, practise, teaching, administration, technology, and institutional culture. Most online courses lack result-oriented evaluations, which means that if a student does not do well, they will have to repeat the course and go over the same material again, likely with identical results. This cycle can be interrupted with the use of result-based assessments. As digital videos are so popular, including them into the E-Learning process would give education a versatile and convenient twist. Videos, as a result, should never be disregarded as a valuable resource for teachers, students, and educational institutions. In this age of networking, courses should make use of social media channels, e- mails, student chat groups, and other means of communication to allow students to communicate with their classmates and lecturers. Students' involvement rises as they are able to debate course-related issues, ask questions, and even compare their assessment scores, which fosters a healthy competitive spirit and helps them perform better every time.

Ethical issues and Challenges in Work from Home

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Abstract:

Communications technology has opened the door for employees to work from almost anywhere, specially from home. Work from home policy is a mutual understanding between employer and employee and it explain the expectations and responsibilities for employees who work from home. It is an indication of trust and shows that the employer care about their employees' health and happiness. This policy is beneficial for an organization as it develops trust and makes an emotional bond between employer and employee that enables engagement and foster more productivity. This policy restricts absenteeism in employees. When employees feel sick, they are less likely to spread illness to the rest of the team ultimately results in a healthy and more productive team. It can provide valuable time for person to spend with healthy family lives, social lives, passion, projects and hobbies. But there are some potential challenges are also associated with this freedom. Our bodies release the feel-good chemicals oxytocin and serotonin when we see people we care about like friends, co-workers, and family members. The main cause of depressed mood is loneliness. An office environment gives employees a sense of identity and connection with company and its values. There should be a policy to ensure the productivity during work from home. It should include regular working hours, create attendance and availability standards, and provide IT support. "Work from home" doesn't mean "forgot connection and work", we have to stay connected with each other even if we aren't in a physical office environment.

Keywords: Work from home, Employees, Employer

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Opportunity and Challenges in Biomedical Science- New Horizon due to Covid- 19

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Abstract:

COVID-19 pandemic caused severe acute respiratory syndrome coronavirus 2 (COVID-19) which has resulted in health and economic crisis all over the world. It is posing great threats to public health, economic and social stability but simultaneously given us a new vision and opportunity to tackle this new world of pandemic. Opportunity has been coming in biomedical science like to work in collaboration instead of competing each other and the result of this collaboration is preparation of vaccines within 1 year and many clinical trials in the context of covid 19 reshaping research and development of biomedical science. Hundreds of universities and non-profits organization came together to produce large scale personal

protective equipment from face shield to mask and biosafety suits, use of fabricated hand free openers, disinfectants, air filter, robots' wireless sensors to detect covid 19 symptoms etc. Telemedicine a new emerging field in this new normal world to get the health care while practicing social distancing. This telemedicine also reduces wait time and number of visits to clinic. Digitalization has broadened the horizon of new possibilities in the life science sector. Another possibility is the use of nanobiotechnology, which have potential utility for both therapeutic and diagnosis interference to combat covid in the form of antiviral agents against respiratory disease. The management of solid biomedical wastes (infected mask, gloves, waste from isolation ward, quarantine center and other protective equipment's) was a challenge. So appropriate identification, collection and final disposal of this waste become the part of effective management.

Keyword: Collaboration, telemedicine, digitalization, nanobodies, alternative.

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National Education Policy: New Opportunities in Higher Education

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Abstract:

In order to achieve the full potential of the human race, education is essential to the development of a just and equitable society and to the promotion of national development. The whole world is experiencing rapid changes in the information space. In this context, the new education policy was approved by our government in July 2020; after a 34-year gap, by bringing about changes in the national education system. The new education policy aims to make the learning process more efficient by developing students' thinking and creativity. The new education policy includes a few changes at the school level and higher education. The previous education system focused on learning and delivering results. The education policy envisages the creation of a new curriculum and an education structure that will assist students in their various stages of learning. Transformation must be made to the existing education system to make education accessible to all, from urban to rural areas. It will be about achieving sustainability by achieving goal 4- Quality Education. The main motivation is to educate the child and to become proficient. In this way, students are able to discover their purpose, and their abilities. Students will be provided with integrated reading which means they have knowledge of all the disciplines. The same thing applies with higher education. The objective of the policy is to construct the overall personality of students by strengthening infrastructure for open and distance learning, online education and increasing the use of technology in education.

Keywords: Education policy, national education system

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Ethical issues and Challenges in Work from Home in Education System

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Abstract:

Teaching at a distance may cause some ethical issues when distance teaching is also online teaching, the situation is even more complex. Online teaching environments amplify the ethical issues forced by instructors and the students. Online sites support complex, discourses and multiple relationships; they cross physical, cultural and linguistic boundaries. Data of various kinds are automatically recorded in a relatively permanent form. The lack of a deliberate design in remote work and work flow has called problems throughout schools and resulted in knowledge fragmentation, loneliness, though mediated by control of times, remains a major problem beyond supervision. This has surged the problem of "work from home productivity challenges" for the student. Students are not trained to schedule their own time table, and they definitely don't have the discipline to avoid all the distractions present in their home. The mismanagement of timing has affected the performance of employees, which ultimately reduced their productivity. Some students may take continuous breaks resulting in less study time and this also go unmonitored. Whereas in workplace, one is constantly, reminded to be on the right track and perform efficiently and effectively, which is impossible with remote system. This can turn into a disadvantage for some students as some student can't track their time and unable to differentiate between work-life and home-life. This might lead to working longer than one should, thus; resulting in "Work Burnout".

Keywords: Ethical Issues, Work from Home, Studies



National Education Policy: New Opportunities in Higher Education

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Abstract:

As we all are awarded about the COVID-19 pandemic era, many drastic changes have been seen in every sector of our life, but this pandemic mostly effected our education system of India, whether it is school education system or higher education system both are affected simultaneously. To recover and make a education system which consist of more practical knowledge, government of India has announced "The New Education Policy" (NEP 2020). This spreaded a fresh new amidst all the negative surroundings in the world due to the challenges posed by COVID-19 pandemic. The announcement of NEP 2020 was purely unexpected by many scholars and educationist also. The changes NEP 2020 has recommended were something that many educationist never saw coming. Since our teaching system has been influenced by new education policy announced by Indian government but this articles mainly emphasis on the impact of NEP 2020 on higher education only.

Keywords: New education policy, higher education, covid-19.



Sustainable Development in Science and Technology New Opportunities and Challenges

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Abstract:

The term “sustainable development” first came to fame in the World Conservation Strategy (WCS) in 1980. The development meets needs of present without compromising the ability of the future generations to meet their own needs. Sustainable development protects resource technology, provide basic human needs, agricultural necessity, accommodate city development, control climate change, sustain biodiversity. Science and technology are fundamental to the intelligent management and use of natural resources and economic development as they are engines of modern societies i.e. essential to sustainability. Science and technology equip us to find solution by creating knowledge to today's acute economic, social and environmental challenges and in achieving sustainable development and greener societies and also involve ethical choices. There are some challenges which threaten progress towards sustainable development goals and they are: the spike in food and energy in 2008 led to a severe food crisis. Growth rates are falling, unemployment is rising, poverty is deepening, hunger and malnutrition are increasing again. The new opportunities of sustainable development are-It helps in sustainable management of means and resources. It helps to ensure a bright future. It focuses on the environment conservation, acquisition, mobilization.

Keywords: Sustainable Development, Environmental, Malnutrition, Acquisition



Invitro effect of Plant Extracts on Mycelium Growth Inhibition of selected Phytopathogens

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Abstract:

Indian plants have been reported to possess properties related to crop protection against several pathogens which has drawn the attention of several pharmacological researches. These plants especially with medicinal properties are known to have strong antifungal potential. The primary objective of this research was to study the in-vitro effect of four Indian medicinal plants known to have an antifungal mechanism with ethanol solvent. The study was focused on the effect of different plants with organic solvent (ethanol) against isolated phytopathogens from an infected medicinal plant. Four medicinal plants with antifungal properties included *Catharanthus roseus*, *Calotropis procera*, *Ocimum sanctum*, and *Nerium indicum*. Leaf extract of the selected plants was tested against *Alternaria alternata* and *Fusarium oxysporum* by disc diffusion method. The leaf extract of *Calotropis procera* showed a significant difference compared to other tested medicinal plants against *A. alternata*. However, for *F. oxysporum*, *N. indicum* showed maximum mycelium

growth inhibition compared to other tested medicinal plant extracts. Our findings showed neutral to positive effect of all tested Indian medicinal plants against the two phytopathogens for fungicidal properties. This research could be highly beneficial for crop protection and the agriculture sector which is the prime source of economy and employment worldwide.

Keywords: Antifungal, phytopathogens, plant extracts.

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National Education Policy: New opportunities in Higher Education

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Abstract:

Well defined and futuristic education policy is essential for a country at school and college levels due to the reason that education leads to economic and social progress. Different countries adopt different education systems by considering the tradition and culture and adopt different stages during their life cycle at school and college education levels to make it effective. Recently Government of India announced its new Education policy which is based on the recommendations by an expert committee headed by Dr. Kasturirangan, Former chairman of the Indian Space Research Organization (ISRO). This paper highlights on various policies announced in the higher education system and compare them with the currently adopted system. Various innovations and predicted implications of NEP 2020 on the Indian higher education system along with its merits are discussed. Finally, some suggestions are proposed for its effective implementation towards achieving its objectives.

Keywords: Higher Education, National Education Policy Overview & Analysis

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Smart Health Care System to Combat Viral Diseases

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Abstract:

Infectious viral diseases are never-ending challenges that can emerge or re-emerge in unpredictable regions and at unpredictable times. Various viruses such as acute respiratory syndrome-related coronavirus (SARS-CoV), Middle East respiratory syndrome coronavirus (MERS-CoV), human coronavirus (229E, OC43, HUK1, NL63), bird influenza A (H7N9), and Ebola are newly released. MERS-CoV is an example of a virus that occurs in. It has been developed in various times. To effectively prevent and control the emerging viral diseases, we should

make efforts to explore the identification of the unknown virus species in nature and prepare in advance. From recent years, it can be seen that some new viruses emanate from formerly present viruses by mutating themselves into a new variant, which leads to a new disease. Sometimes there are some undiscovered viruses already present inside or outside the human body which can lead to a new deadly disease after encountering their favorable condition. After being discovered, we have to look over the new viruses that how dreadful they can be depending upon how and which part of the body is been affected by the virus. So, in order to challenge the virus, we have to create along with personal behavioral changes, such as washing hands and wearing masks, persist beyond strict blockades, and help control the wave of infection. The ability to stop any pandemic in the future depends on the related country, state, or individual economy. In order to stop the pandemic, we must have the economical back for preparation and fighting with the virus using necessary preventions. Smart healthcare is defined by the technology that leads to better diagnostic tools, better treatment for patients, and devices that improve the quality of life for everyone. For building a strong smart healthcare system, we have to flourish some healthcare schemes like “AAGANWADI”, sophisticatedly and more convenient.

Key words: SARS-CoV, Healthcare, Viral Diseases, Pandemic



Development of Smart Health Care System for Behavior Monitoring of Remote Patient Durnig Covid-19

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Abstract:

Covid-19 is infection that has become a global pandemic due to the speed spreading off in whole world. An increase numbers of patient that are infected by this disease cause the problem to fully care in hospital and trouble many doctors and nurses inside the hospitals. A smart health system that monitors the infected patients holding the covid-19 remotely. To protect the lives of the health services members (like doctors and nurses) form coronavirus. A remote smart home health care system (ShHeS) is advised for monitoring patients' health status and receiving doctors' prescriptions while staying at home. This smart system notices the people with this infection based on putting many sensors to record many features of their patients in every second. For automatic capturing of physiological health parameters including measuring the patient's temperature, respiratory rate, pulse rate, blood pressure and time sensors are incorporated in the system. It suggests using artificial intelligence and Internet-of-things (IOT) to make remotely quarantine and develop decisions in various situations. In android mobiles special application are installed that combine with web-based application for efficient patients- doctors dule real-time communication. The main significant contribution of this technology is that patients in self-quarantine or self-isolation can use the system and able to send the data of daily health symptoms and challenges to doctors by mobile phones.

Keywords: Internet-of-Things, Smart Health, COVID –19, Artificial Intelligence, Quarantine



National Education Policy: New Opportunities in Higher Education

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Abstract:

The national education policy 2020 launched on 29 July 2020. What we know today is that higher education, both domestically and internationally, has been disrupted. A higher education allows you to pursue a career that interest and inspire you. When you have the freedom to choose your career, you're more likely to enjoy it. Higher job satisfaction also comes from higher income, better employment benefits, and more advancement opportunities. Those who get an education have higher incomes, have more opportunities in their lives, and tend to be healthier. Societies benefit as well. Societies with high rates of education completion have lower crime, better overall health, and civic involvement. Higher education improves your emotional intelligence. You become a better person—more like understanding, kind, self-sufficient, love yourself before anyone else, yet self-less so, that is how education makes life better the earth becomes a better place to live because of more educated people implementing their learnings. Education can stimulate economic growth less directly, by increasing innovations, productivity, and humans' capital. Education also has a history of fostering positive social change, by encouraging things like political participation, social equality, and environmental sustainability. Education brings an initiate change in the pattern of social relationships. Education empowers the individual. It is a process which enables every individual to effectively participate in the individual to effectively participate in the activities of society and to make positive contribution to the progress of society.

Keywords: Education Policy, Higher Job, Higher Education, Environmental Sustainability



Challenges in Biomedical Science after Covid-19

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Abstract:

A pandemic Coronavirus Infectious Disease (COVID- 19) resulting from Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) appeared at the end of 2019, resulting in a remarkable illness and economic depression in whole world. Safe therapies, monitoring, quick solutions are needed for effective access for inhibition. In the whole world researches have been conducted to resist COVID-19 and created nearly instantaneous changes in the research environment. Biomedical science presented a feasible field for fighting against the SARS-CoV-2 virus because of the unusual difficulties caused due to illness with laboratories and clinical research groups worldwide working furiously to understand the science of SARS-

CoV-2 and to develop diagnostics tests and medicines, including COVID-19's survival period, surface protein composition, and mechanisms of infection. The scientific challenges were also daunting, as the biology and pathophysiology of SARS-CoV-2 and COVID-19 were not well understood also closure of many laboratories, confined or loss of connection to machinery and facilities, technical and scientific conferences cancellation, disruption in supply chain and problems to acquire new equipment, retard or uncertain career prospects and graduation schedules and career for new trainees and early career scientists and inefficient work patterns. This pressure is possible to persist for many more months or longer.

Keywords: COVID-19, Biomedical Science, Challenges

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Impact of Digital Learning Strategy among the Learners

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Abstract:

After Covid-19 education institutions started adopting the technologies in teaching, gradually it brings new results and challenges to the learners and teachers. Through the First Generation cloud meeting software changed the learning environment; however it has created trust among the learners, educators and social reformers but miles to go yet. Second generation teaching app and hardwares has entered the market and we hope after third generation tools and application will makes our dream come true. We should digitally educate our neighbors, friends, students and teachers for enlighten their lives through the AIML based Gadgets and apps. Our motto to bring the awareness among the traditional educators so that to spread the quality education at an affordable cost. *The Digital Learning Strategy (DLS)* is designed to help you build a blueprint for your enterprise that is flexible, personalized, and scalable, and that leverages transformative technologies. Through hands-on maker space activities and under the guidance of industry experts, you will explore AIML and robotics technologies firsthand, giving you the knowledge to begin using them immediately in your digital learning strategy. Our DLS system shall overcome the hurdles in our education system within coming five year and our generation will be benefitted a lot.

Keyword: AIML, Third Generation Teaching Apps or Application, DLS and Technology

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Putative Anti Covid Drug

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Abstract:

Chemistry plays a pivotal role in biomedical sciences. The isolation of some important natural products like Quinones and Naphthol have plentiful uses in antitumor, trypanocidal, molluscidal, leishmanicidal and anti inflammatory activities. The isolation of naphthol and anthraquinone is from the species of *markhmania*, *tecomella*, *heterophragma*, *kigelia* of the Bignonaceae family, thus designating that quinones may be a characteristic feature of this family. Biogenetically related Quinones that have characteristics described above are naphthoquinones, anthraquinones and deoxylapachols. The most isolated product lapachol is a chemical marker of the family Bignonaceae.

The structural properties of these compounds furnish them with some marvellous biological oxidative processes. The biological cycle is initiated by the reduction of quinones by an electron leading to the formation of semiquinones. The product formed reacts discernibly with molecular oxygen consequently generating free radicals. Due to innocuous nature of lapachols, they are still preponderating in South American countries as an antitumor agent. In addition to its use as an antimalarial drug, Quinones could be used for the treatment of Covid convalescents.

Keywords: Covid-19, antimalarial, anthraquinones, bignonaceae.

References:

1. Vivek Krishna; Poonam Khandelwal; Neetu Koolwal; M.C.Sharma; Pahup Singh; J. Indian Chem. Soc.;Vol.2012.
2. Poonam Khandelwal and Pahup Singh; J.Indian Chem. Soc.;85;2008.
3. Poonam Khandelwal and Neetu Khandelwal; Synthetic Communication; online; 2017.

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Fortuity and Remonstrance of Covid-19 in Biomedical Science

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Abstract:

The coronavirus infectious disease (Covid-19) was caused by the severe acute respiratory syndrome coronavirus 2 (SARS Cov-2).

One key aspect, compared to the other recent pandemic is the level of urgency. Research across the world has been directed to fight against COVID-19. Biomedical science has been presented as a possible area for combating the SARS-COV 2 virus due to unique challenges raised by the epidemiologists, immunologists and medical doctors including Covid 19's survival symptoms, protein surface composition and infection mechanism. Here we review the current status, future perspectives of biomedical science in context of COVID-19, including nanotechnology, prevention through vaccine engineering, diagnostic, monitoring and therapy.

The researchers focused on following agenda's-

1. Natural history of SARS-cov-2.
2. Prevention, mitigation and intervention strategies.
3. Transmission of SARS-cov-2.
4. Social, behavioral and communication science

The concern related to Covid-19 spread and management assessing the situation regarding effectiveness of preventing Bio Medical Waste (BMW).

Management during the pandemic including existing infrastructures, capacity utilisation, policy guidelines, operation practices and waste handler aspects.

Keywords: Clinical trials, Nanomedicine, COVID-19.

References:

1. Camilo zamora-Ledezma et al.; *Molecules*;25(20);2020
2. M.Goswami...SP; *Heliyon*; 7(3); 2020.

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E- Learning Systems in Virtual Environment

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Abstract :

Practical experience is an important component of the educational process. However, the time and economical resources often required for the setting up and construction of Scientific laboratories is outside the scope of many institutions. A solution of this problem could be found in the adaptation of the virtual Reality technology, which could allow the creation of Virtual Laboratories, which will simulate the processes and actions that could take place in real laboratories. In particular, this paper, based on the expertise and motivation and motivation gained by the VirRAD-IST project, proposes and describes such an educational virtual laboratory, which aims to meet the requirements of a real laboratory and furthermore to support communication and collaboration services. We propose a web-based system, which allows users to perform experiments on educational fields, such as Physics or Chemistry in 3D multiusers worlds where users are represented by avatars and they are offered a wide range of communication and collaboration services in order to simulate efficiently a real learning experimental process.

Keywords : Distance learning, Virtual reality, Multi-user virtual environments, Virtual Laboratories, Educational Virtual Environments

References:

1. <https://www.researchgate.net>
2. Global Engineering Education Conference (EDUCON), 2013 IEEE
3. CUC 2004, 6th CARNet Users Conference
4. C.Bouras, M.Paraskeuas, Educational Information Society in Greece: The Greek School Network, IADIS International Conference e- SOCIETY, Lisbon, Portugal, June 2003, pp. 179-186

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Day- 2

Emerging Technologies in Nursing and Pharmacy to Recreate Education after COVID-19

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- Richa Agarwal

Programme Schedule

Date: Dec. 15, 2021; Wednesday (Day-2)

Theme: Emerging Technologies in Nursing and Pharmacy to Recreate Education after COVID-19

Standard Time IST	Schedule
Inaugural Session, 09:00 AM-10:00 AM IST (12:30-13:30 JST) Moderator: Ms. Rumana Ali	
09.00 AM-09.05 AM	Lighting of the Lamp
09.05 AM-09.20 AM	Welcome address by BICON-2021 Organizing Chair Dr. Manish Biyani Director (Research & Development), Biyani Group of Colleges, INDIA Professor (Research), JAIST, JAPAN
09.20 AM-09.25 AM	About the BICON-2021 Day-2 Theme by Convener Ms. Jishu B. George Vice Principal, Biyani Nursing College, India
09.25 AM-09.40 AM	Inaugural Address by Chief Guest Dr. Shirbhan Singh Mudgal Deputy Registrar, Rajasthan University of Health Sciences, INDIA
09.40 AM-09.55 AM	Address by Guest of Honor Dr. Yogesh Yadav Registrar, Maharaja Vinayak Global University, Rajasthan, INDIA
09.55 AM-10.00 AM	Vote of Thanks and Group Photo by Ms. Taravati Chaudhary Principal, Biyani Nursing College, INDIA
Special Session, 10:00 AM-11:00 AM IST (13:30-14:30 JST) Introduction of Toyama Prefectural University Chair: Dr. Manish Biyani	
10.00 AM-10.10 AM 13:30-13:40 JST	Prof. Kaori Yasuda , Toyama Prefectural University, JAPAN Title: Introduction of Toyama Prefectural University
10.10 AM-10.20 AM 13:40-13:50 JST	Prof. Toshiyuki Sakaki , Toyama Prefectural University, JAPAN Title: Production of Drug Metabolites using Genetically Engineered Yeast Cells Expressing Human Drug-Metabolizing Enzymes
10.20 AM-10.30 AM 13:50-14:00 JST	Prof. Yasuhiro Isogai , Toyama Prefectural University, JAPAN Title: Production of Single-Chain Variable Fragment Antibodies with the use of Diving-Mammal Myoglobins as a Fusion Tag
10.30 AM-10.40 AM 14:00-14:10 JST	Prof. Kaori Yasuda , Toyama Prefectural University, JAPAN Title: Development of Vitamin D3 and its Analogs for Prevention and Treatment of Osteoporosis and Cancer
10.40 AM-10.50 AM 14:10-14:20 JST [Young Researcher talk]	Ms. Satoko Kise , Toyama Prefectural University, JAPAN Title: The Possibility of the Gene Therapy for Rickets Type II Alopecia
10.50 AM-11.00 AM 14:20-14:30 JST [Young Researcher talk]	Ms. Vanshita Sharma , Toyama Prefectural University, JAPAN Title: A beginning of new research journey in TPU-Japan from BiyaniCollege-India.

Recreating Higher Education in the Post-Pandemic World

11:00 AM-11:10 AM 14:30-14:40 JST	Q&A, Session closing remarks and Group Photo
Break 05 min	
Technical Session – I , 11:15 AM-11:55 PM IST (14:45-15:25 JST) <i>Proper Nutrition, Regular Yoga and Exercise to Improve the Physical and Mental Health</i> Chair: Ms. Jishu B. George	
11.15 AM-11.30 AM 11:45 PM-12:00 AM (Dec 14) Local time in Texas	Prof. Jackie Michael , Clinical Asst. Professor, University of Texas, USA Title: <i>Health Transformation in the Post-Covid Era: Health Promotion and Resilience for Nurses</i>
11.30 AM-11:45 AM	Dr. Satish Kumar Avasthi , Principal, Institute of Medical Tech. & Nursing Education, Rajasthan, INDIA Title: <i>Yoga and Exercise to Improve the Physical and Mental Health</i>
11.45 AM-11:55 AM	Q&A, Session closing remarks and Group Photo
Technical Session – II , 11:55 AM-12:35 PM IST (15:25-16:05 JST) <i>Healthcare Transformation in the Post-COVID-19 Pandemic</i> Chair: Dr. Pawan Patodiya	
11.55 AM-12:10 PM	Dr. Bhuvnesh Shukla , Principal, Govt. Nursing College, Punjab, INDIA Title: <i>Health Preparedness for Health Care Transformation in the Post-Covid 19 Pandemic</i>
12.10 PM-12:25 PM	Dr. Shabina Parveen , Senior Educator, Narayana Multispecialty Hospital, Rajasthan, INDIA Title: <i>Awareness Regarding Health Care Transformation Among People in Post Covid-19</i>
12.25 PM-12:35 AM	Q&A, Session closing remarks and Group Photo
Technical Session – III , 12:35 PM-01:15 PM IST (16:05-16:45 JST) <i>Barriers and Facilitators to Online Nursing & Pharmacy Education</i> Chair: Ms. Remya Renjan	
12.35 PM-12:50 PM	Prof. (Dr.) Peekesh Kumar , Vice Principal, Metro College of Nursing, Uttar Pradesh, INDIA Title: <i>Barriers and Facilitator to Online Nursing Education</i>
12.50 PM-01:05 PM	Dr. Umakant Gupta , MD-General Medicine, MBBS Consultant Physician at Narmada Hospital and Diagnostic Centre, Rajasthan, INDIA Title: <i>Challenges Faced in Online Learning</i>
01.05 PM-01:15 PM	Q&A, Session closing remarks and Group Photo
Lunch Break 20 min	
Technical Session – IV , 01:35 PM-02:15 PM IST (17:05-17:45 JST) <i>Digital Health in Pharmacy Education: Global Showcase of Initiatives from Pharmacy Institutions</i> Chair: Dr. S.S. Pancholi	
01.35 PM-01:50 PM	Dr. Vivekanand Kisan Chatap , Asst. Professor, Department of Pharmaceutics, H.R. Patel Institute of Pharmaceutical Education and Research, Maharashtra,

Recreating Higher Education in the Post-Pandemic World

	INDIA Title: Artificial Intelligence: Recent applications in Pharmaceutical Industries
01.50 PM-02:05 PM	Dr. Pramod Kumar , Asst. Professor, National Institute of Pharmaceutical Education and Research, Assam, INDIA Title: Digital Health in Pharmacy Education: Global Showcase of Initiatives from Pharmacy Institutions
02.05 PM-02:15 PM	Q&A, Session closing remarks and Group Photo
Technical Session – V , 02:15 PM-02:55 PM IST (17:45-18:25 JST) Information and Communication Technology (ICT) Tolls for Pharmacy Education: Challenges and Opportunities of Global Emergencies -The New Normal Chair: Dr. Charanjeet Singh	
02.15 PM-02:30 PM	Prof. (Dr.) Dharmendra Ahuja , Professor & Director, Faculty of Pharmaceutical Science, Jayoti Vidyapeeth Women's University, Rajasthan, INDIA Title: Virtual Pharmacology Experimentation
02.30 PM-02:45 PM	Dr. Kratika Daniel , Associate Professor, Faculty of Pharmacy, Oriental University, Madhya Pradesh, INDIA Title: ICT tools: Used for Drug Designing
02.45 PM-02:55 PM	Q&A, Session closing remarks and Group Photo
Technical Session – VI , 02:55 PM-3:35 PM IST (18:25-19:05 JST) Challenges and Opportunities for Pharmacy Education in Post Pandemic era Chair: Ms. Richa Agarwal	
02.55 PM-03:10 PM	Dr. Rahul Shukla , Assistant Professor, National Institute of Pharmaceutical Education and Research, Uttar Pradesh, INDIA Title: Education in Pharmacy in the Post-Pandemic Era
03.10 PM-03:25 PM	Dr. Shekhar Verma , Professor and Principal, Pt Deendayal Upadhyay Memorial Health Sciences and Ayush University of Chhattisgarh, INDIA. Title: Challenges and Opportunities in Pharmacy Education
03.25 PM-03:35 PM	Q&A, Session closing remarks and Group Photo
Break 10 min	
Virtual Oral Presentations , 03:45 PM-04:15 PM IST (19:15-19:45 JST) Chair: Dr. Tarun K. Kumawat	
03:45 PM -04:15 PM	Oral Presentations
04:15 PM -04:25 PM	Award Ceremony
04:25 PM -04:30 PM	Closing Remarks and Group Photo Dr. Charanjeet Singh Principal Biyani Institute of Pharmaceutical Sciences, INDIA

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INVITED LECTURE-1

Production of drug metabolites using genetically engineered yeast cells expressing human drug-metabolizing enzymes



Toshiyuki Sakaki

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Research Interest:

- Structure-function analysis and application of cytochrome P450
- Metabolism and molecular mechanism of vitamin D and its analogues
- Drug metabolism
- Metabolism of food factors

Education & Professional Career:

1980 M.A. from Department of Biophysics, Graduate School of Science, Kyoto University

1980-1994 Takarazuka Research Center, Sumitomo Chemical Co. Ltd.

1986 Ph.D. from Kyoto University

1994-1996 Research Center, Sumitomo Pharmaceutical Co. Ltd.

1997-2004 Associate Professor of Department of Food Science and Technology, Graduate School of Agriculture, Kyoto University

2004-2016 Professor of Department of Biotechnology, Faculty of Engineering, Toyama Prefectural University

2017-2020 Professor of Department of Pharmaceutical Engineering, Faculty of Engineering, Toyama Prefectural University

2021 to date Professor Emeritus of Toyama Prefectural University

Major Publications:

1. Yasuda K. *et al.*, *J Biol Chem* 296, 100668 (2021)
2. Nishikawa M *et al.*, *Sci Rep* 10(1):5677 (2020)

3. Nishikawa M. *et al*, Appl Microbiol Biotechnol 102, 723-732 (2018)
4. Ikushiro S. *et al.*, Mol Pharmaceut (2016)13, 2074-2082
5. Munetsuna E. *et al*, Mol Cell Endocrinol 382, 960-970 (2014)

Abstract

Production of drug metabolites using genetically engineered yeast cells expressing human drug-metabolizing enzymes

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Dpt. Pharmaceutical Engineering, Toyama Prefectural University, TOPUBIO RESEARCH Co., Ltd

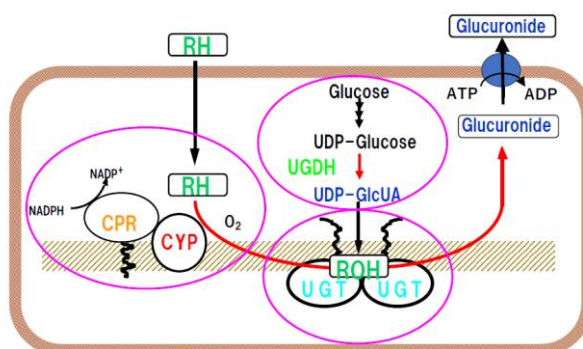
FDA guidance in 2008 showed consideration for safety assessment of the metabolites identified only in human plasma or metabolites present at disproportionately higher levels in humans than in any of the animal test species. Phase II conjugation reactions generally render a compound more water soluble and pharmacologically inactive, thereby eliminating the need for further evaluation. However, if the conjugate forms a toxic compound such as acylglucuronide additional safety assessment may be needed. Thus, development of an efficient *in vitro* system to produce drug metabolites was required.

Each of human UDP-glucuronyl-transferase (UGT) isoforms was co-expressed with rat UDP-glucose dehydrogenase (UGDH) in *S. cerevisiae* AH22 cells. A multicopy vector pGYR and a genome integrated vector pAUR were used for expression of UGT, UGDH, and cytochrome P450 (CYP) in several combinations. In addition, each of human sulfotransferases SULT1A1, 1A3, 1B1, 1E1, and 2A1 was expressed in *S. cerevisiae* AH22 cells with or without CYP. Glucuronide or sulfoconjugate formation in yeast cells was performed in reaction buffer containing 8% glucose, and most of the metabolites were readily recovered from cell medium.

Our yeast expression systems have made it possible to produce human phase I and phase II drug metabolites in the milligram to gram scale

Keywords: drug metabolite, yeast expression system, UGT, SULT, CYP

Co-expression system for CYP, UGT, and UGDH in *S. cerevisiae* cell



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INVITED LECTURE-2

Production of single-chain variable fragment antibodies with the use of diving-mammal myoglobins as a fusion tag



Yasuhiro Isogai

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Research Interest:

Protein folding, engineering, evolution

Education & Professional Career:

- 1984-1989 M.S. and Ph.D. Kyushu University (Japan)
1989-2007 Research Staff in RIKEN
2007-2018 Asso. Prof. in Toyama Prefectural University
2019- Prof. in Toyama Prefectural University

Major Publications:

- Y. Isogai et al., Common and unique strategies of myoglobin evolution for deep-sea adaptation of diving mammals. *iScience*. 24(8): 102920, 2021
- Y. Isogai et al., Tracing whale myoglobin evolution by resurrecting ancient proteins. *Sci. Rep.*8, 16883, 2018
- Y. Isogai et al., Supramolecular polymer formation by a *de novo* hemoprotein with a synthetic diheme compound. *FEBS Open Bio* 8, 940-946, 2018.
- Y. Isogai & K. Nakayama, Alteration of substrate selection of antibiotic acylase from b-lactam to echinocandin, *Prot. Engi. Des. Sel.* 29, 49-56

Abstract

Production of single-chain variable fragment antibodies with the use of diving-mammal myoglobins as a fusion tag

Ayaka Sakai *, Yoshihide Makino **, Kaori Yasuda *, Yasuhiro Isogai*

**Department of Pharmaceutical Engineering, Toyama Prefectural University, Japan*

***Department of Biotechnology, Toyama Prefectural University, Japan*

Antibody drugs now form the main modality in contemporary medicine. Common problem of using these drugs is their high costs, mainly due to large sizes of normal antibodies as ca. 150 kDa, which are produced with mammalian cultured cells. By protein engineering, some full-length antibodies have been miniaturized and transformed into single-chain fragment (scFv) protein without losing the antigen-binding activity. Such scFv antibodies can be synthesized with recombinant DNA and *Escherichia coli*, but their soluble expression yields are generally low in comparison with similar-size globular proteins. Here we have demonstrated that myoglobin (Mb) from deep-diving mammals can be used as an effective fusion tag for the soluble expression of scFv and possibly for other unstable proteins with lower solubility *in vivo*. Expression systems of scFvs of anti-EGFR antibody cetuximab and anti-HER2 antibody trastuzumab were constructed with and without the Mb as a fusion tag, indicating that the Mb tag little affected soluble expression of the cetuximab scFv but significantly increased that of the trastuzumab scFv. Their antigen-binding activities were confirmed with ELISA and biolayer interferometry assays. The trastuzumab scFv was successfully applied to prepare immuno-liposomes against HER2-positive breast cancer cells.

Keywords: Antibody, microbial production, fusion tag.

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INVITED LECTURE-3

Development of vitamin D3 and its analogs for prevention and treatment of osteoporosis and cancer



Kaori Yasuda

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Research Interest:

Biochemistry, Drug metabolism, Metabolism and molecular mechanism of vitamin D and its analogs

Education & Professional Career:

- | | |
|-----------|---|
| 2002-2004 | M.S. in Engineering, Kyoto University |
| 2004-2005 | Government Employee, Fukui Prefectural Government |
| 2005-2008 | Researcher, Research Institution of Innovative Technology for the Earth |
| 2008-2013 | Researcher, Toyama Prefectural University (2013, Ph.D, in Engineering) |
| 2013-2016 | Post-doctoral fellow, Toyama Prefectural University |
| 2016-2019 | Assistant Professor, Toyama Prefectural University |
| 2019-Now | Junior Associate Professor, Toyama Prefectural University |

Major Publications:

- Yasuda K. et al., Elucidation of metabolic pathways of 25-hydroxyvitamin D3 mediated by CYP24A1 and CYP3A using *Cyp24a1* knockout rats generated by CRISPR/Cas9 system *J. Biol. Chem.*, 296: 100668 (2021)
- Yasuda K. et al., Epicatechin gallate and epigallocatechin gallate are potent inhibitors of human arylacetamide deacetylase. *Drug Metab Pharmacokinet.*, 39: 100397 (2021)
- Nishikawa M. et al., Generation of novel genetically modified rats to reveal the molecular mechanisms of vitamin D actions. *Sci Rep.* 10(1): 5677 (2020)
- Yasuda K. et al., Sulfate conjugates are the major metabolites in rats administrated with sesamin. *Drug Metab Pharmacokinet.* 34(2):134-140 (2019)

- Yasuda K. et al, Metabolism of 2 α -[2-(tetrazol-2-yl)ethyl]-1 α ,25-dihydroxyvitamin D₃ by CYP24A1 and biological activity of its 24R-hydroxylated metabolite.
- *J Steroid Biochem Mol Biol.* 178:333-339 (2018)

Abstract

Development of vitamin D₃ and its analogs for prevention and treatment of osteoporosis and cancer

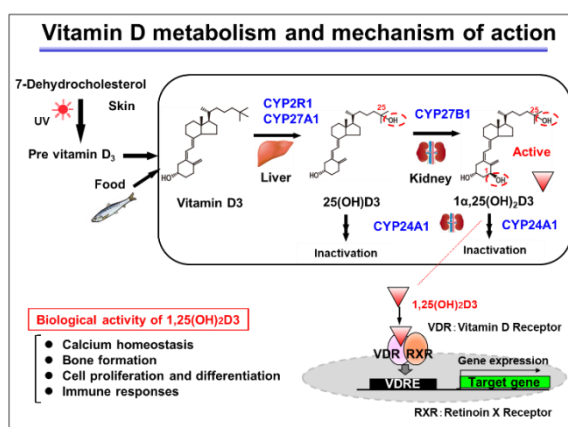
Kaori Yasuda*, Miyu Nishikawa, Shinichi Ikushiro**, Toshiyuki, Sakaki***

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**Department of Biotechnology, Toyama Prefectural University, Japan

Vitamin D₃ is metabolized to 25-hydroxyvitamin D₃ (25(OH)D₃) in the liver, and further metabolized in the kidney to 1 α ,25-dihydroxyvitamin D₃ (1,25(OH)₂D₃), which exerts various physiological effects such as bone formation, calcium homeostasis, cell proliferation and differentiation, and so on, by binding vitamin D receptor (VDR). Thus, 1,25(OH)₂D₃ and its analogs have been clinically used as therapeutic agents against rickets, psoriasis, and secondary hyperparathyroidism. Vitamin D analogs have been also expected as cancer treatments, and we have found that an analog which have high anti-cancer effects. Now we are searching better analogs which have stronger effects and less side-effects.

Recently, we have demonstrated that not only 1,25(OH)₂D₃, but also 25(OH)D₃ binds VDR, although its bind affinity is much weaker than 1,25(OH)₂D₃. Daily administration of 25(OH)D₃ to *Cyp27b1* knockout rats (type I rickets model) and mutated-*Vdr* rats (type II rickets model) recovered both type of rachitic phenotype without any side effects. Furthermore, administration of 25(OH)D₃ to wild-type rats didn't cause any side effects. 1,25(OH)₂D₃ is known to cause hypercalcemia as a side effect when administered in even a small excess. On the other hand, the present results suggest that 25(OH)D₃ could be useful in the prevention and treatment for rickets and osteoporosis, with wide safety margin.



Keywords: vitamin D₃, metabolism, rickets, osteoporosis, cancer



INVITED LECTURE-4

**Health Transformation in the Post-Covid Era: Health Promotion and Resilience
for Nurses**

Prof. Dr. Jackie Michael



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Research Interest:

Nursing leadership, Succession planning, Strategic planning, Non-Governmental Agency operations, Nursing Education, Curriculum design and Health assessment.

Education & Professional Career:

1988	Registered Nurse
1993	Women's Health Nurse Practitioner.
2006,07,11	University of Texas at Arlington School of Nursing's nominee for Provost Award
2015-2016	Past president Indian Association of North Texas
2017-2018	Past president National Association of Indian Nurses of America
2018-2019	Past- President of Texas Nurses Association District
2017-2021	TNA District 4 Mock Trial Planning Committee for the past 12 years and has served on their board and the Chair.
2021	Sigma Theta Tau International Honor Society of Nursing in the CRTF (Governance Committee) and is the Delta Theta Chapter Past-President. She has served as a Mentor in the STTI and Elsevier Foundation's NFLA program.

Abstract

Health Transformation in the Post-Covid Era: Health Promotion and Resilience for Nurses

Prof. Dr. Jackie L. Michael*

PhD., APRN., WHNP-BC., PMHNP-BC

*Associate Chair of Nurse Practitioner Programs, Graduate Nursing Department
Clinical Assistant Professor, Lead Clinical Placement Faculty, University of Texas (U.S)*

Abstract:

Nursing is challenging as healthcare increases in complexity placing healthcare workers at risk for burnout and stress. Resilience is effective in increasing happiness and mindfulness while decreasing anxiety and stress. Effective strategies can improve workplace environment by reducing stress and burnout, while increasing job satisfaction and productivity. Physiological and psychological benefits of intentional mindfulness practices can improve the worker, the work, and the workplace in healthcare settings facing new and unique stressors. The benefits of mindfulness in the literature make a strong argument to incorporate these in everyday life. The challenge continues to be the implementation of resilience building exercises and activities which are time consuming. Simple strategies to incorporate mindfulness and relaxation techniques must also become a part of our occupational practices to increase resilience and reduce stress.

Keywords: Mindfulness, resilience, stress.



INVITED LECTURE-5

Yoga and Exercise to Improve the Physical and Mental Health



Dr. Satish Kumar Avasthi

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Research Interest:

Nursing

Education & Professional Career:

2012-2013 Ph.D in Nursing
2013 Persuing MAPC (PSYCHOLOGY)
2003-2005 Clinical Instructor/ Principal Incharge, K L E Society, Inst.Of Nursing Sciences, Ankola, Karnataka
2007 Principal, Institute of Medical Technology and Nursing Education Sitapura, Jaipur, Rajasthan

- **Resources person** in national seminar on nursing excellence with evidence based practice, Jabalpur Inst. of Nursing Sciences, Jabalpur
- **Resources person** in national seminar on euphoria to death drug abuse- a multidisciplinary approach
- **Resources person** in national conference on chemotherapy errors and pathetic palliative care from rheotorism to clinical competence at gain Sagar College of Nursing, Rajpura, Patiala, Punjab
- **Board of study member** in Rajasthan University of health sciences, Jaipur, Rajasthan.Gfatm training by Indian nursing councilin RAK College of Nursing, New Delhi

Major publication:

1. A Complete Handbook For Nursing Competition Exams, JP Publication; 2013
2. Presentation As A chairperson/moderator “Theme qualitative research: a step towards theory construction & development” In NRSI,14 Conference At Indore, M.P .(14-16th nov. 2014).
3. Internationally Published article; Reasons effecting self care in type-2 diabetes in elderly: PANACEA INTERNATIONAL research journal, 2013, vol-1, no.-2, page no.-79-83
4. Organized national seminar on manuscript preparation & publication ethics, in institute of medical technology and nursing education Sitapura, Jaipur Rajasthan dated 6th April 2016

Abstract

Yoga and Exercise to Improve the Physical and Mental Health

Dr. Satish Kumar Avasthi

Abstract:

Yoga originated in India several thousand years ago as a system of physical and spiritual practices. It was formalized in the second century BC in the form of the Yoga Sutras, attributed to the scholar Patanjali. The word 'yoga' means 'union' or 'yoke' or 'joining'. Originally, yoga was a method for joining a regular imperfect human being with the divine principle, or God. It is aimed to unite the mind, the body and the spirit. Through the practice of yoga, the mind can be trained to relax through deep breathing and become focused while holding the breath. This practice will lead to control of the mind. Doing yoga, not just the physical portion, but also immersing oneself on to the mental aspect of it, can help improve mental health. "Yoga is a very effective stress reduction and relaxation tool. Performance of various postures requires the tensing and stretching and then relaxing of muscle groups and joints, which effectively produces relaxation in much the same way that a massage does. Before we get into the benefits of Yoga, it is essential to understand what exactly Yoga really is. Yoga is not a religion, it's a way of living that aims towards a healthy mind in a healthy body. Man is a physical, mental and spiritual being; Yoga helps in developing the balance between all the three as stated in Ayurveda in India. Other forms of exercise, like aerobics, only assure physical wellbeing. These exercises have very little to do with the improvement of spiritual or astral body.

Keyword: Mental Health, Yoga, Ayurveda, Aerobic.



INVITED LECTURE-6

**Health Preparedness for Health Care Transformation in the
Post-Covid 19 Pandemic**

Dr Bhuvanesh Shukla



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Govt. Medical College, College of Nursing, Amritsar, Punjab, India.

Phone +91 7877845836

Email: bhuvaneshshukla@gmail.com

Research Interest:

Nursing

Major Publications:

- Text Book of Pediatric Nursing, Lotus Publishers, Jalandhar, Punjab, India.
- Sick Sinus Syndrome (SSS), Imperial Journal of Interdisciplinary Research
- Knowledge & Attitude Regarding Self Care among Patients Undergoing Hemodialysis, International Research Journal, Australia.
- Study to Assess Physical Health Status of Children at Selected Orphanage, International Research Journal, Australia.
- Challenges in Child Mental Health in the COVID-19 scenario, Journal of Advance Nursing Research

Education & Professional Career:

- Ph.D Nursing, M.Phil, M.Sc Nursing pediatrics (silver medalist)
- Associate Professor, Pediatrics Nursing, Punjab Govt. College of Nursing
- Academic Counselor, Post Basic B.Sc. Nursing, IGNOU (Indira Gandhi National Open University)
- State President, Punjab, The Nursing Teachers Association
- Founder Member, India, Pediatric & Neonatal Nursing forum(PNNFI)
- Consulting Editor, M.P, Journal of Advance Nursing Research
- Subject Expert and Examiner in 8 universities.

• **Major Publications:**

- Book Published 3 and 1 under publication.
- Published Papers in Journals & Full papers in Conference Proceedings 20
- Delegate in 11 Seminars
- Award Selection;- 6 Educational Awards, 5 Sports awards and 3 literature award
- News paper article published 14

Abstract

**Health Preparedness for Health Care Transformation in the
Post-Covid 19 Pandemic**

Dr Bhuvanesh Shukla

Associate Professor, Govt Medical College, College of Nursing, Amritsar, Punjab, India.

Abstract:

The effects of the coronavirus disease 2019 (COVID-19) pandemic globally are striking as it impacts greatly the social, political, economic, and healthcare aspects of many countries. It becomes clear that infectious diseases should be considered among the most important health hazards that we will need to continue facing in the foreseeable future. Thus, the transformation of various aspects at the individual as well as the societal and governmental levels seems inevitable. The COVID-19 pandemic has become a reality check for many aspects of healthcare systems, especially regarding their overall readiness. Taking the former into account, the following aspects seem likely to emerge as most affected in the post COVID-19 era. The COVID-19 outbreak serves as a reminder that proactive planning for healthcare emergencies as well as an intensified commitment to global public health preparedness remains necessary. Optimal outcomes can be attained where both patients and healthcare providers become active participants in this process. However, for that to be achieved, ethical, regulatory, and legal concerns that is emerged during this pandemic need to be addressed.

