The 15th Anniversary of

BICON-2020

The E-Proceedings of Conference on

THE NEW NORMAL

Industry-Academia Alliance in the Post COVID-19 Era

December 17-19, 2020

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Organized by:

Biyani Group of Colleges

Jaipur, India

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- Ms. Richa Khunteta
- Ms. Neelam Kumari
- Ms. Jishu B. George

Designed by:

- Mr. Nilesh Sharma
- Mr. Sunil Saini

Welcome to BICON-2020 Virtual Conference

This year we are celebrating the 15th 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-2020** is '**The New Normal - Industry-Academia Alliance in the Post COVID-19 Era'** guided by different departments including Science, Commerce & Management, Information Technology, Social Science, Nursing and Law based on 'multidisciplinary-to-interdisciplinary' approach. This is an initiative to introduce and promote role of multidisciplinary alliance to develop new normal at the post of COVID-19 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-2020 has decided to call for Abstract of the paper to be published in the conference proceedings with ISBN numbers. There are 34 invited talks (12 International + 22 National) in BICON-2020.

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, Antigua, Oman, Trinidad and Tobago 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. Tarun K. Kumawat
Convener
R&D Coordinator,
Biyani Group of Colleges, Jaipur, India

 ISBN: 978-93-83462-98-8

CHIEF MINISTER
RAJASTHAN

Message

I am glad to know that the 15th India-Japan Bilateral Conference (BICON-2020) is being organized on December 17-19, 2020 on the theme 'The New Normal'.

The theme of the conference has much significance in the present context when our lifestyle and work-culture is undergoing several 'new normals'. It would be better for all of us to adopt covid-appropriate behavior so as to keep ourselves safe.

I am sure that this three day virtual event will provide a good platform to the participating academicians, industrialists, scientists and research scholars of various subjects to share their experiences, views and ideas in their respective fields in the present-day situation of the global pandemic COVID-19.

I am thankful for inviting me to be the 'Chief Guest' during this conference and extend my good wishes for the success of the event.

(Ashok Gehlot)

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Dr. C.P. Joshi
SPEAKER
Rajasthan Legislative Assembly

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

No. R-305
Jaipur, Dated 16 December, 2020

Message

I am glad to know that the Biyani Group of Colleges, Jaipur is organizing the 15th India Japan Bilateral Conference on December 17-19, 2020.

Rajasthan has been benefited from the special relationship between India and Japan. Japan and Rajasthan have been working together from more than a decade and this partnership will keep going stronger in the coming years.

I am sure that this conference shall provide a good platform to discuss the issues important in bilateral relations between India and Japan.

I wish the Conference the very best.

(Dr. C. P. Joshi)

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डॉ. रघु शर्मा
मंत्री,
चिकित्सा एवं स्वास्थ्य,
आयुर्वेद एवं भारतीय चिकित्सा,
चिकित्सा एवं स्वास्थ्य सेवाएं (ईएसआई) एवं
सूचना व जनसम्पर्क विभाग, राजस्थान सरकार।

सत्यमेव जयते

कार्यालय : 4125, मुख्य भवन, शासन सचिवालय।
निवास : 18, सिविल लाईन्स, जयपुर।
दूरभाष : 0141–2227473, 2220655 (O)

पत्र क्रमांक : 15325
दिनांक : 14/12/2020

Message

I am very happy to know that Biyani Girls College is organizing 15th India-Japan Bilateral Conference (BICON-2020) to be held in Biyani Girls College Jaipur from December 17th to 19th 2020.

I hope that this conference will attract bilateral academic/research agreements and promote further stronger relationship between Japan and India especially Rajasthan.

This event is organized to celebrate the bilateral research agreements and promote strong relationship between JAIST and Indian institutes

I wish Biyani Group of Colleges a great success for the conference.

(Dr. Raghu Sharma)

Dr. Sanjay Biyani,
Director (Acad.)
Biyani Girls College,
Sector-3, Vidhyadhar Nagar,
Jaipur - 302039

 ISBN: 978-93-83462-98-8

डॉ. सुभाष गर्ग
राज्य मंत्री
राजस्थान सरकार

सत्यमेव जयते

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

MESSAGE

I am pleased to know that the Biyani Girls College, jaipur is organizing the 15th India-Japan Bilateral Conference (BICON-2020) from December 17th to 19th 2020 in Jaipur.

Rajasthan maintains special relation with Japan in terms of investment. This relationship has strengthened during the past years as investment made by the Japanese companies in the state has brought prosperity to the region.

I hope that this event will further strength an bonds between the people of India and Japan.

I wish the conference a great success.

(Dr. Subhash Garg)

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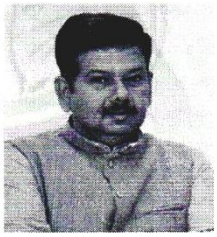
भंवर सिंह भाटी
राज्य मंत्री

सत्यमेव जयते

उच्च शिक्षा (स्वतंत्र प्रभार),
राजस्व, उपनिवेशन एवं कृषि सिंचित क्षेत्रीय विकास
एवं जल उपयोगिता विभाग
राजस्थान सरकार, जयपुर - 302005

S.No.: SM/HE/2020/2420
Jaipur, Date: 14.12.2020



MESSAGE

I am pleased to know that the Biyani Group of Colleges, Jaipur is organizing the 15th India Japan Bilateral Conference on ''The New Normal'' from December 17-19, 2020.

Rajasthan maintains special relations with Japan in terms of Research and Academic Activities.

Your organization is also publishing an e-souvenier on this occasion. I hope this souvenier will be inspiring for the young generation and promote further stronger relationship between India and Japan.

I wish all the best for the success to the conference.

(Bhanwar Singh Bhati)
State Minister

Dr. Sanjay Biyani
Director (Acad.),
Biyani Girls College,
Jaipur (Rajasthan).

385-B, Civil Lines, Jaipur, Ph. : 0141-2227544 (O), 0141-2222654 (R)

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टीकाराम जूली
राज्यमंत्री
श्रम, कारखाना एवं बॉयलर्स
निरीक्षण विभाग (स्वतंत्र प्रभार)
सहकारिता एवं इंदिरा गांधी नहर
परियोजना विभाग

150 YEARS OF CELEBRATING THE MAHATMA

सत्यमेव जयते

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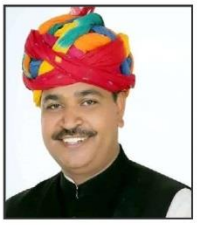

MESSAGE

I am happy to know that Biyani Group of College is organizing 15th India-Japan Bilateral Conference (BICON-2020) between 17th-19th Decemeber, 2020.

I am confident that the outcomes of the brainstroming sessions will be most fruitful, resulting in educating the masses and transformaing common men into responsible citizen.

I extend my wishes to the organizers of the Conference for great success.

Your Faithfully,

(Tikaram Jully)

 ISBN: 978-93-83462-98-8

प्रो. राजीव जैन
Prof. Rajeev Jain

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

16th December 2020

Message

I am delighted to learn about the 15th India- Japan Bilateral Conference that is being organized by Biyani Group of Colleges in association with JAIST and other Japanese Institutes on 17th-19th December 2020. Traditionally, India and Japan have been very close historically, and this science conference will take this bilateral association further. The unprecedented pandemic situation that is affecting the whole world has changed the way the world conducts its everyday business, and this august gathering of leading scientists, industrialists and scholars is expected to bring out novel strategies to deal with this "New Normal". The three day conference will deliberate on Industry-Academia collaboration, Entrepreneurship and Self-Employment, Privacy concerns, Re-skilling and training in the evolving world, Rekindling career passion, and exploration of traditional and alternative career options for students.

I wish the organizers the best for the conference, and eagerly await to having fruitful discussions with academia-industry leaders and students during this Bilateral Virtual Conference.

16/12/2020

(Rajeev Jain)

Dr. Sanjay Biyani
Director (Acad.)
Biyani Girls College
Sector-3, Vidhyadhar Nagar
Jaipur-302039

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 ISBN: 978-93-83462-98-8

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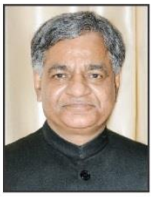
PROF. (DR.) PRAVIN CHANDRA TRIVEDI
VICE-CHANCELLOR



MESSAGE

It is a pleasure to know that **Biyani Group of Colleges** is organizing the **"15th India-Japan Bilateral Conference (BICON-2020)** during December 17-19, 2020 on **"The New Normal"** where leading academicians, Industrialists, scientist and Research Scholars will share and discuss their knowledge and New Ideas on current developments in their respective field during COVID-19 pandemic and "**The New Normal"** strategies.

On this occasion, I extend my best wishes to the organizers, faculty and the management and I wish the conference function a grand success.

I hope that the institution will achieve excellence in all its activities and will have a glorious future.

Trivedi

(PRAVIN CHANDRA TRIVEDI)

December 14, 2020

 ISBN: 978-93-83462-98-8

OM THANVI
Vice Chancellor,
Haridev Joshi University of
Journalism and Mass Communication
Jaipur, Rajasthan

संदेश

बियानी ग्रुप ऑफ कॉलेजेज द्वारा तीन दिवसीय इंटरनेशनल कॉन्फ्रेंस बायकॉन–2020 'द न्यू नॉर्मल' इंडस्ट्री एकेडमिया अलायंस इन पोस्ट कोविड–19 इरा जिसका आयोजन 17 दिसम्बर से 19 दिसम्बर तक किया जा रहा है, के सफल आयोजन के लिए देश–विदेश से आमंत्रित सभी सम्मानीय वक्ताओं, रिसर्च स्कॉलर्स एवं आयोजकों को मेरी ओर से हार्दिक शुभकामनाएँ!