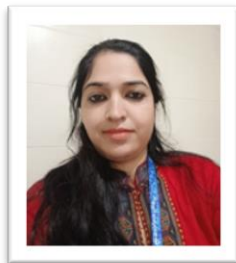
Keywords: COVID-19, healthcare transformation, technological innovation, coronavirus.

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INVITED LECTURE-7

Awareness regarding Health Care transformation among People in Post Covid-19

Prof. Shabina Parveen



Affiliation and Contact:

Senior educator in Narayana multispecialty Hospital, Jaipur

Phone +919602209781

Email Id shabinaparveen6477@gmail.com

Research Interest:

Nursing

Education & Professional Carrier:

1. PhD In Nursing JJTU Jhunjhunu (Perusing)
2. Master Of Nursing From Rajasthan University of health & Science
3. Infection control nurse in SDMH Jaipur
4. Senior Nurse educator in Eternal heart and cardiac care centre Jaipur

Major Publications:

Handbook of ANM Bukera publication, India

Abstract

Awareness regarding Health Care transformation among People in Post Covid-19

Prof. Shabina Parveen

Abstract:

Covid 19 is worldwide recognized as big pandemic of the era, this produced unpredictable disruption of the healthcare infrastructure, it shows the pit falls of our health care policies, during the COVID 19 pandemic world No 1 health care system was collapsed, so in concept of the developing countries where health care issues are always challenging, it also brought the urgency to discover new approaches to respond this big crisis. In the collaboration of the government, private participation We have done well, but more emphasize need to be done with collaboration of government and private sector, we need to develop and strengthen our health care infrastructure on each level including strengthening our community surveillance activity, primary health care infrastructure, ever tertiary health care system. It is also equally important to motivate individual and families, to take healthy habits seriously, need to make awareness in general public about health insurance. The covid 19 becomes a milestone for the transformation of the health care the below listed changes taken place after COVID 19 Pandemic: Improvement of medical infrastructure, Recognition of health care staff, Government focus on health care system, General population & health care insurance, Teleconsultation & Tele-medication, General population awareness regarding Health & Hygiene and Increase No of Community surveillance activities.

Keywords: COVID-19, healthcare transformation, teleconsultation, tele-medication

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INVITED LECTURE-8

Barriers and Facilitator to Online Nursing Education



Prof. (Dr.) Peekesh Kumar

Affiliation & Contact:

Professor & HOD Psychiatric Nursing C/o Teerthanker Mahaveer University, College of Nursing, Delhi Road, NH 24, Bagadpur, Moradabad Uttar Pradesh 244001

Phone 8005925819

Email.id: dr.pksinghal4u@gmail.com

Research Interest:

1. Occupational Stress among Class IVth Employees.
2. Develop Assertive Communication among Nursing Students.
3. Stress among Nursing staff due to COVID-19

Education & Professional Career:

2003-04 Staff Nurse in Dialysis Unit K.L.Es Hospital & Research Centre, Belgaum.

2004-05 Asst. Prof in MM University Mullana, Ambala.

2005-07 Asst. Prof in CIMS, Kullu, HP.

2009-11 Associate Professor in Jai durga College of Nursing, Jaipur, Rajasthan.

2011-19 Professor in Institute of Medical Technology & Nursing Education, Jaipur.

2014-20 Ph.D. in Nursing Maharaj Vinayak Global University Jaipur, Rajasthan.

2019-21 Professor cum Vice principal in Metro College of Nursing, Greater Noida, UP.

Major Publications:

1. Alternative medicine for treating depression, Biomedical Journal of Scientific & Technical Research, Biomed J Sci & Tech Res. Volume 5-Issue 2: 2018
2. Descriptive survey of depression in India, Journal of Anesthesia & Intensive Care Medicine (Juniper), J Anest & Inten Care Med Volume 7 Issue 3/ August 2018

3. Effectiveness of structured teaching programme on knowledge regarding assertive communication and its benefits in nurse patient relationship among B.Sc. Nursing students in selected nursing colleges at Jaipur (Rajasthan), International Journal of Applied Research, International Journal of Applied Research 2020; 6(9): 47-51
4. Knowledge of assertive communication among B.Sc. Nursing students in selected nursing colleges at Jaipur (Rajasthan), International Journal of Multidisciplinary Research, GFNPSS-International Journal of Multidisciplinary Research, Volume1, Issue 4, September 2020
5. A need for the study on knowledge of assertive communication among B.Sc. Nursing students in selected nursing colleges at Jaipur (Rajasthan), Universe International Journal of Interdisciplinary Research, © UIJIR | ISSN (O) – 2582-6417 OCT. 2020 | Vol. 1 Issue 5 www.ujir.com
6. Publish Articles as in College blogs, and Journal

Abstract

Barriers and Facilitator to Online Nursing Education

Prof. (Dr.) Peekesh Kumar

Professor & HOD Psychiatric Nursing C/o Teerthanker Mahaveer University, College of Nursing, Delhi Road, NH 24, Bagadpur, Moradabad Uttar Pradesh

Abstract:

COVID-19 has resulted in schools shut all across the world. Globally, over 1.2 billion children are out of the classroom. As a result, education has changed dramatically, with a distinctive rise of the e-learning, whereby teaching has been undertaken remotely and on digital platforms. The spread of COVID-19 has forced millions of students and teachers to move their communication online. The outbreak of Corona virus has greatly disrupted our educational system. Schools, Colleges and Universities across the country have been closed to keep students safe and healthy at home. But many academic institutions, particularly colleges, schools, have started conducting virtual classes through different digital and social media platforms, and television channels to complete the syllabus and prepare students for utilizing this time in a better way. E-Learning has been defined as an educational method that facilitate learning by the application of information technology and communication providing an opportunity for learners to have access to all the required educational programs. Classes on zoom, WhatsApp and Skype are becoming the norm for students, parents and teachers. Online classes are become a significant approach to supply education in educational institutions and experiencing rapid development.

Keywords: COVID-19, E-Learning, Educational programs.

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INVITED LECTURE-9

Challenges Faced in Online Learning



Dr. Umakant Gupta

Affiliation & Contact:

MD-General Medicine, MBBS Consultant Physician at Narmada Hospital and Diagnostic Centre, Jaipur.
Phone: 9829077318

Research Interest:

1. Pulmonary Diffusing capacity in left ventricular dysfunction and awarded Gold Medal 1994
2. Recent advances in Liver Dysfunction

Education & Professional Career:

- 1989 MBBS Sardar Patel Medical College, Bikaner
- 1995 MD Sawai Man Singh Medical College, Jaipur
- Practicing medicine as a Senior consultant at Narmada Hospital and Diagnostic Centre, Jaipur
- Previously worked as a consultant in SMS Hospital, Jaipur
- Previously worked as a consultant in Ram Manohar Lohia Hospital, Delhi.
- Topped PUC in University of Rajasthan. Awarded gold medal.
- Nominated as member of Senate (Council) in University of Rajasthan

Major Publication:

1. Advances in management of Hypothyroidism
2. Advances course in ECHO
3. FIRST to start - colon irrigation therapy in Rajasthan, for treatment of Chronic Abdominal problems.

Abstract

Challenges Faced in Online Learning

Dr. Umakant Gupta

MD-General Medicine, MBBS Consultant Physician at Narmada Hospital and Diagnostic Centre, Jaipur

Abstract:

Knowledge is the most powerful tool a person can have and he/she can conquer the world with the correct knowledge. This last year our covid warriors not only the doctor's but the nurses, interns residents each and everyone right from the administration to the top has tirelessly worked for us to get back to our normal lives. The education of these students is extremely important from the perspective of our medical sector to flourish. Although online education is well recognised and documented as a promising and effective mode for teaching undergraduate medical and nursing students, it was a different story to conduct fully online courses during the COVID-19 crisis, as the online courses' function and people's mental states can be very different from those during ordinary times. More importantly, as for the international students who were currently learning distantly from their resources-limited homelands, the institutional readiness in technological and infrastructural supplies is not always present, which makes cross-national online education more challenging. Learner satisfaction and teacher satisfaction, which relate to their attitudes towards the education experiences and the achieved education outcomes, are among the "five quality pillars" in the quality framework of the Online Learning Consortium and are thus highly predictive of the quality and outcome of the online courses. Therefore, exploration of learners' and teachers' online education satisfaction and the influential factors can provide important guidance and reference for the improvement of the online education outcomes.

Keywords: COVID-19, Online Learning Consortium, Knowledge



INVITED LECTURE-10

Artificial Intelligence: Recent applications in Pharmaceutical Industries



Dr. Vivekanand Kisan Chatap

Affiliation & Contact:

Assistant Professor, Department of Pharmaceutics
H. R. Patel Institute of Pharmaceutical Education & Research, Karwand Naka,
Shirpur.Tal- Shirpur, Dist- Dhule (M.S.)-425 405
Email: chatap@rediffmail.com

Research Interest:

Solubility Enhancement and targeted drug delivery

Education & Professional Career:

- 2001 Diploma in Pharmacy, MSBTE, Mumbai
- 2004 Bachelor's Degree, Dr. BAMU, Aurangabad
- 2006 Master's Degree, RGPV, Bhopal
- 2018 PhD, KBCNMU, Maharashtra
- Worked as lecturer at BRNCOP, Mandsaur (M.P.)
- Worked as lecturer followed by assistant professor at SPCOP, Otur. Pune
- Worked as assistant professor at HRPIPER, Shirpur

Major Publications:

1. Vivekanand K. Chatap and Savita D. Patil, Formulation Strategies for Enhancement of Solubility and Dissolution Rate and limitation for oral bioavailability of Repaglinide. *RGUHS J Pharm Sci.* 6 (2), 54-62, 2016.
2. Vivekanand K. Chatap, Savita D. Patil, *In-vitro* and *in-vivo* Consideration of Repaglinide Immediate-Release Tablet: Assessment of Porous Acetostarch as a Promising Carrier for Dissolution Rate Enhancement. *Food Science and Technology* 4(4): 78-88, 2016. DOI: 10.13189/fst.2016.040405
3. Chatap, V. K., and S. D. Patil. "Dissolution Rate Enhancement of Repaglinide Using Dietary Fiber as a Promising Carrier. *Current Drug Delivery* 2016;13(6):994-1002. DOI: 10.2174/1567201813666160616114447 (I.F.1.582)

4. Vivekanand K. Chatap, Prashant L. Patil, Savita D. Patil, In-Vitro, Ex-Vivo Characterization of Furosemide Bounded Pharmacosomes for Improvement of Solubility and Permeability. *Advances in Pharmacology and Pharmacy* 2(5): 67-76, 2014.
5. Rahul STade, Vivekanand K Chatap, Mahesh P More, Pravin O Patil & Prashant K Deshmukh, Fabrication and In vitro drug release characteristics of magnetic nanocellulose fiber composites for efficient delivery of nystatin. *Materials Research Express*, 5(11):2018. 102-116 (1.929 IF)
6. Prashant K. Deshmukh, Ketan P. Ramani, Saurabh S. Singh, Avinash R. Tekade, Vivekanand K. Chatap, Ganesh B. Patil, Sanjay B. Bari, Stimuli-Sensitive Layer-by-Layer (LbL) Self-assembly Systems: Targeting and Biosensory Applications. *Journal of Controlled Release*. 166 (2013) 294–306. doi: 10.1016/j.jconrel.2012.12.033 From 1 To 43 (I.F. 7.87)

Abstract

Artificial Intelligence: Recent applications in Pharmaceutical Industries

Dr. Vivekanand Kisan Chatap

*Assistant Professor, Department of Pharmaceutics
H.R. Patel Institute of Pharmaceutical Education & Research, Karwand Naka,
Shirpur Tal- Shirpur, Dist- Dhule (M.S.)-425 405*

The 16th Anniversary India-Japan Fest and BICON (Biyani's International Conference)-2021 will be held on December 14-18, 2021. Authors are invited to contribute original presentations on topics included in different technical sessions in this meeting. Artificial intelligence (AI) has recently become more prevalent in daily life. Data digitization and data integrity have become increasingly important in the pharmaceutical industry in recent years. Similarly, artificial intelligence is used in the pharmaceutical business from drug discovery through finished goods with the goal of increasing efficiency and reducing human involvement in aseptic manufacturing as well as meeting milestones in a short amount of time. Pharmaceutical Technology looks at how AI is being used by a new generation of drug development businesses to find new medicines.

Keywords: AI, Pharma Industries



INVITED LECTURE-11

Digital health in Pharmacy Education: Global showcase of initiatives from pharmacy institutions



Dr. Pramod Kumar

Affiliation & Contact:

Assistant Professor, Department of Pharmaceutical Analysis, National Institute of Pharmaceutical Education and Research (NIPER-Guwahati), Sila Katamur (Halugurisuk), P.O.: Changsari, Dist: Kamrup, Assam, Pin: 781101, Assam, India

Mobile No.: +91-9166094822; +91-7014685463

Email: drpramodkumar14@gmail.com and drpramodkumar14@gmail.com

Research Interest:

Dr. Kumar has published various research papers based on nanotechnology especially focusing lipid based nanocarriers for brain delivery. Various International and national conferences have been attended by Dr. Kumar. Dr. Kumar has visited Malaysia, Japan and United Arab Emirates. Currently, Dr Kumar is working on impurity profiling, phytopharmaceuticals and 3D printing of tablet/capsular devices and their quality Control. Dr. Kumar research interests include Development of reference materials, Impurity profiling, Analytical Method development and validation, Analytical quality by design, Stability testing and Pharmacokinetic.

Education & Professional Career

2011B. Pharm, Jaipur National University, Jaipur, India

2013M. Pharm (Quality Assurance), Jaipur National University, Jaipur, India 2017 PhD, Central University of Rajasthan, Ajmer, India

2017-18 Research Associate, Jamia Hamdard (Deemed to be University), New Delhi

Major Publications:

1. Analytical developments of p-hydroxy prenylamine reference material for dope control research: Characterization and purity assessment in Drug Testing and Analysis (Impact Factor 3.345)
2. Synthesis, characterization, method development, and validation of nor-ethylmorphine hydrochloride reference material using established analytical techniques for dope control analysis in Drug Testing and

Analysis (Impact Factor 3.345)

3. Preclinical Explorative Assessment of Dimethyl Fumarate-Based Biocompatible Nanolipoidal Carriers for the Management of Multiple Sclerosis in ACS Chemical Neuroscience (Impact Factor 4.418)
4. Stearic Acid-based, Systematically Designed Oral Lipid Nanoparticles for Enhanced Brain Delivery of Dimethyl Fumarate in Nanomedicine (Lond.) (Impact Factor)5.307
5. Vitamin-derived nanolipoidal carriers for brain delivery of dimethyl fumarate: A novel approach with preclinical evidences in ACS Chemical Neuroscience(Impact Factor4.418)
6. Enhanced Brain Delivery of Dimethyl Fumarate employing Tocopherol Acetate-based Nanolipidic Carriers: Evidences from Pharmacokinetic, Biodistribution and Cellular Uptake Studies in ACS Chemical Neuroscience(Impact Factor 4.418)
7. Promises of a biocompatible nanocarrier in improved brain delivery of quercetin: biochemical, pharmacokinetic and biodistribution evidences in International Journal of Pharmaceutics (Impact Factor 5.875)

Abstract

Digital health in Pharmacy Education: Global showcase of initiatives from pharmacy institutions

Dr. Pramod Kumar

Assistant Professor, Department of Pharmaceutical Analysis, National Institute of Pharmaceutical Education and Research (NIPER-Guwahati), Sila Katamur (Halugurisuk), P.O.: Changsari, Dist: Kamrup, Assam, Pin: 781101, Assam, India

Abstract:

Digital literacy is a great challenge in the current covid-19 pandemic era. World is completely changing towards digital education. After COVID-19 era, development of knowledge and skills of digital health tools and provision is relevant to all pharmacy and pharmaceutical sciences students. Major objectives of the Digital health in Pharmacy Education to enable pharmacy faculties and students for the development of digital platforms/contents/assets for the learning and development purposes. Digital literacy programs have been initiated by various pharmacy institutions. Enhancement of awareness about digital literacy and development of digital contents is primary focus of the digital pharmacy education. Various methodologies have been adopted by pharmacy institutions to assess pharmacy education via digital mode. Various online platform such as Microsoft team, zoom and codetantra etc are being used to practice digital health in pharmacy education along with prerecorded videos along with vides of practical sessions to under basic and practical knowledge. Smartphones and various online apps are playing outstanding role to undertake the digital health in pharmacy education. I will be discussing more in details during workshop.

Keywords: digital education, aatannirbhar bharat, online tutorials



INVITED LECTURE-12

Virtual Pharmacology Experimentation



Prof. Dr. Dharmendra Ahuja

Affiliation & Contact:

Professor & Director, Faculty of Pharmaceutical Sciences, JVVU

Phone: +91-9636348191

Email: dahuja369@gmail.com

Research Interest:

Virtual Pharmacology

Education & Professional Career:

- Principal Mentor, Experimental Pharmacology Series Software - BHESU
 - Member BOM, Director & Professor, Faculty of Pharm Sc., Jayoti Vidyapeeth Women's University, Jaipur (Raj.)
 - Listed Mentor For Change - Niti Aayog, Govt. of India
 - Ex. Fellow: State Innovation Council, Dept. of Planning, Govt. of Rajasthan
 - Ex. Fellow: MHRD, Govt. of India
 - Multiple Patents, Publications & Technology Transfers
 - Recognised and Awarded By:
 - Health Minister, Govt of Rajasthan
 - Women and Child Development Minister, Govt of Rajasthan
 - Mayor, Jaipur
 - Vice President -PCI
 - Drug Controlling Authority - Govt. of Delhi
- and many more dignitaries.

Experiences:

1. Presently working with Jayoti Vidyapeeth Women's University, Jaipur.

Designation	- Director & Professor, Faculty of Pharmaceutical Science.
Work Profile	- Teaching & Administration
Year	- Working since 9 Sep 2010

(Joined as Asst. Prof. later promoted as Head of Dept on 1/09/2012 followed by promotion as Director on 07/05/2018)

Member of Board of Management (The Apex Governing Body) of Jayoti Vidyapeeth Women's University, Jaipur.

2. Worked with Sri Balaji College of Pharmacy Jaipur
Designation - Asst.Prof. (Pharmacology)
Work Profile - Teaching
Year - June 2009 to Sep 2010
3. Aurobindo Pharma Ltd. (India's No.1 Bulk Drug Manufacturer)
Designation - Territory Officer
Work Profile - Clinical Research (Enrollment of Clinical Trial Participants)
- Market Research & Pharma Brand Image building.
Year - Sep 2001 to March 2004
4. Worked with Cachet Pharmaceuticals Ltd.
Designation - Business Officer
Work Profile - Clinical Research (Enrollment of Clinical Trial Participants)
- Market Research & Pharma Brand Image building.
Year - Jan 2001 to Sep 2001

* Empaneled (on advisory part) with "Niti Aayog – Atal Innovation Mission" Govt. of India as "Mentor for Change" since April 2019.

Major Publications:

1. Entitled "Effect of *Momordica Charantia* L. Seeds extract on biophysical and biochemical parameters of wound in experimentally induced diabetes in rats" *journal of biomedical and pharmaceutical research* [online], volume 2 number 6 (January 2014)
2. Entitled "Effect of *Momordica Charantia* L. Leaves extract on biophysical and biochemical parameters of wound in experimentally induced diabetes in rats". *Journal of drug Discovery & Therapeutics* volume 2 number 13 (March 2014)
3. Entitled "Designing of potential drug-like inhibitors to serine-threonine protein kinase b (PKNB) in tuberculosis through computer-aided drug design" *European Journal of Pharmaceutical & Biomedical Science*, 2014.
4. Entitled "Development and validation of RP-HPLC method for the quantitative estimation of Stavudine, Lamivudine and Nevirapine in pharmaceutical dosage forms" *international journal of advance pharmaceutical research*, 2014.
5. Entitled "Development and validation of analytical methods for alprazolam and fluoxetine in *pharmaceutical dosage form*" *American Journal of Pharmaceutical Technology Research*, January 2014.
6. Entitled "Pharm D - Present Scenario" in *Indian Journal Of Pharmacy Practice*, Issue 2009 Oct - Dec, Vol 2(4), Page No. 7-13, Published by Association of pharmaceuticals teachers india (APTI).
7. Evaluation and comparison of antibacterial activity of leaves, seeds and fruits extract of *Momordica charantia* in *Research Journal of Pharmaceutical, Biological and Chemical Sciences* April-June 2011, Vol 2(4), Page No.185-92.

8. Effect of Various Polymers on Carvedilol Transdermal films: *In-Vitro* Permeation Studies in *Der Pharmacia Sinica*, Issue 2011, Vol 2(4), Page No.203-217, Published in Pelgia Research Library.
9. In vitro–In vivo Correlation: Application in pharmaceutical development of various dosages forms J. Chem. Pharm. Res., 2011, 3(5):550-564.
10. Transdermal electronically assisted technologies: current approaches on Iontophoretic delivery system, *IJDFR* volume 2 Issue 4, Jul-Aug.2011
11. Entitled “ Anti Diabetic Activity of *Helicteres* Species” in *Indian Journal of Herbal Technology* , Issue 2011 Oct - Dec, Vol 2, Page No. 32.
12. Entitled “*In Vivo* Antihyperglycemic Activity of the Ethanolic Crude Extract of *Sorbus decora*” in *Indian Journal of Herbal Technology* , Issue 2010 Oct - Dec, Vol 2, Page No. 36.
13. Entitled “Antidiabetic activity of water extract of *Solanum trilobatum* (Linn.) in alloxan-induced diabetes in rats” in *Indian Journal of Herbal Technology* , Issue 2011 Oct - Dec, Vol 2, Page No.26.
14. Entitled “ Hyoglcemic activity of *Celeosea argentea* in alloxan induced diabetic rats” in *Indian Journal of Herbal Technology* , Issue 2010 Oct - Dec, Vol 2, Page No. 12.
15. Entitled “ Diabetic wound healing activity of *Patrocarpus marsupium* in alloxan induced diabetic rats” in *Indian Journal of Herbal Technology* , Issue 2011 Oct - Dec, Vol 2, Page No. 25.
16. Entitled “A systematic review of Nootropic Potential of *Phyllanthus amarus*” in *J. Hosp. Pharmacy* 09(2) 2014 (Supplement Issue-A). ISSN-2348-7704
17. Entitled “Analysis of Nootropic Effect of Ethanolic Extract of *Beta Vulgaris* L. Roots in High fat diet induced amnesia in Swiss albino mice” in *Journal of Chemical and Pharmaceutical Research*, 2016, 8(4):1191-1199.
18. Entitled “A systematic review of Nootropic Potential of *Bacopa monnieri*” in *J. Hosp. Pharmacy* 09(2) 2014 (Supplement Issue-B). ISSN-2348-7704
19. Entitled “Analysis of nootropic effect of ethanolic extract of *beta vulgaris* l. roots in scopolamine induced amnesia in swiss albino mice” in *International Journal Of Current Medical And Pharmaceutical Research*, Vol. 1, Issue,6, pp.77-82,July, 2015
20. Entitled “A systematic review of Nootropic Potential of *Withania somnifera*” in *J. Hosp. Pharmacy* 09(2) 2014 (Supplement Issue-C). ISSN-2348-7704
21. Entitled “Analysis of nootropic effect of ethanolic extract of *beta vulgaris* l. roots in age induced amnesia in swiss albino mice” in *WJPS*, Volume 4, Issue 08, 1541-1553.
22. Entitled “A systematic review of Nootropic Potential of *Mamsyadi kwatha*” in *J. Hosp. Pharmacy* 09(2) 2014 (Supplement Issue-D). ISSN-2348-7704
23. Entitled “A systematic review of Nootropic Potential of *Rosa damascene*” in *J. Hosp. Pharmacy* 09(2) 2014 (Supplement Issue-E). ISSN-2348-7704
24. Entitled “Pharm D – Present Scenario ” in *CASS Studies*, January-2017, Vol. 1, Issue 1 ISSN-2581-6403
25. Entitled “Pharmacy Practice Regulation” in *CASS Studies*, June-2017, Vol. 1, Issue 2 ISSN-2581-6403
26. Entitled “Analysis of nootropic effect of ethanolic extract of *beta vulgaris* l. roots in diazepam induced amnesia in swiss albino mice” in *IJPT* | July-2015 | Vol. 7 | Issue No.1 | 8221-8236
27. Entitled “Ex-Pharm Software-A Review” in *CASS Studies*, January-2018, Vol. 2, Issue 1 ISSN-2581-6403

28. Entitled “Digi Frog Software – A Review” in CASS Studies, June-2018, Vol. 2, Issue 2 ISSN-2581-6403
29. Entitled “A systematic review of antibiotic prescription pattern studies in mahala region of rajasthan jayoti vidyapeeth women’s university” in J. Hosp. Pharmacy 10(4) Oct to Dec., 2015 (Supplement Issue-A). ISSN-2348-7704
30. Entitled “Chronopharmacology: Recent Advancements” in CASS Studies, January-2019, Vol. 3, Issue 1 (Addendum 1).

Abstract

Virtual Pharmacology Experimentation

Prof. Dr. Dharmendra Ahuja

*Dean & Professor, Faculty of Pharmaceutical Sciences
Jayoti Vidyapeeth Women’s University, Jaipur, Rajasthan*

Abstract:

Experimentation on animal serves as a major tool for the advancement of medical, pharmaceutical and biological sciences since animals are much similar to human systems all the process require animals to be incised, dissected and sometimes have to be killed. An emerging trend as an alternative to animal experiments is use of computer simulations to duplicate live dissections has emerged as virtual Pharmacology. Prevention of cruelty to animals: According to prevention of cruelty to animals Act 1960. The experiments should as far as possible be performed while the animals are under the influence of an anesthetics. If it is possible to substitute the use of animals by devices such as models, films, charts, books, etc. it should be used. Virtual Pharmacology Software is also one of the alternatives. Virtual Experimentation in pharmacology: Virtual Experimentation in pharmacology is almost similar to the experiential model of learning on it is done using computer. Demonstration of the effect of drugs on various models like tissues or on whole animal is an integral and essential part of practical pharmacology teaching for medical students. So it should be the constant effort of a pharmacology teacher to bring down the usage of animals and increase the teaching quality in pharmacy. Like a laboratory class, it must be fully integrated into a module if real benefits are to be obtained.

Keywords: Virtual Pharmacology, Animal Saving

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INVITED LECTURE-13

ICT tools: Used for Drug Designing



Dr. Kratika Daniel

Affiliation & Contact:

M.Pharm, Ph.D (Medicinal & Pharmaceutical chemistry), DMLT
Associate Professor, Faculty of Pharmacy, Oriental University, Indore
Phone +91-9993610031
Email: kratikadaniel@orientaluniversity.in

Research Interest:

Molecular Docking Software. Medicinal & Pharmaceutical Chemistry, Phytochemistry, Natural Products.

Education & Professional Career:

2009-2017 Ph.D. Awarded in 2014, From Mahatma Jyoti Rao Phule University, Jaipur, Rajasthan, India.
[En. No. MJRPU/09/10698]Dissertation Title: “Synthesis, Characterization and Pharmacological Evaluation of some Novel Azole Derivative of 4-Amino Hippuric Acid”

2021-till date Associate Professor, Faculty of Pharmacy, Oriental University, Indore

2016 - 2021 - Associate Dean Research & Associate Professorat B.R Nahata college of Pharmacy, Mandsaur University.

2014 - 2016 Associate Professor at Mandsaur Institute of Pharmacy, Mandsaur

2009 - 2014 Assistant Professor at Mandsaur Institute of Pharmacy, Mandsaur

2008 - 2009 Assistant Professor at Ravi Shankar College of Pharmacy, Bhopal (M.P)

Major Publications:

1. Chavan B. Ajinkya, Daniel Kratika, Patel M. Ansar, “In-silico Exploration of Phytoconstituents of *Gymnema sylvestre* as Potential Glucokinase Activators and DPP-IV Inhibitors for the future Synthesis of Silver Nanoparticles for the Treatment of Type 2 Diabetes Mellitus”, Current Enzyme Inhibition 2021; 17
2. Anuja Kolsure, **Kratika Daniel**, Mahesh Bhat. (2020). Formulation and Development of Novel Gel Of Glabridin and Its HPLC Analysis. International Journal of Advanced Science and Technology, 2020, 29 (08), 6341 - 6354. ISSN No. 2005-4238 Retrieved from <http://sersc.org/journals/index.php/IJAST/article/view/37212>[SCOPUS Indexed till 2020]

3. **Kratika Daniel**, Vivek Daniel, Anil Gupta. In Silico Docking Studies, Synthesis and Characterization Of Nitrogen And Oxygen Containing Heterocyclic Compound (1,3,4 –Oxadiazole) With Promising Antimicrobial And Anti-Inflammatory. International Journal of Pharmaceutical Research, ISSN No. 0975-2366, October- December **2020**, Vol 12, Issue 4, 3868 – 89. **[IF = 0.8, SCOPUS Indexed]**
4. **Kratika Daniel**, Vivek Daniel, *In silico* docking studies, synthesis and characterization of some novel 1, 3, 4 thiadiazole analogue of 4-amino Hippuric Acid as potent antimicrobial agent. 2019, Indian Drugs, ISSN No. 0019-462X, 55 (12), 7-19. **[IF = 0.13, SCOPUS Indexed]**
5. Bharatee Chaudhari, **Kratika Daniel**. A Validated RP-HPLC Method for Simultaneous Estimation of Tizanidine and Nimesulide in Bulk and Pharmaceutical Formulation. Research J. Pharm. and Tech 2020; 13(9): 4207-4212. E-ISSN: 0975-8232; P-ISSN: 2320-5148, doi: [10.5958/0974-360X.2020.00743.X](https://doi.org/10.5958/0974-360X.2020.00743.X). **[IF = 1.3, SCOPUS Indexed]**.

Abstract

ICT tools: Used for Drug Designing

Dr. Kratika Daniel

Associate Professor, Faculty of Pharmacy, Oriental University, Indore

In this digital world, using ICT in the classroom is essential for students to learn and apply the necessary 21st-century skills. ICT enhances teaching and learning to fulfill their role as pedagogical environment designers. As well as ICT tools also help in Research and development and generation of new molecule by using Drug designing Techniques. Molecular docking is one of the most commonly used virtual screening approaches. This technique was able to estimate the ligand–protein binding affinity as well as the structure of the protein–ligand complex, which is useful information for lead optimization. Indeed, molecular docking has been used for more than three decades, and it has resulted in the discovery and development of a large number of new drugs.

Keywords: Docking, Information and communication Technology, Drug discovery

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INVITED LECTURE-14

Education in Pharmacy in the Post Pandemic Era



Dr. Rahul Shukla

Affiliation & Contact:

Assistant Professor, Department of Pharmaceutics, National Institute of Pharmaceutical Education and Research (NIPER-Raebareli), Bijnor-Sisendi Road, Sarojini Nagar, Near CRPF Base Camp, Lucknow (UP)-226002

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Research Interest:

Dr. Shukla has developed expertise in characterization and stabilization of the nanotechnology-based system like nanocrystal and its amorphous, polymorphism, pseudo-polymorphism form, nanocolloidal carriers, nanoparticles, cosolvency approach for improvement of bioavailability. His group works make industrially viable pharmaceutical technologies. Dr. Shukla's lab has developed platform technologies to improve delivery of 'difficult-to-deliver' drug molecules. His group has recently patented novel PharmaSolveWave technology based on cosolvency and ultrasonication. Dr. Shukla's work is based on enhancing the delivery of therapeutics via Intranasal, lymphatic routes for neurodegenerative disorder and neglected tropical disease respectively.

Education & Professional Career:

2002-2006 B. Pharm, Jamia Hamdard University, New Delhi

2006-2008 M. Pharm, IIT-BHU, Varanasi

2008-2009 Research Scientist, Dr. Reddy's Lab, Hyderabad

Ph.D., JNU-CDRI, Lucknow

D.S. Kothari Post Doctoral Fellow, UIPS, PU, Chandigarh

Assistant Professor, Department of Pharmaceutics

Major Publications:

1. Recent advances in lipid-engineered multifunctional nanophytomedicines for cancer targeting in Journal of Controlled Release (Impact Factor-9.776).
2. Therapeutic potential of nanoemulsions as feasible wagons for targeting Alzheimer's disease in Drug Discovery Today (Impact Factor-7.89).

3. Nanotechnological approaches for targeting amyloid- β aggregation with potential for neurodegenerative disease therapy and diagnosis in Drug Discovery Today (Impact Factor-7.89).
4. Silymarin encapsulated nanoliquid crystals for improved activity against beta amyloid induced cytotoxicity in International journal of biological macromolecules (Impact Factor-6.9).

Abstract

Education in Pharmacy in the Post Pandemic Era

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Abstract:

Pharmacy colleges and schools worldwide faces unprecedented challenges to timely deliver sustainable education during the novel coronavirus (COVID-19) pandemic. Globally, experiences of pharmacy educators in delivering emergency remote teaching, supporting displaced or isolated students, ensuring purposeful experimental placements, and communicating with faculty members, staff members, and students are discussed. Looking for purpose and opportunity, however, requires faculties to approach work differently. Generally, in pharmacy schools or colleges worldwide, staged implementation and long-term planning of major teaching initiatives is undertaken. We ask each other, “what do we want our graduates to be able to do at the end of the program?” and “How can we support the use of medicines and health technologies over the next 20 years?”.

Although online pharmacy lectures for course curriculum have allowed to continuously training future pharmacists in this pandemic. There is no doubt that access to on-campus instruction more significantly encourages the connections between students and their campus, their peers, and what they are learning. Even in the earliest stages of this remote model of online education, students grieve over the loss of casual interactions with their peers and participation in cocurricular activities and other social events. However, some students find distance education more convenient, and others say it is difficult to motivate themselves due to lack of personal connections. Academics are mourning this as well. The memories of our collegial interactions at coffee shops, libraries, and conferences leave holes in the university or college experience for student as well as faculty members too. To familiarize instructors and students with new technologies, resources and training on adaptation with virtual meeting technologies (i.e., Zoom or Microsoft Teams) for use in teaching. Training included etiquette functionality, for video conference calls, and recorded examples. Recorded video has an add on advent with the students who are residing in remote areas can download later on listen to the lectures of respective subjects.

The role of this pandemic in accelerating opportunities for new models of pharmacy education across the world has open the new horizons with 3Ls i.e., lives, livelihoods, and learning.

Keywords: Pharmacy, education, faculty, curriculum, digitalization

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INVITED LECTURE-15

Pharmacy Education's: Challenges and Opportunities



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Research Interest:

Novel and Controlled Drug Delivery

Biological and Chemical Sciences

Education and Professional Career:

B.Pharm SLT Institute of Pharmaceutical Sciences, Guru Ghasidas University Bilaspur, Chhattisgarh

M.Pharm B.R. Nahata College of Pharmacy, Mandsaur, MP. Rajiv Gandhi Proudyogiki Vishwavidalya, Bhopal

Ph.D. SLT Institute of Pharmaceutical Sciences

2018-Present - Worked as professor at University College of Pharmacy Raipur, Pt. Deendayal Upadhyay Memorial Health Sciences and Ayush University of Chhattisgarh

Worked as associate professor at Shri Shankaracharya Group of Institutions-Shri Shankaracharya Technical Campus, Junwani, Bhilai CG

Worked as assistant professor at Institute of Pharmacy, Raipur Institute of Technology, Raipur, Chhattisgarh

Major publications:

1. **Shekhar Verma**, "Enhancement of site-specific delivery of diloxanide furoate as an antiamebic drug". European Journal of Pharmaceutical Sciences, Elsevier IF- 4.384. **European Journal of Pharmaceutical Sciences 86 (2016) 50–57.**
2. **Shekhar Verma**, "Catalytic pyrolysis of ulvalactuca macroalgae: Effects of mono and bimetallic

catalysts and reaction parameters on bio-oil up-gradation” **Bioresource Technology, Elsevier. IF- 9.642, March 2021**

3. **Shekhar Verma**, “Anti-tuberculosis activity and its structure activity relationship (SAR) studies of oxadiazole derivatives: A key review. *European Journal of Medicinal Chemistry. Elsevier. IF- 6.514. 209 (2021)*
4. **Shekhar Verma**, Paper accepted on Anhydrous Nanoemulsion: An Advanced Drug Delivery System for Poorly Aqueous Soluble Drugs. *Journal of current nanomedicine. Current Nanomedicine, 2016, 6, 1-11. Bentham Publication.*
5. Shekhar Verma, Amelioration of lipophilic compounds in regards to bioavailability as self-emulsifying drug delivery system (SEDDS). *Future Journal of Pharmaceutical Sciences (2020) 6:21 Springer open*

Abstract

Pharmacy Education's: Challenges and Opportunities

Dr. Shekhar Verma

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Abstract:

The corona pandemic impacted both healthcare as well as the education system worldwide. All over the globe, Pharmacy Institutions face unexpected challenges to ensure sustainable education during this novel corona virus (COVID-19) pandemic. This ongoing pandemic situation forced both pharmacy faculty members and pharmacy students to adapt to a new teaching and learning environment not only in India but also around the entire world. The pharmacy education system faces various challenges and opportunities to convert classroom teaching learning and experiences and student assessments to an online format—a modern teaching-learning approach from classroom to Zoom, from personal to virtual and from seminars to webinars. The most popular online communication platforms that would change the destination and direction of the entire education system across the globe in post-pandemic circumstances are Start me, Classtime, Classwize, Google Classroom, ClassDojo, Edmodo, Parlay, Udemy, WeVideo, Skillshare, Gynzy, Adobe Captivate, Seesaw, Edx, Elucidat, Pluralsight, Otus, Floop, Future Learn, Blackboard Learn, Hapara, Shift, Lectora Inspire, Kialo Edu, Buncee, LanSchool and many more seem relevant as the current scenario tries to keep our education away from the traditional formal education system and provide an opportunity to flourish on their curiosity. Now the epidemic has passed, so after the epidemic, the conventional education system will have to be assimilated and kept moving as before. At the same time, there are many types of online educational resources, and they also have to be constantly used within limits. So that students continue to get the benefits of both traditional and modern education systems.

Keywords: Pharmacy, education, COVID-19, pandemic, online platform, educational resources

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In-vitro alpha amylase, alpha glucosidase inhibitory activity and lc-ms analysis of *cedrus deodara* (roxb. Ex d.don) g.don bark fractions

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Abstract

The study has been aimed to evaluate in-vitro alpha amylase, alpha glucosidase inhibitory activity and LC-MS analysis of *Cedrus deodara* (Roxb. Ex. D. Don) G.Don bark fractions. The pulverized plant bark was subjected to extraction with methanol using cold maceration technique with three consecutive cycles. Further, methanolic extract (CDM) of bark undergo successive fractionation using different solvents, i.e., hexane (CDMH), chloroform (CDMC), butanol (CDMB) and water (CDMW) respectively. The freshly prepared fractions were investigated for their alpha amylase and alpha glucosidase inhibitory potential and then the fraction with maximum enzyme inhibitory potential was selected for further LC-MS screening in order to identify the presence of compounds responsible for the observed effects. The results of in-vitro alpha amylase and alpha glucosidase assay revealed that among different tested fractions, hexane fraction of methanolic extract (CDMH) exhibited maximum enzyme inhibitory potential in a dose dependent manner (1-100µg/ml). In addition, LC-MS analysis exhibited presence of some major compounds viz. dehydroepitodomatonic acid, himachalol, naringenin, isorhamnetin, myricetin, 17 alpha, 18-dihydroxydehydroabietanol and meso-seco-isolariciresinol in hexane fraction of *C. deodara* bark. Thus, the study confirmed promising alpha amylase and alpha glucosidase potential of *C. deodara* hexane fraction which might be due to the presence of these compounds. Further, computational studies are required to dock the identified compounds against targeted enzymes. Moreover, toxicity studies are required to evaluate safety and efficacy of the fraction.

Keywords: *C. deodara*, Fraction, Alpha amylase, Alpha glucosidase, LC-MS analysis

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Microwave assisted oxidation of carbonyl compounds using Au (III) metal ions and Au (III) nanoparticles

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Abstract:

We reported a highly efficient catalytic activity of Au(III) metal ions and Au(III) nanoparticles by in situ generated sodium ferrate for the oxidation of carbonyl compounds under microwave irradiation. Au³⁺ nanoparticles are prepared by the chemical reduction and green synthesis method in favor of the fabrication of 30-70 nm in the size. The Au³⁺ nanoparticles are characterized by using UV-Vis, Zeta, FESEM, TEM techniques. The results revealed that the Au³⁺ nanoparticles give higher yield as compared to gold metal ions. This is due to the large surface area of the Au³⁺ nanoparticles which in turn increases its catalytic

activity in comparison to Au³⁺ metal ions.

Keywords: Microwave irradiation, in situ generation, oxidation, carbonyl compounds, chemical reduction, green synthesis.

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Gas Chromatography-Mass Spectrometry and Phytochemical Analysis of *Chenopodium album*

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Abstract :

Chenopodium album Linn or Pigweed is a commonly known as bathua. It is member of Chenopodiaceae family, which is extensively cultivated and consumed in northern India as a food crop. The quantitative and qualitative analysis of phytochemical studies and possible chemical constituents of *chenopodium album* (chenopodiaceae) was analyzed using Gas Chromatography-Mass Spectrometry (GC-MS). The plant exhibited the presence of alkaloids, flavonoids, phenols, and Terpenes. Purified phytochemical (secondary metabolites) compound, alkaloids, and phenols were extracted from *chenopodium album*. These chemical compounds are considered biologically and pharmacologically important. Gas chromatography-mass spectrometry (GC-MS) is an analytical method that combines the features of gas-liquid chromatography and mass spectrometry to identify different substances within a test sample. GC-MS method is powerful technique for quantitative and qualitative analysis of several components present in natural products. GC/MS technique has been widely applied in biological, medical, and food research. The study showed that the presence of these compounds in the *chenopodium album* might be responsible for its biological activities in traditional medicine.

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The possibility of the gene therapy for rickets type II alopecia

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Abstract

Type II rickets is a hereditary disease caused by a mutation in the vitamin D receptor (VDR) gene. The main symptoms are bone dysplasia and alopecia, and while there is symptomatic treatment by high calcium intake for the former, there is currently no cure for the latter. Therefore, in this study, we verified whether gene therapy using adenoviral vector [1] on type II rickets disease model rat (VDR-KO rat) [2] could provide a therapeutic effect on alopecia. three 7-week-old female VDR-KO rats were used for this experiment, and we separate these three into 2 groups, one is a VDR-expressing adenovirus vector (VDR-adenovirus) –

administered (n=2), the other is non-administered (n=1). First, the hair on the backs of 4 animals including wild-type rat was shaved to the same extent with hair clippers, and then about 1.0×10^{10} pfu of VDR-adenovirus was intradermally administered to 2 rats in the administration group. Skin was collected from each rat at 2 days and 10 days after administration, and the state of hair growth and hair loss was observed. As a result, in the adeno-administered group showed hair growth promotion, hair loss suppression, and cyst formation suppression around the administration sites. However, no such phenomena were observed in VKO-control rat. These results suggest the possibility of gene therapy using VDR-expressing adenoviral vector for type II rickets model rats.

[1] Nakai et al. Hum Gene Ther. 18: 925 (2007) [2] Nishikawa et al. Sci Rep. 10:5677 (2020)

Keywords: Gene therapy, Adenoviral vector, Rickets type II, VDR, Genome editing

Introduction :

Vitamin D₃ is taken from foods or produced in the skin by UV, and it is converted to 25-hydroxyvitamin D₃ (25OH)D₃ by CYP2R1 and CYP27A1 in the liver and then converted to 1,25-dihydroxy-vitamin D₃ (1,25(OH)₂D₃) in the kidneys. 1,25(OH)₂D₃ binds to a nuclear vitamin D Receptor (VDR) to regulate expression of genes involved in Ca homeostasis, bone formation, and hair follicle formation. Rickets type II patients have a mutation in their VDR gene, and they show symptoms like O legs, X legs, and alopecia due to no function of VDR. Overintake of Ca could improve bone formation. On the other hand, at present time, there is no good treatment for alopecia. In this study, we conducted gene therapy for rickets type II model rats, by using adenoviral vector, which expresses VDR cDNA, to treat alopecia.



Figure 1 Comparison of the appearances at 23 days after injection of VDR-adenovirus in the back skin (right: treated with VDR-adenovirus left: non-treated)

Result and Discussion :

A clear difference was observed in hair growth between VDR-adenovirus-treated rat and non-treated rat (Fig.1). This result implied the possibility of gene therapy for rickets type II alopecia, with VDR-adenovirus.

Experimental :

First, the hair on the backs of 4 animals was shaved to the same extent with hair clippers, and then about 1.0×10^{10} pfu of VDR-adenovirus was intradermally administered to 2 rats in the administration group. Skin was collected from each rat 2 days and 10 days after administration, and the state of hair growth and hair loss was observed.

Conclusion :

This study implied the possibility of the gene therapy for rickets type II alopecia with VDR-adenovirus, and we also try the permanent cure of rickets type II alopecia with CRISPR-Cas9 express adeno-viral vector.

Physicochemical characterization and fatty acid composition of *Aethocytus foveolus* (Bug)

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Abstract :

The present study was conducted on the physicochemical activities and fatty acid compositions of oil from bug of (*Aethocytus foveolus*). The percentage yield of the sample was (44 ± 0.20 %), this showed that it is an oily insect. The physicochemical parameters of the insect determined are; acid value (6.94 ± 0.06), peroxide value (20.59 ± 0.95) mEqvO₂/kg, Saponification content (530.66 ± 0.61) mg/KOH/g and iodine value (13.62 ± 0.33) mg/100g as well as specific gravity and refractive index values were evaluated. The results of the Fatty acid Composition of Oil of (*Aethocytus foveolus*) were: Palmitic Acid, Palmitoleic Acid, Oleic Acid, cis-Vaccenic acid respectively. These results indicated that (*Aethocytus foveolus*) is unsaturated and can be employed industrially. Thus, this oil is expected to be lubricating oil, non-drying oil and cannot be prone to rancidity due to low acid and peroxide value, therapeutic uses in medicine and also useful in pharmaceutical industries.

Keywords: physicochemical activities, pharmaceutical industries, Fatty acids etc.

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Changes in Health Care Delivery Post Covid Pandemic

Manisha Shekhawat

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Abstract :

The corona virus disease 2019 (Covid-19) pandemic globally stroked As it impacts greatly the social economical and mainly the healthcare services of many countries. The COVID-19 crises have generated human, social and economical Costs. Claiming many lives and many more suffering health as direct or indirect Consequences of the virus. It has placed immense pressure on health care services, one often already over stretched before the pandemic. The COVID 19 pandemic has become a reality check for many aspects of health care system, especially regarding their over all readiness. Public health care surveillance program and Available infrastructure were shown as not consistently optimal additionally health care system appear unavailable to absorb and manage sudden and persistent pressure on their work load specially in the settings of acute care. Eve. Though contingency plans were often in place, health care system seemed unable to cope with sudden intense surge in demand. As the population of patients recovering from COVID 19 grows it is paramount to establish an understanding of the healthcare issue surrounding them. After covid-19 we had seen that we need development in our healthcare, health team and others, approaching for care of the patient & their priorities. A comprehensive understanding of patients care need will helps in the development after COVID-19. In effort to overcome many healthcare impairment and psychological impact, effective transformation is introduced which constitute strong reason to translate experience to action ables to Prevent further more crises. These changes are not made in overnight but it has changed for sure. So, we will have to

have our plans in places for further. Here we will be discussing about some changes introduced in healthcare delivery services post corona virus.

Keywords: Transformation, Health, Impact, Pandemic.

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Design and Synthesis of Pyrimidine Derivatives

Meenu Devi and Jaya Dwivedi*

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Abstract:

Novel series of pyrimidine derivatives were synthesized via its nitrile-derived amidoximes, using one pot procedures with dimethyl acetylenedicarboxylate. Synthesized compound was investigated by standard techniques such as IR, ^1H NMR, ^{13}C NMR, and mass spectrometer. For each synthesized compound, anti-microbial efficacy was determined using broth microdilution assay and minimum inhibitory concentration (MIC). Anti-bacterial studies revealed that compound UG/VI-40 was most active against targeted bacterial species.

Keywords: Domino approaches, Pyrimidine, Microbial evaluation

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Synthesis of Novel Heterogeneous Catalysts for Suzuki Miyaura cross coupling reaction

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Abstract

In the present work we report the construction of zeolite enslaved transition metal complexes (Pd^{2+} , Ni^{2+}) as novel heterogeneous catalysts for synthesis of polycyclic heterocycles using Suzuki-Miyaura cross coupling reaction in ethanolic medium. The synthesized catalysts were characterized by employing FT-IR, magnetic susceptibility, N_2 sorption, XRD, NMR, FE SEM analysis. Results of the study advocate that newly developed catalysts give rise to a rapid and easy synthesis of various polycyclic heterocycles by Suzuki coupling reactions in impressive yields. In conclusion, developed catalyst may be used as a versatile tool in the synthesis of various industrially and pharmaceutically important polycyclic heterocycles under greener conditions.

Keywords: Zeolite; Heterogeneous Catalyst; Suzuki-Miyaura Cross Coupling Reaction; Schiff Base

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Importance of Diet, Exercise & Yoga in Improvement of Physical & Mental Health

Nisha Rathore

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Abstract :

This presentation provides an indepth basic knowledge about proper diet, regular yoga and exercise to improve our physical and mental health status. Here we are going to discuss about yoga and exercise how they maintain our growth and development of body in terms of physical and mental wellness. Regular exercising and daily yoga enhance our immune system and delay our aging process, they also help us to cope with stress conditions and hypertension. All these activities increase our satisfaction with oneself thus, improves our mental stability. Whereas, staying healthy is at the top of nearly everyone's priority list, and our daily choices can determine just how healthy we are. So, the areas which we have the most control over are our diet, exercise and yoga. These all can have huge effects on overall health, and can be some of the main factors in preventing disease and other complications later in life. Diet and exercise are an important part of our health. If we don't eat a good diet and not performing physical activities, we are at increased risk of developing health problems. The present study explored the relationship between participation in yoga, healthy eating behaviors and physical activities among young adults. As the whole point of proper diet, regular yoga and exercise is to build good physique and mental wellness in all aspects of our body.

Keywords – proper diet, yoga, exercise, physical and mental health, preventing disease, mental stability.

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Techniques to improve Mental & Physical Health

Paridhi Sharma

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Abstract:

Understanding the definition of Health and its segment. Through various cohort studies conclude that physical and mental health is a key to a long and healthy life. Health is a vital aspect of living. In this short presentation, I would like to introduce the importance of physical and mental health. I will also like to discuss how mental and physical health are linked to each other and, imbalance in any one of them can lead you to a serious illness so, to keep them in balance we will discuss various techniques such as regular yoga, proper nutrition, and exercise which will improve our physical and mental health. Last but not least, I mark your focus on the crisis caused by pandemics to the physical and mental health of the people. Various facts and figures have concluded that during this pandemic we all suffered from great loss so the post-pandemic situation is more critical than Intra-pandemic. In the post-pandemic mental and physical health of the human beings are totally disturbed and take a long to come back on track. In this presentation, we will talk about the points that will be remembered to keep our physical & mental health in balance in the pandemics situation and can be improved by Nutrition, Yoga, and exercise.

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Advanced Emerging Technologies in Nursing Education Post Covid-19

Priya Chauhan

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Abstract :

This presentation discusses about technologies which are emerging in nursing education post COVID-19. As technology in nursing and medicine has developed, so technology role in nursing education for nursing student have access to online education, live and web based simulation, apps reference, guides, and electronic textbooks on mobile devices. Technology has been combined into health care system with continue advancement. Technological advancement such as e-learning has incorporated into many programs, helping students to learn in remote location and from home. Simulation learning is another technology uses within educational programming. The use of simulation has become more prevalent and is now well accredited among numerous nursing programs use of technology satisfies the demand of future generation of nursing faculty and students. Virtual environment may provide greater access practice opportunities at a much lower cost than high fidelity simulators. The virtual environment can provide opportunities for practice of non technical skills such as clinical judgment, team work, communications, and leadership skills. This methodology provides an opportunity for practices anywhere internet is access is available. Nursing programs vary in the type of technology they use, and they introduce new technology almost daily. There is no doubt that the future will bring more technological ways to enhance the educational process for nurses while also improving patient safety.

Keywords: Technology, simulation, e-learning, mobile devices.



Bioassay-guided fractionation and ex-vivo evaluation of roots of *Aconitum heterophyllum* Wall. Ex Royle in asthma

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Abstract :

Asthma is a pulmonary hyperresponsiveness, characterized by reversible airflow obstruction and hypersensitivity of the lungs affecting around 260 million people all around globe. *Aconitum heterophyllum* Wall. Ex Royle., an Indian traditional medicine has been widely used for treatment of respiratory disorders including asthma. The present study was aimed to evaluate the chemical composition and anti-asthmatic effect of fractions of hydro-methanolic extract of *A. heterophyllum* roots to extensively assess its therapeutic efficacy. The dried-roots of *A. heterophyllum* were extracted (hydro-methanol) and fractionated through a series of liquid-liquid partitions using chloroform, 1-butanol and water as solvents and their in vitro mast cell stabilization effect at the dose of 5 and 10 mg/Kg., p.o. was assessed. Most active fraction was further evaluated at the concentrations range of 1-250 µg/ml, to determine its anti-asthmatic potential against guinea

pig tracheal smooth muscle contraction. Additionally, these fractions were subjected to TLC and HPTLC analysis to determine the presence of major bioactive constituents. Butanol fraction not only showed maximum mast cell stabilizing effect but also significantly reduced tracheal contractions induced by histamine in a dose-dependent manner. Chemical analysis revealed presence of alkaloids as major constituents in the selected butanol fraction. These results highlight the anti-asthmatic potential of butanol fraction of hydro-methanolic extract of *A. heterophyllum* roots, supporting its traditional use in treatment of asthma.

Keywords: *A. heterophyllum*, Asthma, Alkaloids, Tracheal smooth muscle relaxant, Mast cells, Histamine

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Revolution in the Health Care After COVID-19

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Abstract:

This presentation discusses about health care transformation in the post corona virus pandemic Covid-19 pandemic acts as a transformation catalyst, accelerating the implementation and adoption of changes in public health intervention. Thus, a new model of health care delivery emerges with more emphasis on preventive measures, remote care, and substantial technological dependence. The transformation in healthcare would not be possible if it is not associated with technological innovations in communication, machine learning, and transportation. Mobile-enabled technologies, improving in public health literacy and mental health care system strengthen the health care system.

This presentation discusses about revolution in the healthcare after COVID-19 pandemic era. The third corona virus outbreak of international concern in 20 years, after the severe acute respiratory syndrome (SARS-COV) and the middle -east respiratory syndrome (MERS-COV), in the addition to other viral outbreaks such as zika virus and Ebola virus over the last decade. Covid-19 pandemic acts as a transformation catalyst, accelerating the implementation and adoption of changes in public health intervention. The transformation in healthcare would not be possible if it is not associated with technological innovations in communication, machine learning, and transportation. It seems inevitable that posts COVID-19 there will be a review of policies, guidelines, and regulations relating to individual rights and the implementation of drastic public health measures as well as the governance of new technologically driven solutions within health care. Mobile-enabled technologies, improving in public health literacy and mental health care system strengthen the health care system. Thus, a new model of health care delivery emerges with more emphasis on preventive measures, remote care and substantial technological dependence.

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Novel functionalized biosorbent for removal of As(III) and As(V)

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Abstract:

The present study focuses on the uptake of As(III) and As(V) ions from aqueous solution using low cost, green, chemically modified biosorbent *Saccharum officinarum* bagasse commonly referred as sugarcane bagasse (SCB). Functionalization of SCB was carried out with 2- mercaptoethanol by incipient wet impregnation method. Material was characterized by SEM, EDAX and FTIR spectra. FTIR spectra provided evidence to the presence of potential binding sites associated with thiol groups which are responsible for As(III) and As(V) removal. The optimum equilibrium contact time, dose rate, isotherm and pH used for adsorption of As(III) and As(V) were studied. The adsorption data showed good fit to both Langmuir and Freundlich isotherm models. The Langmuir monolayer capacities for As(III) and As(V) were estimated to be 28.57 and 34.48 mg/g of SCB-S, respectively. Recyclability studies demonstrated the applicability up to 5 cycles without much depreciation in sorption capacity. Finally, the green sorbent was applied to the removal of both trivalent and pentavalent arsenic species from arsenic contaminated ground waters.

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Pharmacological Studies of Novel Soluble Epoxide Hydrolase Inhibitor, Spbv-02 as a Potent Anti-Inflammatory Agent

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Abstract

Inflammation is a local response to cellular injury that is marked by capillary dilation, leukocytic infiltration, redness, heat and pain and that serves as a mechanism initiating the elimination of noxious agents and of damaged tissue. Many of the drugs like cortisone, hydrocortisone, aspirin, diclofenac, ibuprofen are frequently used in the management of inflammation. But, owing to their various adverse effects their usage has become a serious risk to clinicians, for instance gastric irritation, peptic ulceration, hyperglycemia as the most important adverse effect. In view of the associated adverse effects with anti-inflammatory drugs and ever-expanding number of patients suffering, there is an urgent need to develop some novel therapeutic agents which could reduce inflammation in better means with minimal antagonistic effects. Through, virtual high throughput screening, our team has successfully identified some novel soluble epoxide hydrolase inhibitors which showed impressive results in docking study and in-vitro *cell-free* sEH inhibitory assay. Thus, the present study aims to evaluate the in-vivo anti-inflammatory activity of SPBV-02 (in-silico

derived) using robust preclinical models. The anti-inflammatory activity of SPBV-02 was investigated using carrageenan- induced paw edema and cotton pellet induced granuloma in rats. The results of present investigation revealed that oral administration of SPBV-02 (0.1mg/kg and 0.2mg/kg) in both models in rats produced a significant reduction in paw edema and granuloma formation respectively in a dose dependent manner. Moreover, SPBV-02 also exhibited a marked reduction in the liver enzymes and biomarkers of oxidative stress. The results concluded that SPBV-02 has remarkable anti- inflammatory effect. Yet advanced studies are needed to elucidate the possible mechanism of action of SPBV-02.

Keywords: Inflammation, Soluble epoxide hydrolase, Antioxidant, Edema, Granuloma

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Synthesis and biological aspect of Quinazoline derivatives

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Abstract

Present paper aims to highlight the application of synthetically viable eco-friendly domino approach to the preparation of biological important quinazoline derivatives. The interested synthetic organic and medicinal chemists will find this report very practical, handy and useful in their quest of exploring the discovery of many other novel medicinally important materials from this class of “privileged medicinal scaffold”.

The reported material aptly illustrates the ingenuity and imaginative breadth on the work done by the scientists in the development of ecofriendly synthesis of bioactive quinazoline derivatives. For the sake of brevity, the synthetic protocol for their preparation have been concisely summarised in the presentation to provide an excellent guide to those searching for selective procedure to achieve the desired transformation. In this respect, this presentation seeks to present a timely account of current depth on the splendid array of ecofriendly procedures of synthesis known today for the preparation of bioactive quinazoline derivatives.

Keywords: Domino approach, quinazoline derivatives, Microbial evaluation

□□□

QSAR Modeling of (4-Phenocyclophenyl) Tetrazolecarboxamide Motif Analogues as Potent Anti-Alzheimer Agents

Smita Jain*, Sarvesh Paliwal and Swapnil Sharma

Department of Pharmacy, Banasthali Vidyapith, Banasthali, India

Abstract

Introduction: Alzheimer's disease (AD) is a neurodegenerative disease consisting in a progressive loss of memory and cognitive functions.

Materials and Methods: QSAR studies were performed on (4-Phenocyclophenyl) tetrazolecarboxamide motif, which were aligned for generation of a QSAR based model. Multivariate statistical approaches were applied using linear and nonlinear analysis such as multiple linear regression (MLR), partial least square (PLS) and forward feed neural network for the generation of model.

Results: The best MLR statistical expressions were evaluated with good predictive and authenticated ability and the values were $s= 0.273971$, $f= 79.0831$, $r= 0.950236$, $r^2 = 0.903$, $r^2_{cv}= 0.857917$. The r^2 (training and test-set) values of MLR, PLS and FFNN are 0.903, 0.9004, 0.8737, 0.8263 and 0.9772, 0.9366 respectively, which predicts the soundness of the model.

Conclusion: The values of standard statistical parameters reveal the predictive power and robustness of this model and also provide valuable insight into the significance of three descriptors (cosmic total energy, lipole X component and VAMP XZ polarization). After performing Lipinski's rule of five on (4-Phenocyclophenyl) tetrazolecarboxamide based derivatives no molecule was violating the rule. Therefore, these features can be effectively employed for the modelling and screening of active neurological agents as FAAH inhibitors kinase inhibitors.

□□□

High Surface Area Hypercrosslinked Polyaniline for Adsorptive Removal of Dyes

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Abstract :

Water pollution is the most serious problems. Heavy metal ions and synthetic organic dyes along with some other organic compounds mostly contribute to the water pollution. Synthetic organic dyes are the major pollutants in the effluents of textile, paper, leather, plastic, cosmetics and food industries. The widespread use of different synthetic dyes has led to water deterioration and is associated with allergic, toxic and carcinogenic damage to human health. Ion exchange, adsorption, chemical precipitation, membrane filtration, coagulation, floatation, electrodialysis etc are the various physico-chemical removal techniques proclaimed for waste water treatment. Hefty amount of chemicals, huge operation cost, high waste production, etc. are the several disadvantages associated with the above-mentioned methods. Recently, nanoporous polymers were explored as potential materials for the adsorptive removal of the dyes due to the its high surface area and well defined pore size, easy processability, wide range of functionality and availability of several possible routes for the synthesis of polymeric materials. Nanoporous hypercrosslinked Polyaniline (HCPANI-S) with specific surface area of $711 \text{ m}^2 \text{ g}^{-1}$ was synthesized as an effective adsorbent to remove both cationic (crystal violet, CV) and anionic (methyl orange, MO) dyes in the aqueous solution. HCPANI-S has an adsorption capacity of 209 mg g^{-1} for CV and 106 mg g^{-1} for MO and removes dyes as early as in 60 minutes. Both the dyes obey pseudo second order kinetics and Langmuir adsorption isotherm model.

Keywords: Hypercrosslinked Polyaniline, Dye adsorption, Crystal violet, Methyl Orange

□□□

Day- 3

New Challenges and Scopes in Education & Physical Education

CORE COMMITTEE :

- Ms. Pushpa Biyani (Mentor)
- Dr. Rajeev Biyani (Chairman)
- Dr. Sanjay Biyani (Director-Acad.)
- Prof. Manish Biyani (Director-R&D)
- Dr. Neeta Maheshwari (Sr. Principal, BGC)
- Dr. Sujata Biyani (Asst. Director)
- Ms. Priyanka Biyani (Asst. Director)
- Dr. Madhu Biyani (Asst. Director)
- Dr. Neha Pandey (Principal)
- Dr. Dhyan Singh Gothwal
(Dean, Administration & Vice-Principal)
- Ms. Taravati Chaudhary (Principal, Nursing)
- Dr. Archana Yadav (Principal, Law)
- Dr. Ekta Pareek (Principal, Education)
- Ms. Renu Tandon (HR Manager)
- Dr. Tarun Sharma (HOD, Science)
- Dr. Charanjeet Singh (HOD, Pharmacy)
- Dr. Devika Agarwal (HOD, Commerce & Management)
- Ms. Jishu B George (HOD, Nursing)
- Dr. Poonam sharma(HOD, IT)
- Mr. Roshan Lal (HOD, Law)
- Ms. Malti Saxena (HOD, Humanities)
- Dr. Tarun K Kumawat (R&D Coordinator)
- Ms. Anju Bhatt (Skill Coordinator)

ORGANIZING COMMITTEE:

- Dr. Ekta Pareek
- Dr. Shipra Gupta
- Dr. Manish Saini
- Dr. Arti Gupta
- Dr. Bharti Sharma
- Ms. Sarika Sharma
- Ms. Sunita Sharma
- Ms. Tripty Saini
- Ms. Sarita Pareek
- Ms. Sunita Kumari Sharma
- Ms. Muksh Kumari
- Ms. Pushpa Kumawat
- Ms. Neelam Kumari
- Ms. Ranjana Pareek
- Ms. Sarita Sharma
- Ms. Purva Gautam
- Mr. Rajendra Shekhawat
- Dr. Amita Adhikari
- Mr. Pavitra Singh Bishnoi
- Mr. Naveen Singh
- Ms. Saroj

Programme Schedule

Date: Dec. 16, 2021; Thursday (Day-3)

Theme: New Challenges and Scopes in Education & Physical Education

Standard Time IST	Schedule
Inaugural Session, 9:00 AM to 10:05 AM IST Moderator: Dr. Bharti Sharma	
09:00 AM-09:05 AM	Lighting of the Lamp
09:05 AM-09:15 AM	Welcome address by BICON-2021 Organizing Chair Dr. Manish Biyani Director (Research & Development), Biyani Group of Colleges, INDIA Professor (Research), JAIST, JAPAN
09:15 AM-09:30 AM	Inaugural Address by Chief Guest Prof. Naresh Dadhich Former V.C., VMOU, Rajasthan, INDIA
09:30 AM-09:45 AM	Address by Guest of Honor Dr. B.L. Saini Director, Rajasthan Hindi Granth Academy, INDIA
09:45 AM-09:55 AM	Vote of Thanks Dr. Sanjay Biyani Director (Academics), Biyani Group of Colleges, INDIA
09:55 AM-10:05 AM	Closing remarks and Group Photo Dr. Ekta Pareek Principal, Biyani Girls B.Ed. College, INDIA
Break 10 min	
Technical Session – I, 10:15 AM-11:40 AM IST Chair: Dr. Neha Pandey	
10:15 AM-10:40 AM	Dr. Sanjay Sengar , Professor, Rajasthan State Council for Education Research and Training, Rajasthan, INDIA; School Education Department, Govt of Rajasthan Topic: Digi World as A Stimulator of Educational Reforms
10:40 AM-11:05 AM	Dr. M.R. Bhadu , Deputy Director, Rajasthan Council of School Education, INDIA Topic: Agents for Redeeming Education in Present Scenario
11:05 AM-11:30 AM	Dr. Subhasis Bhadra , Associate Professor, Central University, Kishangarh, Ajmer, Rajasthan Topic: Need of Psychological Education for Reorienting Mental Health in Pandemic Situation
11:30 AM-11:40 AM	Q&A, Session closing remarks and Group Photo

Recreating Higher Education in the Post-Pandemic World

Virtual Oral Presentations, 11:40 AM-12:30 PM IST (Education) Chair: Dr. Arti Gupta	
11:40 AM-12:30 PM	Oral Presentations
12:30 PM-12:35 PM	Award Ceremony
Lunch Break 25 Min	
Technical Session – II, 01:00 PM-02:30 AM IST Chair: Dr. Bharti Sharma	
01.00 PM-01:25 PM	Dr. Piyush Jain , National Secretary, Physical Education Foundation of India Title: COVID-19 and the Physical Fitness of Students
01.25 PM-01:50 PM	Dr. A. S. Sajwan , Professor and Dean, Sports Sciences, Officiating Registrar, Lakshmibai National Institute of Physical Education, Madhya Pradesh, INDIA Title: New Education Policy 2020 Encourages Holistic Education Through Sports and Play
01.50 PM-02:15 PM	Dr. Pratibha Singh Ratnu , Assistant Director of Physical Education, Department of Physical Education, University of Rajasthan, INDIA Title: Behavioral Strategies in Sports for Coping With Stress
02:15 PM-02:25 PM	Q&A, Session closing remarks and Group Photo
Virtual Oral Presentations, 02:25 PM-03:15 PM IST (Physical Education) Chair: Dr. Vishnu Sharma	
02:25 PM - 03:15 PM	Oral Presentations
03:15 PM-03:20 PM	Award Ceremony
03:20 PM - 03:30 PM	Closing Remarks Dr. Amita Adhikari Principal Biyani Institute of Physical Education, INDIA

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INVITED LECTURE- 1

“Digi World as an Stimulator of Educational Reforms”



Prof. Sanjay Sengar

Affiliation & Contact:

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Phone: 8949084495

Email: sanjayrscert@gmail.com

Research Interest:

Update: Emerging Initiatives in Educational Technology

Education & Professional Career:

M.Sc. Chemistry, M. Ed., M. A. – Hindi, English, M.Com. – Economics

Professional Career:

2013-2014	Block Education Officer, Block – Bikaner -Dist, Bikaner
2014-2019	Assistant Director, Dept. Of Education -Bikaner
2019 -2020	District Education Officer, Nagaur
2020- Current	Professor – RSCERT, Udaipur

Abstract

“Digi World as an Stimulator of Educational Reforms”

Sanjay Sengar

*Rajasthan State Council for Education Research and Training, Udaipur
School Education Department, Govt of Rajasthan*

In the 21st Century, Online Education has become increasingly prominent, especially with the onset of the Pandemic. School closures leading to learning moving digital has shown the potential of the role “Online education” can play in catalyzing education. When schools were closed in late March 2020, acting swiftly to ensure continuous learning was a key priority for the education department of the state. By 13th April 2020,

the Online Education - SMILE (*Social Media Interface for Learning Engagement*) project was kicked off by the state education department.

Key Outcomes: The content reached lakh students via 9,226 WhatsApp groups and 3.28 lakh teachers via 9,768 WhatsApp groups every day.

Teacher training in govt schools are traditionally a “one size fits all” approach, generally disconnected from classroom realities and not linked to the outcomes. Closure of schools also meant that teachers across the state have more time in hand and gave the state a great opportunity to move away from this traditional approach. Online education here played a pivotal part in catalyzing this initiative. Digital largescale teacher education – through the DIKSHA, Uni-learn platforms were explored by the state and the learnings from how “digital” played a pivotal part in both student education and teacher education will be illustrated in detail.

Key Outcomes: Rajasthan was ranked #1 in Diksha usage within the first 2 months of launching digital teacher training.

- 89% teachers logged in via the MIS portal
- ~1.8 L teachers Enrolled- high demand for training

96% course completion with fidelity- teachers scored avg. 77% on post-module assessment

Keywords: Platform, DIKSHA, Outcomes, Impact, Digital, MIS



INVITED LECTURE- 2

Agents for Redeeming Education in Present Scenario



Dr. M. R. Bhadu

Affiliation & Contact:

Deputy Director Rajasthan council of School education

Phone: 9314586956

Email: mrbhadhu@gmail.com

Research Interest:

Emerging Initiatives in Educational Technology

Education & Professional Career:

- MA, MEd, NET, SET, Phd
- Participated in various International and National seminars, workshops and conclave
- Awarded on 15Aug 2017 at the state level for doing remarkable work in the field of education.
- Various books written including value and moral education

Abstract

Agents for Redeeming Education in Present Scenario

Dr. M. R. Bhadu

Deputy Director Rajasthan council of School education

In many societies teachers are looked upon as the individuals who can help to bring about positive changes in the lives of people. They are seen as natural leaders who can give advice on various affairs of the communities. Within the context of their direct interaction with children, parents and communities, teachers and educators could play several major roles in the prevention and elimination of child labour. They can act as:

- Frontline monitors and “child watchers”
- Community resource persons on child labour and advocates for children

- Catalysts for change in the educational system
- Strengthen the education system
- Create a network in the society to bring awareness towards education
- Identify the new reforming ways for education system
- Support the government to change education policies and practices
- Advocates the new educational technologies
- Do practice to enhance the quality of education
- Build the potential personalities for education reforms

So all these acts make the teachers and stakeholders the catalysts of education. They provide the best path to reform education through their great experience in education field.

Keywords: awareness, catalysts, reforming education, child watchers.



INVITED LECTURE- 3

**Demand of Psychological Education for Reorienting Mental Health
in Vulnerable Pandemic Situation**



Dr. Subhasis Bhadra

Affiliation & Contact:

Bandarsindri (NH-8, Jaipur- Ajmer Highway)

Kishangarh, Ajmer District, Rajasthan

Central University of Rajasthan, 305817

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Research interest:

- Psychosocial support, Mental health and well-being
- Livelihood intervention
- Life skills education
- Peace and conflict, Issues of marginalization and human rights violation
- Community interventions

Educational & Professional Career:

- **Ph.D.** in Psychiatric Social Work, from NIMHANS (National Institute of Mental Health and Neuro Sciences), Bangalore in 2006. The thesis titled “*Impact of Disaster and Life Events among Survivors*”.
- **M. Phil.** in Psychiatric Social Work from NIMHANS (National Institute of Mental Health and Neuro Sciences), Bangalore in 2000. The study conducted titled “*Teacher Trainees’ Perception about Life Skills for Children and Adolescents*”.
- **Master of Social Work (MSW)** from Vidyasagar School of Social Work, Vidyasagar University, Midnapur, West Bengal in 1997. The dissertation was “*Impact of an Industry on Its Surrounding Villages (with Special Reference to Kolaghat Thermal Power Station*”.

Experiences:

- *Associate Professor and Head in Department of Social Work, School of Social Sciences, Central University of Rajasthan, Head, Department of Sports Psychology*

- **Assistant professor and Head** in *Department of Social Work, School of Humanities and Social Sciences, Gautam Buddha University, Greater NOIDA, Uttar Pradesh* from 22nd April 2010 till 2nd November 2017.
- **Assistant professor** in *Department of Social Work, Assam University (Central University), Silchar, Assam*, 1st December 2009 to 19th April 2010.
- **Director, Disaster Mental Health** in *American Red Cross, India Delegation*, November 2006 till November 2009.
- **Research Coordinator** in the project of *CARE India & National Institute of Mental Health and Neuro Sciences*, Bangalore in collaboration as Strategic Partner, for Gujarat Riots Intervention (Gujarat Harmony Project), Tsunami Intervention and for Kashmir Earthquake Intervention. From November 2002 – October 2009.
- **Programme Coordinator**, in *OXFAM – India* (Bangalore), based at Bhuj, Gujarat for Earthquake rehabilitation programme from May 2001–October 2002.

Major Publications:

Book:

Deb S, **Bhadra S**, Sunney S, Sahay, S (2020), *Childhood to Adolescence: Issues and Concerns*, Pearson-India, ISBN: 978-93-534-3692-6

Sole AN, **Bhadra S** (2019). *Social Policies in India- Contemporary Perspective* (edited book). ABD Publisher, Jaipur, ISBN 9788183766876 (edited Book)

Research Papers:

1. **Bhadra S.** (2021). Vulnerabilities of the Rural Poor in India during pandemic COVID-19: Social Work perspective for designing sustainable emergency response. *Asian Soc Work Policy Review*. (doi: 10.1111/aswp.12236)
2. Kousar R, **Bhadra S.** (2021). Border Conflict: Understanding the impact on education of the children in Jammu Region, *Journal of Peace Education*, Routledge (Taylor & Francis), Vol 18, No-1, pp-48-71 (doi: 10.1080/17400201.2021.1873756)
3. **Bhadra, S.** (2020). Issues among Elderly Survivors and Provisions of Support in Disaster Response Policies and Programme in India, *Indian Journal of Gerontology*. Vol-34, Issue 04, Page 525-543, (ISSN 09714189)
4. **Bhadra, S.** (2017), Women in Disasters and conflict India: Interventions in view of Millennium Development Goals. *International Journal of Disaster Risk Sciences*, Volume 8, [Issue 2](#), pp 196–207
5. Des Marais, E, Boxel, S, **Bhadra, S.** (2015), Reflexive Development: A model for helping Social Workers Contribute to Sustainable Global Future. *Social Work Education: The International Journal*, (Francis & Taylor)- Vol-35, No 1, pp 100-112 (ISSN: 0261-5479)

Abstract

“Demand of Psychological Education for Reorienting Mental Health in Vulnerable Pandemic Situation

Dr Subhasis Bhadra

Associate Professor and Head in Department of Social Work, School of Social Sciences, Central University of Rajasthan, Head, Department of Sports Psychology

The civilization is threatened by disasters over and again. The humanity is at crisis not just with deaths and destruction, but with the fear of death, scores of insecurities and problems to lead a healthy life that are outfall of a disaster, may even continue for years together. Disasters are becoming complex, critical, severe and deadly. The events of disaster and development are at race all the time, as civilization strive to bring development, but often increases the risk of disasters by compromising with the natures' ability to withstand the rupture made. Further, the threats of chemical, biological, radiological and nuclear (CBRN) disasters are gradually increasing over past few decades. The pandemic as biological disasters crippled the human life many a time, but the ability to fight with the same varied, as well the intensity of the impact thereby. Thus, overall well-being is severely affected due to COVID_19 and there is an essential need to facilitate mental health understanding and reorienting the psychological well-being. Wellbeing and health are closely connected. Lack of wellbeing contribute towards increasing ill-health and vulnerabilities. The source of well-being is multi-dimensional and an outcome of complex phenomena. The life experience of an individual in comparison to the existing social norms and values contribute to well-being. The psychological issues among the children and adolescent, students during pandemic caused a concern about the future of the next generation. The close of school, cease of physical presence in the classroom, lack of contact with the peer groups, closer of the avenues of healthy entertainment like playing in the park, playground caused major distress. The Corona virus pandemic also underscored the mental health pandemic and ruptured the psycho social well-being. Therefore, psychosocial recovery and regaining social and mental well-being in the continuum of attending hope became a crucial need for all, specifically for the students at all levels, to augment the learning temperament.

Keywords: CBRN, biological disasters, psychological well-being, psycho social well-being.

□□□

INVITED LECTURE- 4

COVID-19 and the Physical Fitness of Students



Dr. Piyush Jain

Dr. Piyush Jain founded Physical Education Foundation of India with clear objectives of creating better opportunities in the physical education segment, developing culture of physical activities and sports, creating equal sporting opportunities at grass root level especially in rural areas and for kids coming from economically weaker sections.

He is serving in the organization as Secretary. Dr. Piyush Jain is an alumni of one of the most reputed physical education institutes in India, He did his Bachelor and Masters in physical education from the Lakshmibai National Institute of Physical Education, Gwalior and received his doctorate from SRTM University, Nanded, Maharashtra.

For the past two decades, Piyush Jain is continuously working for the upliftment of Physical Education and Sports at Grass root level in India. He has enabled the organization to create sporting opportunities for all through his persistent efforts. He is also the managing Editor of International Journal of Physical Education, Health & Sports Sciences.

Dr. Piyush Jain has contributed significantly in research and development in the field of physical education and sports, he has several publications to his credit in International and National peer reviewed Journal. Recently on his visit to China in the World Congress, his Paper “Relevance of Leisure Sports for Promoting Health” was awarded the Outstanding Paper of the Congress.

He was the President Literary Society of Lakshmibai National Institute of Physical Education, Gwalior in the year 2001. He has participated in the Kamal Nayan Bajaj Memorial Elocution Competition. Represented Inter University Youth Festivals in Debate and Elocution Competition.

He has been invited regularly in various talks on the Sports, Physical Education, Health Sectors in the All India Radio, Rajyasabha and other News Channels.

Dr. Piyush Jain has been awarded with Rajiv Gandhi Excellence Award – 2013, Khiladi – The Player Excellence Award – 2013, Sports India Award -2017, Pt. Deenadayal Award – 2017 for his inspiring work in Physical Education and Sports.

Abstract

COVID-19 and the Physical Fitness of Students

Piyush Jain

National Secretary, Physical Education Foundation of India

The Covid 19 pandemic has been an unprecedented disaster that has impacted masses globally. We have been tested for our perseverance in every walk of life. The ongoing pandemic is certainly the most devastating event that we have experienced in our generation, every family around us have been affected, we all have seen the grief and agony of losing our loved ones or someone we know. Moreover, other repercussions such as financial troubles, staying indoors under lockdown for months, and negative news have shaken the psyche of millions across the country in a very negative sense.

It would be apt to say that the last two years of pandemic have certainly impacted the students around the world and the education sector as well on the whole. For young students, times have been tough, especially with the lockdown restrictions in place they have been forced to live their lives in very unfamiliar environments with minimum social interaction, no or minimal physical activity, minimum outings etc. It has certainly impacted their physical health but the most important aspect has been the mental health issues that have arisen, especially amongst youth and children. The situation needs experts to devise a strategy for masses to recover from the mental trauma that people have suffered, especially families which have lost their member untimely due to covid.

It is important to understand the long term effects this pandemic will impose on students and the education sector. The environment of uncertainty and fear of future lockdowns have forced the entire education system to opt for a hybrid style of education. This however poses the threat of putting an entire generation of students into anxiety owing to minimum social interaction and lack of physical activity. Therefore it becomes important for educators and other stakeholders to devise and implement a strategy that can ensure holistic development of students despite the fears of future restrictions due to new variants of Covid-19.

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INVITED LECTURE- 5

New Educational Policy 2020 Encourages Holistic Education through Sports and Play



Prof. A. S. Sajwan

Dr. A. S. SAJWAN is a Professor and Dean of Sports Sciences, at present working as **Officiating Registrar** at **Lakshmibai National Institute of Physical Education (Deemed University), Gwalior (M.P.)** and has experience of more than **Thirty-Seven** years of Research and Teaching Kinesiology, Sports Biomechanics, Sports Training and Sports Specialization (Athletics) in graduate and undergraduate level. This Institute is under the Ministry of Youth Affairs and Sports, Govt. of India.

Working as a professor in this institute from 2006 and possesses Master degree, M.Phil beside Ph.D. degree in Physical Education. He has destination of holding 1st position in Diploma in Sports Coaching (Athletics) from NSNIS Patiala, and 1st position in LLB. He also completed advance diploma in Motion Analysis from **Athens (Greece)** and Indian technical delegate for Asian Junior Athletic championship held at **Singapore**. He has been visiting faculty of many colleges of Nagpur University, Jiwaji University and Indian Institute of Travel and Tourism Management. He has guided **17** Ph.D. candidates and has three book published. He has **35** research paper/Articles to his credit. He has completed many workshop and seminar in the institute as well as other institutes.

He has participated National level Athletic competition many times. He also awarded Govt. of India fellowship during M.Phil. course and got other Sports Scholarship during the period of study. He also granted Army commission (**NCC Officer**) and promoted to **Major** in Army wings. He conducted many adventure expeditions of the institute and NCC. He has been appointed technical delegate for National and International winter sports. He is technical official as photo finish judge for many National and International Athletic competition including 2010, **Common Wealth Games** at Delhi.

Administrative Assignments:

- a) Officiating Registrar, LNIPE, Gwalior.
- b) Dean, Sports Science, LNIPE, Gwalior.
- c) Worked as Director, Centre for Sports Coaching & Management, Lakshmibai National Institute of Physical Education (Deemed University).
- d) Head of Department of Sports Coaching and Fitness from 2007 to 2015.

- e) Member of Academic council of Institute.
- f) Chairman of Board of Study of Department.
- g) Head of Department of Sports Biomechanics till August, 2020.
- h) Director, HRDC (ASC) from 2018 to till August, 2020.
- i) Chairman of Departmental Research Committee.
- j) Chief Proctor.
- k) Incharge Vice-Chancellor time to time.

Important Achievements:

- a) Represented National Award competition.
- b) 1st place in Decathlon in Jiwaji University (Iron man of Jiwaji University, 1979-80).
- c) Awarded Govt. of India fellowship (1984-85)
- d) Member of editorial Board of International Journal of Fitness.
- e) 6th Place in All India Inter University Athletic Championship 1979-80.

Important Assignment:

- a) Acted many times as a subject expert in Uttarakhand public service commission.
- b) Acted as an expert for selection of professor in many Universities.
- c) Conducted many workshop and seminar in sports Biomechanics and Athletics.
- d) Visited foreign countries like Austria, Athens, Philippines and Singapore for academic visit/assignments.
- e) NCTE expert team member for inspection of colleges.
- f) NAAC expert team member for H.E.I.

Selection committee membership:

- Selection committee for the post of professor in Kanpur University.
- Selection committee member for the post of professor in Pune University.
- Selection committee member of Uttarakhand and Uttar Pradesh **Public Service Commission** for appointment of assistance professor and coaches.

Mission

- To achieve quality in teaching, coaching and research to excel world class educators in the field of sports and sports sciences.
- To protect, sustain and enhance top form of sports persons in competitive sports and games and traditional Indian games.
- To provide healthy and ecofriendly environment for upcoming sportsman.

Vision

- To prepare sports person, sports scientists, sports manager and physical educationist with the help of innovative research diverse programme and offering opportunities to ward manifestation, transformation and channel of communication on power of good inherent in sports and sportsman.

Abstract

New Educational Policy 2020 Encourages Holistic Education through Sports and Play

Dr. Arvind Singh Sajwan

Professor & Registrar, LNIPE

Abstract

The new NEP includes several key points that are instrumental for the holistic development of a child. By eliminating the rigid separation between curricular and extracurricular activities, the NEP acknowledges sports to be equally important as any other subject like English and Science, thereby increasing the fun and engagement that children desperately seek in school. Through play, children can develop physically, mentally and socially. And it is also found that play contributes positively to academic outcome, classroom behavior and attendance levels.

The recent National Education Policy 2020 (NEP) has brought about monumental change in our education system. In doing so, it has also placed high priority on children's health and their nourishment.

Multidisciplinary and holistic education is part of the principles of the NEP. Along with subjects like the sciences and social sciences, the curriculum must contain courses that make education well-rounded, useful and fulfilling including games, sports and fitness.

At the school level, the NEP propose sports-integration, or utilizing physical activities in pedagogical practices, to increase the students cognitive abilities, while promoting their physical and psychological well-being. Sports-integrated learning will help students achieve fitness levels envisaged in the Fit India movement, and adopt fitness as a lifelong attitude. It will also develop their skills like collaboration, self-initiative, teamwork and responsibility.

The NEP also proposes other ways to increase school students' exposure to sports and other activities. It increased flexibility and choice of subjects, allowing students to choose physical education as part of the curriculum. The policy also proposes 'bagless' days to allow students to engage in local vocational and other activities, such as sports and gardening. The NEP further encourages formation of clubs, for sports, yoga, and health and wellbeing, at the levels of schools, school complexes districts and beyond.

Higher education institutions will also have departments in subjects like sports, art and music, to provide a multidisciplinary and stimulating environment. Credits will be given for such subjects in undergraduate programmes.

Once the new educational policy gets implemented, which is announced by the Union Cabinet, children will benefit from the focus on balanced and all-round development from an early age.

Unemployed youths with degrees diplomas and certificates in Physical Education across the country are upbeat over the stress on sports and yoga in the new National Education Policy (NEP) 2020. These youths believe that the change would create new jobs for them at the school level.

Even though NEP envisages every aspects of human resource development need to be viewed from two lenses: whether NEP is useful for all stakeholders, and how easy or difficult to implement. The overall planning is good, but training of Physical Education teachers and an elaborate system for proper implementation are missing and there is no clarity of vision regarding actual translation of the goals of equity into reality and the challenge lies in it.



INVITED LECTURE-6

Behavioral Strategies in Sports for Coping with Stress



Dr Pratibha Singh Ratnu

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Research Interest:

Exercise physiology and sports psychology

Education & Professional Career:

2002 B.P.Ed. (Gold medalist) Department of Physical education, University of Rajasthan, Jaipur (Raj.)

2004 M.P.Ed (Gold medalist) Department of Physical education, University of Rajasthan, Jaipur (Raj.)

2004 QUALIFY UGC DEC. NET in Physical Education

2005 M.Phil in Physical Education, Kurukshetra University, Haryana

2011 Ph.D. in Physical Education from Mohan Lal Sukhadia University, Udaipur (Raj.)

Major Publication

1. **Impact of different phases of menstrual cycle on muscular strength** Published research paper in Velocity International Journal of Physical Education, Sports, Health & recreation ISSN 2348-9057 Volume 02: Issue Sep. 2015
2. **Menstrual Cycle and Motor Sports** Published research paper in Wellness Journal of Health / Physical Education, Sports, Health & recreation ISSN 0975-1361 Volume 03: Issue No.2 Dec.2011
3. **Impact of different phases of menstrual cycle on muscular strength**, Published research paper in Space Research Journal of Science, Physical Education, Udaipur ISSN 0976-2175 Volume 02: Issue Sep. 2011
4. Study of Anthropometric Measurement Status of the Rural and Urban Male Students

<http://sersec.org/journals/index.php/IJAST/issue/view/272> international journal of advance science and technology Vol. 29 No. 5s (2020): Vol 29 No 5s (2020) (Special Issue)

5. A Study of Health-Related Physical Fitness Status Rural and Urban Male Students of District Jaipur in Rajasthan, /international journal of advance science and technology Vol. 29 No. 5s (2020): Vol 29 No 5s (2020) (Special Issue)

Abstract

Behavioral Strategies in Sports for Coping with Stress

Dr Pratibha Singh Ratnu

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This paper aimed to systematically review the literature on coping in sport, examining evidence for both the trait and process perspectives, Coping strategies are being used as a way of eliminating an athlete's level of stress and arousal before a game (Morgan, 2010).

Coping is a major component in the transaction stress process, defined as an individual's ability to cope with his/her environmental stimuli and personal responses. The COVID-19 pandemic caused the greatest disruption to the world sports calendar since World War II. Sporting events have been canceled or postponed worldwide There are two fundamental coping approaches highlighted in literature.

The first, **problem-focused coping**

The latter is **emotion-focused coping**

The failure to cope effectively with acute stress during the sport contest may lead to undesirable changes in psycho-behavioral processes (Anshel, 1990; Anshel, & si, 2008; Campen & Robert 2001; Gaureau, Blondish & Lapierre, 2002; Giacobbi & Weinberg, 2000) Coping strategies used are self-talk, imagery, and muscular relaxation

A comprehensive literature search of SPORT discus, PsychLIT, and PsychINFO in November 2004 yielded 64 studies spanning 16 years (1988 – 2004).

The results indicated that athletes use a variety of coping strategies. Forty-six papers supported or adopted the process perspective (Lazarus, 1999; Lazarus & Folkman, 1984). There were also gender and age-related differences. Evidence was found to support three of the different models of coping effectiveness (goodness-of-fit approach, choice of coping strategy, and automaticity). Based on this evidence, future research should address some of the methodological and measurement limitations of the sport psychology coping literature. In particular, prospective research designs that minimize the time delay between recall and the stressful experience are required to assess how coping changes over time. More attention to developmental issues to guide the formulation of sport-specific models to enhance our theoretical understanding is also required. Finally, coping effectiveness should be examined both in the short and long term, as a greater

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ABSTRACTS

Transition from offline to online Learning : A Shift due to Covid-19

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Abstract:

COVID-19 has completely altered the educational landscape. Virtual learning/online learning platforms have previously been utilised in educational institutions to improve students' interest in subjects and study something other than the course material. However, as of April 22, 2020, this paradigm has altered, and virtual learning has taken over as the primary platform for teaching and learning. The back-to-back COVID waves have transformed everything. There is a blended teaching model everywhere. The researchers attempted to determine the effectiveness of a virtual learning environment on education in this study. In addition, the post-pandemic behaviour of students for online learning was also studied. A total of 384 undergraduate and postgraduate students from various Indian universities were asked to assess various features of virtual learning. The data is analysed using weighted average, rank analysis, correlation, and regression. It is found that VLE is a successful teaching strategy, with important benefits including effective communication with the entire class, board visibility, and the explanation of doubts, among others. However, students have had the most difficulty connecting to the virtual classroom due to technological difficulties. In a time when physical classrooms have become impracticable, it has shown to be a successful and even more vital instrument for learning and evaluation. It keeps students on pace and in sync with their courses across the board. The majority of students are familiar with the VLE and, in many circumstances, would wish to continue their education online.

Keywords: COVID-19, Discussions, Virtual Learning, Education, Evaluation Lectures, Online Classes, Online Platforms,

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Effective Leadership: As a Key to achieving School Improvement

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Abstract:

Effective leadership is widely accepted as being a key constituent in achieving school improvement. The evidence from the international literature demonstrates that effective leaders exercise an indirect but

powerful influence on the effectiveness of the school and on the achievement of students (Leithwood et al, 1999). Whilst the quality of teaching strongly influences levels of pupil motivation and achievement, it has been consistently argued that the quality of leadership matters in determining the motivation of teachers and the quality of teaching in the classroom (Fullan, 2001; Segiovanni, 2001). A preliminary glance at the leadership research literature however reveals that it is largely premised upon individual impetus rather than collective action and offers a singular view of leadership predominantly bound up with headship. As Murphy (2000) notes that the 'great man' theory of leadership prevails in spite of a groundswell towards leadership as empowerment, transformation and community building. Possibly, this is because schools as organisational structures remain largely unchanged equating leadership with status, authority and position. One of the most congruent findings from recent studies of effective leadership is that authority to lead need not be located in the person of the leader but can be dispersed within the school in between and among people (MacBeath).