मुझे यह बताते हुए अत्यंत हर्ष का अनुभव हो रहा है कि भारत ने जापान के साथ रिसर्च और शैक्षिक गतिविधियों को साझा करके अपने द्विपक्षीय संबंधों को और अधिक प्रगाढ़ किया है।

इसी श्रृंखला में बायकॉन–2020 'द न्यू नॉर्मल' के जरिये शिक्षाविदों एवं उद्योगपतियों को एक मंच पर लाने का प्रयास बियानी ग्रुप ऑफ कॉलेजेज द्वारा किया गया है। समय के साथ बियानी ग्रुप ने शिक्षा के तरीकों में बदलाव कर छात्र–छात्राओं को लाभान्वित किया मुझे आप सभी को यह बताते हुए खुशी हो रही है कि हरदेव जोशी पत्रकारिता विश्वविद्यालय में देश में पहली बार पोस्ट ग्रेजुऐशन में ऑनलाईन आधारित कोर्सेज का प्रारम्भ किया जा रहा है। इससे न सिर्फ वर्तमान समय की पत्रकारिता के नये आयाम की जानकारी होगी बल्कि पास किये गये छात्रों को रोजगार में भी दिक्कत नहीं आयेगी। तकनीकी पक्षों को ध्यान में रखकर एडिटोरियल कंटेट का समावेश कर न्यू मीडिया जर्नलिज्म में युवाओं को तैयार करने की हमारी कोशिश निश्चित तौर सकारात्मक परिणाम देंगे।

मुझे यह जानकर खुशी हुई कि इस कॉन्फ्रेंस में देश–विदेश के लगभग 850 प्रतिभागी भाग ले रहे हैं। संयुक्त राज्य अमेरिका, ओमान, एन्टीगुआ, भारत, जापान, वेस्टइंडीज जैसे देशों से शिक्षा एवं उद्योग के जाने–माने वक्ता कॉन्फ्रेंस को सम्बोधित करेंगे और रिसर्च स्कॉलर्स अपने शोध–पत्रों का वाचन करेंगे।

भारत एवं जापान ही नहीं बल्कि अन्तर्राष्ट्रीय स्तर पर पोस्ट कोविड इफैक्ट हर क्षेत्र में देखा जा रहा है। इसलिए यह जरूरी हो जाता है कि 'न्यू नॉर्मल' के अन्तर्गत हमारे शिक्षाविद् भविष्य की शिक्षा एवं रोजगार की संभावनाओं पर चर्चा करें। कोविड महामारी ने हमें अपने शोध की दिशा पर फिर से विचार करने को विवश किया है।

बियानी ग्रुप ऑफ कॉलेजेज के मैनेजमेंट, रिसर्च टीम और फैकल्टी मेम्बर्स निःसंदेह बधाई के पात्र हैं जिन्होंने 'न्यू नॉर्मल' जैसे महत्त्वपूर्ण विषय पर कॉन्फ्रेंस का आयोजन किया। मुझे पूर्ण विश्वास है कि विभिन्न देशों से आमंत्रित शिक्षा प्रतिनिधि कॉन्फ्रेंस में सम्मिलित होकर पोस्ट कोविड इरा पर मंथन करेंगे और भविष्य के लिए बेहतर रिसर्च संभावनाओं के सुझाव हमें मिल सकेंगे।

(ओम थानवी)

 ISBN: 978-93-83462-98-8

Prof. Navin Mathur
President, Jagan Nath University, Jaipur
Formerly Professor & Head, Dept. of Business Admn.,
Administrative Secretary to the Vice-Chancellor
Principal, University Commerce College,
Director (Research), Director, University Central Library, University of Rajasthan, Jaipur

Message

BICON 2020 an International virtual Conference, will be organised by Biyani Group of Colleges during 17-19 December 2020. It is a specialized conference on the theme The New Normal, Industry-Academia Alliance in the past Covid 19 Era.

I am very happy to hear that the Biyani Group of Colleges, Jaipur is organizing the 15th India Japan Bilateral Conference (BICON-2020) on "The New Normal" to be held in Biyani Girls College, Jaipur from December 17-19, 2020.

I am confident that this conference will attract bilateral academic and research agreements and promote further stronger relationship between Japan (Advanced Institute of Science and Technology, Akita Prefectural University, Saitama University, Kyoto University, Kyushu University, Well Group and ISE Food Inc) and higher level Indian Institutes. Participation of the accomplished girls from Biyani College in this event shall faster 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.

(Navin Mathur)

 ISBN: 978-93-83462-98-8

Office : 0291- 2545066
Secy : 0291- 2545251

THE BAR COUNCIL OF RAJASTHAN
OLD HIGH COURT BUILDINGS
JODHPUR – 342001
e-mail : Secretary @ barcouncilofrajasthan.org
website: www.barcouncilofrajasthan.org

Syed Shahid Hasan
Chairman

MESSAGE

I am extremely pleased to know that Biyani Shikshan Samiti is organizing BICON – 2020 (Virtual Conference) fixed from 17th to 19th December, 2020 on "The New Normal Industry-Academia Alliance in the Post Covid-19 Era." The topics selected are important so far for current developments in their respective field during COVID-19 pandemic. The Conference also interact with local and international participants.

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

I congratulate the organizers, and wish the Virtual Conference – BICON-2020 a success.

(Syed Shahid Hasan)
Chairman
Bar Council of Rajasthan

 ISBN: 978-93-83462-98-8

K.M. Duriya, R.A.S.
Registrar,
Rajasthan University, Jaipur
Phone: 0141-2706813

MESSAGE

BICON 2020 an International virtual Conference will be organised by Biyani Group of Colleges during 17-19 December 2020. It is a specialized conference on the theme The New Normal, Industry-Academia Alliance in the past Covid 19 Era.

I am very pleasure to hear that the Biyani Group of Colleges, Jaipur is organizing the 15th India Japan Bilateral Conference (BICON-2020) on "The New Normal" to be held in Biyani Girls College, Jaipur from December 17-19, 2020.

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

I congratulate the organizers, and wish the Virtual Conference – BICON-2020 a success.

Wish you all the success.

(K.M. Duriya)

 ISBN: 978-93-83462-98-8

Prof. Dr. Ramesh H. Makwana
(MA Gold Medallist, M.Phil. Ph.D. NET,GSET),
Professor & Head, Department of Sociology,
Sardar Patel University, Vallabh Vidhyanagar-388120, Gujarat, India,
98241 55903 / 92653 55883

Date:14/12/2020

Best Wishes

Biyani Group of Colleges takes immense pleasure in announcing the 15thIndia-Japan Bilateral Conference (BICON-2020) to be organized from 17th to 19thDecember 2020. It is an honor and privilege to invite me to speak in this Conference as Guest Speaker for the conference on "The New Normal" on 19th December 2020.

BICON-2020 is the leading academic and Industry gathering for presenting novel and fundamental advances in the field of Social Sciences. It is continues to increase in quality and prestige, the growth in numbers of attendees will be no different this year. Conference aims to bring together researchers, scientists and scholar students to exchange and share their experiences, new ideas, and research results about all aspects of Social Sciences discuss the practical challenges encountered and the solutions adopted. Thank you for the opportunity to partake in the Conference.

May I take this opportunity to convey my very best wishes for an effective, successful and productive virtual conference.

Thank you for all you did to make participation in this Conference so easy, pleasurable and rewarding.

Prof.(Dr.) Ramesh H.Makwana
Professor & Head
P. G. Dept of Sociology
Sardar Patel University
Vallabh Vidyangar (Gujarat) India

 ISBN: 978-93-83462-98-8

Mr. Prasant Pal
Founder & CEO,
Pure India Trust, NGO
Jaipur, Rajasthan, India

Message

I am pleased to know that Biyani Group of Colleges is organizing 15th India – Japan Fest, Virtual Conference "THE NEW NORMAL" during December 17-19, 2020 in this pandemic situation.

The institution is creating a platform for the industrialist, professionals, researcher and students to share and express their views on Innovative and Advanced Technologies.

Unemployability is a bigger problem than unemployment and Indian youth is suffering from issues of Unemployability. The partnership with Japan is a big opportunity to create awareness among youth about choosing a career that can them successful in life. I am looking forward to sharing my experiences with the students.

(Prashant Pal)
Founder & CEO
PURE India Trust (NGO)
Jaipur, Rajasthan
India

 ISBN: 978-93-83462-98-8

Anila Choraria
Assistant Director at O/O DC-MSME
Ministry of Micro, Small &
Medium Enterprises (MSME)
Jaipur, Rajasthan

Message

It is a matter of immense pleasure to know that the Biyani Group of Colleges is organizing the 15th India-Japan Bilateral Conference (BICON) on "The New Normal" from 17th to 19th December, 2020.

"I want to express my gratitude for the invitation and extend my appreciations and heartiest congratulations to the Biyani Group of colleges for organizing this virtual Summit/Conference.

The notion of organizing a conference and sharing ideas virtually keeping in mind the current Covid 19 Pandemic will add a unique touch in your repo for successfully organizing the 15th version of your yearly conference in the series, for the furtherance of the bilateral relation.

Certainly, your endeavours would strengthen the bilateral relations between India and Japan. I sincerely feel this will open new horizons in excelling academic and research activities among both the Nations.

Wishing you future successes and thanking again.

Anila Choraria
Assistant Director at O/O DC-MSME
Ministry of Micro, Small & Medium Enterprises (MSME)
Jaipur, Rajasthan

 ISBN: 978-93-83462-98-8

Prof. (Dr.) K.K. Rattu, IBS, D.Litt.
Director Media and Head,
School of Journalism and Mass Communication,
Jaipur National University, Jaipur, Rajasthan
Former Senior Officer of Indian Broadcasting Service
Deputy Director General, Doordarshan and Author

Message

I am pleased to know that Biyani Group of Colleges is organizing 15th India – Japan Fest, Virtual Conference "THE NEW NORMAL" during December 17-19, 2020 in this pandemic situation. It would be a great pleasure for me to join as a Guest speaker on December 19, 2020.

As given in the brochure, I would be delivering my lecture on 'New avenues and changing trends in the Media industry'.

I congratulate the organizers, and wish the Virtual Conference – BICON-2020 a success.