In the USA, Canada and Australia the notion of 'dispersed', 'distributed' or 'teacher leadership' is particularly well developed and grounded in research evidence. This model of leadership implies a redistribution of power and a re-alignment of authority within the organisation. It means creating the conditions in which people work together and learn together, where they construct and refine meaning leading to a shared purpose or set of goals. Evidence would suggest that where such conditions are in place, leadership is a much stronger internal driver for school improvement and change (Hopkins, 2001). In practice, this means giving authority to teachers and empowering them to lead. Taking this perspective, leadership is a fluid and emergent rather than as a fixed phenomenon. It implies a different power relationship within the school where the distinctions between followers and leaders tend to blur. It also opens up the possibility for all teachers to become leaders at various times and suggests that leadership is a shared and collective endeavour that can engage the many rather than the few.

Keywords : Teacher , motivation , transformation, community building

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Impact of Coronavirus disease-19 (COVID-19) lockdown on physical activity and energy expenditure among physiotherapy professionals and students using web-based open E-survey sent through WhatsApp, Facebook and Instagram messengers

Dr. Anupama Goyal

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Abstract :

Background: Coronavirus disease—19 (COVID-19) spread throughout the world and become pandemic. To stop and control the rapid infection of COVID-19 lockdown is the best option. Sudden lockdown implies change in entire lifestyle of the population. Social isolation affects individual's lives by greater reduction in their physical activity, which might increase the chance of infection by reducing immunity. To what extent, the physical activity is reduced during this lockdown period among physiotherapy professionals, and students who propagate physical activity is not known. Hence, we aimed to evaluate the impact of the COVID-19 lockdown on physical activity level and energy expenditure among physiotherapy professionals

and students.

Material and methods: One hundred and forty three volunteered physiotherapy professionals and students participated in web-based open E-survey. The survey was carried out by sending the Google Forms link for International Physical activity questionnaire-short form (IPAQ-SF) through social networking sites using Google Forms to gather the amount of PA before and during COVID-19 lockdown period and analysed using Wilcoxon signed rank test.

Results: Among identified 261 potential survey participants, 143 responded, reaching a response rate of 54.8%. Total physical activity before and during COVID-19 lockdown period were 7809.7 (3849.7–11769.8) MET-min/ week and 4135.7 (867.2–7404.1) MET-min/week; $p < 0.0001$. While energy expenditure before and during COVID-19 lockdown period were 8189.8 (4242.1–12137.6) kcal/wk and 4221.7 (1004.6–7438.8) kcal/wk; $p < 0.0001$.

Conclusion: A significant reduction in self-report physical activity and energy expenditure levels were observed among physiotherapy professionals and students during the COVID-19 lockdown period.

Keywords : Coronavirus disease, Social isolation, physiotherapy

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India's First Education Policy

Bhagwansahai Saini

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Abstract

India's first Education Policy was passed and implemented in 1986. After thirty-four years, the National Education Policy (NEP) for India has been updated, revised and approved on 29 July 2020. The policy signifies a huge milestone for India's Education system, which will certainly make India an attractive destination for higher education world-wide.

The policy is based on the pillars of "Access, Equity, Quality, Affordability, Accountability" and will transform India into a **vibrant knowledge hub**

NEP 2020 emphasises systemic and institutional improvements to regulation, governance and promotion of multidisciplinary academics and research in Indian HEIs.

Several aspects of the plan may create new opportunities for UK HEIs. For example, changes to the basic education system will make Indian school leavers more prepared to directly enter a UK undergraduate programme; a new nationwide academic credit system will simplify credit recognition partnerships between UK and Indian universities; and legislation will soon be submitted to allow leading overseas universities (institutions ranked in the top 100 worldwide) to open branch campuses in India. At the same time there may be consultancy opportunities related to the quality focus of the new education policy.

Key words: education policy, vibrant knowledge hub, academic credit system.

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Management of Teaching During Covid-19 Pandemic in Higher Education

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Abstract

The paper aims to examine the use of different teaching methods used by teachers in Higher Education during the present scenario in Covid-19 pandemic. The paper analyzes the integrated use of traditional and innovative methods with information communication technology in Higher Education. The blended uses of methods enable teachers to adopt classroom activities effectively. The worldwide lockdown period has accelerated adaptation of digital technology. Teachers in Higher Education are in key position during the Covid-19 pandemic situation; they accept the challenges of Teaching Learning activities inspite of complete lockdown of Education system. In this lockdown period they adopt all the online methods and techniques for providing the continuous knowledge and learning to the students at Higher level of Education. The literature review indicates the effective use of methods and techniques which improves learners learning skill.

Keywords : Higher Education, Teachers, Methods, Traditional and Innovative Methods.



Emerging forms of E-Learning: Post Covid-19 Trends

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Abstract

With time and space, technology has begun to rule the world and learning has not remained unaffected by it. Earlier, teaching used to be confined to chalk and board system with learners receiving knowledge within the periphery of a classroom. But with the advent of technology, the education sector has also been digitalized and Online learning has widened the domains of knowledge for everyone. Earlier, E-learning was either used as a distance learning mode, or as a support to traditional learners, but, with the outbreak of the COVID-19 pandemic, educational institutes have been forced to shift to online mode completely, making e-learning an emergency substitute to regular teaching held in schools and colleges. Online learning is now being used as an important tool for not only higher education, but also primary and secondary education. This paper explores the future learning trends and the challenges in the education sector post the COVID-19 pandemic. It is also supported by an online survey of 40 learners to understand their eLearning patterns and preferences during the pandemic. Thus, the research aims to discover the various emerging forms of eLearning post the pandemic

period. This research is important for educational institutes as well as learners and instructors to prepare them effectively for the upcoming changes and challenges in the field of education.

Keywords: COVID-19, Education sector, Learning Trends, E-learning.



Re -Engineering the Human Resource Management System in Post Pandemic in Higher Education

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Abstract :

The disruptive impact of Covid-19 and the availability of digital technologies present an unprecedented opportunity for the transformation of higher education at a global level.

It is to be noted that even post pandemic the time and efforts took to get use to the technology in education sector should not be underestimated rather it should be considered as an opportunity in disguise. Through virtual learning process, despite having some adversaries in the beginning on both the sides (trainer and the trainee) this process has eased up the lives of people to an extent. Digital education has provided an appropriate infrastructure and technological platforms, solid servers that can sustain the virtual workload, and methodological training of professors and students for online delivery using all the technical and educational resources available. It is to remember that this process is yet to be established on a more firm ground.

However, the various actors in the learning processes (students, professors, universities) encountered several barriers in adapting to this new setting. Notwithstanding the fact that these measures were taken to subsidize the problem of not meeting in person and still not compromising in the quality of education after COVID we are required to create a healthy balance between virtual classes and face to face interaction as per the situation demands. Along with digital resources, human resources will also be required to utilize their skills for the fuller expression of their potential that will be for benefit of the society

Keywords : Higher education, Digital education, COVID 19, technology, society



Role of Adhomukhashvanasana and Anjaneyasana in the Development of Mental Health and Well-Being of Academicians in Meerut of Uttar Pradesh State

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Abstract:

The present research was intended to study the role of Adhomukhashvanasana and Anjaneyasana in the development of mental health and well-being of academicians' of Meerut district of Uttar Pradesh State. For the purpose of study two objectives were formulated which were followed by the hypotheses. 120 academicians' were randomly selected from three institutions of Swami Vivekanand Subharti University of Meerut District. The collected data were analyzed using ANOVA to find out the significant improvement in the selected variables by both the groups. Results revealed that the main effect of AdhoMukhaShvanasana was significant on Mental Health. The main effect of Anjaneyasana was found not significant on Mental Health. The effect of interaction of AdhoMukhaShvanasana and Anjaneyasana on Mental Health was not noticeable.

Keywords: AdhoMukhaShvanasana, Anjaneyasana, Mental Health, Well-Being

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राजस्थान में राजकीय एवं निजी महाविद्यालय के महिला शिक्षकों की स्थिति व रोजगार पर कोविड-19 का प्रभाव एक अध्ययन

डॉ. निम्मी महर्षि

सहायक व्याख्याता

शोध सार :

शोध पत्र यह अध्ययन विशेषतः राजस्थान में राजकीय एवं निजी महाविद्यालय के महिला शिक्षकों की स्थिति व रोजगार पर कोविड-19 का प्रभाव का विश्लेषण करता है। अध्ययन के माध्यम से यह पहचानने का प्रयास किया गया है कि महामारी में वास्तविक रूप में महिला शिक्षकों के रोजगार पर वृहद् स्तर पर प्रभाव डाला है एवं उसके परिणाम भी बड़े स्तर पर आकांक्षाओं के प्रतिकूल रहे हैं। शोध अध्ययन का उद्देश्य यह दर्शाता है कि कोविड-19 की स्थिति की वजह से महिला शिक्षकों के रोजगार छिन जाने, वेतन कटौती आदि से उन्हें शारीरिक, मनोवैज्ञानिक, मानसिक एवं आर्थिक स्वास्थ्य पर प्रतिकूल नकारात्मक प्रभाव झेलने पड़े हैं वहीं शोध पत्र यह भी दर्शाता है कि पुरुषवादी मानसिकता की प्रवृत्तियों के अस्तित्व से महिलाओं को लैंगिक असमानता जैसी धारणाओं व घरेलू हिंसा जैसी स्थितियों से जूझना पड़ता है। शोध अध्ययन का मुख्य प्रश्न यह जांच करना है कि महामारी में महिला शिक्षकों की रोजगार संबंधी व उनके आय के स्रोत पर खामोशी से जो कुठाराघात किया गया है उसके प्रभाव अनेक रूपों में परिलक्षित हो रहे हैं एवं उन्हें समाज की संकीर्ण सोच की चपेट से

दीर्घकालीन स्तर पर चुनौतियों का वहन करना पड़ रहा है। शोध अध्ययन की प्रामाणिकता की कसौटी व रोजगार पर कोविड-19 के प्रभाव की वास्तविकता को उजागर करने हेतु महिला शिक्षकों के व्यक्तिगत साक्षात्कार टेलीफोनिक माध्यम से आयोजित किये गये। प्राथमिक एवं द्वितीयक स्रोतों के माध्यम से अध्ययन में गुणवत्तापूर्वक विश्लेषण के साथ व्यवस्थित समीक्षा की गई एवं महिला शिक्षकों के साक्षात्कार के माध्यम से अन्य महत्वपूर्ण प्रभाव उनमें नौकरी की असुरक्षा हेतु मानसिक तनाव भी महसूस किया गया।

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Challenges Faced in Virtual Practicum Orientation and Demonstration in English Medium B.Ed. Colleges and Role of Teacher in Reformation

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Abstract:

Due to ongoing pandemic, the E-learning method use and application in the teaching and learning process is adopted. Practicum is core part of B.Ed. Now days as teaching learning is shifted to online mode , so B.Ed. teachers are facing some technical problems in practicum orientation and demonstration to the students . The study developed is qualitative nature. The study was conducted on B.Ed. College of Nashik city of Maharashtra. Five colleges were selected on random basis for data. Data was collected with the help of semi structured interview and focus group discussions with B.Ed. College teachers. The teachers discussed about problems that they faced while virtual practicum orientation and demonstration.

Key words: Practicum, B.Ed, Virtual, Orientation and Demonstration

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Role and impact of Bhagavad Gita with reference to Self-Management in COVID-19 Pandemic situation

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Abstract :

People of India deal with the outbreak of COVID-19 pandemic. WHO declared COVID-19 a pandemic on the 11th March, 2020. It means it has impact all over the world. There is increasing stress, anxiety, nervousness, depression, hypertension and other psychological problems in people all over the world. It is well established fact that stress is the root cause of almost all the major diseases. The Bhagavad Gita deals with almost all the aspects related with physical, mental, emotional and spiritual health of human beings. The Gita was preached in the battled field of Kurukshetra by Lord Shri Krishna to Arjun to counsel him to do his duties and to boost Arjuna's declining moral and self-confidence. The main challenge in today's world

is to manage oneself effectively, to convert informations into wisdom specially in COVID-19 pandemic situation. Bhagavad Gita is a doctrine of universal truth and help in human transformation. It helps in finding ways to avoid negative thinking, right knowledge, high consciousness, detachment from materialistic pleasure, realization of power of Nature and God. Bhagavad Gita is full of advice on the theory of cause and effect making the doer responsible for the consequences of his deeds.

A survey was conducted on total 210 faculty members and students of higher education who were provided sessions on Shrimad Bhagavad Gita before getting feedback. The respondent observed more self-control, positivity, enhanced their decision making power in self-management in COVID-19 pandemic situation.

Introduction:

Aurbindo (2006) explained that only those scriptures, religions and philosophies which can be constantly renewed, relived, being constantly, reshaped and developed in the inner thought and spiritual experience of a developing humanity, continue to be of living importance to mankind. Bhagavad Gita is one among them.

P.Kumari (2012) found strands of holistic education present in one of the scriptures of perennial philosophy, Bhagavad Gita.

Globally there have been 16.57 crore confirmed cases of COVID-19 including 34,37,545¹ reported deaths as per WHO Coronavirus Dashboard as on 22 May, 2021 and it is increasing day by day. The purpose of study is to realize the role of stress during this pandemic situation and to find out the role of Bhagavad Gita to deal with this worldwide problem.

The researchers are professionally and academically qualified in management, law, psychology, yoga and continuously studying and taking sessions on Bhagavad Gita. The Bhagavad Gita effects on our thought process thereafter on our belief system. Further our belief system effects on neuronal pattern and hormonal system and overall mental and physical health. But is very difficult to measure it. Therefore researcher opted to get respondent observations and feedback to know the role and impact of Bhagavad Gita to self-management in COVID-19 pandemic situation.

Review of Literature :

Reviewer considered literature of Vivekananda, AI Drucker, S. Radhakrishnan, Mahatma Gandhi, Aurbindo and spiritual leader like Ramsukh Das Maharaj, Osho Rajneesh and Anandmurti Guru Maa. Sharma Adarsh (1990) conducted a study of 'Nature and development of the personality in Bhagwad Gita : educational relevance in the present society'. The main findings included that the educational aim of Bhagwad Gita is to remove the ignorance of man and to develop a rapport with the society. Charlu M.K. (1971) has done a study titled 'The Educational Philosophy of Bhagwad Gita'. This is a study of the educational implications of the philosophical aspects of the Bhagwad Gita with a view to form a basis for the reconstruction of a sound educational system.

Objective :

1. To know the impact of study of Bhagavad Gita on different people of age, gender and education level during pandemic situation for self-management and social skills.
2. To know the level of knowledge of Bhagavad Gita gives positive impact on mind, body and emotion during the pandemic situation.

¹ www.covid19.who.int.

Research Methodology :**Source of Data :**

A questionnaire was administered to 210 faculty members and students of higher education through Google form based on the responses received, the same was trimmed down to 180 responses. The respondents who were asked to take the 19 module course of Bhagavad Gita. It was necessary to provide basic and fundamental knowledge to the respondent and thereafter the feedback was taken in order to get prudent result due to this limitation researcher kept the sample size. The respondents were given adequate conceptual knowledge and understanding of the Bhagavad Gita. Researcher made 19 digital module sessions after careful study of original text of Bhagavad Gita and uploaded the same on YouTube for the benefit and use for the respondents. The feedback was taken after live interactive sessions and question-answer round. The data collection was done through a questionnaire which was prepared with 10 items having open ended question. The question related to certain personal details, self-awareness, self-control, positivity, self-management and social skills among these samples were collected, purposive sampling techniques was adopted to elicit information from various age group. The data so collected was analyzed using statistical tools fit were frequency analysis, chi-squared test, to check the validity of data.

The tools is as follows :

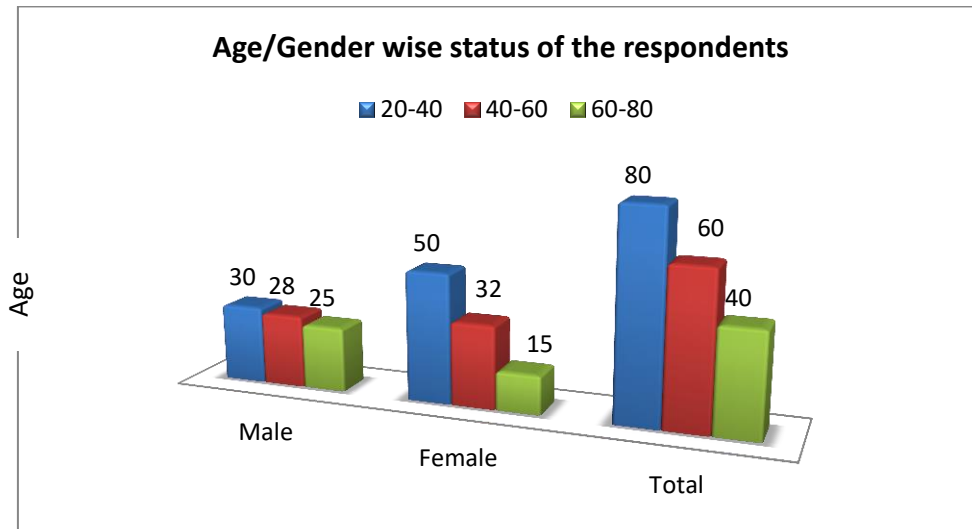
1. How much this course has helped you in controlling your stress?
2. How much this course has helped you in controlling your anger?
3. Did preaching of Bhagavad Gita during the course led to more positive thinking than before?
4. Did this course lead to an improvement in your life management skills? If yes, which skills has enhanced the most?
5. In your opinion, can the mind be controlled with the constant preaching of Bhagavad Gita?
6. Can Bhagavad Gita be considered as a tool to control jealousy?
7. Did the digital session of Bhagavad Gita help in controlling your greed for worldly items?
8. Do you think that Bhagavad Gita can be considered as a guide to control one's ego and achieve self-satisfaction in life?
9. Are teachings of Bhagavad Gita relevant in today's scenario?
10. In what aspects of Bhagavad Gita relevant in this situation of COVID-19 pandemic?

Demographic Profile of the Respondents:

Table-1 : Age/Gender wise status of the respondents

Age	Male	Female	Total
20-40	30	50	80
40-60	28	32	60
60-80	25	15	40
Total	83	97	180

Figure-1



Source: Analyses were based on the sample surveyed

Over 97 respondents were female and majority of the female respondents belonged to the age group of 20-40, while only 15 respondents were from the age group of 60-80 with an equal gender distribution.

Hypothesis:

H₀₁ : There is no significant association between age, gender and educational status of the respondents and their level of self-management and social skill among the selected sample by study of Bhagavad Gita during pandemic situation.

Table-2 : Chi-squared Test Results

Value	19
Df	9
Significance	16.92

The results of the Chi-square test indicate that there is a significant relationship between respondent's age, gender and educational status and their level of self-management and social skills after the study of Bhagavad Gita during pandemic situation. So that the researcher able to reject the null hypothesis. It may be concluded the age, gender and education level of the respondents are significantly impact by study of Bhagavad Gita.

Responses of the selected samples:

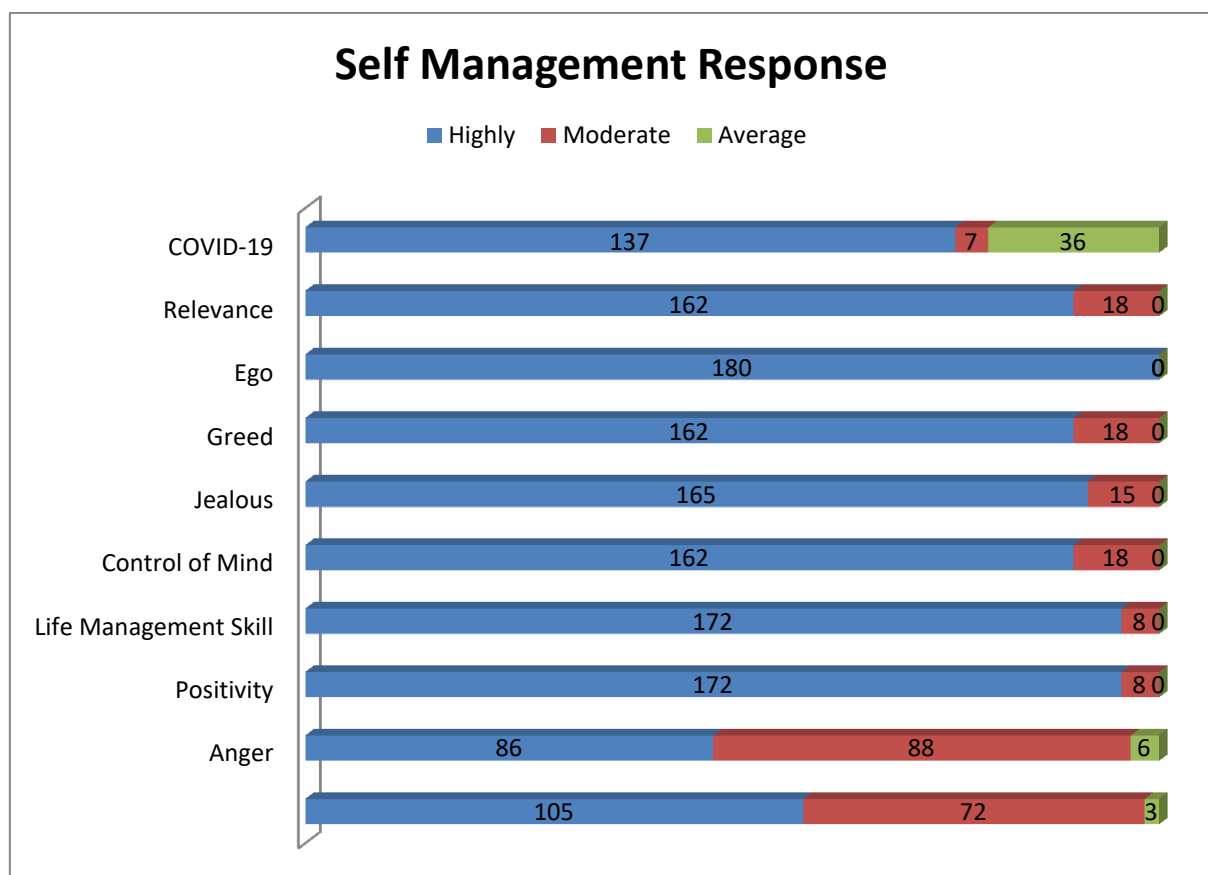
Table-3: Response of Bhagavad Gita

Self-management Tool	Beneficiary Status			Total
	Highly	Moderate	Average	
Stress	105	72	03	180
Anger	86	88	06	180

Recreating Higher Education in the Post-Pandemic World

Positivity	172	8	00	180
Life Management Skill	172	8	00	180
Control of Mind	162	18	00	180
Jealous	165	15	00	180
Greed	162	18	00	180
Ego	180	00	00	180
Relevance	162	18	00	180
COVID-19	137	07	36	180

Figure-2



Source: Analyses were based on the sample surveyed

Figure-2 shows the response of the selected sample to question related to self-management majority of the respondent have opined true about the impact of Bhagavad Gita on their mind, body and emotion.

The overall results of the researcher outcome could be explained as under :

- (i) **Stress** : 58% of the people find this course was highly beneficial in controlling stress whereas 40% considered it moderate.
- (ii) **Anger** : 48% of the people find this course highly beneficial in controlling anger whereas 49% considered it moderate.

- (iii) **Positivity** : 96% of the respondent believe that preaching Bhagavad Gita Shlokas during the course has enhanced positive thinking in them.
 - (iv) **Life Management Skill** : 96% of the respondent feels improvement in their Life Management Skills after undergoing this course.
 - (v) **Control of Mind** : 90% of the respondent believe that mind can be controlled with constant preaching of Bhagavad Gita.
 - (vi) **Jealous** :92% of the people within sample considered Bhagavad Gita as a valuable tool to control jealous.
 - (vii) **Greed** :90% of the people feel that it help in controlling greed an individual.
 - (viii) **Ego** :100% respondent considered Bhagavad Gita as a guide to control ones ego and realize than the soul consciousness.
 - (ix) **Relevance** :90% people believed that Bhagavad Gita is relevant in today's scenario.
 - (x) **COVID-19** :76% people considered this is relevant in the current situation of COVID-19 whereas 20% respondents are confused regarding the same.
- H₀₂** : There is no significant difference between the level of knowledge of the Bhagavad Gita and positive impact on mind, body and emotion during the pandemic situation.

Table-4 : Chi-squared Test Results

Value	17.918
Df	9
Significance	16.92

Chi-square test results show that there is significant difference between the level of knowledge of the Bhagavad Gita and positive impact on mind, body and emotion during the pandemic situation. The researcher able to reject the null hypothesis and conclude the Bhagavad Gita has positive impact on the self-management of the respondent in the current pandemic situation.

Discussion:

We could understand that our mental phenomenon give effect on our emotional state which in turn impact on our chemical body or hormone system and ultimately effect on our physical body. In COVID-19 pandemic situation we could observe negative environment and fear is created by print, digital and social media and it cause saviour impact on COVID-19 pandemic situation. India is considered as counting of intellectual people where the impact of Bhagavad Gita could not be ignored.

References:

1. Aurbindo (2006) Essay on the Bhagavad Gita (ninth edition), Pondicherry, Sri Aurbindo Ashram
2. Bhatt P.K., Shrimad Bhagavad Gita me Nirupit Jivan Vyavhar ke Mulya (2018), Thesis, <http://hdl.handle.net/10603/230611>

3. Bhawna Sharma, M. Ramchandran (2015), *Need of Bhagavad Gita Concepts in present scenario of professional education*, International Journal of Applied Engineering Research, November 2015, Vol. 10
4. Charlu M.K. (1971) "The Educational Philosophy of Bhagavad Gita". In first survey of research in education, M.S. University, Baroda
5. J.M. Chinawa, Psychosomatic Problems among medical students : A myth or reality, Shrivastava Antima
6. Kumari P. (2009) Stands of Constructivism in Bhagavad Gita. Educational Research and Review, 4(11) P.P. 530-534
7. Lulla Aruna (2020), Impact of Bhagavad Gita course on college students : A study based on students feedback, Journal of Religion and Health Springer
8. Muralikrishna Dantu (2019) Bhagavad Gita and Science - A Review, International Journal of Recent Scientific Research, Vol. 10, Issue 12(E)
9. Sharma Adarsh (1990) Nature and Development of Personality in Bhagavad Gita (5th Survey of NCERT, New Delhi)
10. Shrimad Bhagavad Gita me varnit samajik mulyo ka adhyayan (1998), Thesis, <http://hdl.handle.net/10603/11830>
11. W.H.O. Coronavirus (COVID-19) Dashboard (www.covid19.who.int.)]



Factors Associated with Teacher's Effectiveness during Pandemic in Rajasthan

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Abstract :

Teachers are one of the key elements in any school and effective teaching is one of the key propellers for school improvement. This review is concerned with teacher's effectiveness during present scenario of pandemic and what makes an effective teacher. This paper highlights key issues and findings about two related but distinctive topics – how to define a teacher's effectiveness and what is known about effective

teaching practices. It also seeks to identify the implications for policymakers in education and for improving classroom practice. The paper also includes the study of inspection evidence that involves making judgment about improving teaching quality in schools.

Many researchers view teacher effectiveness or effective teaching in a broader sense. They adopt criteria that seek to encompass the duties that are seen to be part of the wider role of teachers in the COVID pandemic in Rajasthan because the role of a teacher is rarely restricted to pedagogical role or classroom instruction only. He/she may be facilitating his/her colleagues 'teaching, engaging in broader leadership roles in the school, enhancing the quality of his/her teaching through his/ her own reflection or engaging in professional development programmes. Besides the above they were also indulge in other non-educational government oriented plan or programme also.

Keywords: Teachers effectiveness, Pandemic, Teaching Practice



A Survey on 'Role of Physical and Mental Health in Academic Achievements of Medico's

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Abstract:

An Individual person will be called healthy when he will be fit at all three level, Physically, Mentally and Socially. In our Research work we carried out a survey on 100 samples on title 'Role of Physical and mental health in academic achievements of Medico's.

In our survey we find out following conclusions.

69.2% Participant do daily light physical Exercise and 26.9 % do Moderate levelexercise,7.7% Medico have addiction of Alcohol, Due to low exercise level and other factors about 30.8% fills over all burden ,30.8 % fill burden due to exams,26.9 % fills burden due to studies and 11.5% fills burden due to assignment and presentation. In the condition of burden around 56 % medico firstly think then react,24 % not showed any responses and 16 % will remain calm and cool.56 % medico doing regularly medication and 40 % sometime. Only around 15% fill their life is at good quality level. So overall we conclude that poor Physical and Mental Health also affecting their Academic Achievement and for improving overall quality of life they should more concentrate on improving the physical and Mental Health.

Keywords: Physical, Mental, Health



Education as an Innovation to Improve Education

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Abstract

Online education system (e-learning) is defined as all forms of electronically assisted learning and pedagogy, which are functional in nature and aimed at building knowledge in the context of learner's personal experience, practice and knowledge is to impress. Information and communication systems, whether networked or not, serve as a special medium for carrying out the education process.

E-learning is essentially computer and network enabled transfer of skills and knowledge. E-learning refers to the use of electronic applications and learning processes. Applications and processes of e-learning include web-based learning, computer-based learning, virtual classrooms and digital collaboration. Curriculum materials are distributed through the Internet, intranet/extranet, audio or video tapes, satellite TV and CD-ROMs. It can be done on its own or led by an instructor and the medium is text, image, animation, streaming video and audio.

The gain

Revised performance: A meta-analysis of 12 years of research conducted by the US Department of Education found that students studying online generally performed significantly better than students studying for higher education by pursuing direct courses.

Enhanced Access: The most intelligent instructors can share their knowledge even beyond their limits, allowing students to take advantage of these courses outside their physical, political and economic conditions. Accredited experts have the opportunity to make information available internationally at the lowest cost to any interested person. For example, the MIT OpenCourseWare program makes substantial portions of university courses and lectures available online for free.

Convenience and Flexibility of Learners: In many situations, eLearning/eLearning is done on one's own and its academic session is available 24x7. Learners are not subject to any particular day/time to physically attend classes. They can also stop the education sessions for a while as per their convenience. Not all online courses require high technology. It usually suffices to have only basic internet usage, audio and video knowledge[3] depending on the technology used. Can also be done at home.

Developing the skills and abilities needed to ensure the presence of essential digital literacy skills in a learner's discipline, profession or career, especially in the 21st century: Bates (2009) [4] states that the interest of e-education is a the major argument is that it enables the learner to develop the skills needed for people working on the knowledge base by embedding the use of information and communication technologies within the curriculum.

Additional benefits of computer-based training over traditional classroom training include the ability to:

Pay less per credit hour reducing overall training time

To spread the training over an extended period of time (even months) Marking progress (computer remembers where the student left off so that they can resume their course from there)

Living in a place (eg, home, office, airport, coffee shop, etc.) where no travel is required (also reduces the cost of transportation to physical classes and a beneficial environment). Participate in classroom activities at convenience (not tied to class meeting time)

Keywords : meta-analysis, e-learning, instructional, C B T.

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New Challenges in Education

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Abstract:

At present, due to Covid 19, many radical changes have taken place in the field of education. Due to this epidemic, online education system has been developed. In this, many platforms for imparting education have been made available online. According to a report of Human Resource Development in the field of education, India is already lacking educational resources, now it has also been added to the lack of online education tools like smartphones, laptops and internet facilities. Shortage of teachers, lack of employable skills, lack of skills of teachers etc. have also been the major challenges of the Indian education system. Due to which the number of youth with only degree is increasing in India. In a single year innumerable degrees of engineers, lawyers, doctorates etc. are awarded but the quality of the curriculum is lacking. Due to this the present education system is only increasing the crowd of unemployed. The increasing trend of online has made the availability of education easy but it also lacks quality.

The present article discusses the challenges of the present day education system along with their solutions.

Keywords: Education, Challenges, Skill, Online

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Need of Psychological Education after Pandemic to Enhance Mental Well-Being

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Abstract

Mental Health has been a critical theme during pandemic .The issue of mental health is not only relevant but crucial Pandemic has led to self and social isolation, disconnection from family and friends, quarantine ,lockdown. This results in feeling loneliness, helpless, anxiety and depression. To face these challenges

mental health is crucial .There is way to assist them is Volunteering; It not only reconnect people and support those who need help and produce a positive thinking . Like, Schools have confronted unprecedented challenges as they quickly move to shift classes to an online format ,due to this students also suffer from mental issue .School based mental health professionals can give support to students who are potentially at risk for emotional issue by helping to implement systematic screenings. Within this process c can talk to the students and they can easily solve their problems about their mental health. There is a need to conduct webinars by school authorities in which motivational speakers gave session as through the webinars and sessions students can get emotional support as well as mental strength. Government should also conduct webinars on wider level so that people who are suffering from stress or mental problems can become mentally stable and well also by getting this psychological education. So that they can work on their Duties and Responsibilities even in pandemic.

Keywords: Psychological education, Pandemic, mental strength.

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लोक संस्कृति पर कोविड-19 महामारी का प्रभाव

वन्दना गजराज

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आज समूची दुनिया कोविड-19 महामारी की चपेट में हैं महमारियाँ पहले भी आती रही है और मनुष्य अपना बचाव करने में सफल भी होता रहा है आशा है इस बार भी कोरोनावायरस और मनुष्य की जीत होगी परंतु हारा हुआ कोरोनावायरस जाते जाते इतना तो जरूर कहता जाएगा कि मैं आधुनिक सभ्यता का वायरस हूं और मेरे फैलने और फूलने की बेशुमार सुचालकता उसके रंगों में है अब यह मानव जाति के विवेक पर निर्भर करता है कि वह आधुनिक सभ्यता के व्यामोह से निजात पाने का विकल्प ढूंढ लेगा या फिर उसी के एक आभासी आयाम को विकसित कर लेगा जो मेरी संक्रामक शक्ति की पकड़ से बाहर हो।

यूनेस्को के अनुसार, केवल फिल्म उद्योग में ही, इस साल लगभग एक करोड़ लोगों का रोजगार खत्म हो सकता है, जबकि दुनिया की एक तिहाई आर्ट गैलरियाँ, आधे से ज्यादा रोजगारों की कटौती कर सकती है।

इसी तरह, छह महीने से संगीत और कन्सर्ट बन्द होने के कारण, संगीत उद्योग को प्रायोजकों से मिलने वाली 10 अरब से अधिक धनराशि का नुकसान उठाना पड़ सकता है, वही वैश्विक प्रकाश बाजार भी साढ़े 7 प्रतिशत सिकुड़ सकता है।

उन्होंने कहा “संस्कृति ने हमें संकट से बाहर निकालने में मदद की है अब हमें संस्कृति की मदद करनी है और विविधता का समर्थन करना है, जिस पर संस्कृति की ताकत टिकी है।”

संकट का सामना केवल यह सैक्टर ही नहीं कर रहा है, लोगों के लिये भी यह एक बड़ा नुकसान है क्योंकि उन्हें भी सांस्कृतिक कार्यक्रमों में वंचित होना पड़ा है।

कोविड-19 महामारी शुरू होने के बाद से ही, अनेक संगीत कार्यक्रम, कला कार्यक्रम और उत्सव ऑनलाइन होते रहे हैं।

हालाँकि यूनेस्को के अनुमानों के अनुसार, इन्टरनेट कनेक्टिविटी की कमी जैसे मुद्दों के कारण विश्व स्तर पर दो में से लगभग एक व्यक्ति को उन कार्यक्रमों तक पहुँच हासिल नहीं हो पाती है।

लक्षित नीतियाँ :

यूनेस्को ने, इस स्थिति के समाधान के लिये, एक संसाधन विकसित किया है, जो सरकारों और नीति निर्माताओं को उन चुनौतियों से निपटने में मदद देगा, जिसका सामना महामारी के दौरान कलाकारों और सांस्कृतिक पेशेवरों को करना पड़ रहा है।

Culture in Crisis : A policy guide for a resilient creative sector में, भविष्य में रचनात्मक उद्योगों का लचीलापन बढ़ाकर उन्हें मजबूत करने की सलाह भी दी गई है।

संयुक्त राष्ट्र एजेन्सी, संस्कृति के क्षेत्र पर कोविड-19 के प्रभाव के लैंगिक आयामों को सम्बोधित करने के लिये विशिष्ट कार्यवाही का भी आग्रह कर रही है, क्योंकि इस क्षेत्र में अनिश्चित रोजगार में महिलाओं की आनुपातिक संख्या अधिक है, और वे विशेष रूप से सामाजिक व आर्थिक असुरक्षा का शिकार बनती है।

इस गाइड में सरकारों के लिए तीन प्रमुख चरण प्रस्तुत किये गये हैं : कलाकारों और सांस्कृतिक पेशेवरों को प्रत्यक्ष समर्थन: सांस्कृतिक और रचनात्मक उद्योगों को अप्रत्यक्ष समर्थन और सांस्कृतिक व रचनात्मक उद्योगों की प्रतिस्पर्धा क्षमता को मजबूत करना।

नीति मार्गदर्शिका में उल्लेखित विशिष्ट उपायों में रचनात्मक कार्यों व उत्पादों की खरीद व संविदा : आमदनी की हानि के लिये मुआवजा प्रदान करना: नए कौशल विकसित करने के लिये कार्यक्रमों को बढ़ावा देना : मांग बढ़ाना और विशेष ऋण उपलब्ध कराना शामिल है।

इस गाइड में अनेक देशों से सर्वश्रेष्ठ उदाहरण भी शामिल किए गए हैं उन्हें भी सांस्कृतिक कार्यक्रमों से वंचित रहना पड़ा है।

कोविड-19 महामारी शुरू होने के बाद से ही, अनेक संगीत कार्यक्रम, कला कार्यक्रम और उत्सव ऑनलाइन होते रहे हैं।

हालाँकि यूनेस्को के अनुमानों के अनुसार, इन्टरनेट कनेक्टिविटी की कमी जैसे मुद्दों के कारण विश्व स्तर पर दो में से लगभग एक व्यक्ति को उन कार्यक्रमों तक पहुँच हासिल नहीं हो पाती है।

संयुक्त राष्ट्र एजेन्सी, संस्कृति के क्षेत्र पर कोविड-19 के प्रभाव के लैंगिक आयामों को सम्बोधित करने के लिये विशिष्ट कार्यवाही का भी आग्रह कर रही है, क्योंकि इस क्षेत्र में अनिश्चित रोजगार में महिलाओं की आनुपातिक संख्या अधिक है, और वे विशेष रूप से सामाजिक व आर्थिक असुरक्षा का शिकार बनाती है।

कुंजी शब्द : महामारी, सांस्कृतिक पेशेवर, लैंगिक विभिन्नता



Day-4

Recent Technologies & Management Tools to Recreate New Higher Educational World after COVID-19

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Programme Schedule

Date: Dec. 17, 2021; Friday (Day-4)

Theme: Recent Technologies & Management Tools to Recreate New Higher Educational World after COVID- 19

Standard Time IST	Schedule
Inaugural Session, 09:00AM - 10:15 AM IST	
09.00A M -09.05AM	Lighting of the Lamp
09.05AM-09.10AM	Welcome address by BICON – 2021 Organizing Chair Dr. Manish Biyani Director (Research & Development), Biyani Group of Colleges, INDIA Professor (Research), JAIST, JAPAN
09.10AM-09.25AM	Inaugural Address by Chief Guest Prof. Rajeev Jain Vice Chancellor, University of Rajasthan, INDIA
09.25AM-09.35AM	Address by Guest of Honor Prof. Abha Jain Nagawat Dean, Faculty of Commerce, Principal, University of Maharani's College and Head, Dept. of EAFM, University of Rajasthan, INDIA
09.35AM-09.50AM	Address by Keynote Speaker-1 Prof. Matsushima Daisuke Professor & DBA, Kanazawa University, JAPAN
09.50AM-10.05AM	Address by Keynote Speaker-2 Prof. P. N. Mishra Professor & Head, School of Economics Institute of Management Studies, INDIA
10.05AM-10.10AM	Vote of Thanks Dr. Neeta Maheshwari Sr. Principal, Biyani Girls College, INDIA
10.10AM-10.15AM	Closing Remarks & Group Photo Dr. Sanjay Biyani Director (Academics), Biyani Group of Colleges, INDIA
Technical Session – I, 10:15 AM-11:05 AM IST Chair: Prof. Manvinder Singh Pahwa	
10.15 AM-10.35 AM	Prof. Malay Kumar Mohanty , Professor and Former Registrar, Ravenshaw University Orissa, INDIA Title: Role of Management Tool Shaping Career of Youth during Pandemic
10.35 AM-10.55 AM	Prof. Sandeep Poddar , Deputy Vice Chancellor (R&D), Lincoln University College, MALAYSIA Title: Re-engineering Human Resource Management Systems Post Pandemic
10.55AM-11.05AM	Q&A, Session closing remarks and Group Photo
Technical Session – II, 11:05 AM-12:00 PM IST Chair: Dr. Neha Pandey	
11.05 AM-11.25 AM	Prof. Sunil Kumar Gupta Professor, School of Commerce & Management IGNOU, New Delhi, INDIA

Recreating Higher Education in the Post-Pandemic World

	Title: New Economic Models to Promote E-learning in the COVID Era
11.25 AM-11.35 AM	Dr. Chintan A. Shah , HOD & Assistant Professor, Bhagwan Mahavir College of Commerce and Management studies, Surat, Gujarat, INDIA Title: New Educational Leadership Models in the COVID Era
11.35AM-11.45AM	Q&A, Session closing remarks and Group Photo
Break 05 min	
Virtual Oral Presentations, 11:50 AM-12:50 PM IST (Commerce and Management) Chair: Dr. Smriti Tiwari	
11.50AM-12.50PM	Oral Presentations
12.50PM-01:00PM	Award Ceremony
Lunch Break 30min	
Technical Session – III, 01:30 PM-02:20 AM IST Chair: Prof. Anoop Kumar Mukhopadhyay	
01.30PM-01:50PM	Prof. Sandeep Chaurasia , Professor & HOD Computer Science & Engineering Department School of Computing & IT, Manipal University, Rajasthan, INDIA Title: Role of Technology in the Era of COVID-19 Pandemic
01.50PM-02:10PM	Prof. S. C. Jain, Professor , Rajasthan Technical University Kota, Rajasthan, INDIA Title: Block chain – A Pandemic Proof and Quantum Secure Technology for Smart Transactions
02.10PM-02:20 PM	Q&A, Session closing remarks and Group Photo
Technical Session – IV, 02:20 PM-03:10 PM IST Chair: Dr. Devika Agarwal	
02.20PM -02:40PM	Prof. Sachin Bhosale , Professor, ICS college, Khed, Ratnagiri, Maharashtra, INDIA Title: Artificial Intelligence (AI) Applications for COVID-19 Pandemic
02.40PM-03:00PM	Dr. Anirban Das , CEO, Analyst Consulting, Haryana, INDIA Title: Solution for ensuring Covid protocol in Educational Institute in Post Pandemic Era
03.00PM-03:10PM	Q&A, Session closing remarks and Group Photo
Break 5 min	
Virtual Oral Presentations, 03:15 PM-04:15 PM IST Chair: Dr. Poonam Mittal	
03.15PM-04:15PM	Oral Presentations
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04.25PM-04:30PM	Closing Remarks Dr. Pawan Patodiya Associate Professor Biyani Institute of Science & Management, INDIA

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INVITED LECTURE-1

Future Collaboration with Transdisciplinary Science & “REP” of Kanazawa University

Prof. Matsushima Daisuke

Kanazawa University, JAPAN

Abstract

Kanazawa University, national university, launched a new college this April. This is called College of Transdisciplinary Science (hereinafter "CTS") and we have a couple of specific features in comparing the other existing colleges in Japan. We, first of all, will focus entrepreneurial education which creates "disruptive innovative" rather than "sustainable innovation." CTS also is situated in line with new type of production of knowledge, so called "mode II" which pick up global or local challenges with back-casting approach from the future goals and then solve any problem by fruits from a variety of disciplines. CTS and its "community of practice, " "REP: re-startup entrepreneurial education program, focuses on "re-startups" rather than "startups," based upon the Hokuriku as "Japanese West" region where so many "only one tech. companies" or global niche tops are mostly accumulated in the world. CTS eagerly wishes to collaborate with Biyani group as academic cooperation near future and then to develop our mutual educational program as for upcoming Beyond-COVID 19 new era.

□□□

INVITED LECTURE- 2

Role of Management Tool Shaping Career of Youth during Pandemic



Dr. Malay Kumar Mohanty

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Professor and Head, P.G. Department of Commerce GM College (Autonomous), Sambalpur (The first college in Odisha to start commerce education in 1944) now University

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Research Interest:

Accounting, Taxation, Finance

Education & Professional Career:

M. Com, LL.B, M.Phil., Ph.D., MSW

Major Publications:

More than 60 research articles, 7 books

Abstract

Role of Management Tool Shaping Career of Youth during Pandemic

Malay Kumar Mohanty

Ravenshaw University Orissa, India

Abstract

Corona virus pandemic has influenced a huge number of young students all over the world, and India is no exemption to this phenomenon. Educational institutions in India are still wrestling with the consequences of Covid-19 and the consequent long lockdown. The lessons learned during the Covid-19 period could be applied to the post Covid-19 period also. For example, frequent parent teacher interactions could be held online, besides periodic offline meetings with the parents. A more urgent need is to address mental health issues emerging from the pandemic in students and provide them care and guidance through professional counseling and accompaniment. This will also help in reducing the negative impact of pandemic on the young minds. There is a growing demand to reshape the business education in India in this digital era. Almost one-third of the world population is Gen Z. These are also the future workforce and leaders.

Key words: Pandemic, Management, impact and lockdown



INVITED LECTURE- 3

Re-engineering the Human Resource Management Systems in Post Pandemic



Sandeep Poddar

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Research Interest:

Environmental Toxicology, Nutrition & Dietetics, Healthcare management, Organizational Behavior

Education & Professional Career:

Name of the Examination	Board / University	Year of passing
B.Sc (Hons) in Zoology	University of Calcutta, Kolkata, India	1993
Diploma in Dietetics	-Do-	1995
M.Sc. in Zoology	Dayalbagh Educational Institute, (Deemed University) Agra, India (specialization in Biochemical Genetics)	1998
PhD (Sc) in Zoology	University of Calcutta, Kolkata, India	2004
Title of the thesis “Comparison of cytotoxic effects of iron with other Group VIII metals and protection against effects of iron overload by dietary intervention” supervisor Late Dr. (Mrs.) Geeta Talukder and Late Prof. (Mrs.) Archana Sharma.		
Master of Business Administration (MBA)	Lincoln University College, Malaysia	2021

- Lecturer, Department of Biotechnology, Vidyasagar Institute of Education Technology & Research, Pursurah, Hooghly, from January 2008 –July2010.
- Part time Lecturer in Zoology, Sarojini Naidu College for Women, Kolkata from January 2010 – July2010.
- Guest Lecturer in Zoology, MSc Zoology, Asutosh College, University of Calcutta, 2010.

- Lecturer, Lincoln University College, July 2010-2011.
- Associate Professor, Lincoln University College, 2011-2016
- Senior Research Director & Professor, Lincoln University College, 2016- 2020.
- Deputy Vice Chancellor (Research & Innovation) 2021- till date.

Major Publications:

1. Maya Fadlilah, Aristoteles, Trilia, Maratun Ulla, Sandeep Poddar. The Effect of Pineapple Consumption on Uric Acid Levels in Elderly at Panti Sosial Harapan Kita Palembang. *Malaysian Journal of Medicine & Health Sciences*. 17(SUPP4): 15-17, June 2021.
2. Hilman Mulyana, Sandeep Poddar, Hafizah Che Hassan. The Relationship between Nurses Work Motivation and in Conducting Documentation of Observations According to The EWS Escalation at The Awal Bros Hospital. *Malaysian Journal of Medicine & Health Sciences*. 17(SUPP4): 27-30, June 2021
3. Natarajan Kannan, Sharath Asokan, Keshav Ram Gopal, Sandeep Poddar, Amiya Bhaumik. Randomized Controlled Trial for Comparative Assessment of Effect of Artificial Saliva Versus Virgin Coconut Oil on Salivary Proteolytic Activity & Radiation Mucositis in Patients undergoing Radiotherapy for Head and Neck Cancers. *Malaysian Journal of Medicine & Health Sciences*. 17(SUPP4): 52-56, June 2021
4. Feny Wartisa, Neila Sulung, Aldo Yuliano Mas Putra, Sandeep Poddar, Amiya Bhaumik. Relation between Sexual Age and HIV Incidence Among Men Who Have Sex With Men. *Malaysian Journal of Medicine & Health Sciences*. 17(SUPP4): 57-61, June 2021

Abstract

Re-engineering the Human Resource Management Systems in Post Pandemic

Sandeep Poddar

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Abstract:

Today's Human resource is Technology driven and controlled and aligned with fulfillment of personnel policies of the organization. The implementation of technology into the HR workflow frees the professionals from a great amount of routine work. The automation of processes eliminates paperwork, speeds up the execution of many tasks, and contributes to more efficient HR performance. The advancement and forced conversion to digital working environment enables modern HR specialists to perform certain tasks in a faster way and thus, pay more attention to such issues as the satisfaction of the employees, optimization of the recruiting and related processes, employee motivation, etc. during this COVID pandemic period. The term "e-HR" describes the transformation of HR service delivery using web-based technology. Implementing e-HR requires a fundamental change in the way HR professionals view their roles. Now HR professionals must not only master traditional HR skills and knowledge, but also have the ability to apply that knowledge via technology. Human resource information systems (HRIS), is the integration of hardware, software and

business processes used to implement an e-HR approach. The Technology driven HR also have some disadvantages such as in case of software minimal customization options. Integrated nature of such solutions, they can be prohibitively expensive to customize, or maintain customizations, as new versions of the underlying package are released. And some tools not necessarily offer the best solutions in each functional area. Stigma among employees to use new technologies is also an obstacle. A proper coordinated approach in providing training to help employees to manage an online environment and to manage themselves in a learning environment with new HR technologies should be considered in every case.

Keywords: HRIS, e-HR, Human Resource, Technology controlled HR, HR Performance.

□□□

INVITED LECTURE- 4

New Leadership Models for the Educational Sector in the COVID Era



Dr. Chintan A. Shah

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Research Interest:

Finance, Management and Stock Market

Education & Professional Career:

2005-2008	BBA (Finance)
2008-2010	MBA (Finance)
2015-2016	PGDRM, Research Methodology
2014-2018	Rai University, Ahmedabad (Management - Finance)
2011-2021	Assistant. Prof in Bhagwan Mahavir College of Business Admin BBA, Surat

Major Publications:

“Financial Risk Analysis of Selected Paper in India” Jointly organized by IQAC and P.G Section of NSS College of Commerce & Economics, Tardeo, Mumbai on 30.10.2021. **(Publish in “Shodhsamhita”** (ISSN 2277- 7067 - Print Version) Publisher: Kavikulaguru Kalidas Sanskrit Univeristy in the month of October).

“Earning Potential of Straddle and Strangle With Reference to Nifty50 Index” on 8th & 9th September, 2021. **(publish in–** Tukish Online Journal of Qualitative Inquiry).

“Impacts of Covid-19 on the Performance of NSE Index” In the 6th International Youth Symposium B.K. School of Professional And Management Studies, Gujarat University, India, **PP. No.137-143** January &

February 2021 **Published By** Mrs. Meena Pandey for Himalaya Publishing House Pvt. Ltd. on January 29-30, 2021.

“Usage Pattern of Social Networking Apps Before and During COVID 19 Pandemic” in National Multidisciplinary E-Conference on Opportunities and Challenges for Indian Business: Self Reliance and Development through _Vocal for local to Global approach – 2020_ on 27th June, 2020 organized by Bhagwan Mahavir College of Management (MBA & IMBA), Surat, Gujarat.

Abstract

New Leadership Models for the Educational Sector in the COVID Era

Chintan A. Shah

Assistant Professor (Department of Management)

Bhagwan Mahavir College of Commerce and Management studies,

Bhagwan Mahavir University, Surat.

Abstract

A leader is a person who organizes and holds responsibility over a certain, defined group of people. Leadership and entrepreneurship are closely connected in a number of ways. “Entrepreneurship is an expression of efficacy in change being possible whether for profit or not for profit. Especially among recent college graduates and college students, leadership is incrementally being carried out in the form of entrepreneurship”. A new chapter is being written about school leadership in disruptive times that will possibly overtake and overshadow all that were written before on the topic. Today’s ever-changing educational environment has created a need for new leadership styles that encourage positive change and improvement. The growth in the importance of school/College/university leadership has been accompanied by theory development, with new models emerging and established approaches being redefined and further developed.

In this context, the purpose of this session is to establish the role of the new leadership and management styles in helping to promote change and encourage innovation and innovative ideas from students and faculty members. Generally speaking, the endeavors to answer the following primary questions: “What type of leadership model is needed to encourage innovation in Education?” and “What is required of university management to promote entrepreneurship in universities and increase industry–university collaboration?” Transformational leadership also has a great impact on the higher education itself in terms of learning and teaching (Quinlani, 2014). First, as a major component for empowering innovation and entrepreneurship within higher education, participatory democracy was on the top of the list for creating a successful future leadership model, and second, new models of leadership management have no future without a thoroughgoing collaboration with industry management members.

Keywords: Leadership Style, Education, Innovation & Entrepreneurship



INVITED LECTURE- 5

Role of Technology in the Era of COVID-19 Pandemic



Dr. Sandeep Chaurasia

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Research Interest:

Advanced Science and Technology, Robotics, Machine Learning, Deep Learning

Education :

2010-2014	Sir Padampat Singhanian University, Udaipur	Ph.D.
2007-2009	Devi Ahilya Vishwavidyalaya, Indore	M.Tech.
2002-2006	University of Rajasthan	BE

Professional Career:

2015 – Present:	Professor in Manipal University
2009 -2015 :	Asst. Professor in Sir Padampat Singhanian University, Udaipur
2006 – 2007 :	Guest Faculty in Engineering College, Kota

Major Publications:

Early Detection of Breast Cancer through Supervised Machine Learning, Lambert Academic Publishing, Germany- ISBN - 978-3-659-36728-1, February, 2015

Ambiguity Exists in Discourse Knowledge Processing. Paper presented at the 1st National Conference on ICT, Sir Padampat Singhanian University, Udaipur, India (2010, March 5-6)

A Survey on Temperature Monitoring and Control Mechanism of Public Building Using Machine Learning, 2nd International Conference on Intelligent Communication and Computational Techniques (ICCT), Jaipur, India, 2019, pp. 101-105 (2019)

Anonymous Vehicle Detection for Secure Campuses: A Framework for License Plate Recognition using Deep Learning, 2nd International Conference on Intelligent Communication and Computational Techniques (ICCT), Jaipur, India, 2019, pp. 79-82 (2019)

Abstract

Role of Technology in the Era of COVID-19 Pandemic

(Remote- work deployment and Cloud Computing Implementation after COVID-19)

Sandeep Chaurasia

*Professor & HOD Computer Science & Engineering Department School of Computing & IT, Manipal University,
Jaipur*

Abstract

The contagion of COVID – 19 put Governments in emergency mode and led to lockdowns in various regions. 97.46 million Positive cases were identified for Coronavirus; everyone has suffered due to this unprecedented time. The restriction has been imposed in the economic and social world; boundaries have been created within countries as a strategic measure to treat this virus. Corporates were facing obstacles, roadblocks that open a new era of working culture. With the need of accessing critical applications and scalable solutions, cloud computing emerges a major role in transforming business as well in imparting knowledge through online education.

Cloud computing helps countries in combating COVID – 19, in education and health services, from the economic to the commercial sector. The following aspects will be covered :

Advantages of state of the art technology and its application in different areas of life during the COVID 19 crisis.

Assisting officials and decision-makers to take the appropriate decision for employing educational technology.

The latest trend in Artificial Intelligence in the current ecosystem.



INVITED LECTURE- 6

Block chain – A Pandemic Proof and Quantum Secure Technology for Smart Transactions



Prof. S.C Jain

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Chairperson BOS MCA, DRC CSE & MCA
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Email- Id : scjain@rtu.ac.in

Research Interest:

VLSI Design, Real Time Systems, Advanced Algorithms

Education :

2004	Ph.D. (Computer Science and Engineering)
1987	M.Tech (Computer Science and Technology)
1983	M. Phil.

Professional Career:

2004 onwards	Professor, in Rajasthan Technical University, Kota
1992-2004	Reader in Rajasthan Technical University, Kota
1988-1992	Scientist 'B' DRDO, Bangalore
1987-1989	Asst. Professor College of Engineering Pusad
1987	Lecturer, MITS Gwalior

Major Publications:

Evaluation of Various Routing Architectures of Multi-FPGA Boards, 13th International Conference on VLSI Design-2000, Kolkata, India

Efficient Embedding of Partitioned Circuits onto Multi-FPGA Boards, 10th International Conference on Field-Programmable Logic and Applications (FPL-2000) in Villach, Austria

Hybrid Multi-FPGA Board Evaluation by Limiting Multi-Hop Routing, 10th International Workshop Rapid System Prototyping RSP-2002, Darmstadt, Germany

Multi-hop routing of multi-terminal nets for evaluation of hybrid multi-FPGA boards, 1st International Conference on Field-Programmable Technologies FPT-2002, Hong Kong

Towards Implementation of Fault Tolerant Reversible Circuits, 1st IEEE Sponsored International Conference on Emerging Trends and Applications in Computer Science (ICETACS-2013), Shilong, Meghalaya, India

Abstract

Block chain – A Pandemic Proof and Quantum Secure Technology for Smart Transactions

(Role of AI and Machine Learning to Overcome from COVID-19 Pandemic)

S. C. Jain

*Chairperson BOS MCA, DRC CSE & MCA
Rajasthan Technical University, Kota, Rajasthan*

Abstract

Present financial system is facing a number of challenges across the globe in terms of dependence on banks, fraud/ cheating/ corruption, hacking, delay, cost etc. In order to make the world more transparent and financially smart, a hassle free, fast and independent Pandemic Proof and Quantum Secure financial system is needed. A revolutionary technology named Block chain is emerging as a good alternative to make smooth transactions for not only in financial world, but also in many fields like supply chain management, health sector, record keeping etc.

This talk will provide an exposure on working of the technology in very simple terms, various skills associated for its implementation and its applications.

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INVITED LECTURE- 7

Artificial Intelligence (AI) application for COVID-19 pandemic



Prof. Sachin S. Bhosale

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Big Data Analytics, Robotics, Machine Learning, Deep Learning

Education :

2018 : Ph.D From Shree Jagdisprasad Jhabarmal Tibrewala University, Rajasthan
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June 2001 - June 2008 IT Teacher in NVT's Senior College of Arts Science & Commerce Ladvali

Major Publications:

Research Paper on Modern Network Security, Contemporary Research In India (Issn 2231-2137): Special Issue: April, 2021

Research Paper on Business Intelligence, Contemporary Research In India (Issn 2231-2137): Special Issue: April, 2021

Abstract

Artificial Intelligence (AI) application for COVID-19 pandemic

Sachin S. Bhosale

*Head of Department, Computer Science
I.C.S College of Arts Science & Commerce Khed Dehmi Kalan,*

Abstract :

The expert systems are the computer applications developed to solve complex problems in a particular domain, at the level of extra-ordinary human intelligence and expertise. After that discuss the characteristics

of expert system. Using the knowledge engineering design the process of expert system. In knowledge engineering the process is defined as domain expert->knowledge engineering->expert system. Then discuss the human enrolment in expert system. Some benefits of expert system. Limitations of expert system. Explain the applications of expert systems. Relationship with the rule based expert system. How we can define the complete structure of a rule based expert system. Also define can expert system make mistakes?, also we can define the comparison of expert systems with conventional systems and human experts. Then define the course outcomes, objective of the expert system. What are the innovations in medical and biosocial engineering?

After that we come to the use of artificial intelligence in medicine with virtual branch. Also discuss the benefits of artificial intelligence in a medical field. The physical branch of artificial intelligence in medical. What are the growth of drivers of AI in healthcare, potential and future in Indian scenario? Then we discuss about the current scenario about the use of AI to help combat COVID-19.

□□□

INVITED LECTURE- 8

Solution for Ensuring COVID Protocol in Educational Institute in Post Pandemic Era



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Education :

2004-2006	Jamia Millia Islamia	PHD in Computer Science
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1996 – 1999	Jawaharlal Nehru Vishwavidyalaya	MCA
1994 – 1999	University of Calcutta	M.Sc (Applied Mathematics)
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Professional Career:

Nov. 2014 – Present	:	Founder & CEO of Ansyst Consulting
Nov. 2011 – April 2017	:	Director and Co Founder in Knowlez Flow
July 2018 – May 2011	:	Principal Scientist& Comptency Lead Vision in Hi Tech Robotic Systems
Nov. 2005 – June 2008	:	Associate Professor in Ansal Institute of Technology
2005 – 2008	:	Head, R & D and Associate Professor in AIT
2003 – 2005	:	Assistant Professor in Institute for International Management & Technology
2002 – 2005	:	Assistant Professor in IIMT

Major Publications:

Windows Programming using Visual C++ & Allied Languages , SCITECH Publications, March 2018, ISBN: 9789385983559

Optimized Reach of International Digital Library in Indian Scenario, Scholars' Press, Mauritius, 2018, ISBN: 9786202313544

Importance of Cost Analysis for International MPLS WAN (International Journal of Recent Scientific Research, SCOPUS, Vol. 9, Issue, 7(G), pp. 28158-28161)

An empirical study and recommendations to improve GER of West Bengal, (International Journal of Engineering Science Technology And Research (SCOPUS) Vol 3, Issue – 3, Page No. 17 – 26, 2018)

Importance of Standardization in Wide Area Network Capacity Management for Cost Optimization (International Journal of Engineering & Technology, 7 (2) (2018) 921-926).

LP based Model to Find Optimal Portfolio to Maximize the Profit in Software Project Billing (Second International Conference on Green Computing and Internet of Things (ICGCIoT 2018) sponsored by IEEE, August 16-19, 2018 ,Bangaluru, India)

Abstract

Solution for ensuring Covid protocol in Educational Institute in Post Pandemic Era (New Tools and Technology for Recreation the Post Pandemic Education World)

Dr. Anirban Das

Ansyst Consulting

Abstract

The COVID-19 has resulted in schools shut all across the world. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms. Although e-learning is greatly adopted in Indian school and colleges, but it has been realized that it could not be a solution to basic and higher education. So, there is need of reopening all educational institutes, but also it is evident that we cannot return to the world as it was before.

The major challenges to the academic administrators in post pandemic era, is that how to implement covid protocol in premises after reopening institutions. The gathering in hostel mess, common areas, corridors, closed places are very natural once students start coming to institutions. Particularly, hostels are such places where 24 X 7 monitoring is necessary to avoid gatherings. Moreover, if someone is having covid symptoms, then how to track their movements at individual level. These are few challenges for administrators to restart the classroom teaching.

To address these issues, some institutions has created bio-bubble among students, but that is not a long-term solution. UEd, an IoT (Internet of Things) sensor-based solution is developed to capture real time movement of people in campus. IoT beacon are used to create an Indoor Positioning System (IPS) and AI rules are applied to implement administrative guidelines for classrooms, labs, hostels and campus. Students, faculties, and administrators get real time information on mobile app, which help everyone to follow covid protocol.

Apart from that UEd also helps to get attendance of students, tracking of class held and many other added advantages.



ABSTRACTS

Indian Educational System: Post Covid Era with New Technologies

Aavidhata Adhishthata Aakashreom

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Abstract

In the last ten years, pedagogy has been evolving rapidly in terms of teaching approaches. Indian education system is still not mature at both the urban and rural area. Midday meal is the program organized to attract the students to get education. Under these circumstances government imposed nation wise lockdown on March 25th, 2020 to combat COVID-19, has made severe impact on the education system. India has the world's second largest school system, after China. A total of 1.3 billion learners around the world were not able to attend schools or universities, and approximately 320 million learners are affected in India alone. It has changed the traditional education system to the educational technologies model in which teaching and assessments are conducted online. Both the positive and negative impacts of COVID-19 on Indian Education system are observed. The new sudden law of teaching and learning completely implemented in the field of technology. How has Covid 19 pandemic altered main processes in education, including academic recruitment, academic management, teaching and learning processes, study and advancement processes, student life (accommodations on the campus, financial and co-curricular activities and other student welfare activities including food, transportation etc. On the other hand, how has Covid-19 compelled the institutions of higher education to implement new approaches, and to let go of their current teaching practices. In addition, intellectual honesty is a crucial concern in the online educational network. In this paper, all the main issues described above will be addressed through the development of a conceptual framework as a response to the Covid-19 pandemic that is happening throughout the world. This paper aims to analyze the Impact of COVID-19 on Indian Education System, focusing on education during online teaching and assessment of students getting online classes in this pandemic from settings at home. The practical application of this study is the find the benefits, drawbacks and barriers to online platforms or new technologies adopted after the pandemic.

Keywords: Online teaching-learning modes, pandemic, COVID-19, Assessment, online education



Re-Developing Human Resource Management Systems in Post Pandemic Era

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Abstract

Human resource management (HRM) is the strategic approach to effective and efficient management of people in company such way that they help their business gain a competitive advantage. It is designed to maximize employee performance with low cost. During the Covid, every organization is facing obstacle to

run the business smoothly. All type of businesses continues to cope with the uncertainty and its economic impact. Now day by day, as vaccination process is going on in full swing in our country, we shall overcome of this pandemic very soon and after that the biggest challenge will be to return on the track and to make financial position good. This provides the role of HR to co-lead their organization in becoming more robust and resilient to overcome the losses post COVID. In this new environment, the tools which can make an impact are - to implementation of digitalization (in work), freezing the new recruitments, process of regular health check in practice, to motivate the employees for high work performance and lean in to learning culture by reskilling and upskilling of employees. This study shows with the help of these tools organization can achieve their financial targets and will save cost which can be turn in to profit later.

Keywords: Employee performance, recruitments, reskilling and upskilling.



A Critical Evaluation of Customer Perception towards Online Marketing: With Special Reference to the State of Rajasthan

Amit Sharma

Abstract

Since last 10 years the numbers of internet users are increasing in India and in the world; this increment is in the terms of age, skill and background of the users. In the present times internet has emerged as an important medium of communication, entertainment, shopping, promotion of goods and services, spread of information and news, current updates, and many other relevant prepositions. This present study has taken the inspiration from this growth prospect of online business and tried to evaluate the perception of customer towards the purchase of electronic items. The researcher has considered the professionals from the field of education in Jaipur. Total sample size of the study is 200 respondents. This study is based on primary data and uses ANOVA (Analysis of Variance) for finding difference in the responses. SPSS is used as a platform of study.

Keywords: Digital Marketing, Customer perception, Electronics.



Online Teaching-Learning in Higher Education during Lockdown Period of Covid-19 Pandemic

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Abstract

The entire education system from primary to tertiary institutions has collapsed during the 2019 coronavirus (COVID-19) closure not only in India but worldwide. This study is a portrayal of online learning methods adopted by the University of Mizoram through the teaching and learning process and subsequent semester

tests. He is looking forward to a clever opportunity to continue making informed education decisions in the future during any crisis. The intended purpose of this paper is to address the educational needs of online education in the context of the COVID-19 epidemic and how existing educational institutions can effectively transform formal education into online education with the help of visual classes and more. Online tools are essential in this ever-changing field of education. This paper uses both the measurement and quality of teaching ideas for teachers and students in online teaching methods and also highlights the process of implementing online teaching and learning methods. The purpose of this paper is to draw a complete picture of online learning activities that take place during the closure period that includes establishing a link between the change management process and the online learning process in the education system during the COVID-19 outbreak in order to overcome persistent academic disruptions of educational activities and discourses as a normal course of procedure in the education system.

Keywords: COVID 19, Online Tools, Teaching Aids, Academic, Disruptions



Reengineering of Higher Education Post Pandemic

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Abstract

Technology has become indispensable at all levels of learning & education from kindergarten to universities. It has changed the way of communication, access information, work life and even play and disrupted our way of living. New technology driven trends we are seeing across Higher education. Like New learning trends, new resources, forms of interaction, teaching methods, etc. The difference between Schooling and Education is a phenomenon that has been understood and lamented for a while now, but the pandemic has crystallized the difference. As the pandemic continues, sharing the results of this study will help to enhance the efficacy of higher education engineering.

Keywords: pandemic, technology, education, higher education, learning, interaction.



Higher Education Expenditure and Economic Growth in India: The Role of Innovation

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Abstract

“No other investment yields as great a return as the investment in education”. – **Brad Hendry**.

In today's era of knowledge economy, it is evident that investment in human capital significantly contributes to economic growth. Many empirical studies have proved that education especially higher education is a key enabler of human capital development as it increases the competitiveness and skills of people resulting into high degree of innovation and sustainable economic growth. The aim of this study is to establish the causal relationship between higher education expenditure and economic growth in India using innovation as a mediating variable for the period 1990 to 2020. For the purpose of the study, economic growth has been measured in terms of per capita GDP (GDP), expenditure on research and development (ERD) and number of patent applications (NPAT) measures the level of innovation and expenditure in Higher education (EHE) has been used to quantify higher education. The study uses the vector auto regressive (VAR) model to test the relationship between these three variables. The findings indicate that level of innovation acts as a linking variable between higher education expenditure and economic growth. Higher education expenditure is a driving factor for level of innovation and level of innovation further promotes economic growth. The findings of the study suggest an important policy implication that Government should focus more on higher education expenditure in order to increase level of innovation in the country that leads to economic growth.

Keywords: Higher education expenditure, Innovation, Economic Growth, VAR Model

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Recreation of Education Industry by using New Tools and Technology during Covid-19

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Abstract

Recreation means ‘refreshments of spirits’ or how we create something ‘out of box’ to make today's better. New technology and tools of learning always play an important role in education industry. Aborting the rule of physical classrooms turned to online classes, replacing the projectors boards with laptops, tablets, online attendance software, etc. at the time of pandemic. During and post covid-19 there was the high need of online education system by using various online platforms and applications like zoom, goggle meet, Unacademy, Byju's, etc. Education industry is a wide term which includes primary school education to higher professional courses like MBA, NEET, JEE, CA, other competition exams, etc. There's lot of opportunities for online learning applications to built-up their market by making study material interesting and in easy to learn format for students and interactive too at the same time as well. With the help of audio-

visuals, 3D animations, live chat sessions with experts, solving doubts at anytime from anywhere strengthen the spirits to learn everyday something new and innovative.

Online Education become necessity and most useful in today's era i.e. post pandemic time as it comes up with flexibility in terms of schedule, syllabus, learning modes etc. where if some students want to do job with studies he can able to do both. He can able to learn and choose topics of his own interest from different options. No need to follow specific study structure, either he wants to learn science or commerce or some research topics, he can opt any of it.

Keywords: Online Education, online Learning platforms, Recreation, Flexibility

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Role of ELT in adorning the Career and Improving Employability after Pandemic: A Special Case of Jaipur, Rajasthan

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Abstract

This present study embodies and caters the direction toward the learning process of English language after the completion of graduation and post-graduation. It has been observed that after Covid-19 many students of UG and PD after completing their courses fails to face the campus drives due to lack of confidence in communication. Many of the job aspirants use to learn English from the private English learning centers, who are having different methodologies for teaching the language. This present paper explores out the reality of teaching methodologies used in online classes while teaching the important subject like English. Using a mixed methods approach, data was gathered through telephone interviews, student workplace simulations and employer focus groups. Findings of the study focus on the increase in employability skills, channeled through English as a second or additional language, becoming confident, gaining knowledgeable, etc.

Keywords: English, Employability, Pandemic of COVID-19

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The Psychological Impact and Concept of Well Being

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Abstract

The psychological impact and concept of well being has been changed completely. According to a medical survey of AIIMS the patients of stress and depression has increased during lock down and the most important thing was there were lot of students in it. We have seen many social groups came forward for different type of services and help for administration, college students were indulged in these activities. Corona pandemic has a worst effect on higher education. We have seen closed institution, postponed of main examination and promotion of students by past record, it was not a good situation when we concern as a teacher. Higher education is associated with personality development and a lead role for a youth in society, but a gap in regular classes and other activities had a bad effect on a generation. There are some changes in the concept of well being after Covid pandemic like:

1. People are now more sensitive for hygiene and personal space.
2. Youth is considered nations real human resources.
3. Nations are committed to spend more money of it's GDP on research and development.
4. Different nations show help in this era, it's a good sign as a globalization.
5. Immunity is a top priority for students. They are more interested in physical work and in sports.

So we can see a new world of possibility and innovation in upcoming years.

Keywords: AI, artificial intelligence, COVID-19, Higher Education, Online education



Edutech Startups Shaping the Education Industry in the Pandemic Era

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Abstract

The outbreak of COVID 19 in 2020 came as one of the catastrophes impacting millions of lives around the globe. Education and hospitality sectors were the first ones to get disrupted. The education sector which was hitherto resistant to change has recently witnessed a massive transformation focusing on implementation of ICT tools and mushrooming of Edutech startups throughout the nation. When the entire economy was facing a slowdown, Edutech startups flourished during this period and came to the limelight. Online Educational

portals are an extension to traditional education and offer B2B, B2C and C2C solutions that are designed to cater to the customers' needs. During Pandemic, classes with teacher-learner remote interface flooded the market attracting numerous users, angel investors and stakeholders like never before. In 2020, the Edutech industry itself attracted \$1.4 billion funding. Major mergers were witnessed like CodeChef, PrepLadder, Mastree, Kreatryx, NeoStencil and Coursavy were acquired by Unacademy and companies like LabInApp and WhiteHat Jr. were taken over by Biju's. It is estimated that the Edutech Industry will do \$10.2 billion business in India in the next five years. Edutech companies are offering engaging modules with innovative solutions keeping the users glued. Vernacular languages and need based solutions in tutoring, digital core functions like operations management, auditing, business development, coding etc. are few of the services offered by online platforms using Machine Learning algorithms, 3D videos and Gamification to attract its users. The top few Edutech Startups flourishing in India are Awign Enterprises, Classplus, DoubtNut, Masai School, Pesto and Quizizz.

These days online courses are well recognized and accepted by most of the employers in India. The online courses are now accredited and approved by the Distance Education Council (DEC) of India which facilitates employees to upgrade their skills at their own pace. The major market driver of the Edutech startups is its budget friendliness and least investment in infrastructure. According to the KPMG report on 'Online Education in India 2021', online skill enhancement courses are 53% cheaper than offline alternatives. Apart from this innovative digital user interface and quality education are few of the USP's of Edutech Companies which are making them popular among the users. Our government has launched various programmes like 'Skill India' and 'Digital India' to facilitate digital literacy campaigns. The campaign targets in creating a knowledge-based society and bringing in inclusivity and sustainability in the society.

The paper tries to analysis the present scenario and future prospects of Edutech Startups in India. It was seen that amid COVID-19 Crisis, the future of Edutech startups seems bright and is here to stay due to the push by government and non-government stake holders. The need is to improve the digital ecosystem to reach out to more students and working professionals across Tier 2 and Tier 3 cities. The Startups should focus on regional viewers with options of translation and transliteration of the online learning interface. Lastly, innovative pricing model must be worked out in collaboration with the educational institutions and the government.

Keywords: Edutech Startups, COVID-19, digital interface, Online learning

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Recovery of Education- Post-Covid-19 Education and Education techniques

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Abstract

Education system of India has been distorted after the COVID-19 pandemic. Due to this distraction in education systems in last year, a plenty of inequalities in learning have been found. Schools play an important role all over the world and ensure the delivery of essential health services and healthy meals, and psycho-social support. Thus school closure during pandemic not only affected their learning but also students overall wellbeing and development. This is not sufficient for schools to simply reopen their doors after

COVID-19. Students will require modified and constant support to help them readjust after the pandemic. Schools must prepare to provide that support to students and meet the massive challenges of the months ahead. The future of all students is on stake. But this is also evident that every opposite situation brings some opportunities to learn something new. Policy of social distancing and restraining movement has widely disturbed traditional educational practices. In order to keep education running, educational institution pushes to online learning. But now schools are reopening, teachers must take all the measures to recover learning losses, improve overall wellbeing and development of students. In this order there are some priority actions that should be given by schools and teachers like, all the students are back in school to receive the tailored services needed to meet their learning, psychosocial wellbeing, and development, all teachers should give support to students to recover their learning losses due to closure of physical classes, all the teachers address the learning losses among to their students and incorporate digital technologies into their teaching. Apart from above stated techniques of Schools, some actions must be taken on country and global level like- Promote knowledge and peer-learning in strengthening education recovery, make a team which support countries in achieving the previously described priorities.

Keyword:- Online education, Children wellbeing, Learning loss recovery, Education techniques.



Relevance of E-Learning in the Pre and Post Pandemic

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Abstract:

Technology advancements have provided us with a variety of ways to gain knowledge from anywhere in the world. During the Covid-19 epidemic, the relevance and necessity of the various technologies available were recognized. The pandemic has turned the entire world, including the educational system, detached from reality, leaving no choice but to rely on online learning. The study explores e-learning before and after the epidemic, taking into account students' and teachers' perspectives on e-learning during the time. The research is descriptive and analytical in nature, and it incorporates both primary and secondary data. Convenience sampling was used to collect data from e-learning users in Thiruvananthapuram district with the help of a questionnaire. The numerous learning portals and tools used around the world, as well as their diverse opportunities, were also examined. According to the study, the pandemic has helped individuals recognize the importance of utilising the various technologies available, which increase and improve the learning experience. It was also discovered that during the pandemic, students and teachers were satisfied with the e-learning system, which they considered to be simple to use and adapt. The main challenge faced was the lack of internet connectivity and the sudden impact it had on their lives. The limitations of e-learning must be addressed to make it one of the most viable solutions in learning in times of necessity and beyond.

Keywords: e-learning, covid-19, learning portals and tools.



Emerging Forms of E-Learning: Post Covid-19 Trends

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Abstract

With time and space, technology has begun to rule the world and learning has not remained unaffected by it. Earlier, teaching used to be confined to chalk and board system with learners receiving knowledge within the periphery of a classroom. But with the advent of technology, the education sector has also been digitalized and online learning has widened the domains of knowledge for everyone. Earlier, E-learning was either used as a distance learning mode, or as a support to traditional learners, but, with the outbreak of the COVID-19 pandemic, educational institutes have been forced to shift to online mode completely, making e-learning an emergency substitute to regular teaching held in schools and colleges. Online learning is now being used as an important tool for not only higher education, but also primary and secondary education. This paper explores the future learning trends and the challenges in the education sector post the COVID-19 pandemic. It is also supported by an online survey of 40 learners to understand their eLearning patterns and preferences during the pandemic. Thus, the research aims to discover the various emerging forms of eLearning post the pandemic period. This research is important for educational institutes as well as learners and instructors to prepare them effectively for the upcoming changes and challenges in the field of education.

Keywords: COVID-19, Education sector, Learning Trends, E-learning.



Post-Pandemic Pedagogy Reconfiguring Higher Education: Role of Artificial Intelligence

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Abstract

The COVID-19 outbreak was very devastating and affected each and every business world irrespective of geographic boundaries. The educational sector also witnessed tremendous changes in the pedagogy and tools. With schools closing down and universities moving exclusively into remote learning, teachers and professors, as well as pupils and students, have found themselves working in completely new circumstances. With Artificial Intelligence (AI) entering all sectors, higher education is no exception. From the way institutions worldwide have adapted to concepts like virtual assistants and augmented reality in classrooms, it is clear that these technological leaps are here to last. The pandemic has made students and teachers familiarize themselves with online teaching tool for remote learning. The universities around the world are using AI technologies such as smart text messaging, personalized curriculum, and immersive classroom

teaching to make applying and studying at their institutes easier for students instead of classroom lectures. AI tutors are great time-savers for the teachers, as they do not need to spend extra time explaining challenging topics to students. With AI-powered chatbots or virtual personal assistants, students can avoid being embarrassed by asking for additional help in front of their friends. AI tools have reconfigured the higher education pedagogy by personalizing education, producing smart content, contributing to task automation and ensuring access to education for students with special needs. AI can also free up educators' time by automating tasks, analyzing student performance and closing the educational gap. Artificial Intelligence is one of the disruptive techniques to customize the experience of different learning groups, teachers, and tutors. If this way of learning became the norm, it would also go a long way to solve the problem of how to pass insight to future generations and will reconfigure the world of education.

Keywords: AI, artificial intelligence, COVID-19, Higher Education, Online education

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Impact of Digital Social Media on Indian Higher Education, Post Covid Approach

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Abstract

Indian higher education, in terms of dynamic content, is a leader among many emerging countries. The COVID-19 pandemic has impacted around 20 million academic hours across all higher education institutions, including universities, autonomous institutes, and colleges. The UGC advised all institutions to continue lessons online when possible and utilize ICT tools available in academic discourse. Many institutions use social media to spread information. The current crisis has forced the country's higher education system to use video-conferencing-based online learning to make up for lost academic activity. This article will examine the types of social media used to communicate educational information to students, and their influence on loss of educational time. For the current research the data from 500 University students and Teachers were gathered from the geographical area of Jaipur Region. 9 questions as independent variables were asked from the respondents regarding the use of digital social media during post covid period for educational purpose. The data gathered is analyzed with the statistical tool multiple regressions and the results revealed with the views of the respondents that use of social media is a significant tool for educational purpose.

Keywords: Social Media Tools, Education, COVID-19, live classes and live video for education.

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Emerging Human Resource issues during Covid-19 and Risk Management

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Abstract

The unexpected coronavirus disease 2019 (SARS-CoV-2) Pandemic has thump intercontinental business heavily. This epidemic interrupted the management of Human Resource across several industries. The main objective of the study is to conduct systematic research to investigate emerging challenges and issues arise in hotel industry during the covid-19 pandemic and purpose related practices to solve these issues. Exploratory and descriptive research design is apply to conduct this study. 200 employee of the hotel industry from Jaipur, India are selected as respondents. Focus area of the study is impact of external environment and development of technology, expansion in traditional HR practices amid covid-19, sustainable HRM. Crucial issues are HR well being, flexible work force, job loss, human capital, training and development, leadership, performance and communication. The finding of this study exhibit that COVID-19 has massive impact on conventional work force management and requires the hypothetical and empirical concentration of researchers. The proposition recommend related to HR practices to deal with promising Human Resource issue and recognize numerous research venues for further studies in this field.

Key words: Human Resource Management, COVID 19 Pandemic, Risk Management.

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Online Education Post Pandemic: Luxury or Necessity

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Abstract

Amidst COVID-19 threat, the Indian government announced a nationwide lockdown due to the spread of the Corona virus in the country. As per WHO, Lockdown was a much required step to control its spread. It has challenged the normal living, work, economy, and the education sector also went into the clutches of virus. Even after the lockdown, there was uncertainty over the future scenario of studies as there was no specific cure and vaccine for COVID-19. Globally, over 1.2 billion children were out of the classroom. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms. To combat this inevitable crisis the educational institutions started the use of innovative, receptive and adaptive mechanisms for strengthening teaching and learning process with distance learning when the institutes are closed. As per Marcus Specht “The students of the future will demand the learning support that is appropriate for their situation and context. Nothing more, Nothing less”. When it was seen that the institutes are shut and the future of India is struggling for their education, various tools like Zoom, Google Meet ,MS teams, WebX etc were launched where the students and teachers could meet up to continue their studies. Management tools like Google Classrooms were also developed to

synchronize the studies with notes tests and materials. The pandemic also acted as a blessing in disguise as it provided learners with global learning platform where they can find structured study material in the form of videos and think-tanks.

As every coin has two aspects, these technologies were also equipped with certain disadvantages.

Firstly, internet connectivity was the major issue as students from far flung areas were bereft of internet. Secondly, as it was a new experiment, teachers were struggling on technical front and students were also not taking the classes properly. As discussed, due to closure of institutions, online education was a much required step, so that the studies of students could be synchronized with the time. Tools like Zoom, Meet etc proved out to be very useful in the time. Therefore, it could be safely claimed that online education was a Necessity, not luxury during pandemic times. This paper intends to study the behavior of students regarding popular E – education tools and Apps and their respective impact on studies after shifting from offline to online education mode. This paper also state that how the mental stress was managed by faculties during the online classes in pandemic era. To know the behavior of students & faculty, we collect primary data through Questionnaire & Personal Interview and the analysis through various Parametric & Non-Parametric test.

Keywords - Online tools, Pandemic, Technology, Management tools.

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New Economic Models to Promote the Emergence of E-Learning System in Covid Era

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Abstract

This study aims at studying the new economic models adopted to promote the emergence of E- learning in COVID era. Educational institutes across the world have closed due to the COVID-19 pandemic jeopardizing the academic calendars. Most educational institutes have shifted to online learning platforms to keep the academic activities going. However, the questions about the preparedness, designing and effectiveness of e-learning is still not clearly understood, particularly for a developing country like India, where the technical constraints like suitability of devices and bandwidth availability poses a serious challenge. The results indicated that majority of the respondents (70%) are ready to opt for online classes to manage the curriculum during this pandemic. Majority of the students preferred to use smart phone for online learning. The students opined that flexibility and convenience of online classes makes it attractive option, whereas broadband connectivity issues in rural areas makes it a challenge for students to make use of online learning initiatives. However, in agricultural education system where many courses are practical oriented, shifting completely to online mode may not be possible and need to device a hybrid mode, the insights from this article can be helpful in designing the curriculum for the new normal.

Keywords: COVID-19, Education, Online learning

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Future of Higher Education: Post Covid Approach

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Abstract

The Pandemic had affected all aspects of academic life. It has influenced or impacted the way in which students could live through the university experience. So, the mode of being a student had changed completely, the mode of being an academic & instructor changed completely, the budgets of universities had to change & be reallocated. And of course, the mode, the way in which we use our physical infrastructure change and finally teach & learn, which is really the key aspect.

The current crisis had forced the country's higher education system to be virtual. But there were several issues faced by universities and also by the students & their parents like; Issue of Access, lacking university exposure, etc. This article will examine the method to be followed for teaching after COVID-19 pandemic. For the current research, the data from 500 university teachers & students were gathered from the geographical area of Jaipur region. The data gathered is analysed and result revealed with views of respondents that we have to adopt Hybrid method of teaching; A model where you pay a premium for "Campus Experience" but can choose to be educated online for less money.

Keywords: Pandemic, Hybrid Method, Infrastructure, Education.

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Impact of GST Implementation on Exports on Exporters of Handicrafts in Rajasthan

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Abstract

Taxation is the major tool for the collection of revenue by the government, to finance various development activities. In India, there are two types of taxes i.e. direct taxes and indirect taxes comprehensively. The structure of indirect taxes in India was based on three lists in the seventh schedule of the constitution of India. These lists were majorly based on the Government of India Act, 1935. The structure of indirect taxes was very complex and inefficient due to changes in technology, situations, etc. As per the requirement and need, the government brings out changes in the tax laws by introducing excise duty, customs duty, service tax, VAT, MODVAT, etc. The introduction of GST could be the result of all these changes made by the government.

The world has given acceptance to GST long ago. The developed nation France was the first country that implemented the same in 1954 and eventually, India has also shown an inclination for GST on 1-7-2017 by implementing GST in its 101st amendment in the Constitution of India. It is a comprehensive value-added tax on goods and services. GST was implemented, intending to make the unified and simplified fiscal tax

structure of India. The main reason behind the implementation of GST was to amalgamate all indirect taxes into a single tax and creating efficiencies in tax administration. The handicraft sector of India is extensively scattered all over the country which is majorly affected by GST.

This sector is foremost, as it generates employment, foreign revenue from exports, investments, etc. The dominant states for handicraft export in India are Tamil Nadu, Rajasthan, Uttar Pradesh, Karnataka, Jammu, and Kashmir. India is one of the major exporters and producers of handicraft products in the world. This study focuses on exports of handicrafts, as Export is an essential engine of India's economic growth. The present research covers the major components of GST and their effect on the Export of handicrafts from Jaipur (Rajasthan). It also analyses the overall Rajasthan handicraft export performance in the past 6 years, especially focusing on the handicraft export values before and after the implementation of GST. This research has covered the overview of the GST and has also identified the handicraft products which are being exported from Jaipur. A comprehensive literature survey was done to obtain information about indirect taxation, tax reforms, GST, and Indian handicraft. Several research papers have been reviewed to understand the effect of GST on the economies of other countries. It was found that very few studies have been done on GST in the handicraft sector of India and the studies on the handicraft sector of Jaipur, Rajasthan showing the impact of GST especially related to exports of handicrafts products were not performed yet.

Keywords: Goods and Services Tax (GST), Handicrafts, Exports, Handicraft Exporters, Impact, VAT, Taxes, Rates, Regime, Ease of Exports

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Customer Relationship Practices in Multi Level Markets

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Abstract:

Multi level marketing is fast growing business phenomenon, because it's flexibility and high profitability. Anyone anywhere can become a distributor and build a network without sacrificing his/ her job or business. Not much initial investment is required to get started. The customer of an MLM form are their con-evangelist or sales people as well, referring it's potential audience to the business and they earn whenever they are referred by products.

These companies are creating new and improved strategies to improve customer base, retain the existing distributor inspiring them to increase the business. The most aspect of MLM is people, distributors, customers or prospective with which good relationship with highly crucial, for which customer relationship is very important. Customer relationship management (CRM) helps manage & analyse customer interaction with the business. Now a day's CRM has become one of the most important aspect of business due to it's strategically approach to Customer Management.

This article studies the CRM strategies used by different MLM forms in the Healthcare sector and analyse their marketing scheme by a questionnaire interview from expert in the MLM firms.

The emergence of with big data brings a new wave of customer relationship management (CRM's) strategy in supporting personalization and customisation of Sales. Service and customer services CRM needs big data of a better Customer services experience especially personalization and customisation of services. Big data is a popular term used to describe data is volume, velocity, veracity and value of data both structured and unstructured.

In multilevel markets the aim of the research is to examine Big data requires new Tools and techniques to capture and store in a light it used to improve decision-making for enhancing Customer Management. The aim of this study was to examine big data CRM scenario. The method of Collection of data for this study was literature review and thematic analysis for recent studies. This paper analyses the CRM practices adopted by this firm by which day as well as their reference improve their profitability. The questionnaire analysis techniques used by firms for customer engagement & segmentation and the marketing strategies used by it.

Keywords: Big Data, CRM, Data Analytics, Social Network, Web 2.0



Impact and New Leadership Models of Covid-19 on the Educational Sector Worldwide

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Abstract

The noble corona virus (covid-19) has made the drastic ever changes in everyone's life. This virus has caused damage to everyone in mild or moderate way such that the recovery rate became less than the infecting rate. India is a country which constitutes the largest youth population and covid-19 affected the studies and jobs equally to the lives of the population. Due to this virus, the schools and universities were physical closed and it was the biggest challenge for the whole children and youth community to study and make their career. Studies had to be conducted online and also the exams had to be conducted online or sometime cancelled.

At this time "internet" was the first spike for helping institutes to take one step forward and to implement the new techniques in everyone's daily life.

Models for educational sector:

1. When somehow, the pandemic was in control the government decided that they will conduct online exams under consideration of students.
2. The new thinking driven by strong leadership is needed if we are to create more inclusive equitable system that can promote quality education.
3. Education development trust and the education commission's education workforce initiative (EWI) came together to host a webinar on education leadership during and beyond COVID-19.

From the conversation of these two parties they captured three key principles which will be especially important for leaders as they continue to respond to the crisis and move beyond it. Harnessing new forms of collaboration, smart use of technology or data and a focus on equity inclusion with wellbeing. Such mobilization of resources within a community may prove to be highly important in ensuring quality education for all in the covid-19 era.

Keywords: COVID-19, leadership and Education development.

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"Positive Thinking" Need of the Time During Pandemic Covid-19 Crisis

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Abstract

Today mental health issues have become major problem throughout the world. So positive thinking is must need by all human being to survive and sustain during this pandemic Era. Since last two year whole world is struggling with pandemic named Covid-19. Every day we see so many news of Covid-19 crisis where thousands of people are losing their lives every day due to this pandemic. Many people lost their jobs. In News Channels or any social networks we see only news related to Covid-19 which is causing fear, stress, hopelessness and frustration among all of us.

Mind is a treasure house to keep good memories, love, happiness and positive thinking. Empty your mind of all negative thoughts and let your heart be at peace. Mind is precious part of our body and it's our responsibility to keep it calm and at peace and it will be at peace when we will not overburden it with negative thoughts and negative emotions. This piece of work is an attempt to make your outlook brighter amid this crisis. With positive thinking and positive mind we can conquer this world, nothing is impossible if we are strong determinant and we have 100 % faith on our capabilities.

Keywords: Positive thinking, Pandemic, negative thoughts

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The Impact of Covid on Education System

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Abstract

This article focuses on the rapid change caused by COVID-19 on the education system at a glance, chosen for its special relevance at the moment. This article will help in understanding the efforts to develop an education system that can mitigate the growing impact of COVID-19 while maintaining the standard of education.