(Prof. (Dr.) K.K. Rattu)

E-mail: kkrattu@gmail.com | Mobile : +91-9478730156, 7986179330

 ISBN: 978-93-83462-98-8

C. L. SAINI
Additional Advocate General
Rajasthan High Court, Jaipur

सत्यमेव जयते

Ph. : 0141-2205225
Mob. : 9414043151
E-mail : clsainiadvocate@gmail.com

Ref. No. CLS/2020/12 91

Date 09.12.2020

I am glad to know that the Biyani Group of Colleges is going to publish book on the 15th India-Japan Bilateral Conference for the year 2020. I hereby, thank the organising institutions- Biyani Group of Colleges from India and partner Institutes- Japan Advanced Institute of Science and Technology, Akita Prefectural University, Saitama University, Kyoto University, Kyushu University, Well Group and ISE Food Inc. from Japan, for providing me this excellent opportunity to be part of this knowledge enhancing exercise.

I see the Annual India-Japan Bilateral Conference as an extension of the historical links between both the countries. I am very confident that this book will be of great help for all the students.

My best wishes are with the Biyani group of Colleges in all of its constructive and innovative activities.

Chiranji Lal Saini

(Addl. Advocate General)

High Court: B-Block, Ambedkar Bhawan, Rajasthan High Court, Jaipur
Off.: Bachan Ocean Park Complex, Opp. Jangleshwar Mahadev Temple, Kanti Chand Road, Bani Park, Jaipur

 ISBN: 978-93-83462-98-8

Adv. Shobha Gupta
Senior Counsel, Supreme Court of India
97, Gyan Vihar,
Ajmer Road, Jaipur, Rajasthan
Mobile: +91 9811512794

Message

"Dear Students, It is good to see you all safe and healthy amid this worldwide pandemic, which has taken a historic toll on the mankind. The Pandemic has though confined us all in four bounds of our homes and limited our public movements, but at the same time it has opened up the entire world for us on our palms and how effectively. Honestly, even when this phase is over, then also it would now be difficult for all of us to go back absolutely to the pre-covid practices of communications and dealings. We all have to learn to keep pace with this New Normal/ The New World."

Thanks.

Adv. Shobha Gupta

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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 2020.

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. Archana Yadav
Co-Convener
Principal, Biyani Law College,
India

Ms. Anju Bhatt
Co-Convener
Assistant Professor,
Biyani Girls College, India

Dr. Tarun Sharma
HOD (Science)

Mr. Charanjeet Singh
Principal (Pharmacy)

Ms. Jishu B. George
HOD (Nursing)

Dr. B.N. Gaur
HOD (Comm. & Mgmt.)

Dr. Poonam Sharma
HOD (IT)

Dr. Ekta Pareek
Principal (Education)

Dr. Rehana Khan
HOD (Law)

Ms. Malti Saxena
HOD (Humanities)

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Programme Schedule

Date: 17-12-2020 (Day-1)

Theme: A Holistic Perspective of Industry-Academia Collaboration in the New Normal

Standard Time IST	Schedule
Inaugural Session	
09.00 AM-09.10 AM	Lighting of the Lamp
09.10 AM-09.20 AM	Welcome address by Dr. Manish Biyani (Organizing Chair, BICON-2020)
09.20 AM-09.25 AM	About the BICON-2020 by Dr. Tarun K. Kumawat (Convener, BICON-2020)
09.25 AM-09.30 AM	Presidential Address by Prof. Takafumi Sakai, Saitama University, Japan
09.30 AM-09.40 AM	Inaugural Address by Guest of Honour: Prof. (Dr.) Rajeev Jain, Hon'ble Vice- Chancellor, University of Rajasthan, India
09.40 AM-09.45 AM	Vote of Thanks by Dr. Neha Pandey (Principal, Biyani Girls College)
Special Interest session on COVID-19 Pandemic	
09:45 AM-10:00 AM (EST: Dec 16, 23:15-23:30)	Prof. Jiji Sally Varughese, New York Institute of Tech., USA **Title: Next generation Florences with Fortitude: "Analysis of post COVID nursing profession"**
10:00 AM-10:15 AM (JST: Dec 17, 13:30-13:45)	Prof. Yasukawa Kiyoshi, Kyoto University, Japan **Title: Alteration of enzymes and their application in rapid nucleic acid amplification to combat the virus pandemic**
10:15 AM -10:30 AM	Dr. Vaibhav Bhargawa, Eternal Heart Care Centre, India **Title: Healthcare delivery system to fight against COVID-19**
10:30 AM-10:35 AM (JST: Dec 17, 14:00-14:05)	Young Researcher highlight: Ms. Radhika Biyani, JAIST, Japan **Title: Virtual Reality for Virus-X**
Break 10 min	
Technical session on Industry-Academia collaboration between India and Japan	
10:45 AM -11:00 AM (JST: Dec 17, 00:15-00:30)	Dr. M.M. Gupta, The University of the West Indies, West Indies **Title: Asynchronous assessment technique to fulfill the learning outcomes of the health sciences course and fill gap between industry and academia**
11:00 AM -11:15 AM	Dr. Shekhar Verma, Pt. Deendayal Upadhyay Memorial Health Sciences and Ayush University of Chhattisgarh, India **Title: Creating Indian Pharma, a global R&D leader: Opportunities and challenges**
11:15 AM -11:30 AM	Dr. Sudhir Vyas, Criticonix Khandaka Hospital, India **Title: New Era of Business in Post COVID-19**

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11:30 AM -11:45 AM (JST: Dec 17, 15:00-15:15)	Dr. Fumihiko Yokota, Kyushu University, Japan **Title: Comparisons of anthropometric indicators for predicting hypertension among male factory workers in Rajasthan, India**
11:45 AM -11:55 AM (JST: Dec 17, 15:15-15:25)	Mr. Junya Harada, ISE Foods Inc., Japan **Title: SDGs Business Model Formulation Survey in India and possible collaboration with Biyani Group of Colleges**
Break 05 min	
Technical Session on New Normal in COVID-19 pandemic	
12:00 PM-12:15 PM	Dr. Pooja Jha Maity, Ramjas College, University of Delhi, India **Title: Role of Medicinal Plants in Boosting Immunity during This Pandemic**
12:15 PM-12:30 PM (JST: Dec 17, 15:45-16:00)	Dr. Madhu Biyani, Kanazawa University, Japan **Title: Aptamer as smart drug solution for unreached medical challenges.**
12:30 PM-12:45 PM (Local time: 03:00-03:15)	Dr. Prasanna Honnavar, American University of Antigua, Antigua **Title: Basic Medical Research in the New Normal**
12:45 PM-01:00 PM (Local time: 11:15-11:30)	Dr. Vishal Mathur, Sur University, Oman **Title: The New Normal-Teaching and Research Attributes**
01:00 PM-01:15 PM	Dr. Dharmendra Tripathi, National Institute of Technology, India **Title: Electroosmosis effects on Pumping Flow Models**
01:15 PM-01:30 PM	Dr. Pramod Kumar, National Institute of Pharmaceutical Education and Research (NIPER), India **Title: Data integrity and their role in pharmaceutical analysis, quality control and quality assurance**
01:30 PM-01:45 PM (JST: Dec 17, 17:00-17:15)	Prof. Takashi Kei Saito, Akita Prefectural University, Japan **Title: Virtual asparagus harvesting robot competition - project based learning on agriculture**
01:45 PM-02:00 PM (JST: Dec 17, 17:15-17:30)	Mr. Kevin Maafu Juma, Kyoto University, Japan **Title: Comparison of sensitivity and rapidness of PCR, recombinase polymerase amplification, and RNA-specific amplification for detection of rice yellow mottle virus**
Break 30 min	
Virtual Presentations	
02:30 PM -03:00 PM	**Oral Presentations** *OPP-01: Ms. Anjali Pandit* *OPP-02: Ms Rashi Garg* *OPP-03: Ms. Priya Chauhan* *OPP-04: Ms. Agrima Bhatt*
03:00 PM -03:30 PM	**E-Poster Presentations** *EPP-01: Ms. Riya Jiyani* *EPP-02: Ms. Nirat Kandwani* *EPP-03: Ms. Snehal Gupta* *EPP-04: Mr. Prawal Pratap Singh Verma*
03:30 PM -03:40 PM	**Award Ceremony** (Chair: Prof. Aswani Kumar)
03:40 PM -03:45 PM	**Closing Remarks** by Dr. Neha Pandey (Principal, Biyani Girls College)

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Day- 1

A Holistic Perspective of Industry-Academia Collaboration in the New Normal

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)
- Ms. Sujata Biyani (Asst. Director)
- Ms. Priyanka Biyani (Asst. Director)
- Dr. Madhu Biyani (Asst. Director)
- Dr. Neha Pandey (Principal)
- Dr. Dhyan Singh Gothwal (Dean, Administratin & Vice-Principal)
- Ms. Taravati Chaudhary (Principal, Nursing)
- Dr. Archana Yadav (Principal, Law)
- Ms. Renu Tandon (HR Manager)
- Dr. Tarun Sharma (HOD, Science)
- Mr. Charanjeet Sigh (HOD, Pharmacy)
- Dr. B.N. Gaur (HOD, Commerce & Mangement)
- Ms. Jishu B George (HOD, Nursing)
- Dr. Poonam sharma(HOD, IT)
- Dr. Rehana Khan (HOD, Law)
- Dr. Ekta Pareek (HOD, Education)
- Ms. Malti Saxena (HOD, Humanities)
- Dr. Tarun K Kumawat (R&D Coordinator)
- Ms. Anju Bhatt (Skill Coordinator)

ORGANIZING COMMITTEE:

- Dr. Vishnu Sharma
- Dr. Anita Mishra
- Dr. Neetu Rawat
- Dr. Shilpa Bhargava
- Dr. Yachana Jain.
- Mr. Aashish Kumawat
- Mr. Balkrishn Sarswat
- Ms. Akanksha Shukla
- Ms. Kanchan Sharma
- Ms. Laxmi Pharaswal
- Ms. Mamta Jha
- Ms. Pooja Yadav
- Ms. Priyanka Sharma
- Ms. Rajshri Nagar
- Ms. Remya Renjan
- Ms. Ritu Gupa
- Ms. Rumana Ali
- Ms. Sanju Jangir
- Ms. Shalini Tailor
- Ms. Shiwani Sharma
- Ms. Sonam Yadav
- Ms. Soniya Saini
- Ms. Sunita Godawara

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Invited Lecture – 1

Electroosmosis Effects on Pumping Flow Models

Dr. Dharmendra Tripathi

Associate Professor, Department of Mathematics, National Institute of Technology, Uttarakhand, Srinagar (Garhwal) - 246174, Distt.- Pauri (Garhwal), Uttarakhand, INDIA.