In view of the increasing effect of Corona, initially all types of educational institutions, industries, means of transport and all types of government offices were completely closed in all the countries of the world including India. Then after some time, online learning system was adopted, relaxing the lockdown and adopting corona awareness. The pandemic has proved a challenge to renew commitment to the Sustainable Development Goals. Ensuring that all youth have the opportunity to develop knowledge, skills and values in educational institutions that will enable them to play a good role in the society. The current pandemic has tested our ability to deal with large-scale disruptions. Now it is up to us what we can do better to build a better society.

Keywords: Education System, Digital Learning, and COVID-19 Awareness



Transformative Changes in Teaching Methodology Especially in Higher Education Sector

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Abstract

Due to consequence of the COVID-19 Pandemic and national wide lockdown, higher education in India has faced revolutionary changes. Education sector is facing tremendous challenge for survival. Almost all students of higher education like law, medical, engineering, management etc. are relocated to their homes, leaving their hostels due to lockdown. Thus they missed face to face teaching methodology, practices, tutorials, seminars, technical knowledge, lab practical etc.

The use of emergent technology for education, such as artificial intelligence for adaptive learning and virtual reality, are very likely to be essential components of the transformative change and the future of higher education sectors.

In such a complex situation and despite of all these challenges, the Higher Education Institutions have reacted positively and managed to ensure the continuity of teaching-learning, research and service to the

society with some tools and techniques during the pandemic. Presently, Videos, podcasts, simple virtual reality, and computer simulations are to be used to facilitate student learning and training.

Due to pandemic, many new modes of learning, new perspectives, new trends are emerged. In such a complex situation, the trial access/free version of various online platforms (like Unacademy, Teachable, WizIQ, Skillshare, edX, Microsoft Teams, Zoom), streaming/conferencing tools are introduced. All of these teaching/learning tools can be easily accessed, even from mobile devices. The professional education has opted for e-learning tools and served the beneficiary better in the worst situation created by corona virus. Now this type (on line) of transformation in education has become a necessity instead of a luxury.

Keywords: COVID-19, Higher education, online education, Transformation

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Women Empowerment through Financial Literacy: A Study on Investment Behavior in Pre and Post Covid Era

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Abstract

In recent years the increased participation of women as the users of financial services has led to the benefits that are multifold including reduction in gender inequality. The covid era has shuffled the very functioning of the economies around the globe which has also led to the increased opportunities to search for new opportunities for being financially independent. People have moved their focus from savings to investing, more so, in financial assets. The online tutorials have gained more importance than ever and women being known as multi taskers have utilized this opportunity to the fullest. The Indian stock market has seen an increase in the number of women participants in equity trading. But still owing to the greater disparity within the country itself there are women who are unaware about the existence of financial services in the country.

The paper intends to study the popular investment options and the shift of pattern from “savings to investment” by women in India leading to their financial wellbeing. It also states that how this covid period served as a catalyst in bringing women to the forefront in Investment arena leading to women empowerment.

Keywords: Covid, Investment, Financial Literacy, Financial Services, Women Empowerment.

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Measuring Effectiveness of Emerging use of Technology for Recreation the Post Pandemic Education World: A Survey of Students of Jaipur City

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Abstract

While COVID-19 infection rates vary by country, the pandemic has forced school cancellations in 186 nations, affecting over 1.2 billion children. As a consequence, education has altered considerably, with the emergence of e-learning, or remote instruction through digital platforms. Online learning has been demonstrated to boost retention of material and save time, indicating that the alterations generated by the coronavirus may be permanent. Some are asking whether the acceptance of online learning would continue post-pandemic, and how such a transition might effect the global education sector. Global edtech investments reached US\$18.66 billion in 2019 and the whole industry for online education is estimated to reach \$350 billion by 2025, even before COVID-19. Since COVID-19, utilisation of language applications, virtual tutoring, video conferencing, and online learning software has increased significantly. Byju's, MS team 365, ZOOM, Tencent classroom, Alibaba's distance learning solution are the tools used very commonly across the globe and it is limited with the lack of reliable internet access and technology struggle to participate in digital learning. Our paper uses the data of 120 students of Jaipur district of Rajasthan to measure the benefits or problems of the use of the emerging technologies for teaching the school children's. The study uses statistical technique multiple regressions and revealed the variables the explains the use of emerging technology in teaching in the post COVID scenario.

Keywords: Emerging Technology, COVID-19, School Children, Edtech.



The impact of the Covid-19 Pandemic on Working Women in Imparting Education to their Children

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Abstract

As we all know that Corona virus has affected everyone's lives. Dealing with the unforeseen challenges caused by the COVID-19 pandemic has taken a significant toll on people all across the world. Where boundaries between home and work are distorted women may feel superior levels of strain and workplace burnout. A mother, sister, wife and daughter are some of the roles that women are often allied in a society. But working women also play an additional role outside the household; and balancing these roles is what constitutes the challenge to working women. The journey of motherhood is not easy, particularly for working women who face many hitches while raising their children. It is more challenging at the time of COVID-19 – Pandemic in providing education to their children at home. The school closures had a substantial effect on working mothers' ability to fulfil work obligations and providing quality education to their children. Most of the working women with school age children complained the stress due the concern of academics and online education system has affected their mental health. Most of the working women had to opt for time off due to school or day-care was closed. Family care giving responsibilities before and after the pandemic have largely fallen on women. This paper explores the impact of the COVID-19 pandemic on women working in academia, in particular the disproportionate care burden of women resulting from the dispersed and isolated family unit. This paper will also reveal the facts on disproportionate impact on women in a number of ways along with the consequences in quitting the job. The challenges in raising the children in Covid -19 and imparting education in the mode of online education. This paper will also provide suggestion to support working women in balancing work and family responsibilities in this unprecedented time to upbringing to the children..

Keywords: COVID-19, Working Women, Challenges, Gender Inequality, Education To Children, Work-Life Balance

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Online Learning a New Leadership tool for the Education Sector in Covid Era

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Abstract

The COVID-19 pandemic, which has wreaked havoc in the world for the last two years, has taught us many lessons. Due to this pandemic we have seen many changes in the world. It has brought a digital revolution in the world. All the schools, colleges in the country have been started online teaching through internet based

e-learning system. During this Covid Era the spending on digitalization process for online classes in all education sectors is already increased and they have adopted this user friendly technology. This online learning has given us a new way of learning in this difficult time, which has given us many benefits through online learning, students and teachers are connected to each other on a digital platform, which saves time as well as resources such as petrol sitting at home. In traditional method of learning those who stay away from classes they can also join it from their remote places. Despite having many advantages it has certain limitations such as Internet bandwidth, large number of participants and Network issue etc. A large section of the country is poor and they cannot buy this technology, so at this time the students of a poor section were far away from this online education, which has not noticed yet. So we can conclude that covid-19 had a great impact on education sector and online learning has given a new leadership opportunity in education sector if schools, colleges, institutes, universities they will adopt it as challenge and mould their course curriculum and their teaching style and methods as per the need of the online education then they will become as new leader in education sector in near future.

Keywords: COVID-19, Digital education, Education sector, Online learning.

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Hybrid Learning: A Panacea to Promote E-Learning in Covid Era

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Abstract

E-learning was part of education system much before the outbreak of COVID-19. But the pandemic has resulted into shutdown of schools, colleges and other educational institutions all across the globe which ultimately disrupted the entire education system. As a result, the world saw a complete transition from traditional classroom learning to online learning. However, with the reopening of economies, the concept of 'new normal' has come into existence, which has raised the concern to ensure steadiness in e-learning. This problem can be addressed by adoption of blended approach or hybrid model of teaching. Hybrid learning simply means combination of both online and offline methods of teaching. This model will ensure continuous learning as it will reap in benefits of both traditional and e-learning. Firstly, it will resolve the problem of quality content and restricted curriculum and at the same time will provide personalized learning experience. Moreover, this model overcomes the limitations of geographical constraints and increases flexibility that provides opportunities to even slow learners to communicate with their tutors individually and also access mentorship to gain personal guidance. With the further onset of the pandemic, the government in major economies are putting efforts to make e-learning more inclusive by accelerating the penetration of internet services, developing digital learning platforms and providing free access to study material. Therefore, every stakeholder in the education system must utilize this pandemic as an opportunity to make a powerful impact by embracing the hybrid model.

Keywords: E-learning, Hybrid learning, COVID-19 and Teaching methods.

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Performance analysis of Sustainable Indices against Conventional Indices in Pre and Post Covid 19 Outbreak

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Abstract

Over the past many years there has been rising awareness all over the world related to issues of sustainability, climate change, resource mismanagement, etc. This has led to innovations and development of products and processes in the direction of sustainability. The finance sector too has not been spared with the trend. With the investor's growing demand for sustainable and socially responsible products, new forms of investments took shape. Resultantly, Socially Responsible Investing (SRI) or ESG (Environmental, Social & Governance) Investing, which integrates social, environmental and governance criteria into traditional investment decision process, has emerged as a new concept in investing, especially in the wake of growing concerns for Corporate Social Responsibility. Though the concept is at nascent stage in India and showed slow paced growth in comparison to those in western or developed countries. Recently the COVID-19 pandemic has brought climate change and socially responsible investing back to the forefront. It brought opportunity to visualise innovative approaches towards carbon free and more socially enriching economic development. Sustainable investing, which is well-ingrained in developed countries, is now slowly gaining traction in emerging markets as well. In past studies many researchers focused their attention with central question, whether ESG investing generate competitive returns against traditional investing for investors. They have found significant and insignificant differences in the performances of socially responsible investment stocks vis-à-vis conventional stocks in various contexts such as pre, post and during the financial crisis in both the developed and developing countries. In this scope, the main purpose of this study is to examine the recent developments in ESG investing in India, the performance of sustainable indices by comparing it with their traditional counterpart in Indian stock market and how the pandemic has affected the performance of both. The study is conducted for a period of 3 years from 1st August 2018 to 31st July 2021, taking 18 months period each for pre and post COVID outbreak. To analyse the performance, the study applied Absolute Rate of Returns as well as Risk Adjusted Measures such as Sharpe ratio, Treynor ratio, Sortino ratio, Jensen's α , Information ratio. It considers S&P BSE GREENEX index as proxy portfolios for socially responsible investment stocks while BSE SENSEX was used as proxy for conventional stocks, S&P BSE 500 is used as market index. The results show outperformance of GREENEX during pandemic. This suggests that COVID 19 pandemic certainly gave boost to ESG investments as investors have started looking for the sustainable options in the market including stock market. The study contributes to the related literature by analysing the performance of socially responsible stocks portfolios in Indian stock market which is one of the emerging markets. The findings have academic and practical implications and provided a welcome opportunity to gain more knowledge on sustainable and ESG investments.

Keywords: Sustainability, SRI/ ESG investing, Pandemic, COVID 19.



Talent is Crucial for Performance in Covid Era

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Abstract

COVID 19 pandemic had created certain disruption not only in organization but also in human resources that affect talent managers performance. Human resources are the assets of organization. This crisis has reengineered the education system by digital skills and remote working for employees. Through the turning technology, Chief Human Resource Officer (CHRO) looks for fresh talent HR professionals instead of permanent and contingent hiring that makes easier to connect people. The purpose is to identify the unknown challenges, strategies and unusual decision to survive and stay competitive. The pandemic posed numerous adverse consequences besides the strategies which are adopted include flexibility, strengthening, internal efficiency, talent acquisition and making innovative changes. Reskilling plays a vital role in fulfilling talent gaps. This transformation puts the “HUMANS” back in HR with enhancing the skills. Our technology team worked quickly to create solution and provide access to our systems remotely.

The CHRO also adopts the remote workforce and accelerates in five areas of talent management.

- Finding and hiring right people
- Learning and growing
- Managing and rewarding performance
- Tailoring the employees
- Optimizing workforce planning and strategy



Keywords: COVID 19, Talent managers, Remote technology, Reengineered.

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Measuring Intention of Management Students for Online Learning: An Empirical Analysis using UTAUT

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Abstract

The growth of information and communication technology (ICT) coupled with cheaper internet charges and android and windows-based computing devices facilitate online learning. However, the prevailing COVID-

19 pandemic which witnessed lockdown for every industry led to the scaling up of the online teaching and learning process helping both educators and learners. Students have been using various platforms for online learning according to their level of understanding and as per instructions given by their institutes. This study wishes to examine the adequacy of Unified Theory of Acceptance and Use of Technology (UTAUT) as a theoretical framework in an academic context to identify the factors which impact students' behavioral intentions in the adoption of online learning. Studies have been conducted in developed countries but a detailed study where students' have undergone sufficient exposure to remote learning is now worthwhile. The cross-sectional study used a descriptive methodology to test hypotheses related to the interaction between independent variables of UTAUT, performance expectancy (PE), effort expectancy (EE), social influence (SI), and facilitating conditions (FC) with behavioral intention (BI) as the dependent variable. Data from students pursuing management programs (MBA and PGDM) was collected through a self-administered questionnaire created using Questionpro. Multiple linear regression (MLR) was used for data analysis using SPSS software V23. The research model was found significant with an explanatory power of 39.8 %. The study found that performance expectancy and effort expectancy were significant influencers to students' behavioral intention for online learning. However, social influence and facilitating conditions were found not to be significant predictors.

Keywords: Online Learning, ICT, Consumer Behavior, UTAUT Model.

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Role of AI & Machine Learning to overcome from Covid-19 Pandemic

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Abstract

Artificial Intelligence basically refers to make the computers or robots can do tasks that are actually done by humans because they also require human intelligence. Multiple AI projects based on data science, machine learning & big data are being used across a wide range of fields to predict, explain and manage different scenarios caused by health crisis. As Artificial Intelligence plays a major role in healthcare sector, it is mainly used to scan and track patients as well as to predict future infections and also with the help of algorithms that process data to calculate patterns.

Machine learning is also used behind Artificial Intelligence's capability to find out the patterns. These technologies use algorithms that allow many healthcare organizations to efficiently diagnose medical care & plans that produce better patient experiences. AI & Machine Learning is also helping to prevent from COVID-19 at molecular level (e.g., drug and vaccine discovery), the patient level (e.g., patient diagnosis), and the population level (e.g., epidemiological surveillance). Artificial Intelligence reduces the workload of healthcare workers.

Keywords: Artificial Intelligence, Machine learning, COVID 19 Pandemic

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Cloud Computing Importance Inelearning Inpost Pandemic Era (Remote-work Deployment and Cloud Computing Implementations after Covid-19)

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Abstract:

Cloud Computing or Cloud Processing is a new technology which is used and accepted very rapidly in all major fields. Its scope in education is the eLearning solutions in the covid 19 era. As in this pandemic call educational institutes are closed so eLearning is the best possible option for continuous study and learning process. In eLearning process cloud computing is a back bone of technology. Cloud computing enables us a new era of learning, in which the lectures, study materials, labs and practical's are based on cloud platform through virtualization. A diversity and global knowledge can be delivered to professors, teachers and students through cloud-based services. These cloud-based services can be accessed anytime, anywhere (24*7) and on any device. Educational services provided through cloud computing enables teachers and students to acquire the skills needed in the global information society. Cloud computing is a technology for delivery of different kind of services using the Internet. These services need tools, techniques, resources and applications like data storage, data servers, databases, networking, software, Internet etc.

In cloud computing rather than keeping files or data on a proprietary hard disk or local storage device, these are kept on cloud-based storage which enables it possible to save them to a remote database without using local space and can access them throughout the world from anywhere at any time. Major factors of importance and popularity of cloud computing iscost savings, increased productivity, speed and efficiency, performance, and security. Cloud computing is a technology which store and manage data, files folder etc. on remote data servers and then access them through the Internet. Cloud Computing System allows users to work on the remote place.

This is very helpful and important in eLearning in COVID era as all learning is done in remote mode in virtual form. Physical class rooms are replaced by virtual classrooms. So, Cloud computing is a main weapon in efficient and cost-effective Learning in COVID era. The reason of cost effective is that cloud computing users do not need to own the physical infrastructure; they rent the usage from a third-party provider.

Types of Cloud Computing services:

1. SAAS (Software-as-a-Service)
2. PAAS (Platform-as-a-Service)
3. IAAS (Infrastructure-as-a-Service)

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Importance of AI to follow Covid Guidelines in Higher Educational World in Post Pandemic Era

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Abstract

Due to COVID-19 Pandemic all educational institutes like schools, colleges, universities and coaching's are physically closed to maintain social distancing. And hence education system has completely changed. Physical class room face to face learning process is replaced by virtual class room on digital platforms in the form of eLearning. But as we all know that eLearning is not a solution of face-to-face class room study while it's a compulsion in these situations. So, it is must needed to reopening all educational institutes, especially higher educational world like colleges and universities for effective, efficient, productive research-based study under direct supervision of professors. But also, the fact is that we cannot return to the world as it was before COVID era. Still time to time the virus be affect the society and can't fully free from these situations. So, the major challenges to the higher educational world academic administrators in post pandemic era, is that how to implement COVID protocols and guidelines in institute premises when institutions are reopened. How students and professors be safe from COVID and how to ensure that they all follow the COVID Guidelines issued by Government and Authorities.

However, Institutes make COVID Guidelines like make social distancing, 50% class room attendance by alternate day present, not sharing the items, wearing mask all times etc And Authorities do watch to follow these guidelines. But it is not a practical solution. So we need help of technology to implement and monitor these guidelines.

For this Artificial Intelligence (AI) technology is a key weapon for the authorities to follow COVID Guidelines. Using AI and IoT we may develop sensor-based system to track real time movement of students in institute premises. By using these technologies, we may develop such a system which monitor each individual and guide them to follow the all COVID Guidelines and if not follow by the individual the report to authorities to take action.

By AI we can effectively track, monitor, guide and report to all persons within the institute to ensure covid guidelines are followed by all effectively so that offline face to face direct learning process can continue to get knowledge, education, degree in real way.

Keywords: Artificial Intelligence, sensors, positioning system, IoT

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Role of Big Data Technology in Covid Pandemic

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Abstract

Big data is one of the latest technologies in today's era. It deals with a huge amount of structured, unstructured and semi-structured data that is globally present using various technologies like Hadoop, Spark, and Big Query etc. In ancient times people used the term data or traditional data instead of big data that mostly dealt with data that present in the structured form which is also known as relational database system or RDBMS. The base of the database is designed by E.F Codd. The data present in ancient times is not huge and mostly in structured form so managing that data is easier but nowadays that data we have is 90% unstructured that is present in the form of photos, videos etc. For instance, Facebook generates around 3 to 4 petabytes of data on a daily basis and the velocity or speed of this data increases exponentially so to manage that huge amount of data we need Big Data technologies. Bigdata uses cluster computing or multimode cluster to manage the traffic and a site is in the distributed form which prevents it from single point of failure. For technologies like Data science, mining, AI, analytics etc. we need data to perform mining or analysis to generate insights or trends etc.

Keywords: Big Data, Data science, Data analysis, etc.

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Higher Education Transformation after Pandemic Disruption

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Abstract

The disruption caused by the current Covid-19 pandemic never existed before, and the resulting economic and social measures have brought a huge change in the education system. To lessen the impact of the virus, governments around the world have imposed social distancing measures, lockdowns, and immediate halting of personal contact outside immediate households. And thus educational activities are hugely affected by the COVID-19. The whole education systems, from elementary to higher education had a complete transformation in the activities involved in teaching-learning process. According to UNESCO, higher education institutions (HEIs) were closed completely in 185 countries in April 2020, affecting more than 1,000 million learners around the globe. Global higher education sector is one of the major sectors which are undergoing dramatic digital transformation. The unforeseen shutdown of face-to-face teaching has led the students and academics to a "strange land" of digital or e-learning. Due to this unexpected change, the education systems are forced to update their existing technological resources available and involve professors and researchers for online-teaching. Quality education along with digital transformation,

technological innovation and speeding up the change in the educational framework need to be adapted by the HEIs.

Keywords: higher education transformation, post-pandemic teaching-learning process.

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Role of Smart System in Smart World Applications

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Abstract:

Advanced change in telecommunication technology and the evolution of Internet of Things helped the physical world to interact rapidly with each other by digital network system. It provides us automatic structure of the ancient world applications. Wonderful smart system converts handily world in to digital world: Internet of Things-based Smart World (IOTSW) and make ease the daily routing including healthcare. Corona virus Disease-2019(COVID-19), the Smart System playing a key role in saving human lives in healthcare. Smart System can directly as well indirectly effect on society area including health. The main objective of this paper is to highlight the applications of several automation technologies in society and impact of smart system. Furthermore, we reviewed the internet of Things contribution in this context of smart society.

Keyword: Smart system, COVID-19, Internet of Things

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Internet of Things (IoT): Research, Challenges & Future Applications

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Abstract

Internet of Things (IoT) is a new paradigm & an interconnected system that has changed the traditional way of living into a high tech life style while Smart city, control the pollution, energy saving, smart transportation, smart industries are transformed due to IoT. It is emerged the paradigm that enables the communication between electronic devices through the internet to facilitate our lives. IoT use smart devices and internet to provide innovative solutions to various challenges and issues related to various businesses, governmental and public/private industries across the world. The IoT architecture has 5 important layers, these are: - perception layer, network layer, middleware layer, application layer, business layer. There are several functional blocks that responsible for I/O operations, connectivity issues, processing, and audio/video monitoring and storage management. The main objective is to make it possible for objects to be connected with other objects, individuals, at any time or anywhere using any network, path or service. IoT

will make it possible for ordinary devices to be linked to the internet to achieve goals. Major key issues and challenges of IoT are: -Security and privacy issues, Interoperability/standard issues, Ethics, law and regulatory rights, Scalability, availability and reliability, Quality of Service (QoS). By the year 2020, it is over 50 billion devices will have an internet connection. The applications of IoT cover broad areas including manufacturing or the industrial sector, health sector, agriculture, smart cities, security and emergencies among many others.

Keywords: IoT, AI, IoT Architecture



Comparative Analysis between SQL and FLUX for querying time series data: A Literature Review

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Abstract

In the current rapidly developing world, the largest form of data generated is the time series. Owing to this growth, the research work in this field has been strengthened. Mining of time series data has a vast application in real world. Time series data can be defined as sequence of data generated continuously over a period of time. This kind of data can also be called as sequence data. At present there are many industries which are generating time series data, few of them are Finance, Retail, Health care, Environment and many more. The main goal of time series data analysis is to analyze the trends or to make forecasts. To query such a data we need a powerful database and a powerful query language which can provide us with accurate results to predict trends in time series data. There are several open source data bases available in the market, the most popular among them are two 1) Timescale DB and 2) Influx DB. Timescale Database is an open source data base which was introduced in the market to make SQL scalable for time series data. This database can also be termed as an extension to Postgre SQL. Influx DB is also an open source database platform for time series data. This database also provides facilities to build real time applications for analytics, IoT and cloud services. Earlier Influx DB came into market with InfluxQL which was SQL-like query language but later it changed and introduced a new query language in the market which came to know as FLUX.

In this paper we have laid down a comparative analysis between SQL and FLUX Query language for time series data. Here we found that in some cases FLUX might be preferable but it is acceptable only where there is a limited amount of data set. But SQL was found to be more reliable and is more accepted in the market due to its performance and more accurate results.

Keywords: SQL, FLUX, Time series analysis



Artificial Intelligence

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Abstract:

AI has acquired increased attention from the facts structures (IS) studies community in recent years. There is, however, a developing concern that studies on AI ought to enjoy a loss of cumulative constructing of knowledge, which has overshadowed IS studies formerly. This look at addresses this challenge, by using accomplishing a systematic literature review of AI studies in IS among 2005 and 2020. The seek method ended in 1877 studies, of which 98 were diagnosed as primary research and a synthesis of key issues which are pertinent to this take a look at is offered. In doing so, this observe makes critical contributions, namely (i) an identification of the current mentioned commercial enterprise price and contributions of AI, (ii) studies and practical implications on using AI and (iii) possibilities for future AI studies in the form of a studies agenda.

Keywords: Machine learning, Systematic literature review, Research agenda.

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BIG DATA

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Abstract

“It is mostly a buzzword used to describe a massive volume of structured and unstructured data which is very large and complex to process using traditional database and software techniques”.

Need For Big Data:

- 80% of the data is unstructured which are difficult to analyze,
- Structured formats limitations in handling large quantities.
- Potentially valuable data is dormant and discarded.
- Manage and process a large amount of data.
- Cost efficient
- Analyzes data in all formats like structured/semi-structured/streaming.
- Captures data form last happening events in real life.
- Handles failure of isolated nodes and task assigned to them.
- Turn data in to actionable insights.

The 6V's of big data are described in below image-

- Value: Clinically relevant data. Extract business and insights and revenue from clients.

- Volume: Huge amount of data is being generated.
- Velocity: The speed at which data comes. Devices like RFID send accelerated data in real time.
- Variety: 80% of data is semi-structured or un-structured. Differences in frequencies.
- Veracity: Uncertainty or co-relation pf data due to ambiguity, inconsistency and latency.
- Variability: Data flow is inconsistent with periodic peak.The same tweet can have totally different meaning based on the content.

Keywords: Big Data, Velocity, Varacity

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Voice Recognition System: Speech-to-Text

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Abstract

Voice Recognition System Speech-To-Text is a software that lets the use control computer functions and dictates text by voice. The system consist of two components, first component is for processing acoustic signal which is captured by a microphone and second component is to interpret the processed signal, then mapping of the signal to the words.Model for each letter will be built using Hidden Markov Model (HMM). Feature extraction will be done using Mel Frequency Cepstral Coefficient (MFCC). Feature training of the data set will be done using vector quantization and Feature testing of the dataset will be done using viterbialgorithm. Home automation will be completely based on Voice Recognition System.

Keywords:-Voice Recognition, HMM, MFCC, Vector Quantization, Viterbi Algorithm, Feature Extraction

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Internet of Things (IOT) as Life Saviour

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Abstract

In the modern world, Internet of Things technology has been widely used in various fields and as health is also one of the most important parts of our life. With the rapid growth in the technologies, IoT has changed the way of medical care in our lives. There are thousands of people who lost their lives every year due to various diseases or health problems.Therefore, the use of IoT to solve health problems has become one of

the research hotspots in the field of smart health.

The Internet of Things can improve the health grounds and prevent diseases by providing ongoing monitoring activities to ordinary people or patients. With the help of this technology, the hospitals and the equipment can be managed in a more efficient way. It will provide an easy access to emergency medical services which will improve the quality of life.

Few Application areas of IoT in health care

- Activity Trackers During Cancer Treatment
- Heart Monitors with reporting
- Medical Alert Systems
- Trackable Inhalers
- Wireless Sensors
- Wearables to fight depression

Keywords: IoT, health care, AI



Introduction to Java Language

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Abstract

Java was created by Sun Microsystems Inc, where James Gosling led a team of researchers in an effort to create a new language that would allow consumer electronic devices to communicate with each other. Work on the language began in 1991, and before long the team's focus changed to new miche, the World Wide Web. Java was first released in 1995, and java's ability to provide interactivity and multimedia showed that it was particularly well suited for the web. One design goal of java is portability, which means that program written for the java platform must run similarly on any combination of hardware and operating system with adequate run time support. This is achieved by compiling the java language code to an intermediate representation called java bytecode, instead of directing to architecture specific machine code. Java bytecode instructions are analogous to machine code, but they are intended to be executed by a virtual machine (VM) written specifically for the host hardware. Java was an automatic garbage collector to manage memory in the object lifecycle. The programmers determines when object is created, and the java runtime is responsible for recording the memory once object is no longer in use. Once no reference to an object remains, the unreachable memory becomes eligible to be freed automatically by the garbage collector and omitting. Similar to a memory leak may still occur if a programmer's code hold a reference to an object that no longer needed, typically when object that are no longer are stored in containers that are still in use.

Keywords: JAVA language, Sun Microsystems, bytecode



5g Technologies : Evolution & Revolution

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Abstract:

This paper summarizes most initiatives towards 5G wireless communication networks. 5G wireless technology is supposed to deliver Higher Peak Knowledge Speeds, additional dependability, huge network capability, inflated availability, and user expertise. Trade players claim 5G can be 100 times faster than 4G which an enormous range of devices can connect with the network. Now, analyzing 5th generation wireless communication networks is progressive on several fronts. 5G technologies are a unit expected around 2020. It's new global wireless after 1G, 2G, 3G, and 4G networks. 5G enables a replacement quiet network i.e. designed to connect virtually together. 5G is used three main sorts of connected services which include enhanced mobile broadband, mission-critical communications, and massive IoT.

5g Advanced Specification- AI, Convergence, Enablement. 5G technology powers a huge amount of range in future industries from retail to education, transportation to entertainment, and smart homes to healthcare. This is especially important during the COVID-19 pandemic, which is newly developed in telemedicine as a delivery platform for medical services. It supports High-speed mobile network, Entertainment and multimedia, Internet of Things, Satellite Internet. 5G leads among the largest technological transformations of our life with unlimited possibility. 5G improves cellular capabilities, providing enhanced power and boosting mobile capacity. 5G-Advanced network defines new goals and capabilities for the 5G evolution to enable the generation of greater social and economic value through network evolution.

Keywords: 5G wireless technology, New Developments & Technical Trends, Applications & Evolution.



DATA SCIENCE

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Abstract

Data technology is an interdisciplinary discipline that uses clinical strategies, strategies, algorithms and structures to extract know-how and insights from noisy, based and unstructured data, and follow knowledge and actionable insights from records throughout a vast variety of utility domain names. Data technological know-how is associated with records mining, device mastering and big data.

Data science is a "idea to unify data, data evaluation, informatics, and their related strategies" in an effort to "understand and analyse real phenomena" with information. It uses strategies and theories drawn from many fields inside the context of mathematics, statistics, pc technological know-how, information technology, and domain expertise. However, statistics technology is different from pc science and facts science. Turing Award winner Jim Gray imagined statistics technology as a "fourth paradigm" of technological know-how

(empirical, theoretical, computational, and now information-driven) and asserted that "the whole lot about science is changing because of the impact offacts generation" and the statistics deluge.

Keywords: Algorithm, Analytics, Hadoop, Machine learning, Data mining, Python

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Artificial Intelligence in Daily Life

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Abstract:

Artificial Intelligence is rapidly making grounds in today's world. Its growing applications in the daily lives of humanity have made its study and need of understanding more crucial than ever. Range of applications of AI; from understanding the deep secrets of the universe to using it with other programs such as Netflix and Prime Video and other social media apps, where data is accumulated and analyzed to create a personalized experience for the users and consumers provides enough statistics to prove its worth and importance. In this paper we are trying to understand its applications when used with IOT (Internet of Things). How AI can help make our daily life simpler by understanding the pattern of our living and adapting itself according to our needs. Also we will try to understand and analyze its advantages and disadvantages and its ease of use. We will try to understand the range of possibilities of AI with IOT and discuss how we can proceed in the way of developing this asset in the country and make it available to more and more people.

Keywords: Artificial Intelligence, Netflix, Prime video

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A Review on Security and Privacy Issues of Big Data Management

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Abstract:

Big Data played a major role in the world of Information Technology with the applications of Cloud Technology and Data Mining. The term "Big Data" is related with managing high amount of data exist in digitalized form that is collected by various companies or organization. The analysis of Big Data involves multiplephases which include data obtaining and recording, data integration, aggregation and representation, query processing, data modelling and interpretation.

The Big Data is an area that applied to manage datasets whose size is beyond the ability which used the software tools to capture, manage, and timely analyse that amount of data. All these data are very often unstructured and from various sources such as social media, sensors,video and image archives, Internet

search indexing, medical records, business transactions and system logs.

Big data and privacy along with its security its conclusion is that Many privacy enhancing techniques have been proposed over the last fifteen years, ranging from cryptographic techniques such as data structures that hide data access patterns to anonymization techniques that transform the data to make more difficult that link specific data records to specific individuals and Big data handles a petabyte of data.

Keywords: Big Data, Data Analysis, Cloud, Data Mining, Security and Privacy Issues and its Applications.



Hackers Steal Research Data from Sweden's Volvo Cars

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Abstract

Swedish producer Volvo Cars said Friday hackers have stolen studies and development facts from its gadget in a cyberattack. The enterprise, owned by China's "has emerge as aware that one in every of its record repositories has been illegally accessed by means of a third birthday party," it said. "Investigations to this point verify that a confined amount of the company's R&D belongings has been stolen all through the intrusion," Volvo brought. It desired that "there may be an effect on the agency's operation" from the hack, sending its stock falling 3.5 percent in Stockholm, to 72.44 kronor (\$eight.00 , 7.06 euros). But the company added there has been likely n "effect on the safety or security of its customers automobiles or their personal statistics". Goteborg-primarily based Volvo is currently plumping coins into electrifying its whole variety with the aid of 2030. A spokesman advised AFP that the business enterprise had now not been hit with the aid of ransomware and remained in full manage of its facts. He delivered that a "third birthday celebration" had contacted Volvo "these days" approximately the information robbery, with out giving any details about the exchange. Volvo Cars separated from truck manufacturer Volvo Group in 1999 before being sold via Geely in 2010.

Keywords: Hackers, cyber attack



Artificial Intelligence and its Future Growth

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Abstract :

AI means, any human like tasks performed by machines/robots. At present AI is so advanced to enable optical sensors in malls, auto-drive cars, robots to collect trash from every place, till so on. One of the daily

lifeexample of AI is the facial recognition and detection system, it is used in filters when we click photo of ourselves and also the use of face ID to unlock our phones.

Soon after the pandemic from Wuhan city of China in the year 2019, the WHO declared the outbreak as 'Public Health Emergency of International Concern' on 30 January 2021. Various offshoots of AI have been used during that period of the 'Pandemic'. Yet AI was being successfully used in every aspects of daily life, had it been the recognition of cluster of disease, monitoring different cases, the prediction of future outbreaks, facilitating training, and various other platforms AI was widely used. During this harsh pace of COVID-19, every doctor and scientist was in the race for the development of vaccine for this disease, but by harnessing the power of AI, doctors were able to predict the possible vaccine for COVID-19 using the Vaxignreverse Vaccinology- machine learning platform that works on supervised models of AI. After few years, AI surely have a big scope. It helps in various platforms and if we live a life without AI even a single day, our life would be miserable. Yet there are few concerns over its growth, AI is a robotic system or we can say machines and computers are involved, so soon after a period of time machines are meant to replace human beings as these are very efficient than humans and humans cannot be compared with robots.

Keywords: Artificial Intelligence, Machine learning

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Internet of Things (IoT)

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Abstract

This paper provides a survey and an evaluation of the cutting-edge popularity and concerns of Internet of things (IoT) safety. The IoT framework aspires to attach every person with something, everywhere. As a end result, big volumes of information are being generated, and that data is being processed into useful movements that could "command and manipulate" matters to make our lives a good deal simpler and more secure. As opposed to the conventional Internet, in addition to human beings, an IoT connects a big range of machines, resource constrained devices and sensors using heterogenous wired and wireless networks. Imagine footwear that tune our heartbeat...and flag ability health troubles, we don't have to believe - these "clever" footwear already exist! IoT is a reality this is modern day by day, connecting billions of people and things to form a enormous global network. IoT has packages in numerous domain names like agriculture, industry, military, and private spaces. The creation of 5G is beginning to make the genuine transformative ability of smart era and the internet of factors a fact. And with the ongoing Covid-19 pandemic placing new demands on healthcare and creating the need for answers which could useful resource in offering care remotely. The IoT may be viewed as a international infrastructure for the data society, allowing superior offerings through interconnecting (bodily and digital) things based totally on current and evolving interoperable records and communication technologies (ICT)." Finally, the paper affords future guidelines for securing the IoT.

Keywords: Internet of things (IoT), Smart environment, Security and Surveillance, ICT

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BIG DATA

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Abstract

The Big Data has been in use since the Nineteen Nineties, with some giving credit score to John Mashey for popularizing the term. Big Data is a new motive force of the world financial and societal changes. The international's records collection is accomplishing a tipping factor for foremost technology adjustments which can bring new ways in choice making, coping with our health, bioinformatics, towns finance, fintech, and education. While the facts complexities are increasing which includes records's Volume, Variety, Velocity and Veracity, the real impact hinges on our capability to uncover the 'Value' within the records through Big Data Analytics technologies. Big Data Analytics poses a grand venture on the layout of surprisingly scalable algorithms and gadget to integrate the statistics and discover massive hidden values from datasets that are various, complicated, and of a huge scale. We must reflect on consideration on what value I am going to get. I imply the outcome or ROI of the implementation of Big Data platform. Big Data Analytics is applicable to Hong Kong as it actions toward a virtual economy and society. Hong Kong is already a number of the high-quality within the international in Big Data Analytics, speaking up such leadership position as chairs and editor in chiefs of crucial meetings and journals in Big Data associated regions. Modern Big records approaches leverage the Internet of Things (IOT) and Cloud Computing strategies to report extra data from the world over and gadget gaining knowledge of to construct more accurate modules. Big information analytics ought to also be team attempt slicing throughout educational establishments, government and society and industry, and through researches from more than one subject along with laptop science and engineering, health, information technology and social and policy regions.

Keywords: Big Data, Bioinformatics, Fintech, IOT, Cloud Computing



A Study of Cross Browser Compatibility as Design issue in Different Websites and Mobile

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Abstract

Nowadays, web browsers are not the only things to consider when thinking about website compatibility. Mobile technology increasingly means people will be checking websites on the go. To keep up with this trend, you'll need to make sure your website is mobile compatible. With the emergence of new computing platforms, software applications are increasingly being developed to target multiple platforms. Hence, developers of such software need to duplicate testing and maintenance activities to support the software on different platforms. Often developers are unable to cope with this ever increasing demand and might in advertently release broken software for certain platforms, or miss deadlines while attempting to address this

issue. Hence, in my research, I am developing automated techniques to assist developers with cross-platform testing and maintenance tasks.

Quality factors specifications are the main goal of developer/designer. There are many factors that define equality and scope of a web application.

- A website and mobile application should be reliable for any browser.
- A web application should be efficiency to perform program function.
- There should be error less and compatible of a web application.

In addition a number of measures will be added to browser compatibility parameter to help the designers or developer to create web page that are more efficient. Some parameters that are under consideration to be included in the parameter belong to different categories like diversity in web browser versions, screen sizes, other HTML tag error etc.

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Cyber Security

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Abstract

Computer security is the protection of computer system or the data and information stored in computer system from theft and unauthorized users or hackers. It also protects networks from being hacked. It is also referred as cyber security or information technology security. The key objectives of computer security are confidentiality (to keep information secret), integrity (having strong moral principles) and availability (able to be used or obtained). There are three types of computer security: physical security, network security and executable security. Physical security: always we need to make sure not to share our passwords in-order to safeguard our system from data thefts. Network security: firewall helps the network security by stopping any of the unauthorized networks that would attempt to access your computer. Executable security: anti-virus security is a must to block the virus from attacking the system. Cyber security threats are the risks that can harm the functioning of the computer. There are mainly two types of cyber threats physical threats (when someone steals the computer) and non-physical threats (caused by virus). These days cyber threats are increasing in large number and one must be very careful towards it.

Keywords: Cyber security, physical security, network security, executable security.

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Ethical Hacking

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Abstract

Ethical Hacking, also known as penetration testing, intrusion testing, or red teaming, is the controversial act of locating weaknesses and vulnerabilities of computer and information systems by duplicating the intent and actions of malicious hackers. An Ethical Hacker, also known as a whitehat hacker, or simply a whitehat, is a security professional who applies their hacking skills for defensive purposes on behalf of the owners of information systems. Nowadays, certified ethical hackers are among the most sought after information security employees in large organizations ethical hacking refers to the act of locating weaknesses and vulnerabilities of computer and information systems by duplicating the intent and actions of malicious hackers. Ethical hacking is also known as penetration testing, intrusion testing, or red teaming. An ethical hacker is a security professional who applies their hacking skills for defensive purposes on behalf of the owners of information systems.

Keywords : Ethical Hacking, White hat, Black Hat

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Deep Learning Technology

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Abstract

Deep learning is a branch of machine learning which is completely based on artificial neural network, as neural network is going to mimic the human brain so deep learning is also a kind of mimic of human brain. The term deep learning was introduced to the machine learning community by Rinna Dechter in 1986. Deep learning.ai is company that explores the frontier of (AI). The company founded by Andrew Ng.

To understand deep learning, imagine a toddler whose first word is *dog*. The toddler learns what a dog is – and is not – by pointing to objects and saying the word *dog*. The parent says, “Yes, that is a dog,” or “No, that is not a dog”. As the toddler continues to point to objects, he becomes more aware of the features that all dogs possess. What the toddler does, without knowing it, clarify a complex abstraction – the concept of dog – by building a hierarchy in which each level of abstraction is created with knowledge that was gained from the preceding layer of the hierarchy. To achieve an acceptable level of accuracy, deep learning programs require access to immense amounts of training data and processing power, neither of which were easily available to programmers until the era of big data and cloud computing. Because deep learning programming can create complex statistical models directly from its own iterative output, it is able to create accurate predictive models from large quantities of unlabeled, unstructured data. This is important as the internet of things (IoT) continues to become more pervasive because most of data humans and machine create is unstructured and is not labeled. Because deep learning models process information in ways similar to human brain, they can be applied to many tasks to people do. Deep learning is currently used in most

common image recognition tools, natural language processing (NPL) and speech recognition software. These tools are starting to appear in applications as diverse as self-driving cars and language translation services.

Keywords: Artificial Neural Network, Cloud Computing, 5G, Image Recognition Tools, NPL

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Evolution of AI (Artificial Intelligence)

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Abstract:

AI(Artificial Intelligence) is a mechanical and computerized existence of human or natural being. To make it more easy to understand, AI is the ability of computer to perform tasks that are generally performed by human beings which involves intelligence and decision making.

TRUE STORY: Tim Shaw a great American football player who also played for NFL and been in the university football team as a best player. Back in 2012, Tim felt that his muscles had started twitching and got stiff slowly and slowly he lost control over his muscles. This was because he was suffering from a disease called ALS (Amyotrophic lateral sclerosis) in which our nervous system loses the control over muscles and also affects our speech.

Tim Shaw was no more able to speak clearly. He started communicating less as he was able to speak but, it was not understandable. Here is when speech recognition came into the story which is the part of AI helped a lot to give Tim and a lot others who were suffering from the same their voice back. ALS TDI Boston had a lot of ALS speech data which was to create a new different modal which can recognise their voice and display the words for better communication. By changing a lot of parameters in speech recognition they finally created a modal which was able to recognise the voice of such people who are not able to speak clearly.

Not only speech recognition there are several different fields like image recognition, expression which can be used along with machine learning to create user friendly modals that can resolve real life problems. Image recognition algorithm works by identifying 1000's of example and can identify another image without any human help which also helped in treatment of retinopathy. By taking pictures of several diabetic patients having eye bleeding which could lead to blindness. Image recognition made it easy to identify it at early stage so that it could be treated before getting worse.

In future AI will help hospitals and doctors in better treatment of every disease and also will help to analyse and find out the best treatment out of all. Not only in medical sector but in other different sectors AI and machine learning will change the world in a different way. In educational sector there will be virtual teachers who will be teaching students and will be providing practical knowledge to the students.

Keywords: Machine Learning, Artificial Intelligence, future of AI

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Machine Learning

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Abstract

Machine learning is an exciting branch of Artificial Intelligence, and it's all around us. Machine learning brings out the energy of data in new methods, inclusive of Facebook suggesting articles in your feed. This exquisite era helps pc structures study and improve from experience by using developing pc applications that could routinely get admission to facts and carry out duties via predictions and detections.

As you enter extra statistics right into a gadget, this helps the algorithms teach the computer, accordingly enhancing the delivered outcomes. When you ask Alexa to play your favorite music station on Amazon Echo, she will be able to go to the station you performed most usually. You can further enhance and refine your listening revel in through telling Alexa to pass songs, modify the volume, and lots of extra feasible instructions. Machine Learning and the fast advance of Artificial Intelligence makes this all possible.

Artificial intelligence changed into born in 1950. John McCarthy turned into the person to coin term synthetic intelligence for the primary time, there for the regarded as the daddy of AI. It is the manner of making computers able to expertise as a person, to suppose and perform and the same is carried out through the inculcating the statistics as inputs and commands.

From auto understand mas cars to translate speech and appearing responsibilities in human approaches, device mastering is a sub set of synthetic intelligence. Machine mastering is a systematic take a look at of algorithm and methods to locate connection among records, base at the sample and evaluation -- the way human thoughts does. It specializes in Pattern recognition, predictive and Analysis and statistics mining to study from the records and turn out to be independently adaptable to the new records. ML carefully associated with massive day these days and Analytics.

Keywords: Machine Learning, Pattern recognition, data mining

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Block Chain Technology

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Abstract

Block chains are incredibly well known these days. A blockchain is a chain of blocks that contains data. This technique was initially depicted in 1991 by a gathering of specialists and was initially planned to timestamp digital documents so that it is not possible to backdate them or to tamper with them. Practically like a public accountant. Be that as it may, it passed by generally unused until it was adjusted by Satoshi Nakamoto in 2009 to make the computerized cryptocurrency Bitcoin. A blockchain is a distributed ledger that is totally open to anybody. They have an intriguing property: when a few information has been recorded inside a blockchain, it turns out to be truly challenging to transform it. We should investigate a block. Each block contains a few information, the hash of the block, and the hash of the previous block. The information

that is put away inside a block relies upon the kind of blockchain. The Bitcoin blockchain for instance stores the insights regarding an exchange here, like sender, collector, and measure of currencies. A block likewise has a hash. You can contrast a hash with a unique finger impression. It recognizes a block and the entirety of its substance and it's consistently interesting, similarly as a unique mark. When a block is made, its hash is being determined. Changing something inside the block will make the hash change. Along these lines, at the end of the day: hashes are exceptionally helpful when you need to identify changes to blocks. Assuming the unique mark of a block changes, is never again is a similar block. The third component inside each block is the hash of the previous block. This successfully makes a chain of blocks and it's this strategy that makes a blockchain so secure. The first block of a blockchain is a bit special; it cannot point to previous blocks because it's the first one. We call this the genesis block. Blockchains utilize a peer-to-peer(p2p) network and anybody is permitted to join. These agreements are basic projects that are put away on the blockchain and can be utilized to naturally trade coins dependent on specific conditions.

Keywords: Block chain, Cryptocurrency, peer-to-peer network



User Experience and User Interaction Design

Kirti Khandal

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Abstract

Websites and web applications have become more complex as the technologies advance. But regardless of how much the production process changed, any product success depends on: how the users perceive it. User experience (UX) is how a person feels while interacting with a system. A system could be a website, a web application or desktop software. UX designers study and evaluate the user's problems in interacting with a system or product and find solutions to those and make the product more easy to use. User Experience focuses on the user and their journey through the product while User Interface design focuses on the visual interaction of the user such as typography, colors, menu bars and more.

UI design is the process of transforming wireframes into an attractive graphical user interface. This both enhances a product's usability and creates an emotional connection between the end-user and a product. A user experience (UX) is made up of many user interfaces (UI), which come together in a continuous flow to form a product. We can define the limits of UI in a much more clear way than UX, as its focus is in the name: interfaces. The overall effect of a sequence of interfaces—and the less entire specific parts of a product experience—make up the user experience, but UI is purely concerned with the design of individual screens or interfaces on a user's journey. Evaluating the effectiveness and return on investment of a UX design using quantitative measures is difficult. This is because the field is subjective. UX deals with users' emotions and you can't put a number on it the way you can with page views, loading speed or conversion. Instead, we have to tease out the results indirectly by analyzing revenue levels, page views, before-and-after surveys of users and the like. However, saying that any positive effects are the result of a better user experience or aesthetics or some other factor, such as improved marketing or front-end performance optimization, would be inconclusive.

Keywords: User Experience, User Interface, Typography, Wire frame



Cloud Computing

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Abstract

Cloud Computing is the delivery of different services through the internet. This resource includes tools and applications like, servers, networking and softwares etc. It is developed by Joseph CarlRobnettLachlider in 1960s, with his work on ARPANET to connect people and data from anywhere at any time.CC is beneficial for different fields like, Trade Capital expenses, massive economic scale, stop guessing capacity, increase speed and agility, stop spending money running and maintaining data centers, it means you can provide lower latency and a better experience for your customer at minimal cost.CC whether we like or not to stay in one form or another. It is used in everyday life activities such as Banking, Email, Media streaming and E-commerce, all use the CC Netflix is the best example in the present time of CC. It includes online storage recommendation engine, Video transcoding, Database and analytics etc.Cloud Computing which is faster the world economy global supply chains and remote workforces during the Coronavirus's pandemic, will continue to be an essential target for organizations looking for increasing their profitability, business stability and cost efficiency in 2021.It is a technology in which you the data you create but cloud service provider has ultimate control over it.

Keywords: Cloud Computing, E-Commerce

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Block Chain Technology and its Application: A Technological Review

Lakshmishree Shukla

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Abstract

Blockchain technology has become an active area of research and a technological option for many businesses and industrial communities. With its distributed, decentralized nature, blockchain can provide businesses with new opportunities and benefits through increased efficiency, reduced costs, enhanced integrity and transparency, better security and improved traceability. Although blockchain's largest applications have been in the finance and the banking sector, but we now see experiments and proposed applications in different fields. Blockchain technology brings together all the key design features, characteristics and benefits of blockchain that make it a superior and unique technology and it presents the popular consensus protocols and taxonomy of blockchain systems. Additionally, it surveys blockchain-based applications across multiple domains such as in finance, insurance, supply chain management, energy, advertising and media, real estate and healthcare. It aims at examining the industries' key issues, blockchain solutions and use cases. Tthree broad limitations that blockchain technology presents: scalability, security and regulation, and shows how these challenges could impact blockchain application and adoption.

Keywords: Blockchain, Distributed Ledger, Cryptocurrency, Smart Contracts, Decentralized Applications

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QR Code Drives : The Drives which makes sharing even more easier

Mansi Kumawat

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Abstract

A QR code (an initialism for Quick Response code) is a type of matrix barcode (or two-dimensional barcode) invented in 1994 by the Japanese automotive company Denso Wave. A barcode is a machine-readable optical label that can contain information about the item to which it is attached. In practice, QR codes often contain data for a locator, identifier, or tracker that points to a website or application. Here is a innovative idea: Develop a QR drives like the pen drive we use. The data will be stored in these QR code drives/Chips. Having its own QR code cloud. It will be mutable/editable, i.e., the different set of data can be stored there at different point of time. The special app for generating, editing and scanning should also be developed.

Advantages of it is as:

1. Easy and quick data sharing: The code will be scanned which has visual appearance is formed above the drives. The drive holder (person) will provide the password which he has used for data security. And it's all done, the scanner has received the data.
2. Helpful for storage: It can store large data. It's functionality will be like memory card.
3. Highly secured: It is highly secured as it will be encryption and the data scanned by the app will not store the data in the memory until it is saved by the user. Interestingly each file in it has their own QR code which can be shared in the online platform like emails, Facebook, etc. Obviously, these QR code cannot be hacked.
4. Bugs free: It will be bug free as the user will not always use it in their pc . He will edit the QR through his mobile.

Disadvantages of it is as:

Sensitive appearance: Holding and using it in a wrong way can lead to the failure of the drive.

COVID-19 pandemic:

After the COVID-19 pandemic began spreading, QR codes began to be used as a "touchless" system to display information, show menus, or provide updated consumer information, especially in the hospitality industry. Restaurants replaced paper or laminated plastic menus with QR code decals on the table, which opened an online version of the menu. This prevented the need to dispose of single-use paper menus, or institute cleaning and sanitizing procedures for permanent menus after each use. Due to covid, today, Large data sharing is required, Thus data storage is also required, it will be easier to handle the files through it.

Keywords: QR Code, bar code, QR Drives



Cyber Crime

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Abstract

With the area of globalization, computer, mobile phones and the internet have become part of our daily routine. As a result of this, online processing information is made available on the internet bringing in new threats in the form of cyber crimes. Such threats not only come in different faces, but they also have different execution methods making it difficult for cyber experts to find a viable solution due to the high rates of threats, nations around the globe have become concerned about their netizens' online safety and have implemented several acts of parliament and international instruments. However, most of the laws are still in a mother's womb which are in the process of evolution. There are several reasons why cyber-attacks are planned, as some have serious agendas tagged on them, while others are simply planned as pranks. This paper not only seeks to analyze the political, economic and social effects of cyber crimes in organizations but also recommends how one can be made aware and prevent cyber crimes in organizations as prevention is better than cure.

Keywords: Cyber crime, cyber security, hackers

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Cloud Computing

Palak Rathore and Kailash Kanwar

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Abstract

Cloud computing is a way of computing, in which maximum of our records is saved inside the cloud, i.e., the Internet. A computing functionality that provides an abstraction among the computing useful resource and its underlying technical architecture (e.g., servers, storage, network), permitting convenient, on-call for community get right of entry to a shared pool of configurable computing sources that may be rapidly provisioned and released with minimum control effort. The worldwide of cloud computing is to apply conventional supercomputing, or high-overall performance computing power, usually used by navy and studies facilities, to perform tens of trillions of computations in line with second, in consumer-oriented programs such as economic portfolios, to deliver customized information, to provide records storage or to energy large, immersive pc video games. To do this, cloud computing makes use of networks of big businesses of servers generally jogging low-value purchaser PC era with specialised connections to unfold statistics-processing chores throughout them. Why we pick cloud computing is that, clients would be able to access their packages and information from anywhere at any time. They could get entry to the cloud computing gadget the usage of any computer linked

To the Internet. It could convey hardware charges down. Cloud computing structures would lessen the for superior hardware on the consumer facet. You wouldn't want to buy the fastest laptop with the extra memory, due to the fact the cloud system might take care of those desires for you. Instead, you could

purchase an less expensive pc terminal. The terminal ought to include the monitor, enter gadgets like a keyboard and mouse and simply sufficient processing electricity to run the middleware important to hook up with the cloud gadget. You wouldn't need a big force due to the fact you'd store all of your data on a far flung computer

Keywords: Cloud Computing, shared pool

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Recreating Higher Education in the Post -Pandemic World (Quantum Computing in the New Era)

Prerna Kumari and Khushbu Kalani

Biyani Girls College, Jaipur, India

Abstract

Quantum computing is a type of computation that harnesses the collective properties of quantum states, such as superposition, interference, and entanglement, to perform calculations. The devices that perform quantum computations are known as quantum computers. Though current quantum computers are too small to outperform usual computers for practical applications, they are believed to be capable of solving certain computational problems, such as integer factorization (which underlies RSA encryption), substantially faster than classical computers. The study of quantum computing is a subfield of quantum information science. Analyzing the benefits some are speed, computation, big data, power reduction with applications including like artificial intelligence, hardware and software error simulation, cryptography, data analytics, nanotechnology and digital security. The various careers included are Quantum Communication, Quantum Computation, Quantum Optics, Quantum Fundamentals and Quantum Information Processing. We'll use quantum computing in the future as Logistical and optimization problems, Weather and climate modeling, Personalized medicine, Weather and climate modeling, Space exploration.

Keywords: Quantum Computing, Quantum Optics

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Internet of Things (IoT)

Nikita Agarwal, Akansha Kumawat and Surbhi Joshi

Biyani Group of Colleges, Jaipur, India

Abstract

Internet of Things (IoT) is a quick turning into disruptive era enterprise opportunity, with requirements emerging in general for wi-fi communication among sensors, actuators and gadgets in day-to-day human life, all in standard being known as "Things". The internet of factors, daily accompanies the development of

sports which are completed in any space, through far off get entry to. Households and agencies have protected new technologies in exceptional areas for the automated development of activities or methods, real-time tracking and manipulate, which has emerge as a urgent want for decision-making, For this cause, it's miles essential to carry out a bibliographic review, with the aid of attempting to find clinical articles, within the most recognized digital databases, wherein the maximum essential factors of the net of factors, technologies and elements used inside the closing ones are cited years, so that you can know a touch greater approximately these and their traits in not unusual. For the research, the suggestions and evaluation of the results received in case studies will be taken into consideration, looking for to leave a precedent that contributes to the development of the agro-industrial production strategies, in order that they may be supported in new technology that permit figuring out, degree and control variables, that attain the efficient operation of sources, maximizing the ability of their traits. One of the main capabilities within the development of an IoT structure is the usage of a wi-fi network of sensors that allow statistics seize of device variables, which will then be analyzed for decision making in the manufacturing technique. There are ramifications of technology for the implementation of IoT programs; however their preference will rely upon the environmental and geographical conditions in which they'll be used, in addition to the sources available due to the fact that there are also free hardware and software program alternatives that allow acting the capabilities referred to within the article. The IoT packages that currently exist generate exceptional consequences, but with the passage of time and market demand they will require a greater quantity of packages that leads to the use of better technologies and gadget with greater attain, a whole lot large networks and more complex records structures.

Keywords : IOT, Remote Access, Data Mining

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Sustaining and Strengthening Inclusion in our New Remote Environment

Sujata Biyani and Preetma Ramdatti

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Abstract

COVID -19 pandemic created a common platform for work place through which new remote working technology and workforce introduced and provide organization the opportunity to reset team dynamics from the home itself which helps to expand their work efficiently and effectively. Team helps to strengthen connection and encourage the growth of inclusive cultures that will better realise full potential of all employees. A stage where isolation extended the stress from COVID-19 which drives range of negative emotions in employees. During times of crisis the inclusion becomes crucial and critical which can not be achieved solely through systematic efforts that identify the consequences by addressing unintended and unconscious bias and it leads to effective outcome that helps to support foundational business goals.

- Win the War for talent
- Increase retention of critical talent
- Improve the quality of decision making
- Build greater resonance and trust with customers

Inclusion: It is a collaborative, supportive, and respectful environment that increases the participation and contributions of employees. Through reverting technologies and introduction of remote workforce, enhancing the online connecting in different ways which they didn't experience before pandemic that helps to identify the unknown challenges, strategies and unusual decision to survive and stay competitive. The pandemic posed numerous adverse consequences besides the strategies which are adopted include flexibility strengthening internal efficiency talent acquisition and making innovative changes that helps to develop an enhanced employee workforce for up gradation.

Keywords: COVID 19, Upgradation, Inclusion, Remote Technology

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Artificial Intelligence (AI) Applications for Covid-19 Pandemic

Anuapam Goyal

Maharani Girls College, Jaipur, India

Abstract

Background and objectives

The delivery of health care requires the support of new technologies such as Artificial Intelligence (AI), Internet of Things (IoT), Big Data and Machine Learning to fight forward-looking against new diseases. We aim to review the role of AI as a critical diagnostic technology, to prepare us for the protection and fight against COVID-19 (Coronavirus) and other epidemics.

Ways

A quick review of the literature is done on Pubmed, Scopus and Google Scholar websites using the keyword COVID-19 or Coronavirus and Artificial Intelligence or AI. The latest information on the AI of COVID-19 was collected, and similar analyzes were made to determine the probable cause of the disease.

Results

We have identified seven key AI applications for the COVID-19 epidemic. These technologies play an important role in detecting a collection of cases and predicting what the virus will affect in the future by collecting and analyzing all previous data.

Conclusions

Healthcare organizations have an urgent need for decision-making technology to catch the virus and help them get the right recommendations in real time to prevent its spread. AI works at a high level of imitation as human intelligence. It may also play an important role in understanding and promoting the development of the COVID-19 policy. These results-based technologies are used to accurately assess, analyze, predict and track current and future patients. Essential applications are used in data for certified, restored and death case tracks.

Keywords: Artificial Intelligence (AI), AI Applications, COVID-19, Coronavirus, Epidemic

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Day-5

Pandemic Reconfigurations: Higher Education

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- Vijay Pal Singh
- Raju Madhukar
- Sonam Ratnu
- Ravi Gautam

Programme Schedule

Date: Dec. 18, 2021; Saturday (Day-5)

Theme: Recent Technologies & Management Tools to Recreate New Higher Educational World after COVID- 19

Standard Time IST	Schedule
Inaugural Session, 09:00 AM-10:05 AM IST	
09.00 AM-09.05 AM	Lighting of the Lamp
09.05 AM-09.15 AM	Welcome address Dr. Sanjay Biyani Director, Academics Biyani Group of Colleges, INDIA
09.15 AM-09.30 AM	Inaugural Address by Chief Guest Justice Jinendra Kumar Ranka Former Judge, High Court of Rajasthan, INDIA
09.30 AM-09.40 AM	Address by Guest of Honor Dr. B.R. Panwar Environment Technical Expert, SEAC Govt. of India
09.40 AM-09.50 AM	Address by Guest of Honor Prof. Sheila Rai President, India Society of Gandhian Studies Member, Khadi & Village Industries Commission, Ministry of MSME, Govt. of India Retired from University of Rajasthan, INDIA
09.50 AM-10.00 AM	Address by Keynote Speaker Prof. A.V.S. Madnavat Former Head, Department of Psychology Head, Department of Education Director, School of Humanities University of Rajasthan, INDIA
10.00 AM-10:05 AM	Vote of Thanks Dr. Dhyan Singh Gothwal Vice-Principal & Dean (Administration) Biyani Girls College, INDIA
Technical Session – I, 10:05 AM-10:55 AM IST <i>The Psychological Impact of COVID-19: New Perspectives of Well-Being</i> Chair: Dr. Neha Pandey	
10.05 AM-10.25 AM	Dr. Shiv Gautam , Director and Professor of Psychiatry at the Gautam Institute of Human Behavior and Alternative Medicine, Rajasthan, INDIA Title: Psychological Aspects of Corona Pandemic and Coping Strategies
10.25 AM-10.45 AM	Dr. Chandrani Sen , Associate Professor, Department of Psychology, University of Rajasthan, INDIA Title: Roller Coaster Covid -19: Reorganizing Self for an Enhanced Well-Being
10.45 AM-10.55 AM	Q&A, Session closing remarks and Group Photo

Recreating Higher Education in the Post-Pandemic World

Technical Session – II, 10:55 AM-11:45 AM IST <i>Pandemic Effects on Media and its Future</i> Chair: Dr. Dhyan Singh Gothwal	
10.55 AM-11.15 AM	Prof. Sanjeev Bhanawat , Former Head, Center for Mass Communication, University of Rajasthan & Editor Communication Today, Rajasthan, INDIA Title: Role of Media During COVID 19 and Future Challenge
11.15 AM -11.35 AM	Mr. Nidhikant Pandey , Executive Producer TV 9 Bharatvarsh, Uttar Pradesh, INDIA Title: Quick Measures by News Channels During Pandemic
11.35 AM -11.45 AM	Q&A, Session closing remarks and Group Photo
Technical Session – III, 11:45 AM-12:35 PM IST <i>Humanities as Essential Services: Post Pandemic Educational World</i> Chair: Dr. Devika Agarwal	
11.45 AM-12.05 PM	Prof. Gurendra Nath Bhardwaj (Prof. and Examination Controller), NIIT University, INDIA Title: Effective Use of ICT in Teaching Learning Process
12.05 PM-12:25 PM	Mr. Sudhansh Verma , Social Activist, IRELAND Title: Pandemic Education with WISDOM and Innovation - A Shared Responsibility
12.25 PM-12:35 PM	Q&A, Session closing remarks and Group Photo
Break 5 min	
Virtual Oral Presentations, 12:40 PM-01:25 PM IST (Humanities) Chair: Dr. Arti Gupta	
12:40 PM -01:25 PM	Oral Presentations
01:25 PM -1:30 PM	Award Ceremony
Lunch Break 15 min	
Technical Session – IV, 01:45 AM-02:35 PM IST <i>New Challenges, Remedies and Scopes in Legal Pedagogy</i> Chair: Ms. Monika Paliwal	
01.45 PM-02:05 PM	Prof. Aradhana Parmar , Dean, Faculty of Law, Maharishi Arvind University, Jaipur, INDIA Title: Behavioral and Emotional Disorder in Children During COVID-19 Epidemic
02.05 PM-02:25 PM	Ms. Nidhi Khandelwal , Advocate and Vice President, Rajasthan High Court, Jaipur, INDIA Title: New Challenges, Remedies and Scopes in Legal Pedagogy
02.25 PM-02:35 PM	Q&A, Session closing remarks and Group Photo
Technical Session – V, 02:35 AM-03:25 PM IST <i>The Impact of COVID-19 on Human Rights and Rule of Law</i> Chair: Mr. Roshan Lal	
02.35 PM-02:55 PM	Dr. Ashu Maharshi , Associate Professor, Amity Law School, Amity University, Jaipur, INDIA Title: Changing Mechanism of World and legal Education in the COVID Era

Recreating Higher Education in the Post-Pandemic World

02.55 PM-03:15 PM	Dr. Rachna Katta , Associate Professor, Mahaveer Law School, Jaipur, INDIA Title: Violation of Human Rights in COVID-19 Pandemic and the Rule of Law
03.15 PM-03:25 PM	Q&A, Session closing remarks and Group Photo
Technical Session – VI, 03:25 AM-04:15 PM IST <i>Current Issues and Prospectus of Modern Legal Education in Conditions of COVID-19</i> Chair: Ms. Madhuri Sharma	
03.25 PM-03:45 PM	Dr. Suman Paliwal , Associate Professor, Jagannath University, INDIA Title: COVID and Education - Challenges, Opportunities and Future of Education
03.45 PM-04:05 PM	Mr. Akhil Kumar , Former Vice Principal, University Law College and Former Associate Dean for Student Welfare, INDIA Title: Protection of Human Rights by the European court Human Rights during the COVID-19 Period
04:05 PM-04:15 PM	Q&A, Session closing remarks and Group Photo
Break 5 min	
Virtual Oral Presentations, 04:20 PM-04:45 PM IST (Law) Chair: Dr. Vishnu Sharma	
04:20 PM -04:45 PM	Oral Presentations
04:45 PM -04:50 PM	Award Ceremony
04:50 PM -05:00 PM	Closing Remarks Dr. Manish Biyani Director (R&D), Biyani Group of Colleges, INDIA Professor (Research), JAIST, JAPAN
05:00 PM-05:15 PM	Valedictory Ceremony Dr. Rajeve Biyani Chairman, Biyani Group of Colleges, INDIA

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INVITED LECTURE- 1

Psychological aspects of corona pandemic and coping strategies



Dr. Shiv Gautam

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2. Formerly the Additional Principal of the Sawai Man Singh Medical College, Jaipur,
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Research Interest:

Mental Health Education to masses through the print and electronic media.

Education & Professional Career:

Dr. Gautam entered the medical career when he graduated in MBBS from the S.M.S. Medical College in 1973 in Jaipur.

He, later did his post graduate studies - D.P.M. in 1976,

MDin 1978 - both from the National Institute of Mental Health & Neuro Sciences, (NIMHANS) in Bangalore

Major Publications:

Dr. Gautam provides specialized treatment in Geriatric Mental Health, Alcohol and Drug De-addiction, Child Adolescence, and Women's Mental Health. He is the Hon. Secretary, Alzheimer's and Related Disorders Society of India (ARDSI); Hon. Secretary, Mental Health Foundation, Jaipur; Member of the Publications Committee of the Indian Psychiatric Society Ancips 2010. He has been a Member of the Executive Council IPS Rajasthan State Branch from 2009 to 2012; Convener, Private Psychiatry Section of the Indian Psychiatric Society from 2013 to 2014; and Gen. Secretary of the Indian Association for Geriatric Mental Health from 2010 to 2012.

Dr. Shiv Gautam has received a number of awards in recognition of his service.

Abstract

Psychological aspects of corona pandemic and coping strategies

Shiv Gautam

Director, Gautam Institute of Behavioral Sciences & Alternative Medicine

President, Mental Health Foundation, Jaipur

Member Advisory board on Health NHRC, New Delhi.

Corona Virus is Recently Identified, highly infectious, effects primarily Upper Respiratory Tract Throat Lower Respiratory tract and Lungs. It takes toll of Lives. No Treatment has been found out yet and effective research on vaccine is ongoing. However, measures for Prevention suggested include - Personal hygiene, Personal Social distancing, Self-protection Mask, Cap, Goggles, P.P. Kits for Healthcare Personnel, Frequent cleaning, Sanitization of work place, Sanitization of home, social distancing and locked in and staying at home. Impact of illness is on Emotional biological and social health of the individual. Emotional effects include Sadness, Anxiety, Irritability, and Frustration. Biological Changes include effects on sleep and appetite, sexually activity and pain in fatigue in the body. It also effects individual behavior including either increase or decrease in activities like Exercise/ Indoor Games, Use of social media, Watching TV/ Movies, Internet Gaming, and Reading Books. Some people get involved in Creative Activities like Drawing/ Painting, Reading Books, Creating New Hobbies, Cooking/ Gardening / creative writing, Participating in House hold chores/ cooking cleaning There is Increase in Psychiatric Morbidity for example Generalised Anxiety Disorder, Depression, OCD, Relapse in Recovered Psychiatric Patients and Problems of Patients in Maintenance Phase. Strategies to overcome the stress and improve quality of life have been highlighted.

Keywords: COVID 19, Impact on Psyche, Mental Health, Behavior.



INVITED LECTURE- 2

Roller Coaster Covid-19: Reorganizing Self for an Enhanced Well-Being



Dr. Chandrani Sen

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Research Interest:

Area of interest lies in Organizational Behavior and Positive Psychology.

Education & Professional Career:

1995-1998 Bachelor of Arts (Honours) in Psychology, University of Rajasthan
1998-2000 Master of Arts in Organizational Behaviour, University of Rajasthan
2000-2004 Doctoral Degree in Psychology, University of Rajasthan

Major Publications:

- International 22
- National 14
- Paper Presented 06
- Books/ Chapters Published/ Paper in Proceedings 08
- Ph.D. Research Scholars 07 (Awarded)
- PG Dissertations 40 (Guided)
- IGNOU Dissertations 45 (Guided).

Abstract

Roller Coaster Covid-19: Reorganizing Self for an Enhanced Well-Being

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As we continue to navigate the roller coaster COVID-19 and make a constant effort to rearrange ourselves with each wave, it's the time to revisit the check list that we have been doing more than twenty months by now. Our body and mind aren't really made to handle something like long term pandemic "stress", so the ongoing nature of these periodic waves, of such stressors are really taxing on our well-being. It is easy to catastrophize the present situation but aren't we familiar to the felling this time than the last year? is a question to self. It seems we are better equipped mentally to handle the changing restrictions and the imposed regulations. So reorganizing self seems easy this time by monitoring how we consume the news and then rearrange it to add good emotional space to self. More important now is to focus on positives, opportunities and new found flexibilities per se working being at home. Therefore, it's time to connect with the lessons learned from several past months and reorganize for a better managed today.

Keywords: COVID-19, Pandemic, Stress, Well-being.

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INVITED LECTURE- 3

Sanjeev Bhanawat

Abstract

कोविड 19 और भविष्य की चुनौती के दौरान मीडिया की भूमिका

प्रो. संजीव भानावत

वैश्विक महामारी के रूप में कोविड-19

ने पूरी दुनिया को अपनी गिरफ्त में ले लिया। एक समय ऐसा लगामानो पूरी दुनिया थम जाएगी। भविष्य को लेकर हम सभी आशंकित थे। ऐसे दौर में दुनिया भर के संचार माध्यमों के सामने एक चुनौती थी कि इस महामारी के संदर्भ में कैसे आम आदमी को जागरूक किया जाए और विश्वसनीय सूचनाएं उपलब्ध कराई जा सकें। पत्रकार की घूमने की स्वतंत्रता सीमित होगई थी। अधिकृत स्रोतों तक उसकी पहुंच की भी अपनी सीमाएं थीं। ऐसे दौर में अपने जीवन और नौकरी के बलिदान पर मीडिया कर्मियों ने इस महामारी से लड़ने के लिए एक बेहतर आधारभूमिका तैयार की। आम आदमी को इस महामारी के दौर में न सिर्फ अपने मनोबल को बनाए रखने के लिए मीडिया ने प्रेरित किया उबर अपनी जीवन रक्षा के तौर तरीकों के बारे में भी विविध प्रकार की जानकारी दी और विशेषज्ञों के साक्षात्कार तथा आलेखों के माध्यम से अपने पाठकों,

श्रोताओं और दर्शकों को जागरूक किया। नवीनतम तकनीक का उपयोग करते हुए मीडिया ने एक नए दौर में प्रवेश किया है। डिजिटल माध्यमों ने हमारे जीवन संसार को व्यापक रूप से प्रभावित किया है। निश्चय ही भविष्य में मीडिया की भूमिका की हमें नए रूप से व्याख्या करनी होगी।

INVITED LECTURE- 4

Quick Measures by News Channels during Pandemic



Nidhikant Pandey

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Executive Producer with TV9 Bharatvarsh, Noida.

Associated with a theatre group Three Arts Club(estd. 1943) since 2010.

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Education & Professional Career:

MA in Hindi from University of Rajasthan, Jaipur.

One year diploma in Video Film Production from Aurobindo Institute of Mass Communications, New Delhi.

Major Publications:

An empanelled faculty member & examiner with IP University, Delhi since 2003. Guided the students of Graduation & Post-graduation with the requisite semester course material and conducted many Media & Theatre workshops in various institutions across Delhi-NCR, Jaipur, and Bhopal.

Abstract

Quick Measures by News Channels during Pandemic

Nidhikant Pandey

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Pandemic closed almost everything with the lockdown during March-June 2020 but media houses were trying to deliver the news just as they were doing it in normal scenario. Additional burden was/is to provide all the information about the virus and its variants with less manpower because no sector was untouched with this pandemic. The efforts of medical fraternity, police & administration departments for handling the situations tirelessly need to be saluted and respected. Same way, media people are also corona warriors. We will discuss the measures taken by media houses and how various departments like anchors, camera, input-output, producers, production, GFX, PCR, etc. were able to handle it.

Keywords: COVID-19, Media, Corona Warriors, Pandemic

INVITED LECTURE- 5

Effective Use of ICT in Teaching Learning Process



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Research Interest:

Applied Economics

Education & Professional Career:

2003 Awarded Ph. D. in Applied Economics from University of Lucknow.

Major Publications:

1. Budhiraja Kanan, Raman, T.V. & Bhardwaj, Gurendra Nath, 2018, Impact of Behavioral Finance in Investment Decision Making, International Journal of Civil Engineering and Technology (IJCIET) Volume 9, Issue 6, June 2018, ISSN Print: 0976-6308 and ISSN Online: 0976-6316, pp. 1151–1157.
2. Bhardwaj, Gurendra Nath, Pahwa, Shivank 2018, Liquidity Risk and Credit Risk Assessment of selected Mutual Funds of India, Amity Global Business Review, An International Research Journal of Amity International Business School, Volume 13, Issue 2, September 2018, ISSN, 0975-511X, page number 67-78.
3. Bhardwaj, Gurendra Nath, Gupta, Muskan, 2018, Comparative study of four selected Offer for Sale/IPOs in March 2018, Amity Case Research Journal, An International Case Research Journal of Amity International Business School, volume 7, 2018, ISSN – 231991099, Page number 95.
4. Bhardwaj, Gurendra Nath, Sinha, Gauri, Pal, Soumi, 2019, Fintech and Younger Generation, The IUP Journal of Information Technology, Volume XV No. 1, March 2019, Page number 16-33.
5. Shreekant, G., Rai, R.S., Raman, T.V., Bhardwaj, G.N., 2019, Comparing performance of equity, balanced and debt mutual funds – Empirical evidence from India, International Journal of Innovative Technology and Exploring Engineering.

Abstract

Effective Use of ICT in Teaching Learning Process

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COVID -19 outbreaks has taught many lessons to the world in last few months. The challenges faced by different social and business organizations have been used as drivers of innovations by many organizations. The scope of digital world has totally changed, which forced many of us to change our lifestyle. There are pros and cons of every aspect, but the new normal made us learn about new way of life.

In Education sector, the use of ICT has increased tremendously, leading to increased demand of training and development of new manpower. Hence, it has opened the door for higher education institutions to create productive manpower. The present talk will highlight issues, which are necessary for academic institutions in higher education to improve their teaching learning process in new normal.

Keywords: Remote Assessment, Project Based Learning, New Normal



INVITED LECTURE-6

Pandemic Education with Wisdom & Innovation- A Share Responsibility



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Research Interest:

Education for poor and mentoring

Education & Professional Career:

MBS, MBA, BA

Spiritual Leader, meditation and mantra healer

Gayatri Pariwar Ireland

Abstract

Pandemic Education with Wisdom & Innovation- A Shared Responsibility

Sudhansh Verma

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The global health pandemic has highlighted vulnerabilities and challenges that humankind faces. It has provided a clear picture of existing inequalities and the steps that need to be taken to address them. The main among them is addressing the education of more than 1.5 billion students whose learning has been hampered due to school closures. One of the strongest messages is that our common humanity necessitates global solidarity. We cannot accept the levels of inequality that have been permitted to emerge on our shared planet. COVID-19 has the potential to dramatically transform our world, but we must not sit back and watch what happens. Now is the time for public deliberation, democratic accountability and intelligent collective action. Decisions made today in the context of continued pandemic will have long terms consequences on the future of education and will impact complete humanity. It has revealed vulnerable, surfaced extraordinary human resourcefulness and potential. This is the time for pragmatic, long term sustainable, open and technically uplifted actions with wisdom. Choices must be made today based on humanistic vision of education.

Keywords: COVID-19, Education, Challenges.



INVITED LECTURE-7

Behavioural and Emotional Disorders in Children During Covid-19 Epidemic



Prof. (Dr.) Aradhana Parmar

Affiliation & Contact:

Dean, Faculty of Law
Maharishi Arvind University, Jaipur
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Research Interest:

Jurisprudence, Law of Torts, Criminal Laws and Cyber Laws

EDUCATION & PROFESSIONAL CAREER

Academic Qualifications:

- Secondary in 1992 from CBSE Board
- Senior Secondary in 1994 from CBSE Board
- B.A(Law) in 1997 from M.D. University, Rohtak (Haryana)
- LL.B (5 Year) in 1999 from M.D. University, Rohtak (Haryana)
- LL.M. in 2001 from Kurukshetra, University, Kurukshetra (Haryana)
- Ph. D (Law) in 2012 from University of Rajasthan, Jaipur (Rajasthan)
- M.B.A. (HRM) in 2016 from Jaipur National University, Jaipur (Rajasthan)

Professional Experience:

Total Teaching Experience	: 20 Years (UG / PG)
Law Coaching Institutes in Haryana	: Three Years (2001-2004)
Shree Bhawani Niketan Law College, Jaipur	: Eight Years (2004-2012)
UFYLC, University of Rajasthan, Jaipur	: One Year (2012-2013)
Jaipur School of Law, MVGU, Jaipur	: Three Years (2013-2016)
Faculty of Law, Maharishi Arvind University, Jaipur	: Two Years (2016-2018)
Apex School of Law, Apex University, Jaipur	: Two Years (2018-2020)

Faculty of Law, Maharishi Arvind University, Jaipur : One Year (2020- till date)

Major Publications:

- Book Published on the Title “Law and Social Transformation in India” in the Year 2020
- Book Published on the Title “Concept of Law and Legal Theory” in the Year 2020

Abstract

Behavioural And Emotional Disorders in Children During Covid-19 Epidemic

Aradhana Parmar

Dean, Faculty of Law, Maharishi Arvind University, Jaipur, Rajasthan-302041

Abstract :

The sudden outbreak of novel corona virus disease (SARS-CoV-2) was a call to put everything on halt or an alarming call that kindly wait and watch because you can be the next in the list of the infected people. There was a complete black out and the situation was so pathetic that it is really hard to recall the memories even after almost a year. It affected the human beings of all age group physically, mentally, emotionally and psychologically. The impact of Corona virus was beyond the imagination of an ordinary as well as of the extra-ordinary person and the condition became worse when the lockdown was declared. Though the decision of government was appreciable but the execution was not proper due to which the children had gone through the turmoil of behavioral and psychological disorders in the epidemic situation. Each one of us was waiting for some good news because no official data was available on the outbreak of the virus and the number of symptomatic and asymptomatic individuals who were positive for COVID-19. So the children are not the indifferent to dramatic impact of the COVID-19 epidemic. Initially it was difficult to rely on any news related to it because all media persons and techno savvy got the job to viral news on it and to platter all kinds of remedial suggestions to prevent or to recover from the effects of virus. But surprisingly those who claimed to be intelligent and physically fit became gradually more prone to it. This virus affected the mind more than the body as I have personally experienced those who kept their mind stable with meditation or kept themselves occupied without fear they survived. In extreme cases, children suffered from depression characterized by low mood, tiredness, pessimism, poor sleep, and appetite, feeling helpless, guilty, and hopeless, with a gradual reduction in growth. Children and older people are more vulnerable to it physically, mentally or emotionally and it was advised that special care must be taken for them. But as the corona virus epidemic sweeps across the world, the journey of change commenced with up and downs. Sedentary behavior and self-quarantine paved the way to compromise and knelt down before the situation unwillingly and accepting the negatives too by choice.

Keywords: COVID-19, SARS-CoV-2, epidemic, behavioral, emotional disorder, symptomatic and asymptomatic

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INVITED LECTURE-8

New Challenges, Remedies, and Scopes in Legal Pedagogy



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Email: nidhikhandelwal83@gmail.com

Research Interest:

Please mention field of your major research areas
Education & Professional Career:
1999-2002 B.Sc. from Rajasthan University, Jaipur.
2002-2005 LL.B from Rajasthan University
2005 - 2006 D.LL from Rajasthan University

Major Publications:

Please list your key paper publications.

Abstract

New Challenges, Remedies, and Scopes in Legal Pedagogy

Introduction :

India is a democracy where the 'Rule of law' is the soul of the Constitution, and the legal profession is the primary stakeholder to uphold the ideals of the Constitution. The legal profession plays the most significant role in shaping and operating the legal system. Thus, legal education is instrumental in preparing legal professionals to perform such a fundamental role in society. Furthermore, law students' grooming into competent legal professionals, sensitive to and capable of addressing socio-economic concerns, remains an integral part of legal pedagogy. In a democratic welfare state, the legal profession is not limited to professionals practicing before the Court of law. It is a broad and comprehensive concept instead. Individuals engaged in teaching, research, judicial work, or various administrative posts all come under the legal profession's purview (Jena, 2002).

In India, legal education is regulated by two bodies, viz. the Bar Council of India (BCI) as the primary regulatory body in furtherance of powers vested in it under the Advocates Act (1961) and the University Grants Commission (UGC). UGC has statutory powers to exercise control over the Universities and affiliated colleges for prescribing standards of education, including law (UGC, 2002). In addition to these two regulatory bodies, Universities have the autonomy to decide upon some issues for improving the standard of legal education. The BCI and State bar councils play a significant role in practical training and skill development programs, including court visits, moot court exercises, legal aid work, and other clinical programs (Jena, 2002).

The BCI constituted under the Advocates Act (1961) is the apex body regulating the legal profession's standards. Admissions, ethics, practice, and standards are managed by the BCI in line with state bar councils. The BCI functions related to legal education as envisaged under the 1961 Act are promoting and laying down formal standards of legal education (Advocates Act, 1961, s. 7(h), recognition and inspection of Universities (Advocates Act, 1961, s. 7(i)), and it may conduct seminars or talks by engaging eminent jurists as well as publish journals in topics of legal interest (Advocates Act, 1961, s. 7(ia)).

The BCI has powers to make rules for legal education & related matters. While honoring its functions, the BCI prescribes minimum qualifications required for admission to a degree in law in any recognized University (Advocates Act, 1961, s. 49 (af)). The BCI can also prescribe rules on legal education standards to be observed by Universities in India and inspect them to enforce those rules (Advocates Act, 1961, s. 49 (d)). By these powers, derived from the Advocates Act, the BCI has brought several reforms to Indian legal education from time to time. Clinical education arose only recently in India. It was set when the regulating bodies of legal education realized that classroom teaching and learning were insufficient in producing good lawyers. Thus, Clinical legal education prepares law students to practice law effectively by involving pedagogy methods where students learn through practical experience. It has a larger goal of providing legal aid to the economically backward section of society and ensuring access to justice for all. Clinical Legal Education facilitates teaching methods by orienting the spirit and passion on public interest and social service amongst law students. Globalization has opened various opportunities for the growth of Legal education in general and Clinical Legal Education in particular. Its promotion should be done through institutional mechanisms so that Indian legal education is not left behind of the universal trend (Kashyap, 2016).

Keywords: Instruction, guidelines, abstract.



INVITED LECTURE-9

Changing Mechanism of world and legal education in the covid ERA



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Research Interest:

Contemporary laws, Corporate laws

Education & Professional Career:

MA. Eng Lit from Bansthali Vidyapeeth,

LL.B, LL.M MBA(HR) jai Narain University

2012- Ph.D. from Jai Narain Vyas University

2016- Assistant Professor in Amity University, Jaipur, Rajasthan.

2020 Associate Prof in Amity University, Jaipur, Rajasthan

Major Publications:

1. Rights Accrued Upon an Individual from the Time of His Arrest Till Completion Of Investigation: A Balanced Analytical Approach The (Scopus Listed)
2. Problems Being Faced by the Police Officials during Investigation- An Indian Perspective (Scopus Listed)
3. “Right to Silence”: An Analytical Approach towards the Limited Permissibility for Application of Scientific measures during Investigation (Scopus Listed)
4. Published the book Corporate Governance: Emergence Economies

Abstract

Changing Mechanism of world and legal education in the covid ERA

Dr. Ashu Maharshi

Associate Professor, Amity Law School, Amity University, Jaipur Rajasthan

Abstract:

The spreading of covid -19 since March 2020 has a profound and irreversible impact on all spheres of life around the world. The long-term impact of the pandemic with unpredictable consequences will also be observed in the field of education. The aim of this article is to analyze the potential impact of covid -19 on the providing of qualitative legal education. Full Fledged assurance of the qualitative education is linked to common conditions for acquiring of knowledge skills and competences. There are certain specifics in obtaining legal education, especially higher education. It is related to a combination of circumstances that are relevant to the specific knowledge, skills and competences, to be acquired by lawyer and legal assistants. In 2020 a new standard for the legal profession was approved, which not only defines new qualitative requirements for the relevant profession, but also determines the need to make adjustments in the relevant study programs. The process of implementing and performing qualitative legal education in the current circumstances is being transformed in the line with the international and national regulatory framework in the context of management of covid -19. As research methods are descriptive, analytical, and synthetic methods are used by the authors.

Keywords: Covid-19, Distance learning, legal Education, Professional standard

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INVITED LECTURE-10

The Impact of Covid-19 on Human Rights and the Rule of Law



Dr. Rachana Katta Khandelwal

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Mahavir Law College, Sector 4, Kiran Path, Mansarovar, Jaipur, Rajasthan

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Research Interest:

1. Mercantile Law: I did my doctoral research in the field of Negotiable Instruments, focusing on liabilities concerning dishonour of cheques.
2. Education: I was awarded Post Doctoral Fellowship from Indian Council of Social Science Research (ICSSR), New Delhi for my study over the Implementation of Right to Education Act in Rajasthan with special reference to Jaipur district.

Currently, I am working on a project to study the effect of online classes on the learning outcomes of school children and their mental health with special reference to weaker sections of Jaipur district.

Education & Professional Career:

2004-2008	Ph.D. from University of Rajasthan, Jaipur
2003-2004	Asst. Prof in Ambedkar Vidhi Mahavidyalaya, Tonk
2004-2007	Asst. Prof in Madhav Vidhi Mahavidyalaya, Jaipur
2007-2012	Asst. Prof in Mahavir Law College, Jaipur
2016-2019	Asso. Prof in Maharaja Vinayak Global University, Jaipur
2019-Present	Asso. Prof in Mahavir Law College, Jaipur

Major Publications:

1. RTE Act in Rajasthan: A Bumpy Road Ahead (2016)
2. Law Relating to Dishonour of Cheques (2015)

Papers:

1. *"Violation of Credibility of Negotiable Instrument and the Position of Minor"* in Research Reinforcement (A Peer Reviewed International Refereed Journal).
2. *"Hundis: Indigenous Bills of Exchange in Ancient India"* in Shodh Drishti (An International Refereed Research Journal).
3. *"Reflection of the Development of Negotiable Instruments: A View to Maintain the Credibility of Cheques"* in Abeer (International Journal of Multi-Disciplinary Research).
4. *"Adalaton Mein Hindi Ko Mile Badhawa"* in Bhasha Parichay, Bhasha Vibhag, Govt. of Rajasthan.
5. *"Indian Federal System: Emerging Trends"* in Vidhan Bodhini, Rajasthan Legislative Assembly.
6. *"Principles of Assessment Of Unliquidated Damages Under The Indian Contract Act-An Overview"* in Social Science Explorer, Social Science Research Centre, University of Rajasthan, Jaipur.
7. *"A Critical Assessment of RTE Act, 2009: Policy and Implementation"* in Social Science Explorer, Social Science Research Centre, University of Rajasthan, Jaipur.

Abstract

The Impact of Covid-19 on Human Rights and the Rule of Law

Dr. Rachana Katta Khandelwal

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The article analyses the impact of Covid-19 on Human Rights and the Rule of Law. Covid-19 came as a surprise and shocked the world. This created panic and a state of emergency, with the States issuing various measures such as lock down, stay at home orders, social distancing, quarantine orders, suspension of classes and closure of schools and so on and so forth. Such measures inevitably affected the human rights and its protection adversely. Rule of Law is a concept which describes that it shall always be a supreme authority over a Governmental action and individual behavior. At the time of emergencies Rule of Law, that is, existing constitutional safeguards should always prevail because they are required the most in such times. Ordinarily people believe that when they call for Rule of Law there should be independence of judiciary and presumption in favor of right to life, liberty, equality and dignity of individuals. The emergency measures taken by the States to curb Covid-19 spread denied its citizens the basic human rights guaranteed by the Constitution. They include the right to health- both physical and psychological, as this pandemic led to the increase in depression and suicide. The right to free movement being curtailed increased the ratio. The right to life has been affected as it deteriorated the quality of life and living standards. Here special mention needs to be done with regards to the position of migrant workers. Right to privacy, right to free media, right of public assembly and demonstrations, right to access of information, right to decent burial or cremation, right to protection of vulnerable groups from discrimination, the prisoner's right to early trial was suspended as the courts remained closed during curfew period are a few to be mentioned. The most important right that is affected is right to education due to closure of schools and other institutions. Though online mode was offered but the internet and smart phones unavailability posed challenge for weaker sections. The restrictions imposed upon the rights of individuals in times of such emergency to provide for the safety and wellbeing of its citizens and to stop the spread of such disease, should always be according to the Rule of

Law and not be arbitrary or unreasonable. They should be transparent and uniformly applicable to all without any discrimination. The authorities should be made to justify their actions. Where a person is convicted of a criminal offence in such times, trial must be done only by a court of law and he should always be innocent until proven guilty. Such emergency provisions should be temporary and the States should daily review its situation so as to return to its ordinary laws.

Keywords: Covid-19, Human Rights, Rule of Law, Emergency provisions



INVITED LECTURE-11

**Uncovering the Genetic Mechanisms Underpinning Human Skeletal Disorders
Using Functional Genomics Approaches**



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Research Interest:

Criminal laws and laws related to women

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Major Publication

1. Human Rights and Environmental Juris prudence "Published In Utkal Historical research Journal, ISSNNO09762132
2. "Surrogate Motherhood: An Instrumental Mechanism for a Safeguard the Rights of Surrogate Mother", Published in Research Reinforcement Journal. A Peer Reviewed International Refereed Journal.VOLII,ISSN_23483857
3. *,Women's Right To Education, Published in Research Reinforcement Journal. A Peer Reviewed International RefereedJournal.VOL I,ISSN_23483857
4. *Uniform Civil Code: A Comparative Study of Personal Law in India, Published in Secularism and Nationalism In India Constitutional democracy
5. *"Judicial Initiative towards Women Empowerment "Published in Research Reinforcement Journal Vol.5. Issue II Nov 2017 - April 2018. Date: 1.6.2018 paper ID_RRJ05201830



INVITED LECTURE-12

Protection of human rights by the European Court of Human Rights during the Covid-19 period



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Examinations	Board/University	Year	Division
Secondary	BSER, Ajmer	2000	I
Senior Secondary	BSER, Ajmer	2002	I
LL.B.	University of Rajasthan, Jaipur	2008	II
LL.M.	University of Rajasthan, Jaipur	2010	I
NET	UGC	2012	
SET	RPSC	2012	
Research Project	ICSSR	2017-2018	

Major Publications:

1. Dignitive Life of a common man and Indian Judiciary
2. The Role of ECHR in development of environmental Jurisprudence
3. Election laws and corrupt practice in India

4. Pilot Judgement Procedure of European Court of Human rights
5. Consociationalism and the politics of Power sharing: a case study of Bosnia Herzegovina and Lebanon
6. Justification of Death Penalty in India
7. Bringing Corporate Criminal Liability under the ICC regime
8. Judicial Activism in India
9. Crime against women in India
10. Regional Protection of Human Rights in Europe
11. Plea Bargaining in India
12. Right to Free and Compulsory Education in India
13. Justifications of Death penalty in India
14. Legal analysis of domestic violence against women in Bangladesh

Abstract

Protection of human rights by the European Court of Human Rights during the Covid-19 period

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The Present scenario of covid-19 has compelled to life with their basic rights. On one hand the people has lost their right to work due to lockdown, on another hand the govt is not protecting the fundamental and basic rights of the people in their jurisdictions. The European Court of Human rights; which have 47 contracting parties and so on 47 judges at the Court, has protected basic human rights in a variant of Right of life; Prohibition from torture, slavery, servitude, & forced labour; Right to liberty, property, religion, expression and many more in a deterministic inclination. Aim of the present address is to give an critic outline for the violation of basic human rights in Europe as well as effacement of Rule of Law in European and American Countries with an indication of Human Rights violation in covid 19 period of Indian Scenario.