Email: dharmtri@gmail.com, dtripathi@nituk.ac.in

Dr. Dharmendra Tripathi has been working as Associate Professor in Department of Mathematics, National Institute of Technology, Uttarakhand. Prior to join NIT Uttarakhand, he has worked more than 10 years as faculty member (Associate Professor, Assistant Professor) in various reputed institutions like Manipal University Jaipur, NIT Delhi, IIT Ropar and BITS Pilani Hyderabad. He has completed his PhD in Applied Mathematics (Mathematical Modelling of Physiological flows) in 2009 from Indian Institute of Technology BHU and MSc in Mathematics from Banaras Hindu University.

He has supervised 04 PhD students and 04 are working under his supervision. He has also guided 20 B.Tech projects. He has published more than 130 papers in reputed international journals, 05 book chapters and presented more than 30 papers in International and National Conferences. His research h-index is 37 and i-10 index is 110 and his papers have more than 4000 citations. He has recently been achieved **World rank 375 & Indian Rank 6** in top 2% researchers/scientist across the World as per Updated science-wide author databases of standardized citation indicators in field of Mechanical Engineering and Transport published on October 16, 2020. He has been recognized by the Head of Institution for excellent work and contribution for the NIT Uttarakhand.

He was awarded some prestigious fellowships INAE fellowship in 2015 & 2016, 2017 and 2018, postdoctoral fellowships (NBHM, Dr. D.S. Kothari and Indo-EU) in 2010 etc. He has delivered more than 40 invited talks in National and International conferences, STC/STTP/FDP/Workshop. He has also organized various events like National and International conferences/STC/STTP/FDP/Workshops/Winter School.

He has been discharging additional administrative responsibilities as Dean (R&C) at NIT Uttarakhand and He has discharged many administrative responsibilities of the Institutes like I/c Registrar, Dean (SW), Chief Warden, and Chairman of various Institutes committee.

He is life time member of various professional bodies, member of editorial board of two journals, and reviewer of more than 50 International Journals and reviewed more than 100 articles.

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His research work is focused on the mathematical modelling and simulation of biological flows in deformable domains, Peristaltic flow of Newtonian and non-Newtonian fluids, microfluidics; CFD, Biomechanics; Numerical methods and biomechanics.

Abstract

Electroosmosis effects on Pumping Flow Models

Dharmendra Tripathi

Department of Mathematics, National Institute of Technology, Uttarakhand, Srinagar-246174, India

Electroosmosis plays key role in various microfluidics applications that means the motion of liquid induced by an applied potential across a porous material, capillary tube, membrane, and microchannel under application of external electric field. My talk is aimed to discuss the effects of electroosmosis mechanism on various pumping flow models like peristaltic flow model, membrane pumping flow model, and heart pumping flow model. The results of the mathematical models will be discussed for the possible applications in transport phenomena of physiological systems.

Inspired by the recent applications of electroosmosis in microfluidics as well as developing the new technologies for the health care, some mathematical and computational analyses are required to examine the pumping characteristics, flow analysis and particle trajectories. Numerical simulations for such models will provide a benchmark in designing of various microfluidics devices and valveless pumping actuators.

Keyword: Electroosmosis; Trapping; Reflux; Particle Trajectories; Transport Phenomena: Mathematical Modelling.

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Invited Lecture – 2

Comparisons of anthropometric indicators for predicting hypertension among male factory workers in Rajasthan, India - Results from Portable Health Clinic at Saras and Lotus Dairy

Fumihiko Yokota
E-mail: fumihiko.yokota.2011@gmail.com

Education:

Tulane University, New Orleans, LA - 08/02 – 05/07

Doctoral Program, School of Public Health and Tropical Medicine,

Department of International Health and Development

University of California, Los Angeles (UCLA), CA - 09/99 - 06/01

Master of Public Health, Community Health Sciences

Saitama University, Saitama, Japan - 04/94 - 03/99 Bachelor of Art, Education

Experience:

Lecture - 04/15 – Current

Kyushu University, Institute of Decision Science for Sustainable Society

Senior Program Manager for M&E and Operational Research - 10/11 – 3/15

Clinton Health Access Initiative (CHAI), Indonesia and Papua New Guinea

Epidemiologist (Asian Development Bank Consultant) - 11/07 – 09/11

Research Assistant - 10/02 – 12/06

Tulane University, Department of International Health, New Orleans, LA

Research Assistant - 07/02 - 08/02

National Institute of Mental Health, Tokyo, Japan

Research Assistant - 07/01 - 06/02

University of California, San Francisco, Center for AIDS Prevention Studies (CAPS)

Publications:

Yokota F, Biyani M, Islam R, Ahmed A, Nishikitani M, Kikuchi K, Nohara Y, and Nakashima N. Lessons learned from co-design and co-production in a portable health clinic research project in Jaipur District, India (2016-2018). Sustainability. 10 (11): 4148. 2018.

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Yokota F, Ahmed A, Islam R, Nishikitani M, Kikuchi K, Nohara Y, Okajima H, Kitaoka H, Nakashima N. The relationship and risk factors associated with hypertension, diabetes, and proteinuria among adults from Bheramara Upazila, Bangladesh: Findings from Portable Health Clinic Data, 2013-2016. International Journal of Medical Research and Health Sciences. 7 (2): 1-12. 2018.

Yokota F, Biyani M, Islam RM, Ahmed A, Nishikitani M, Kikuchi K, Izukura R, Nohara Y, Nakashima N. Co-design, co-production, and co-evaluation processes for a mobile health check-up research project in Jaipur India: Case study of the Portable Health Clinic, 2016-2020. Decision Science for Future Earth: Theory and Practice. Chapter 3, Springer. ISBN:9789811586316. 2021.

Yokota F, Biyani M, Hu Y, Kikuchi K, Shah F, Yasuoka J, Nanishi K, Alchoba R, Noureen A. PHC and case studies of remote healthcare services in Asian countries. Mobile Technologies for Delivering Healthcare in Remote, Rural or Developing Regions. Healthcare Technologies. Chapter 9. IET Book.ISBN-13: 978-1-83953-047-0. October 2020.

Abstract

Comparisons of anthropometric indicators for predicting hypertension among male factory workers in Rajasthan, India--Results from Portable Health Clinic at Saras and Lotus Dairy-

Fumihiko Yokota[a], Rajshri Nagar[b], Deepak Tiwari[b], Manish Biyani[b], Mariko Nishikitani[a], Kimiyo Kikuchi[a], Ashir Ahmed[c], Rafiqul Islam Maruf[d], Yasunobu Nohara[d], Rieko Izukura[d], Naoki Nakashima[d]

[a] Institute of Decision Science for Sustainable Society, Kyushu University, Fukuoka, Japan;
[b] Department of Nursing, Biyani Group of Colleges, Jaipur, Rajasthan, India;
[c] Graduate School of Information Science and Electrical Engineering, Kyushu University, Fukuoka, Japan;
[d] Medical Information Center, Kyushu University Hospital, Fukuoka, Japan

It is still largely unknown which anthropometric measure of obesity is the best predictor for hypertension in rural and urban India. This study compares four common anthropometric indices, namely body mass index (BMI), waist-to-height ratio (WHtR), waist circumference (WC), and waist-to-hip ratio (WHR) for predicting T2D among dairy milk factory workers in Rajasthan, India. Cross-sectional surveys, including health checkups and questionnaires were conducted for 179 Saras dairy and 200 Lotus dairy employees between 2018 and 2020. The participants included were randomly selected male factory and office workers who participated in health check-up services called Portable Health Clinic (PHC). The results and next steps for PHC in the post covid-19 era will be presented.

Keywords: Anthropometric indices, Hypertension, Mobile health check-ups, India, Post covid-19.

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Invited Lecture- 3

Next-Generation Florence with Fortitude: Analysis of Post-COVID Nursing Profession

Jiji Sally Varughese

Jiji Sally Varughese DNP, MSN-ED, RN
4609 Ridgepointe Dr., The Colony TX 75056
solomonshealthcareacademy@gmail.com; 7816866524

Qualification:

12/2018 ; Doctor of Nursing Practice Scholarly - Project Title: Chamberlain College of Nursing Downers Grove, IL Community based Fall prevention: Implementation of STEADI Toolkit

12/2012 ; Master of Science in Nursing, University of Phoenix, Arizona

07/2000 ; Bachelor of Science in Nursing Matha College of Nursing, Tamil Nadu, India

08/1995 ; Diploma in General Nursing and Midwifery Karunanidhi Institute of Nursing, Karnataka, India

Licensure as Registered Nurse: Texas

Professional Work History

2020-Present ; Associate Professor, Nursing , New York Institute of Technology, New York

2018- Present ; Visiting Professor Mountainview College Dallas, Texas

2014- Present; Owner, Program Director Solomon's Healthcare Academy, Inc. Carrolton, TX

2013- Present Case Manager Committed Home Health Care, Plano, TX

Professional Associations and Activities

Dates	*Role*	*Organization*
2012- Present 2012-Present 2012 Present	Public relations Chair Member Member	Indian American Nurses Association of North Texas Sigma Theta Tau International Honor Socity of Nursing National Association of Indian Nurses of America
2006- Present	Member	American Association of Critical Care Nursing
2017-Present	Member	NLN
2013-Present 2006-2012	Member Member	International Nurses Association Massacheussetts Nurses Association

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Research and Grants

EBP Project lead Community based Fall prevention: Implementation of STEADI Toolkit Self None

EBP Project lead PUPIE (Pressure Ulcer prevention Includes Everyone) Project Self None

Presentations

February 2019- Community based Fall prevention: Implementation of STEADI Toolkit Poster Presentation National EBP conference Chamberlain University Illinois.

November 2019- Community based Fall prevention: Implementation of STEADI Toolkit Podium Presentation, National association of Indian Nurses of North America Irving, TX.

November 2019- Community based Fall prevention: Implementation of STEADI Toolkit International Biennium Conference SIGMA international, Washington D.C.

Abstract

Next-Generation Florence with Fortitude: Analysis of Post-COVID Nursing Profession

Jiji Sally Varughese

Associate Professor, Nursing , New York Institute of Technology, New York

The pandemic outbreak for Novel Coronavirus disease (COVID-19) started with a global fear and leading to a holistic view of a new normal lifestyle. The presentation aims to bring enlightenment into nursing professionals' fearful attitude to a fortitude perspective filled with emotional intelligence. A systematic review of scholarly peer-reviewed databases and a careful dissection of the present nursing perspectives through professional interaction of the author through professional networking is done to develop a fortitude to move on to a new normal (Jennings, & Yeager, 2020). The COVID-19 urged the need to develop a new strategic plan on every aspect of the nursing profession, just as it did for humanity. Increased dependency on graphic interface and information technology in training and professional practice changed the professional attitude to a new normal (Monaghesh, & Hajizadeh, 2020). A paradigm shift from touch therapy to telenursing brings emotional intelligence concepts from boardroom to bedside (Alonazi, 2020).

Keywords: Fortitude, Graphic interface, Next-Gen nursing, telenursing, Virtual clinical simulations (VSIM), emotional intelligence (EI)

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Invited Lecture – 4

SDGs Business Model Formulation Survey in India and possible collaboration with Biyani Group of Colleges

Junya Harada

Affiliation & Contact:
ISE Foods Inc., Senior Advisor, Overseas Business Division
Address: Tokyo Kotsu Kaikan 8F. 2-10-1 Yurakucho,
Mobile: +81-80-9882-3538 email: harada-junya@ise-egg.co.jp

Industry:
Agriculture, Poultry farming

Education:
2004-2006 MBA, Nihon University Graduate School of Business / Tokyo, Japan
1992-1995 BA, University of Lethbridge / Lethbridge, Alberta, Canada

Abstract

SDGs Business Model Formulation Survey in India and possible collaboration with Biyani Group of Colleges

Junya Harda
Senior Advisor, Overseas Business Division, ISE Foods Inc.

ISE Foods Inc. has two projects in India. One is FDI and the other is SDGs projects.

We have JV with Suzuki Motor Corporation, the company called ISE-SUZUKI EGG INDIA PRIVATE LIMITED (ISEI). ISEI is working on FDI project. And ISE Foods Inc in Japan is doing the SDGs project.

<FDI project>

ISE Foods has more than 100 years' experience in poultry farm business. We have created our own ecosystem, called "ISE Integration System". Our standard size of poultry farm is 1.2 million birds, our

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productive capacity is over 1 million eggs per day. We'd like to introduce large poultry farm and manufacture into India.

<SDGs project>

ISE Foods Inc. in Japan will start SDGs project in India next year. Japan International Cooperation Agency, JICA entrusted SDGs Business Model Formulation Survey to us. And we have picked the government of Telangana, Directorate of Veterinary & Animal Husbandry, as our counterpart. We'd like to contribute SDGs goals of GOAL 1: No Poverty, GOAL 8: Decent Work and Economic Growth and GOAL 12: Responsible Consumption and Production. And the purpose of our SDGs project is Doubling Farmers' Incomes, particularly poultry farmers in India, which is indicated in INDIA Three Year Action Agenda 2017-18 to 2019-20.

And we have been talking with Biyani Group of Colleges how we can work together on both our FDI and SDGs projects. Especially young talented students of Biyani College, we'd like to create special agricultural training for them to be key players in our poultry farm business in Japan and India.

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Invited Lecture-5

Comparison of sensitivity and rapidness of PCR, recombinase polymerase amplification, and RNA-specific amplification for detection of rice yellow mottle virus

Kevin Maafu Juma

Laboratory of Enzyme Chemistry; Food Science and Biotechnology; Graduate School of Agriculture; Kyoto University; Phone +81-75-753-6268; Fax +81-75-753-6265; Email: jumakelvin19@gmail.com

Research Interest:

Enzyme chemistry, Recombinase polymerase amplification

Education & Professional Career:

2007-2011- Moi University, Kenya

2010- Intern at Kenya Plant Health Inspectorate Service

2012 - Teacher at Chiliba Secondary School

2012-2013- Sales officer at Kenya Commercial Bank

2013-2017- Graduate Clerk at Co-operative Bank of Kenya

2018-2019- Research student, Graduate School of Agriculture, Kyoto University

2019- Present Master course student, Graduate School of Agriculture, Kyoto University

Major Publications

Juma, K. M., Kojima, K., Takita, T., Natsuaki, K., and Yasukawa, K.: Comparison of sensitivity and rapidness of PCR, recombinase polymerase amplification, and RNA-specific amplification for detection of Rice yellow mottle virus. J. Biol. Macromol. in press.

Kojima, K., Juma, K. M., Akagi, S., Yahashi, K., Takita, T., O'Sullivan, C. K., Fujiwara, S., Nakura, Y., Yanagihara, I., and Yasukawa, K. Solvent engineering studies on recombinase polymerase amplification J. Biosci. Bioeng. in press.

 ISBN: 978-93-83462-98-8

Abstract

Comparison of sensitivity and rapidness of PCR, recombinase polymerase amplification, and RNA-specific amplification for detection of rice yellow mottle virus

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Division of Food Science and Biotechnology, Graduate School of Agriculture, Kyoto University, Sakyo-ku, Kyoto 606-8502, Japan

Rice yellow mottle virus (RYMV) causes rice yellow mottle disease, which is a severe disease of rice in Africa. The genome of RYMV is a single-stranded, positive sense RNA of 4,450 nucleotide. Recombinase polymerase amplification (RPA) and RNA-specific amplification are isothermal reactions. RPA specifically amplifies a target DNA sequence at around 37-42ºC with recombinase, single-stranded DNA-binding protein, and strand-displacing polymerase. RNA-specific amplification specifically amplifies a target RNA sequence at around 40-43ºC with reverse transcriptase and RNA polymerase. Both isothermal reactions are useful to detect various pathogens. In this study, we developed detection systems of RYMV DNA or RNA using each of PCR, RPA, and an RNA-specific amplification. The sensitivities were in the range of several copies of the target DNA for PCR and RPA and dozens copies of the target RNA for RNA-specific amplification. The cycle numbers or reaction times required for amplification from 10^9 copies of the target DNA or RNA were 15 cycles (27 min) for the PCR-based system and 5-10 min for RPA- RNA-specific amplification-based systems. These results suggested that isothermal RPA and RNA-specific amplification-based detection systems of RYMV will be more suitable for quick detection of RYMV-infected rice plants than the PCR-based one.

Keywords: nucleic acid amplification, next-generation sequencing, reverse transcriptase, recombinase polymerase amplification.

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Invited Lecture – 6

Alteration of enzymes and their application in rapid nucleic acid amplification to combat the virus pandemic

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Research Interest: Enzyme Chemistry, RNA amplification

Education & Professional Career: 1978-1982 - University of Tokyo

1982-1984 - Graduate School of Science, University of Tokyo

1984-2004 - Researcher in Tosoh Corporation

1989 - Ph.D. Osaka University (Medicine)

2004-2013 - Assoc. Prof in Kyoto University

2013 - Present Prof in Kyoto University

Major Publications

Kojima, K., Juma, K. M., Akagi, S., Yahashi, K., Takita, T., O'Sullivan, C. K., Fujiwara, S., Nakura, Y., Yanagihara, I., and Yasukawa, K. Solvent engineering studies on recombinase polymerase amplification J. Biosci. Bioeng. in press

Yasukawa, K., Yanagihara, I., and Fujiwara, S.: Alteration of enzymes and their application to nucleic acid amplification (Review). Int. J. Mol. Med. 46: 1633-1643, 2020

Yasukawa, K., Mizuno, M., Konishi, A., and Inouye, K.: Increase in thermal stability of Moloney murine leukaemia virus reverse transcriptase by site-directed mutagenesis. J. Biotechnol. 150: 299-306, 2010

Ishiguro, T., Saitoh, J., Horie, R., Hayashi, T., Ishizuka, T., Tsuchiya, S., Yasukawa, K., Kido, T., Nakaguchi, Y., Nishibuchi, M., and Ueda, K.: Intercalation activating fluorescence DNA probe and its application to homogeneous quantification of a target sequence by isothermal sequence amplification in a closed vessel. Anal. Biochem. 314: 77-86, 2003.

 ISBN: 978-93-83462-98-8

Abstract

Alteration of enzymes and their application in rapid nucleic acid amplification to combat the virus pandemic

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Since the discovery of polymerase chain reaction (PCR) in 1985, several methods have been developed to achieve nucleic acid amplification, and are currently used in various fields including clinical diagnosis and life science research. Thus, a wealth of information has accumulated regarding nucleic acid-related enzymes. In this review, some nucleic acid-related enzymes were selected and the recent advances in their modification along with their application to nucleic acid amplification were described. The discussion also focused on optimization of the corresponding reaction conditions. Using newly developed enzymes under well-optimized reaction conditions, the sensitivity, specificity, and fidelity of nucleic acid tests can be improved successfully.

Despite being a widespread analytical method both in fundamental research and clinical diagnosis, there are limitations in nucleic acid amplification, which are represented by false-positive and false-negative results. Many efforts are still being devoted to improve the sensitivity, specificity, rapidness, and accuracy of nucleic acid amplification. The catalytic mechanism of nucleic acid-related enzymes has been extensively investigated by means of X-ray crystallography, kinetic analysis, and site-directed mutagenesis, leading to the generation of enzymes exhibiting extremely high activity and stability. Such enzymes and optimized reaction conditions offer many advantages that can be expected to enhance the efficiency of nucleic acid amplification tests, which may meet the increasing demand of point-of-care diagnosis both in developed and developing countries. In this symposium, I will outline recent advances in nucleic acid amplification technologies. The foci of the study are, reverse transcriptase as an example of an enzyme that has been markedly improved by genetic engineering; recombination polymerase amplification, an isothermal amplification which has attracted a great deal of recent attention, and next-generation sequencing (NGS) which was used to evaluate the fidelity of cDNA synthesis.