Keywords: ECHR, Human Rights, Right to Life, Covid-19.



ABSTRACTS

Role of New Media during Covid Era

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Abstract:

New media in the form of many social media sites like Facebook, Twitter etc. proved their significance in the initial phase of COVID-19 as well as in the later stages. Dissemination of Standard Operating Procedures (SOPs), preventive measures and administrative guidelines could happen easily because of the new media. As the cause of this pandemic was new to the medical fraternity, very less information were available worldwide. After tracing the cause of the disease, medical experts issued some very important guidelines. In the initial days when there was no vaccination available, only preventive measures were the option available globally. People used social media tools to know about the symptoms and medications. They consulted their doctors using this mean of media. New media resources also proved very useful for the government and local administration to aware people and to circulate their guidelines. Many places around the world, government posted live feeds of their daily press briefings regarding the daily corona cases. It was very useful mean to communicate and to gather information for those who were tested positive and were isolated from their family members. New media proved its significance during the crucial phase of the pandemic though it had some negatives also. Unauthorised news about the cause of disease created many socio-environmental frictions. Pangolins, monkeys, bats were held responsible for the origin of COVID-19 virus. Many types of misinformation were circulated on the new media platforms. Rumour about the negative effects of vaccination was a challenge for the medical departments and also for the Administration. Still new media helped a larger section of society to create awareness, inform, to consult doctors and to register their grievances regarding the pandemic to the concerned authorities.

Keywords: COVID-19, Social Media, Vaccination

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Covid 19 and Its Impact on Human Rights

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Abstract:

COVID 19, which is a public health emergency, is affecting the exercise of human rights in many ways. Some categories of human rights may be specially affected by COVID 19 due to the measures taken by the government in order to tackle the pandemic. The measures that suspend some human rights by declaring a state of emergency should be selective. The government cannot suspend every human right to tackle COVID 19. Only those rights, the suspension of which is relevant in the fight against COVID 19 could be

suspended. States of emergency laws have their own limitations. Government should craft mechanisms for accounting government measures which are irrelevant in the fight against COVID 19 because more power is susceptible to abuse. Therefore this article argues that state of emergency does not guarantee everything to the government, it has its own limitations.

Keywords: Pandemic, Suspension, State of Emergency laws, Government

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Impact of Mobile Phones and Other Devices with Internet Accessibility on Children of Vadodara: A Case Study

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Abstract:

Industrial revolution in India has brought rapid transformation in society. One such transformation is digitization. This can be seen from the data published by the statista.com survey that there are 560 million Internet users, which ranks as the second largest online market in the world, leaving China behind. Mobile phones have become essential gadgets for us in our activities and help in execution of basic tasks. Novel Corona virus brought the world to a halt. Almost all the countries closed schools, colleges, universities, offices, and corporates. Amid corona virus crisis all chose remote working and work from home was taken as an alternative to continue their unstoppable work. The use of information and communication technology and video conferencing platforms, to compensate for classroom engagement, has witnessed rapid widespread acceptance. Use of such devices by children is going to increase in future as well. This paper aims to analyse effects of use of mobile phones and other devices with Internet access on school children. As the use of digital devices by children accelerated, this emerged the need to study its impact on their development and at the same time the health hazards. Hence, to understand the physical, behavioural, and psychosocial effects on children using mobile phones and other devices the research was conducted and what could be its future. Will this new-normal lead to hybrid work model in schools?

Keywords: COVID-19, Education, Children, Internet

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Pandemic Reconfigurations: Higher Education

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Abstract:

Corona pandemic has the worst effect on higher education. We have seen closed institutions, postponement of main examination and promotion of students by past record; it was not a good situation when we are concerned as a teacher. Higher education is associated with personality development and plays a lead role for youth in society, but a gap in regular classes and other activities has a bad effect on a generation. “The psychological impact and concept of well-being” has been changed completely. According to a medical survey of AIIMS, the patients of stress and depression have increased during lockdown and the most important thing was that there were a lot of students in it. We have seen many social groups coming forward for different type of services and help for administration, college students were indulged in these activities.

There are some changes in the concept of well-being after COVID pandemic like

- People are now more sensitive for hygiene and personal space.
- Youth is considered nations real human resources.
- Nations are committed to spend more money of its GDP on research and development.
- Different nations show help in this era, it's a good sign as a globalization.
- Immunity is a top priority for students. They are more interested in physical work and in sports.

So we can see a new world of possibility and innovation in upcoming years.

Keywords: Pandemic, Higher Education, Students



Impact on Psychological Developmental Level of Kinder - Garden Children Due to Covid-19 – Case Study

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Abstract :

As we can see that COVID 19 has shown its impact not only on the living conditions of people but also it has left its adverse effects on the psychological functioning of humans. Every one of us has experienced its impact but somehow we have found out a way to come out of this problem. Like obstacles at workplace leads to WFH, hurdles in studies leads to online classes, lots of people got to know about their passion which was somewhere get hidden because of their busy schedule. But what I have observed among a no. of factors is that every individual somehow found their way to cope with the surroundings based on their developmental level but it was not possible for the kinder garden children. Because they do not get the

chance to go to kinder garden as per their age as well as the homely environment does not provide them such opportunity where their psychological developmental level could reach to that level where it should be when they were surrounded by the other kids of their age group. Therefore with the help of this case study we will get to know the adverse effects of COVID 19 on the psychological developmental level of the kinder garden but also how long will it take to get over from this effect.

Keywords: COVID – 19, Kinder Garden, Psychological Developmental Level

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Exploring the Socio-Psychological Issues in the Selected Plays of Mahesh Dattani

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Abstract:

A virus came, conquered (perhaps for now) and affirmatively will lose a battle. However, many lost their lives; many lost the lives of their near ones; for many it subverted their lives; for many it occurred as a boon. Virtuality turned into a new normality. In a nutshell, it just did not come as a 21 days period of quarantine; instead, it taught much learning in one or the other way to all the people from all walks of life. This paper attempts to explore the Socio-psychological aspects through a discussion of the characters in the selected plays of Mahesh Dattani giving a new face, dimension and treatment to the post-pandemic World. Furthermore, it focuses on the repercussions of these aspects, eventually showcasing Humanities as an essential service that paves a way to this new normal.

Mahesh Dattani, one of the greatest postmodern playwrights in the world of Modern Indian English drama, subtly represents the sensitive issues of traditional and contemporary society such as gender discrimination, male dominance, gender crisis, identity crisis, homosexuality, etc. In short, he's the spokesman for the 'marginalized people' of our Indian society. Dattani offers a great interplay of socio psycho dynamics. Anybody reading his plays or witnessing them live will definitely move with a better understanding of himself/herself particularly in such an epoch. Theatre is a library for everybody interested in understanding milieu and psychological response. This paper is an attempt to look at the long prevailing various social issues including gender and identity crisis through the dimension of the female protagonist in plays *Where There is a Will* and *Bravely Fought the Queen*.

Keywords: Plays, Post-pandemic, Social issues, Consciousness

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The Legislative and Judicial Responses during Covid-19: A Demand for a Comprehensive Health Care Laws in India

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Abstract:

The COVID-19 pandemic has an impact on everyone. Governments take urgent measures to curb its spread to safeguard public health and provide medical care to those who need it. They are acting to defend the human rights of health and of life itself. Inevitably, these measures, limit our human and fundamental rights to an extent rarely experienced in peacetime. It is important to ensure that such limitations are consistent with our legal safeguards and that their impact on particular groups is adequately taken account of.

The outbreak of the SARS CoV2 virus, commonly referred to as the COVID-19 pandemic, has impacted the social, economic, political, and cultural lives of citizens around the world. The sudden outbreak of the pandemic has exposed the legal preparedness, or lack thereof, of governments to reduce and contain its drastic impact. Strong legislative measures play a crucial role in any epidemic or pandemic situation. In this situation, the Indian Government has requested all state governments to invoke the Epidemic Disease Act (EDA) of 1897 to address the COVID-19 emergency. The Central Government has also used the powers provided in the Disaster Management Act (DMA) of 2005.

As the country is facing its first major health emergency since independence, the existing legislative measures to deal with a COVID-19 like situation are lacking and require certain amendments to address such situations in the future. This paper aims to present the current constitutional and legislative response to health emergencies in India and attempts to identify grey areas in the statutory provisions. This also focuses on the role of judiciary in such kind of emergent situation. Based on the analysis, this paper suggests several recommendations for amending current legislation and suggests the promulgation of comprehensive public health law.

Keywords: Disaster Management, Covid 19, Epidemic, Citizen, Pandemic.

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Post Pandemic Progress: Evolution and Revolution in Education

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Abstract:

Education is one of the prime necessities and signatures of any emerging civilization. It is a potent tool to widen the horizons of thinking. As such, it is quite obvious that its evolution and revolution will continue unabated. It is of paramount importance to be updated and avoid any hindrances coming up in this evolution. India has the pride and privilege of its glorious education systems coming up with *Gurukul System* of

Education in ancient times. It was one of the superlative systems with *sishyas* gathering the gems of knowledge from their *gurus* in the blissful, divine and serene greenery, disturbed only by the music of chirping birds and flowing rivers. Thereafter, the teacher-student bonding was enclosed inside the cemented walls and concrete roofs with classroom teaching coming up. Its evolution continues unabated with glorious universities and institutes doing the needful. The outbreak of pandemic in recent times and the post-pandemic times have delivered a tremendous push with voluminous educational reconfigurations and revolutions. The entire scenario became digitally enriched and the classrooms now got enclosed in mobile and laptop screens. The educational world has now provided us with the fortune of connections across the globe sitting in the comforts of our cosy bedrooms. This is the brighter side of the pandemic, which has helped to make educational reconfigurations with positivity and continuity.

Keywords: Gurukul System, Educational reconfigurations, Post-pandemic times.

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Warriors of Pandemic in the World of Education: Teachers

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Abstract:

COVID-19 is the most challenging period the generation is facing. No department is untouched with this situation. In the time of crisis when we faced complex challenges like global pandemic, we need a collaborative response that transcends disciplinary. Education is one of the most important sections which was affected including the physical and psychological health of the population. But the fact which can't be denied is that educational department namely the teachers or the professors were acting as the warriors in the educational field. The warriors of the educational field were toiling day and night with the online classes and the presentations for the unstoppable education. Online examinations were even conducted for not only enhancing and checking the growth of the students but to keep the spirit and the seriousness of learning alive. As the doctors were acting as the warriors in the hospital for the patients the teachers were acting as the warriors in the educational world for the youth of the world. Various actions and policies are still in pipeline for making the platform a great success.

Keywords : COVID-19, Education, Professor

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Pandemic Effects on Media and its Future

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Abstract:

As we all know what COVID-19 pandemic changed in our daily life routines. And have spread all over the world. It did affect the various economic sectors. Few economic sectors have fared well – apparently – during the Pandemic crisis. The media sector is one of them. The need for information has never been more pronounced and the time available so critical. In this in-depth analysis, we propose to go through together the effects of Covid-19 pandemic on the different types of media: press, radio, television, internet, out-of-home (OOH), cinema, etc.

Media is the only way which kept people connected even in this worst situation of COVID pandemic and helped people to stay close to each other even staying miles away. Media is just playing a vast role in our daily lives after the pandemic as each and everything has gone online for everyone's ease no matter may it be education, watching movies, surfing online, making something new, ordering something online, etc. Living in the days from where we all have interactions with each other we shifted to scrolling our mobile phones.

And most importantly because of COVID in education we shifted from offline classes with books to online classes with mobile phones. somewhere or the other which is directly or indirectly effecting the life of the children and may causing to slowing down of the concentration power are decreasing the eyesight. But these aspects are mostly ignored and the main focus is that phones are the only alternative of having education if there is no offline education available. In the upcoming years media will surely have a great base in everyone's life not only for communication even for education as well.

Keywords: Media, Pandemic, COVID

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Mental Health of Students in Pandemic Era

Muskan

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Abstract :

The official name COVID-19 and SARS CoV-2 were issued by the WHO On 11th February 2020. The first case of COVID-19 was reported in karela on 27th January 2020. Paying attention to the mental health of students is the need of hour. It came as no surprise that Lockdown during the COVID-19 outbreak would adversely affect the mental health of the people. Mental health is the degree of mental prosperity or nonattendance of dysfunctional behaviour. The COVID-19 pandemic and lockdown haven't been Kind to our student population.

Many students found themselves either not focusing enough on their studies or focusing so much that it seemed to consume other aspects of their life. The COVID-19 pandemic brought an ample array of challenges which had mental health repercussions for everyone including children and adults. Unattended mental health problem can disrupt Youth's functioning at home, college and at community level. Parents and teachers should get equipped to detect and deal with the early signs of mental health problems. Early intervention can prevent from long term mental health consequences from this pandemic whether it is at the academic institutional level or at the governmental level; we need to make sure that Youth's mental health is the agenda at the leadership level. It is our responsibility as a country and as a community to protect them, to be there for them in their toughest times. We need to empower our students to be resilient well-rounded adults. I would like to rest my words with a poem which encourages the person suffering from mental health issues: -

I think it's Brave
I think it's brave that you get up in the morning,
Even if you soul is weary and your bones ache for a rest.
I think it's brave that you keep on living,
Even if you don't know how to anymore.
I think it's brave that you push away the waves,
Rolling in everyday and you decide to fight.
I know there are days when you feel like giving up,
But I think it's brave that you never do.

Keywords: Stress, Students, Corona

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Towards A Brave New World: Adopting the New Normal

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Abstract:

The COVID-19 pandemic has impacted the whole world in such a way that we still are reeling from its repercussions. Individual and the community both are trying to adjust to a new world post pandemic. We even have adopted new terminologies like the "New Normal". The 'new normal' is adaptation to changes which comes from unexpected events and the act of settlement to new norms and standard. During this pandemic crisis, the world has to adapt to new norms of living. Some faced the challenge of combating social isolation and anxiety, for others it was the adjustment process of learning how to re-live with family structures/units. Apart from taking protective measures of social distancing and sanitization, people need to take care of their mental health and well being too. This unanticipated situational demand of the time needs

to be navigated through a positive and healthy channel so as to cope and adjust toward a new world in a better way.

Keywords: New Normal, Pandemic, COVID-19, Health.



The Impact of Covid-19 on Human Rights and Rule of Law

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Abstract:

The COVID-19 pandemic has accelerated the erosion of the democratic fabric of our society, on which protection of human rights ultimately depends. The COVID-19 crisis is a brutal reminder of the importance of ensuring lasting progress with respect to social rights enjoyment, particularly through the development of universal public health services. The pandemic shows in practical terms the indivisibility of human rights. The enjoyment of rights is neither a “given” -- nor is it equal. In view of the exceptional situation and to preserve life, countries have no choice but to adopt extraordinary measures. Extensive lockdowns, adapted to slow transmission of the virus, restrict by necessity freedom of movement and, in the process, freedom to enjoy many other human rights.

Because of increasing effect of Covid-19 government have to unwillingly make decisions which may or may not be in favor of all in order to protect everyone and to slowdown the spread of corona virus. It may violate some of the human right but is done just to safeguard the country. In times of pandemic crisis, national governments are taking exceptional measures to slow down the spread of the virus and Even in genuine cases of emergency situations, the rule of law must prevail. In this difficult situation of Covid-19 pandemic government has taken many essential steps in order to protect people by various rules and laws like: Right to protection of health, Human rights and biomedicine and many more.

Keywords: COVID-19, pandemic, Human Rights



Redefining Education System after Covid-19

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Abstract:

The COVID -19 pandemic has transformed not only human beings but the entire services, may it be media, entertainment or education services. A huge positive transformation turned out as the only solution in form of Digital media and the tools were in form of ex Google classroom, Recorded lectures Massive Open Online Course (MOOC) and Educational Technologies which are mainly a utilization of new IT devices and the digitization of textbooks and teaching materials these worked as a catalyst in every sector and proved to

be magic lamp. Although some people struggled to learn the new pedagogy and it was not an easy task but they achieved. In a short period of time, this was very clear that this virus would last long so there is a need to transform and refocus our learning system. The researchers have tried to reshape and redefine the entire sector as still, we are not sure that we are or will be out of this situation. The education industry so called service industry has swapped the old traditional “chalk and talk” methods to new digital methods. The example of Japan government is praiseworthy. There the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) implemented a financial support system for higher education in April 2020, which includes a reduction in tuition fees, waivers, and scholarship provision. Finally, if COVID-19 continues then the digital transformation, prompted by the COVID-19 pandemic, will reshape the education service throughout the globe.

Keywords: Reform, Reshape, Education system and transformation

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The Psychological Impact of Covid-19 : The New Perspectives of Well Being

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Abstract:

The virus causes changes in behavior that affect both the business model and the operating model of media and advertising companies. The impacts of Covid-19 on the media are multiple. Television, radio and the press are experiencing historic audience increases. Historical downward trends are being reversed. Media was impacted in 2020 by the fall in advertising investments. However, beware of the loss of “share of voice” for the brands that will have been forgotten. The financial health of traditional media (excluding streaming and social media) is under threat. Restructuring plans are being launched, and the reduction of non-essential costs will be applied across the sector. In the private sector, restructuring will be widespread, with judicial reorganization to be foreseen for smaller entities. For larger groups, some subsidiaries may lose their independence because of the pooling of resources to achieve economies of scale. Cinemas are weakened till date. Broadcasters will see their IT infrastructure costs explode without any savings being made. Cost reductions will be made on staff, and other technologies deemed non-essential. Social distancing guidelines drive cancellations of live events nationwide at stadiums, arenas, theaters, resorts and other venues, resulting in lost revenues. The cancellations affect not just the main performers or teams, but also stadium workers, businesses in close proximity and the community at large in terms of economic impact.

Keywords: COVID-19, Media, Advertising

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Dark Academia: The Emerging Literary Trend during Covid Outbreak

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Abstract :

Literature has always tried to mirror society and reading the same becomes cathartic for us through witnessing our own follies, eccentricities, happiness, sadness, love, hate, fear and guilt. The pandemic has transformed the socio-economic situation all over the world so much as the psychology of people. The challenges of post pandemic life have equally transformed the choice of literature among the readers. When there is no escape from the disease and home is the safest place to be, the feeling of being imprisoned for months has led the human interest towards the literature available online in form of movies and books. This transformed choice of literature has revived the term called “Dark Academia” and attracted the researchers attention. Edgar Allan Poe has been one such dark romantic American story writer who has portrayed the complex human psyche through the psychic characters and images of death and desolation. This paper attempts to highlight the popular literary trend which has developed during pandemic and also gave a new horizon to contemporary research. Edgar Allan Poe’s works have been chosen for analysis while refurbishing the old literature validating the post pandemic scenario.

Keywords: Post-Pandemic, Dark Academia, Literature, Death, Disease

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Post Pandemic Right Industry Selection can be Key to Success

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Abstract:

Two years back, before the pandemic, the world was doing very well with few major challenges (Global warming, hunger, terrorism etc.). Respective affected countries with support from a group of other countries were trying to resolve the same & were able to get good results too, initially because it was something new for this generation, we could not have taken enough measures immediately to protect ourselves and we had to pay a huge cost for this. Affected Countries took strict actions & were able to manage with big dent on Economies & lost precious lives too. The economy of any country is run by a group of industries. Due to lockdown almost everything was stopped except lifesaving essentials; the rest of Industries started to collapse. With time everybody started to realize this pandemic is not going to disappear soon, at the same time Government and individuals started to work on “**How to Make Better Living with Pandemic**”. One of the most affected Industries was Education Industry, as per on-going system Education was mostly centralized in School/Colleges & Universities/institutions & during pandemic lockdown all were shut down. The fast growing new technological Era was introduced to restructure everything & make online Education/Teaching more effective and more realistic. This pandemic took jobs from many but gave new work and

jobs to many others in various industries, like Pharma Industry developed well, Mask/Sanitizer/ hygiene-related business grew up. The Mega COVID-19 vaccination programme has given a good number of job opportunities & business to the Pharma Industry. In developing the online Education system, a lot of new technology setup came into existence giving employment to groups of people. New Business setups like online shopping portals grew rapidly; Reselling online, App development, professional courier services, sanitization etc. are the other sectors that are growing well.

Keywords: Pandemic, Industry, Restructure, Education, Economy



The Psychological Impact of Covid-19: New Perspectives of Well Being with Special Reference to Juveniles

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Abstract

The outbreak of COVID-19 led to a significant psychological impact on individuals, particularly those belonging to vulnerable groups. This study aimed to synthesize literature on the psychological impact of COVID-19 among children, adolescents and juvenile.

Disease itself multiplied by forced quarantine to combat COVID-19 applied by nationwide lockdowns can produce acute panic, anxiety, obsessive behaviors, hoarding, paranoia, and depression, and post-traumatic stress disorder (PTSD) in the long run. These have been fueled by an “infodemic” spread via different platforms of social media. Outbursts of racism, stigmatization, and xenophobia against particular communities are also being widely reported. Nevertheless, frontline healthcare workers are at higher-risk of contracting the disease as well as experiencing adverse psychological outcomes in form of burnout, anxiety, fear of transmitting infection, feeling of incompatibility, depression, increased substance-dependence, and PTSD. Community-based mitigation programs to combat COVID-19 will disrupt juvenile’s usual lifestyle and may cause florid mental distress. This article is an attempt to through lights The Psychological Impact of Covid-19 on human beings with special reference to juveniles. The psychosocial aspects of older people, their caregivers, psychiatric patients and marginalized communities are affected by this pandemic in different ways and need special attention.

Keywords: Social-isolation, Adolescents, Psychological Impact, Juveniles, Delinquency, Pandemic



“Impact of Pandemic on Fundamental Rights in reference to Migrants”

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During the COVID-19 pandemic, human rights violations including censorship, discrimination, arbitrary detention and xenophobia were reported from different parts of the world. Amnesty International has responded that "Human rights violations hinder, rather than facilitate, responses to public health emergencies and undercut their efficiency." The World Health Organization (WHO) has stated that stay-at-home responses for slowing the pandemic must not be mandated at the expense of human rights. Broader concerns have been expressed about the effect of COVID-19 containment measures on human rights, democracy and governance.

The most serious impact of the nationwide lockdown was what came to be known as the “migrant crisis” (the word “migrant” here refers to internal migration within India): with the forced closure of all shops and businesses, the large number of people who had migrated to India’s metropolises to work on (often) temporary and precarious projects, were left with no means of sustenance, and were obliged to trek back to their villages (as transport had also been suspended). The lockdown thus raised important questions under both domestic Indian law and international law.

The present paper entitled ‘Impact of Pandemic on Fundamental Rights in reference to Migrants’ is an attempt to understand this crisis under both domestic Indian law and international law.

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Migrant Workers and Human Rights : A Study of India's Covid-19

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India implement the lockdown to control the covid-19 pandemic still the lockdown failed because of those migrant laborers faced many difficulties. The registered laborers working in villages under various schemes and migrant laborers returning home due to covid-19 concerns the migrant workers face related to food shelter health care and loss of wages.

Human rights do not make any difference between rich and poor person. Article 1 of the 1948 UDHR declaration affirmed all human beings are born free and equal in dignity and rights. Similarly the Preamble of the UN charter additionally calls tenaciousness to reaffirms faith in fundamental rights. The ILO constitution declares that all human beings irrespective of Race, sex have Right to both their spiritual development in conditions of Liberation and dignity of economic security and equal opportunity.

In pandemic situation many human rights violated. All the migrant workers were stuck where they were many human rights got suspended over night as the pandemic was considered as the disaster by the government.

Keywords: Migrant workers, Human rights, Difficulties, Pandemic

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The Legislative and Judicial Responses during Covid-19: A Demand for a Comprehensive Health Care Laws in India

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The COVID-19 pandemic has an impact on everyone. Governments take urgent measures to curb its spread to safeguard public health and provide medical care to those who need it. They are acting to defend the human rights of health and of life itself. Inevitably, these measures limit our human and fundamental rights to an extent rarely experienced in peacetime. It is important to ensure that such limitations are consistent with our legal safeguards and that their impact on particular groups is adequately taken account of.

The outbreak of the SARS CoV2 virus, commonly referred to as the COVID-19 pandemic, has impacted the social, economic, political, and cultural lives of citizens around the world. The sudden outbreak of the pandemic has exposed the legal preparedness, or lack thereof, of governments to reduce and contain its drastic impact. Strong legislative measures play a crucial role in any epidemic or pandemic situation. In this situation, the Indian Government has requested all state governments to invoke the Epidemic Disease Act (EDA) of 1897 to address the COVID-19 emergency. The Central Government has also used the powers provided in the Disaster Management Act (DMA) of 2005.

As the country is facing its first major health emergency since independence, the existing legislative measures to deal with a COVID-19 like situation are lacking and require certain amendments to address such situations in the future. This paper aims to present the current constitutional and legislative response to health emergencies in India and attempts to identify grey areas in the statutory provisions. This also focus on the role of judiciary in such kind of emergent situation. Based on the analysis, this paper suggests several recommendations for amending current legislation and suggests the promulgation of comprehensive public health law. This paper is largely based on primary sources such as the EDA and the DMA, regulations, guidelines, rules issued by the public authorities and court cases related to health and health emergencies along with secondary resources such as newspaper articles and published papers.

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Women at the Core of the Fight against Covid-19

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Abstract The Covid-19 Pandemic is creating are profound shock worldwide with different implications for men and women. Covid-19 spreads around the world, the impact of the pandemic on women is becoming increasingly severe. Due to persistent gender in equalities across many dimensions women's jobs, businesses, incomes and wider living standards may be more exposed than men's to the anticipated wide-spread economic fallout from the crisis. Women are playing a key role in the healthcare response to the Covid-19th Crisis. Women constitute an estimated to 3rd of the work force worldwide and while globally they are under represented among physicians, dentists & pharmacists, they make up around 85% of nurses

and midwives in the 104 countries. Not only do women dominate employment in the care sector, they also provide most unpaid work at home. Much of women's unpaid work time is spent on childcare. Fundamentally all policies responses to the crisis must embed a gender lens and account for women's unique needs, responsibilities & perspectives.

Keywords: Women, Gender Inequalities, Rights, Unpaid Work

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The Impact of Covid- 19 on Human Rights

Mr. Ravi Gautam

The year 2020 is very hard for every human being. It has been evaluated and seen by the law expertise that the pandemic has affected human rights and protection adversely. Human rights are the key for overall development of human being and considered as a catalyst for progress in general. Human rights are mainly related to life, liberty, equality and dignity of an individual.

During the pandemic situation first and most, right to health is affected in the manner of physical and psychological health because there is shortage of masks, sanitizer, limited health facilities, health workers and medical practitioner were put at risk of getting the disease due to lack of pps. Right of life also affected due to availability of necessary food and sanitation items. Right to privacy also affected as govt. Passed a notification to download the arogya setu app which showed the status of infected person. Right to access information was affected as the information relating to status of a no. Of death cases and infected cases were denied to be shared by the govt. Right to free movement was restricted due to lockdown. Right with regard to a decent burial, freedom of religion, prisoners rights are also affected by the covid-19 pandemic. Besides all the most important right to education got affected due to new system of online teaching.

Thus, it can be seen there is needs a lot of measures to be taken by govt. For the purpose of compensating those whose basic human rights are infringed during this pandemic and at the same time new ways also devised by govt. For promoting and protecting the basic human rights which are at risk of being violated during such pandemic period.

Keywords : Pandemic, Physical and Psychological health, Arogya setu, Human rights, Online teaching.

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Legal study in Corona pandemic: Challenges and Remedies

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Abstract

Law is the ultimate weapon of change, governing the world and its inhabitants. It has the ability to reform society and provide justice to its citizens. It is, first and foremost, a fundamental component and facilitator of justice. It is a crucial tool for achieving socioeconomic growth in society. The major goal of law is to ensure social peace and order while safeguarding individual rights and freedoms, and it is thus a fundamental component of society. The underlying intricacy of law with respect to evidence is taught through a theoretical and practical mix in legal education. Many of the issues are presented in legalese, which makes them difficult to comprehend on a theoretical level. It is vital to apply practical tools such as live hearings, mock trials, and hands-on practice to various legal cases. Theoretical lessons are supplemented by technical advancements such as zoom, Google meet, and social media apps in subsequent years. It does, however, reduce the two-way connection between the instructor and the pupils. This strategy limits practical connected law education. This system will, in the long run, leave a major void in our understanding of the practical utility of evidence and logical cross examination during the resolution of an incident and affects the job creativity. It is necessary to advocate the diversity of teaching by the different faculty members of institute. It also needs the group discussion with expert of diverse group, those are having vast knowledge of associate branches of law. Student should motivated to use the practicals by creating the mock practices with the help of friends nearby their residence. Our society's strength and a vital medium of revolution is the law. It is the only profession that deals with the challenges of society as a whole. It is important area, government should do more technological advancement to combat the pandemic challenges in law education by mediating the infrastructure and capacity buildings. Establish a world-class legal education and legal professions to sustain the challenges posed by Globalization and convert the threat into an opportunity. With the help of combine affords by teachers and students will over the challenges created during the corona pandemic.

Keywords: Corona pandemic, Job performance, Legal education, Technological advancement



COVID - 19 & its Impact on Education System in India

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Abstract

Covid - 19 affected all sections of society. Education was one of the largest sectors which was impacted and also evolved to accept unforeseen challenges thrown to it. The impact of this pandemic on the lives of students were very negative and had a great impact on their mental and emotional health along with overall learning.

The pandemic created many challenges for both public and private schools which included a rise in dropouts, learning challenges, Changes in education delivery model, getting accustomed to new technology and uneven reach and divide of technology across the country. It also raised questions regarding the readiness of schools to manage these technology shift, survival of private schools.

Around 32 crores learners stopped going to colleges and schools during the pandemic period. It greatly changed their learning pattern, mode of education that is offline to online, attention span, sleeping habits, time spent on computer/mobile screen & social life, outdoor sports activity to mention a few.

During the pandemic government introduced many changes in the way education was delivered in this country earlier to make sure that the learning of students does not get hampered. To increase literacy in the pandemic time, the government started providing free education to children in the age group of 6 to 14 Years under the article 21 A of constitution of India.

The pandemic situation made people learn and use digital platforms that include schools, Teachers, Parents and students and resulted in increasing the digital literacy and reach of technology across the country.

As schools reopen in many parts, it is important that a smoother transition of children back to school after more than 15 months of home-based learning. This transition has to consider the learning losses which had happened over the previous year as well as take a futuristic approach to build a resilient system which can withstand any future shocks.

Following are few challenges that need to be addressed:

1. Readiness of schools for technology challenges
2. Reach of technology in every part of the country
3. survival of schools
4. capability of teachers in adjusting with online and offline mode of education
5. Quality of education delivered
6. emotional and mental health of students
7. Dropouts

Keywords: Education, Pandemic, Technology, Health



Psychological Effect of Pandemic on School Children

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Abstract:

No one would have guessed that a virus like Covid-19 would come and without differentiating, it will alter the lifestyle of people. Due to Covid-19, many changes came to our world and it took some time for everyone to adapt to the new normal. The Covid-19 impact was everywhere, which resulted in the closure of schools and other educational institutions until COVID got under control. Due to which students are forced to join online classes in which their major motive is to mark attendance. Many students forget to write their names in schools, COVID also affected the mental and physical strength of children including their eyesight, their way of speaking. This pandemic has not only affected the students but also the Low-budget institutions and schools, resulting in the closing down of the same. The low budget schools which are closed due to COVID have many students belongs to middle class family and they also have to suffer because of school closure in between session. Many students in Government School attend their school for nutritious food after COVID this was also closed due to which many children faced starvation. COVID 19 has impacted the world in a way that it will take lot of united effort to recover from it.

Keywords: COVID-19, Pandemic, School Children

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Exploring the Socio-Psychological issues in the Selected Plays of Mahesh Dattani

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Abstract:

A virus came, conquered (perhaps for now) and affirmatively will lose a battle. However, many lost their lives; many lost the lives of their near ones; for many it subverted their lives; for many it occurred as a boon. Virtuality turned into a new normality. In a nutshell, it just did not come as a 21 days period of quarantine; instead, it taught much learning in one or the other way to all the people from all walks of life. This paper attempts to explore the Socio-psychological aspects through a discussion of the characters in the selected plays of Mahesh Dattani giving a new face, dimension and treatment to the post-pandemic World. Furthermore, it focuses on the repercussions of these aspects, eventually showcasing Humanities as an essential service that paves a way to this new normal.

Mahesh Dattani, one of the greatest postmodern playwrights in the world of Modern Indian English drama, subtly represents the sensitive issues of traditional and contemporary society such as gender discrimination, male dominance, gender crisis, identity crisis, homosexuality, etc. In short, he's the spokesman for the 'marginalized people' of our Indian society. Dattani offers a great interplay of socio psycho dynamics.

Anybody reading his plays or witnessing them live will definitely move with a better understanding of himself/herself particularly in such an epoch. Theatre is a library for everybody interested in understanding milieu and psychological response. This paper is an attempt to look at the long prevailing various social issues including gender and identity crisis through the dimension of the female protagonist in plays *Where There is a Will* and *Bravely Fought the Queen*.

Keywords: Plays, Post-pandemic, Social issues, Consciousness

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कोविड-19 महामारी से उबरने में ललित कलाओं का योगदान

डॉ. रमाकान्त गौतम

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शोध-सारांश

कला के अनेक पहलू हैं, अनेक दिशाएँ हैं तथा अनेक उद्देश्य हैं। यह प्रश्न उसी प्रकार है जैसे कि हम पूछें कि जीवन क्या है? अतः कला को जीवन से पृथक् नहीं किया जा सकता। भारतीय आचार्यों ने कला के जिस उच्च स्वरूप की परिकल्पना की है, वह अत्यन्त महत्वपूर्ण है। जैसे:-

“लीयते परमानन्दे ययात्मा सा परा कला।”

अर्थात् जो कला परम् आनन्द प्रदान करती है, वही सच्ची व श्रेष्ठ कला है और ऐसी कला ही कल्याणकारी भी होती है। ललित कलायें मनुष्य के मानसिक विकास, बौद्धिक विकास, आत्मिक विकास, व्यक्तित्व विकास, भावनात्मक विकास, सांस्कृतिक व नैतिक विकास की दिशा में कार्यरत रहती हैं और कोविड-19 महामारी में मनुष्य की जिन अवस्थाओं में रूकावट आई है, उन्हें कला सृजन के माध्यम से दूर किया जा सकता है। चित्र, मूर्ति, संगीत, काव्य आदि कला क्षेत्रों में व्यक्ति कार्य करके अपनी मौलिक प्रतिभा का प्रदर्शन कर सकता है और इस महामारी की अवस्था से उबरने में समाज के सामने मार्ग प्रस्तुत कर सकता है। मानवीय प्रवृत्ति के अनुसार हम प्रत्येक वस्तु में सौन्दर्य तथा आनन्द की अभिव्यक्ति चाहते हैं, जिसका जीवन में कभी अंत नहीं हो सकता।

अतः ललित कलायें हमारे जीवन में अत्यन्त महत्वमयी तथा मानव के लिये अत्यन्त कल्याणकारी हैं, जिससे हम वर्तमान में इस कोविड-19 की विश्व महामारी से उबर सकते हैं।

मुख्य बिन्दु: ललित कलायें, कोविड-19 महामारी, सौन्दर्य, आनन्द

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कोविड-19 के बाद शिक्षा : परिवर्तन एवं प्रयास

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शोध सारांश :

कोविड-19 एक भयंकर संक्रमण है, जो कि एक दूसरे के संपर्क में आने वाले से फैलता है। यह वायरस साल 2019 में चीन देश से शुरू हुआ था। चीन में इस संक्रमण से संक्रमित पहला केस 8 नवंबर को सामने आया।

कोविड-19 के प्रभाव के कारण सरकार द्वारा लॉकडाउन के दिशा निर्देश समय समय पर दिए गए। इस निर्देश के चलते स्कूल, कॉलेज को पूर्णता बंद कर दिया गया है। इस स्थिति में ऑनलाइन शिक्षा प्रणाली की शुरुआत की गई, परंतु ग्रामीण क्षेत्र में निवास करने वाले छात्र- छात्राओं के लिए यह व्यवस्था ज्यादा कारगर साबित नहीं हो सकेगी।

स्कूलों और शिक्षण संस्थानों के बंद होने से विश्व की तकरीबन 94% छात्र आबादी प्रभावित हुई है, महामारी ने शिक्षा पर छाए इस संकट को और बढ़ा दिया है। जिसका असर हमारी आने वाली पीढ़ी पर लंबे समय तक रहने की संभावना है।

उच्च शिक्षा का क्षेत्र इस नई चुनौती से निपटने के लिए बहुत ही कम तैयार था। ऑनलाइन शिक्षा अच्छी तरह से अनुसंधान के बाद अभ्यास में लाई जा रही है। बहुत से देशों में तालीम का ये माध्यम कई दशकों से इस्तेमाल किया जा रहा है। ऑनलाइन माध्यम में स्थानांतरित होने से शिक्षा प्रदान करने का स्वरूप बिल्कुल बदल गया है, इस ऑनलाइन शिक्षा को आपातकालीन रिमोट टीचिंग कहा जा रहा है।

जब केंद्र और राज्य सरकारों ने इन संस्थानों को ऑनलाइन कक्षाओं के माध्यम से अपने छात्रों को पढ़ाई कराने का आमंत्रण दिया, तो ये संस्थान इसके लिए तैयार नहीं थे, स्वयं (SWAYAM) और नेशनल डिजिटल लाइब्रेरी जैसे विकल्पों का जिक्र किया गया था। हाल ही में छात्रों को सेकेंड डिग्री की शुरुआत की अनुमति भी दे दी गई है। जिसे वो अपने नियमित डिग्री कोर्स के साथ साथ ऑनलाइन या ओपन और दूरस्थ शिक्षा के माध्यम से प्राप्त कर सकते हैं।

उच्च शिक्षा वित्तपोषण एजेंसी (Higher Education Financing Agency- HEFA) की स्थापना 1,00,000 करोड़ रुपए के साथ की गई जिसका उद्देश्य शिक्षा संबंधी अवसंरचना विकसित करने पर जोर देना है।

संकट के इस समय में युवा दिमाग की क्षमता निर्माण के लिए प्रभावी शैक्षिक अभ्यास की आवश्यकता है। शिक्षा संगठन यह सुनिश्चित करे कि विद्यार्थी लॉकडाउन के वक्त शिक्षा प्राप्त करे और अपनी पढ़ाई जारी रख सके और शिक्षा में बाधा उत्पन्न न हो।

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कोविड-19, भौगोलिक प्रभाव: एक कार्य योजना

वीरेन्द्र कुमार

सहायक आचार्य, सामाजिक विज्ञान विभाग, बियानी गर्ल्स कॉलेज, जयपुर

शोध-सारांश :

विश्व भर में चल रही कोविड-19 महामारी के बहुआयामी प्रभाव दिख रहे हैं और इसने वर्तमान विश्व के समक्ष विभिन्न दीर्घकालिक मुद्दे प्रस्तुत किए हैं उनमें से एक भौगोलिक प्रभाव भी है, महामारी के चलते विभिन्न वन्यजीव वनों से बाहर आकर सड़कों पर स्वतंत्रता से घूम रहे हैं, अधिकांशतः पक्षी अपने पसंदीदा स्थानों की ओर वर्षों बाद प्रस्थान कर रहे हैं, जलीय जीवों को प्रायः उन स्थानों पर देखा जा रहा है जिन्हें उन्होंने सदियों पहले छोड़ दिया था और अन्य स्थानों पर वायु और जल की गुणवत्ता में भी बेहतर सुधार पाया गया है वर्तमान पर्यावरण में गुणवत्ता में बदलाव अल्पावधि के हैं वैश्विक महामारी के अंतर्गत अस्थायी प्रभाव दृष्टिगत हुए हैं जिसे कोविड-19 के प्रसार को कम करने के लिए लागू किया गया है प्रत्येक दिन हमारे वातावरण में होने वाली घटनाओं के मिश्रण को मौसमी परिवर्तन कहा जाता है वास्तविक रूप में जलवायु परिवर्तन जो कि एक दीर्घ समयावधि तक चलने वाली प्रक्रिया है जिसमें किसी विशिष्ट क्षेत्र विशेष पर लंबे समय तक विभिन्न मौसमी घटनाओं का अध्ययन किया जाता है इन परिवर्तनों का प्रत्यक्ष व अप्रत्यक्ष रूप से किसी स्थान विशेष की भौगोलिक दशाओं पर गहरा प्रभाव पड़ता है पर्यावरणीय असंतुलन और भौगोलिक प्रभावों की अनदेखी भविष्य में ऐसी और महामारी हो को जन्म दे सकती है जहां एक ओर दुनिया भर में कई विकट चुनौतियां पैदा की हैं, वहीं दूसरी ओर प्राकृतिक सौंदर्य के अद्भुत व जीवंत नजारे भी देखने को मिल रहे हैं। इतिहास गवाह है कि अतीत में जब-जब इस प्रकार की भयानक महामारियां आई हैं, तब-तब पर्यावरण ने सकारात्मक करवट ली है। यकीनन कोरोना संक्रमण काल में प्रकृति का यह रूप मानवीय जीवन के लिए भले ही क्षणिक राहत वाला हो, परंतु जब संक्रमण का खतरा पूरी तरह खत्म हो जाएगा, तब क्या पर्यावरण की यही स्थिति बरकरार रह पाएगी? महामारियों का गहरा प्रभाव पर्यावरण पर पड़ा है, परंतु महामारी के फौरन बाद आर्थिक विकास की रफ्तार को बढ़ावा देने के लिए प्राकृतिक संसाधनों का बड़े पैमाने पर अमर्यादित दोहन भी किया गया है। ऐसे में कोरोना महामारी से उत्पन्न अल्पकालिक पर्यावरणीय सुधार से बहुत अधिक खुश होने की जरूरत नहीं है, बल्कि मानव, प्रकृति और आर्थिक विकास के अंतर्संबंधों को नए सिरे से परिभाषित करने की आवश्यकता है। भारत में कोरोना संकट की समयावधि कब तक रहेगी तथा यह भारतीय भौगोलिक परीक्षेत्र को कितना प्रभावित करेगा इसका स्पष्ट अंदाजा अभी नहीं लगाया जा सकता लेकिन यह तय है कि हमारी सामाजिक आर्थिक हालात को काफी नुकसान पहुंचा सकता है ऐसे में वैश्विक जलवायु नीति पर अपना प्रभाव बनाना और देश के हित की रक्षा करना कोरोना संकट के बाद देश की प्राथमिकता होनी चाहिए।

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The Psychological Impact of Covid-19: New Perspectives of Well Being with Special Reference to Juveniles

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Abstract

The outbreak of COVID-19 led to a significant psychological impact on individuals, particularly those belonging to vulnerable groups. This study aimed to synthesize literature on the psychological impact of COVID-19 among children, adolescents and juvenile.

Disease itself multiplied by forced quarantine to combat COVID-19 applied by nationwide lockdowns can produce acute panic, anxiety, obsessive behaviors, hoarding, paranoia, and depression, and post-traumatic stress disorder (PTSD) in the long run. These have been fueled by an “infodemic” spread via different platforms of social media. Outbursts of racism, stigmatization, and xenophobia against particular communities are also being widely reported. Nevertheless, frontline healthcare workers are at higher-risk of contracting the disease as well as experiencing adverse psychological outcomes in form of burnout, anxiety, fear of transmitting infection, feeling of incompatibility, depression, increased substance-dependence, and PTSD. Community-based mitigation programs to combat COVID-19 will disrupt juvenile’s usual lifestyle and may cause florid mental distress. This article is an attempt to through lights The Psychological Impact of Covid-19 on human beings with special reference to juveniles. The psychosocial aspects of older people, their caregivers, psychiatric patients and marginalized communities are affected by this pandemic in different ways and need special attention.

Keywords: Social-isolation, Adolescents, Psychological Impact, Juveniles, Delinquency, Pandemic

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The Impact of Covid -19 on Human Rights and Rule of Law

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Human Rights are the basic rights and freedom that belong to everyone in the world, from birth untill death (UDHR-10 Dec 1948).The core element of the Rule of law are Legality, Legal security Access to justice, prohibition of arbitrariness ,respect for human right and equality before law.

The Covid-19 Pandemic has caused unprecedented challenges to the whole world. The impact of Covid-19 on human right and Rule of law is a profound, significant topic for discussion .During the covid-19 pandemic Human rights violations including Discrimination, Censorship, Arbitrary detention were reported from different parts of the world. Countries experienced restrictions on the news media as part of their response to the Covid-19 pandemic. Journalist, bloggers, cartoonist were arrested for their reporting of the

pandemic .The pandemic and related restrictions have affected everyone lives as work, education, travel and interaction with others. Engaging in Trade, Restaurants, Events and Tourism sector have suffered financial loss. Temporary laid- off and dismissed employees when the freedom to engage in any occupation has been restricted due to pandemic. An important objective of these measures and restrictions are to ensure Health and Life. It is very easy to blame and point finger that our human rights are violated or not protected but our focus must be on the balancing the human rights and Right to life of those person who are facing the more problem on the basis of poverty, gender, race, caste, marginalised sector, migrant workers faced so many problems. Social distancing, wearing mask, these are not violating our human rights or taking away our liberty, these restriction are reasonable to protect the right to life. Human rights includes Right to life, Right to health, Right to livelihood so it is a matter of Global Public Health. This is the reason the whole world has come forward to deal with Right to life.

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Current Issues and Prospectus of Modern Legal Education of covid-19

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Covid-19 A pandemic, Disaster which destroyed everything, everywhere. We faced so many issues and problem during the period. Even situation is not controlled yet but this is also a truth that life and living cannot be stopped.

People tried to search, innovate and create new prospectus and Standards to move on. Education sector is also one of the sector where teachers, students colleges, Administration faced all the difficulties.

Legal education was also challengable but virtual mode was milestone at that time.

By using this method we all were able to continue the Educational Environment.

Hence practical exposure and experience is very must for the law student but it was unfortunately extremely sad for the law student to make and feel like a classroom and court room at the home. Court visits and Moot courts were completely stopped for the students but online preparation YouTube, legal websites and channels helped a lot.

Legal education turned into modern Legal education where sector was dependent on legal channels, classes on Zoom and Google meet apps, videos and lectures.

Students adapted the new normal as it was practically not possible for them to replace traditional learning with online learning.

After all the Circumstances legal sector is also building more sustainable and educational atmosphere even after covid -19.

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