Keywords: nucleic acid amplification, next-generation sequencing, reverse transcriptase, recombinase polymerase amplification.

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Invited Lecture - 7

Use of Asynchronous Assessment Techniques to Attain the Learning Outcomes of the Health Sciences Courses and Fill Gap between Industry and Academia

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The University of the West Indies; St. Augustine, Trinidad & Tobago, WI
Email: mmingupta@gmail.com

Presently working as Associate Professor (Senior Lecturer) in Pharmaceutics at School of Pharmacy, Faculty of Medical Sciences, The University of The West Indies, St. Augustine, Trinidad & Tobago. I have worked as Chairman of Research Committee of School of Pharmacy, Faculty of Medical Sciences, The University of The West Indies, St. Augustine, Trinidad & Tobago. I am also chairman of assessment committee of the School of Pharmacy, Faculty of Medical Sciences, The University of The West Indies, St. Augustine, Trinidad & Tobago. He Developed a Laboratory of Pharmaceutical Formulation Development and Design in the School of Pharmacy, Faculty of Medical Sciences, The University of The West Indies, St. Augustine, Trinidad & Tobago. Dr. Gupta has worked as Professor& Principal, Associate Professor and Head, lecturer in India. By qualification Dr. Gupta is B.Pharm., M.Pharm (Pharmaceutics), Ph.D (Pharmaceutical Sciences), MBA (Human Resources Management), PgCUTL (Post graduate Certificate in University Teaching and Learning from the University of The West Indies, St. Augustine, Trinidad & Tobago), PDCR (Professional Diploma in Clinical Research), Certificate in General Course on Intellectual Property from World Intellectual Property Organization (WIPO) Geneva, Switzerland

Dr. Gupta has published 65 Research and Review article in peer reviewed National and International Journals and has published 5 books (Four at International Level for Postgraduate students and one at National Level for Graduate students) and one book chapter by CRC Press, Taylor and Francis Group Total research grant receive from national and International agencies is more than 32 Lakh Indian Rupees.

Awards and Honours

- My Biography Published in Marquis Who's Who United states of America in 2016
- Best Citizen of India award by best citizen publishing house, new Delhi, India in Nov 2016
- Received "Young Scientist Award- 2017 by EET CRS India
- Received Young talent Award by Association of Pharmacy Professional in January2016.
- Received "International Achievement Award" in 2nd Science and Technology award-2014 by EET CRS India.

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Membership

- Member of American Association of Pharmaceutical Scientist (AAPS), International Pharmaceutical Federation (FIP), Caribbean Academy of Sciences, Trinidad & Tobago, West Indies
- Life member of Indian Science Congress, Kolkata, India, APTI, IPGA, IPA, ISTE, ISPOR
- Editorial board member of more than 11 National and international Journals

Abstract

Use of Asynchronous Assessment Techniques to Attain the Learning Outcomes of the Health Sciences Courses and Fill Gap between Industry and Academia

Madan Mohan Gupta

School of Pharmacy, Faculty of Medical Sciences, The University of the West Indies

The emergence and global spread of COVID-19 has disrupted the traditional methods of teaching, learning and assessment throughout the world. All the academic institutions globally were caught unprepared and this jeopardised the face-to-face method of teaching and assessment of learning outcomes of curriculum. Teaching institutions have shifted to an asynchronous mode whilst attempting to preserve the principles of integrity, equity, inclusiveness, fairness, ethics, and safety. A framework of assessment that enables educators to utilise appropriate methods in measuring a student's progress is crucial for the success of teaching and learning, especially in health education that demands high standards and comprises consistent scientific content. In present covid-19 situation when an educator want to assess students' knowledge, competency as well as skills within the frame work of learning outcomes, a suitable environment is crucial and for that an asynchronous assessment can fulfil the need up to an extent. Assessment methods such as open-ended short answer questions, problem-based questions, oral exams, and recorded objective structured clinical exams (OSCE) would be appropriate for use in an asynchronous environment to assess the knowledge and competence of health professional students during COVID-19. Fairness and integrity can be ensured by using technological tools such as video and audio recording surveillance so to fill the gap between academic and industry learning outcomes could be designed as per the need of global market and these can be assess in present new normal condition in asynchronous environment.

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Invited Lecture – 8

Aptamer as smart drug solution for unreached medical challenges

Dr. Madhu Biyani

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Faculty of Pharmaceutical Sciences, Kanazawa University; Kakuma-machi, Kanazawa 920-1192, JAPAN
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Research Interest:

Aptamer technology, Cancer therapeutic

Education & Professional Career:

2006-2013: Ph. D. and Post doc in Saitama University (Evolutionary Molecular Engineering Biology)

2014-2015: Post doc in Japan Advance Institute of Science and Technology (Polymer chemistry) (JAIST)

2015-2018: Researcher in BioDevice Technology Ltd, Ishikawa, Japan

12019-2020: Post doc in Toyama Prefectural University (Pharmaceutical division)

Present: Assistant Prof. in WPI-NanoLSI, Drug metabolism & Toxicology laboratory, Kanazawa University

Major Publications

M. Biyani, R. Biyani, T. Tsuchihashi, Y. Takamura, H. Ushijima, E. Tamiya, M. Biyani. "DEP-On-Go for simultaneous sensing of multiple heavy metals toxicity in environmental samples", Sensors 2017, 17, 45.

M. Biyani, K. Kawai, K. Kitamura, M. Chikae, M. Biyani, H. Ushijima, E. Tamiya, T. Yoneda, Y. Takamura. PEP-on-DEP: A competitive peptide-based disposable electrochemical aptasensor for renin diagnostics. Biosensors & bioelectronics 84 120 - 5 2016.

M. Biyani, M. Futakami, K. Kitamura, M. Suzuki, T. Kawakubo, K. Yamamoto and K. Nishigaki. In vitro selection of cathepsin E-activity-enhancing peptide aptamers at neutral pH. Int. J. of Peptides 2011.

 ISBN: 978-93-83462-98-8

Abstract

Aptamer as smart drug solution for unreached medical challenges

Madhu Biyani, Masako Nakano, Manish Biyani and Miki Nakajima

Drug Metabolism and Toxicology, Faculty of Pharmaceutical Sciences, Kanazawa University, WPI Nano Life Science Institute (WPI-NanoLSI), Kanazawa University, Kakuma-machi, Kanazawa 920-1192, JAPAN

The development of therapeutic molecules that specifically bind or inhibit the cancer therapeutic target proteins has strengthen the hope of progression of cancer treatments. By combining greater efficacy with selective targeting the cancer biomarker proteins, treatments aim to inhibit tumor cell proliferation, invasion, and reduce the adverse cytotoxic side effects caused by conventional chemotherapy. At present, antibodies represent the largest class of therapeutic agent for the specific binding of cancer cell surface biomarkers. Several antibodies have been approved and are widely used in cancer as diagnostic tools and selective therapeutics. Although, antibodies are less toxic than conventional chemotherapeutics, but they are large in size, complex molecules that are expensive to produce, which has hampered a broader application to the clinic. As an alternative molecular therapy, a nucleic acid aptamer, a sort of "smart" molecule that has gained lots of attention as smart drug solution for unreached medical challenges.

Aptamers are single-stranded oligonucleotides that are selected from high-diversity DNA (or RNA) pools. By unique 3-D specific conformation, aptamers strongly bind to and inhibit protein targets. Chemically modified aptamers exhibit low immunogenicity and toxicity, and an increased half-life in the circulation, making them very attractive and effective therapeutics. Owing to their high specificity of target binding, relatively rapid in vitro production and with high batch-to-batch reproducibility, aptamers thus represent a promising alternative to antibodies.

In this symposium, I will describe the application of our advance in vitro aptamer selection technology for a rapid and selective identification of inhibiting aptamers to potential cancer therapeutic target protein, Adenosine Deaminases Acting on RNA 1 (ADAR1) enzyme. ADAR1 converts adenosines in double-stranded RNA (dsRNA) structures into inosines by hydrolytic deamination. Inosine forms a base pair with cytidine as if it were guanosine; consequently, A-to-I RNA editing may affect the amino acid sequence, splicing, and mRNA stability. The overexpression of ADAR1 or excess RNA editing has been identified to play role in cancer development. Therefore, we aim to develop the inhibiting aptamer targeting ADAR1 for treatment of cancer.

Keywords: Aptamer, Cancer, ADAR1, A-to-I RNA editing, dsRNA.

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Invited Lecture - 9

Basic Medical Research in the "New Normal"

Dr. Prasanna Honnavar

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Work Experience

May 2017- till date - Assistant Professor, Dept. of Microbiology and Immunology, Xavier University School of Medicine, Oranjestad, Aruba-The Dutch Caribbean.

Teaching the MD students and Research

Oct 2016- April 2017- Assistant Professor, Dept. of Microbiology, Saraswati Medical College and Research Centre, Unnao, Lucknow, UP

Teaching the MBBS students and Research

July 2015 – Sep 2016 - PhD scholar, Dept. of Medical Microbiology, Postgraduate Institute of Medical Education and Research, Chandigarh

Teaching the postgraduate students (MD and MSc) and Research

July 2010 – June 2015 - Senior research fellow, Dept. of Medical Microbiology, Postgraduate Institute of Medical Education and Research, Chandigarh

Dec 2009 – June 2010 Assistant Professor, Dept. of Microbiology and Immunology, Xavier University School of Medicine, Oranjestad, Aruba-The Dutch Caribbean.

Teaching the MD students and Research

Publication

Hussain A, Tabrez E, Peela J, Honnavar P, Tabrez S. Vitamin C: A Preventative, Therapeutic Agent Against Helicobacter pylori. Cureus 10(7): e3062.

P Honnavar, AK Ghosh, S Paul, SA Shankarnarayan, P Singh, S Dogra, A Chakrabarti, SM Rudramurthy. Identification of Malassezia species by MALDI-TOF MS after expansion of database. Diagn Microbiol Infect Dis. 2018 (press).

P Honnavar, A Chakrabarti, GS Prasad, J Joseph, S Dogra, and SM Rudramurthy. The lipase activities of Malassezia species isolated from Seborrhoeic dermatitis/dandruff patients. J Clin Diagn Res. 2018,12:DC17-DC19

Zaman K, Rudramurthy SM, Das A, Panda N, Honnavar P, Kaur H, Chakrabarti A. Molecular diagnosis of rhino-orbito-cerebral mucormycosis from fresh tissue samples. J Med Microbiol. 2017;66(8):1124-1129.

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Abstract

Basic Medical Research in the "New Normal"

Prasanna Honnavar

Department of Microbiology & Immunology, American University of Antigua College of Medicine, Antigua
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Post-Covid era is going to provide opportunities as well as challenges for basic medical research. Academia is considered to be loneliness and isolating experience, on top of that quarantine has increased the stress level in the research community. During corona virus outbreak, CDC has even shared the mental health stress management guidelines in its website. Pandemic has aggravated stress in academia many folds. Only few research supervisors are supportive, whereas most of them show passive-aggressive behavior towards the student. One of the biggest setbacks is the travel bans on international students and cancellation of conferences and symposiums. The less opportunity of meeting collaborative partners, on-site job interviews, networking is resulting in thinking locally, losing diversity and less brainstorming. But creative thinking has also paved the way for virtual conferences like BICON-2020. The pandemic has also resulted in research fund crunching, few scholarships and freezing of new jobs. A silver lining among the struggles is the increase in respect and focus on scientific striving hard to come up with an effective vaccine. The current scenario where many countries have reduced research funding, however the pandemic has put basic science back on the table as a guiding force for the survival of the race.

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Invited Lecture – 10

Role of medicinal plants in boosting immunity during COVID 19 Pandemic

Dr. Pooja Jha Maity

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Teaching experience at University of Delhi:

Assistant Professor in the Department of Botany, Ramjas College, University of Delhi. (5th January 2017- till now)

Guest Lecturer in the Department of Botany, Maitreyi College, University of Delhi. (15th September- 20th November 2016)

Assistant Professor in the Department of Botany, Miranda House, University of Delhi. (20th July 2016 – 19th November 2016)

Departmental Research Associate in the Department of Botany, University of Delhi. (13th July 2015 – 12th July 2016)

Taught 1. Plant Biotechnology & Resource Utilization 2. Developmental Biology and Plant Diversity 3. Advances in Archegoniate and 4. Genomics and Proteomics to post graduate Students.

Teaching experience at Stockholm University:

Taught undergraduate students in fall term 2013 at Department of Ecology, Environment and Plant Sciences, Stockholm University, SE-106 91 Stockholm, Sweden

Researcher Positions:

March 2013-April 2015: Worked as post-doctoral fellow with Prof. Katharina Pawlowski at Department of Ecology, Environment and Plant Sciences, Stockholm University, SE-106 91 Stockholm, Sweden, on project: Regeneration and genetic transformation of the actinorhizal plant Datisca glomerata. (Financed by Carl Tryggers Stiftelse)

April 2012 – February 2013: Worked as visiting research fellow with Prof. Sylvia Lindberg at Department of Ecology, Environment and Plant Sciences, Stockholm University, SE-106 91 Stockholm, Sweden, on projects:

Academic qualifications:

Doctor of Philosophy (Botany): April 2006 - December 2011. Degree awarded: January 2012 Department of Botany, University of Delhi, Delhi 110 007, India.

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Supervisor: Professor Vishnu Bhat

PhD thesis title: In vitro genetic manipulation of Pennisetum glaucum (L.) R. Br.

Master of Philosophy (Botany): September 2004 - March 2006 (Marks obtained: 78%/1st Division) Department of Botany, University of Delhi, Delhi 110 007, India.

Supervisor: Professor Vishnu Bhat

Title: In vitro plant regeneration through somatic embryogenesis and direct shoot organogenesis in Pennisetum glaucum (L.) R. Br.

Master of Science (Plant Science): July 2002 - May 2004 (Marks obtained: 76%/1st Division) Department of Biosciences and Biotechnology, Banasthali Vidyapith, Rajasthan, India.

Bachelor of Science (Botany Hons.) July 1997- June 2001 (Marks obtained: 73%/1st Division) St. Columba's College, Vinoba Bhave University, Hazaribagh, Jharkhand, India

Major Publications Published in journals:

Irina V. Demina, Pooja Jha Maity, Anurupa Nagchowdhury , Jason L. P. Ng, Eric van der Graaff, Kirill N. Demchenko, Thomas Roitsch, Ulrike Mathesius and Katharina Pawlowski. Accumulation of and Response to Auxins in Roots and Nodules of the Actinorhizal plant Datisca glomerata Compared to the Model Legume Medicago truncatula. Frontiers in Plant Science. doi: 10.3389/fpls.2019.01085.

Bharti Chaudhry, Suresh Kumar, Anupama Tiku and Pooja Jha Maity (2019). Micropropagation of a medicinally important plant: Bacopa monnieri. Medicinal Plants Vol. 11 (2): 177-182.

Abstract

Role of medicinal plants in boosting immunity during COVID 19 Pandemic

Pooja Jha Maity

Assistant Professor, Department of Botany, Ramjas College University of Delhi, Delhi

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World is suffering from the massive spread of SARS-CoV-2 infection (COVID-19) with more than 72.4 million confirmed cases and about 1.61 million deaths. In the current scenario, where any full proof medicines are not available and the vaccines may take some time to reach the common people, immunity boosting medicinal plants (their extracts and formulations) could be a good remedy to reduce the mortality rate and spread of the infection related to COVID-19. Medicinal plants having low cost, minimum toxicity and rich availability. They provide healthy environment to body and boost the immunity without any side effects. Individual or combinations of extracts from several medicinal plants like Ocimum sanctum, Zingiber officinale, Curcuma longa, Azadirachta indica, Syzygium aromaticum, Piper nigrum, Tinospora cordifolia etc. could be utilized as potential immunity boosters or effective viricidal agents.

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Invited Lecture -11

Data integrity and their role in QAQC

Dr. Pramod Kumar

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Research interest

Nitrosamine impurity profiling, Analytical Method development and validation, Analytical quality by design, Stability testing and Pharmacokinetic

Teaching Interest

Topics in Pharmaceutical Analysis, Quality Control and Quality Assurance, Pharmacopoeial methods of Analysis, Troubleshooting of HPLC, GC-MS and LC-MS/MS

Experience

August 2018 - Present: Assistant Professor, Department of Pharmaceutical Analysis, National Institute of Pharmaceutical Education and Research, Guwahati, Assam, India.

December 2017 - August 2018: Research Associate, School of Pharmaceutical Education and Research, Jamia Hamdard (Deemed to be University), New Delhi, India.

April 2016 - November 2017: Senior Research Fellow, Department of Pharmacy, Central University of Rajasthan, Ajmer, India.

April 2014 – March 2016: Junior Research Fellow Department of Pharmacy, Central University of Rajasthan, Ajmer, India.

Publication

Mukta Agrawal, Shailendra Saraf, Swarnlata Saraf, Sunil K Dubey, Anu Puri, Umesh Gupta, Prashant Kesharwani, V Ravichandiran, Pramod Kumar, V G M Naidu, Upadhyayula Suryanarayana Murty, Ajazuddin, Amit Alexander, Stimuli-responsive In situ gelling system for nose-to-brain drug delivery, In press, DOI: 10.1016/j.jconrel.2020.07.044, Journal of Controlled Release, ISSN: 0168-3659 (print); 1873-4995 (web) [Impact factor 8.626].

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Athira K V, Rajaram Mohanrao Madhana, Akhilesh Kumar Bais, Vijay Bahadur Singh, Arpit Malik, Swapnil Sinha, Mangala Lahkar, Pramod Kumar, Pavan Kumar Samudrala, Cognitive improvement by vorinostat through modulation of endoplasmic reticulum stress in a corticosterone-induced chronic stress model in mice, In press, 2020, doi: 10.1021/acschemneuro.0c00315. ACS Chemical Neuroscience, ISSN: 1948-7193 (print) 1948-7193 (e) [Impact factor 4.486]

Abstract

Data integrity and their role in QAQC

Pramod Kumar

Assistant Professor, Department of Pharmaceutical Analysis National Institute of Pharmaceutical Education and Research (NIPER) Guwahati, Assam (India)-781125

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Data integrity has been considered as backbone for pharmaceutical regulatory affairs now some days in current global scenario. Data integrity is the assurance that data records are accurate, complete, intact and maintained within their original context, including their relationship to other data records. Completeness, consistency and accuracy of data. Back dating of the document, fabricating the data, copy the existing data, discarding data, destroying raw data are the major concern during regulatory audits. Various factors contributing to data integrity will be discussed during presentations.

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Invited Lecture -12

Virtual Reality for Virus-X

Ms. Radhika Biyani

Bioscience and Biotechnology, Material Science, Graduate School of Advanced Science and Technology, Japan Advanced Institute of Science and Technology, Phone +81-80-9781-9989, biyanirb@gmail.com

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

Publications

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.

Rathore, Himankshi, Radhika Biyani, Hirotomo 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.

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).

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.

 ISBN: 978-93-83462-98-8

Abstract

Virtual Reality for Virus-X

Radhika Biyani, Manish Biyani, Masahiro Takagi
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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 -13

Creating Indian Pharma, a global R&D leader: Opportunities and Challenges

Dr. Shekhar Verma

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Presently Dr. Shekhar Verma working as a Professor & Principal at Pt Deendayal Upadhyay Memorial Health Sciences and Ayush University of Chhattisgarh. Raipur, India. He has done his graduation from University teaching department, Gurughasidas University Bilaspur (CG) and done post-graduation from B.R.Nahata College of Pharmacy Mandsaur (MP). He has completed his PhD from Guru Ghasidas Central University Bilaspur (CG). Dr, Shekhar Verma has vast experience of academic, administrative and research.

Dr. Shekhar Verma actively involved in a research in field of Novel and Controlled Drug Delivery System, Non aqueous dispersion for poorly aqueous soluble drugs, Herbal Nutraceuticals, Nutraceuticals etc. Presently he is working on few funded research project. Dr Shekhar Verma is also Nominee of committee for the purpose of control and supervision of experiments on animals (CPCSEA), New Delhi. Recently he has awarded best young teacher award by premier pharmacy publication company, Nirali Publication New Delhi.

Dr. Shekhar Verma published his research work in many national and international journals having high impact factor and also presented his work in different national and international conferences and seminars. He also participated and presented his research paper in international conferences at Dubai (UAE), Bangkok, Thialand and Malysia. Dr Shekhar Verma is a member of editorial board in different national and international journals. He has also chaired different scientific session in national and international seminar-conferences.

Dr Shekhar Verma is a life member of Professional bodies like Association of Pharmaceutical Teachers of India (APTI), Indian Pharmaceutical Association (IPA) and Indian Chemical Society (ICS). He is chairman of board of studies of Pharmacy, Pt. Deendayal Upadhyay Memorial Health Sciences and Ayush University of Chhattisgarh, Raipur and previously he was member of board of studies at Chhattisgarh Swami Vivekanand Technical University, Bhilai.

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Abstract

Creating Indian Pharma, a global R&D leader: Opportunities and Challenges

Dr Shekhar Verma

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Various policy reforms have been introduced in the Indian pharmaceutical sector since the 1990s, aimed at incentivizing the private sector R&D. Patent reforms was the most significant policy reform. An assumption that the Indian pharmaceutical firms have become capable of developing new drugs underlined these reforms and it was expected that both the Indian firms and MNCs would invest in R&D on new drugs not only for diseases that are prevalent globally but also for diseases that are specific to India and other tropical countries.

Now Indian Pharma is on the top of significant change. Its next phase of growth and continued progress is becoming increasingly dependent on the development of innovative and differentiated pharma products speciality generic complex drugs or biologics. As a result, honing and amplifying its skills and capabilities in R&D has become an exigency for pharma companies to create intellectual property, improve product life-cycle management, and gain cost as well as market differentiation.

Keywords: R&D, innovative pharma products, generic complex, policy reforms, Patent

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Invited lecture – 14

New Era of Business in Post COVID-19

Dr. Sudhir Vyas

Dr. Sudhir Vyas worked as SR in Cardiology & Medicine, Now Working as CEO of Criticonix, outsourcing ICU, HDU, ER of Hospitals and Medical Colleges.

Abstract:

COVID-19 totally affected the health care sector not only in India but across the nation. Global medical supply chains are in a weak state, given manufacturing plant shutdowns that have led to a shortage of drugs, testing kits, and other essential items. Pharmaceutical companies are trying to make peace with this new reality and are looking for solutions that mitigate and eventually prevent recurrences of the COVID-19 outbreak. Governments, hospitals, investors, pharma companies, and related businesses are all working toward fast-tracking clinical trials.

Keywords: Pharmaceutical, COVID-19, Clinical trials

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Invited Lecture -15

Virtual asparagus harvesting robot competition- project based learning on agriculture

Takashi Kei Saito

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Research Interest:
Cell-Based Device Therapy, Neural Interface, Bio-Robotics

Education & Professional Career:

1988-1992 - Tohoku University

1992-1994 - Graduate School of Engineering, Tohoku University

1994-1999 - Graduate School of Engineering, University of Tokyo

1999 - Ph.D. The University of Tokyo (Engineering)

1996-1997 - Trainee, BEBIG Isotopentechnik GmbH, Berlin,Germany

1999-2002 - Research Associate, The University of Tokyo

2002-2004 - Research Fellow, National Cardiovascular Center Research institute

2004-2005 - Bio Business Consultant, Toyama New Industry Organization

2005-2008 - Specially Appointed Associate Professor, Osaka University

2008-2010 - Research Fellow, The University of Tokyo

2010 - Associate Professor, Akita Prefectural University

1978-1982 - University of Tokyo

Major Publications

Saito T.K., Seki M. and Tabata H. Self-organized ZnO nanorod with photooxidative cell membrane perforation enables large-scale cell manipulation. Analytical and Bioanalytical Chemistry, 391(7), 2513-2519, 2008.

Tachibana T., Suzuki Y., Fujioka K., Ikeda K., Inoue Y., Tada Y., Saito T.K. and Manome Y. Cell Membrane Perforation with Photosensitizer and a Brush-shaped Soft-polymer Sheet Using a Malignant Glioma Cell Line. Anticancer Res. 35(11): 6069-6074

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Abstract

Virtual asparagus harvesting robot competition- project based learning on agriculture

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At Akita Prefectural University, a new department, Department of Intelligent mechatronics, was established in 2018, and I have started exercises using robot competitions in education as the main instructor. For the first-year students, my team asked them to compete in a team of 5-6 students to build their own system using LEGO Mindstorms robot kits, with the task of a roof snow removal robot project. In 2020, as the advanced project for the third-year students, we prepared "Automatic asparagus harvesting robot competition," which was based on the theme of agricultural robots. However, due to the spread of COVID-19, it was decided that this exercise would be conducted via online. In order to meet the challenge of conducting this group exercise via online, we took advantage of a software license for students. We employed online meeting software “Zoom” (Zoom Video Communications) as the basis for the remote class, LabVIEW (NI) for programming, LabVIEW Vision for image processing, LabVIEW robotics for simulation in the virtual environments and Fusion 360 (Autodesk) for object modeling. The students were asked to produce all of their work in the form of a simulation program for an automatic harvesting robot. After a four-month preparation period starting in May 2020, the presentation of the results of the students' work on the "Automatic asparagus harvesting system" was held on Thursday, August 20, 2020. On the day of the event, each group gave a presentation of their work and competed in the actual operation of their creations. In the competition, the participants had to avoid obstacles such as unripe or overgrown asparagus, standing stalks with leaves, harvest asparagus of the appropriate size, and carry them to the delivery area.There were some difficulties with virtual system, such as the asparagus bouncing and getting caught, which is different from the actual movement of an object, but there were some ingenious creations for better harvesting. These programs will be applied to actual agricultural and industrial cooperative research in the future.

Keywords: agriculture, robot, virtual system, asparagus, project-based learning.

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Invited Lecture -16

Healthcare Delivery System to Fight against Covid-19

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Eternal Heart Care Center and Research Institute, critical care medicine, Jaipur

Education:

Post - Doctoral Fellowship in Critical Care Medicine, Jaslok Hospital and Research Centre (JHRC), Mumbai (Maharashtra), National Board of Examinations.

European Diploma in Critical Care – EDIC, Conducted by European Society of Intensive Care Medicine (ESICM).

Fellowship in Extra Corporeal Membrane Oxygenation (FIECMO), The Simulation society (TSS).

MD (Anesthesia), R N T Medical College, Udaipur (Rajasthan), Rajasthan University of Health Sciences.

MBBS, J.L.N. Medical Hospital, Ajmer (Rajasthan), Rajasthan University of Health Sciences

Work Experience:

In-charge MICU, Senior Consultant Critical Care Medicine (2015 – till date)

Consultant Critical Care - Fortis Hospital, Jaipur (2014-2015)

Intensivist - Jaslok Hospital and Research Center (JHRC), Mumbai (2012-2014)

DNB Fellow in Critical Care Medicine - Jaslok Hospital and Research Center (JHRC), Mumbai (2011-2013)

Sr. Registrar in Critical Care Medicine, Medanta - The Medicity Gurgaon (2010-2011)

Publication:

Critically III obstetric patients: Assessing outcome following early intervention by anaesthesiologist. Asean Journal of Anaesthesia 2010: article 6; vol.11.

Obstetric critical care: A prospective analysis of clinical characteristics, predictability, and fetomaternal outcome in a new dedicated obstetric intensive care unit. India J Anaesth 2011;55 146-53.

Case report: Non-carduigenic pulmonary oedema after neostigmine given for reversal: A report of two cases. Indian J Anaesth 2010; 54:338-41.

Fatal sepsis in ECMO: Case report in H1N1 treated elderly patient. 5th Annual Conference of South West Asia Chapter of Extra Corporeal Life Support Organization, New Delhi, 2018.

Chapter for the book title “Perioperative Critical care” – Chapter 7: Fluid and Electrolyte Disturbances in the Perioperative Period.

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Abstract

Healthcare Delivery System to Fight against Covid-19

Vaibhav Bhargava

Eternal Heart Care Center and Research Institute, Critical Care Medicine, Jaipur

Pandemics are not new to humankind, and invariably our health system takes most of the brunt as it caters to existing workload and in addition attempts to cope with the new demand. The pandemic of a novel Coronavirus Disease 2019 (COVID-19) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV2) has posed a severe global crisis. In India, amid this global pandemic, healthcare delivery system is widely stretched. It has made us to think, not only about Covid-19 but also how to reconfigure care in hospitals, in response to Covid-19, which has led to many patients suffering non-Covid conditions having to delay their treatment.

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Invited Lecture- 17

"The New Normal-Teaching and Research Attributes"

Dr. Vishal Mathur

Assistant Professor, Sur University, Oman

Teaching Area:

Physics-I, Physics-II, Electronic Devices and Circuits

Electromagnetic Field and Waves, R.F. Microwave Engineering.

Research Interests:

Material Science- Nanoscience & Nano Technology

Education:

M.Sc. (Physics), University of Rajasthan, Jaipur, 2002.

Ph.D. (Science-Physics), University of Rajasthan, Jaipur, 2010.

Professional Experience: (12 Years)

July 2002- Sep 2005: Lecturer, S. S. Jain Subodh P.G. College, Jaipur

Oct 2005-June 2013, Faculty Member, Kautilya Institute of Technology & Engineering, Sitapura, Jaipur

July 2013- Sep 2013: Faculty Member, S. S. Jain Subodh P.G. College, Jaipur

Oct 2013 to till date: THE ICFAI UNIVERSITY, JAIPUR, INDIA

Book Published (03)

"A Textbook of Engineering Physics-II" published in 2015 through University Science Press, An Imprint of Laxmi Publications Pvt. Ltd., Delhi, as per prescribed revised syllabus of Rajasthan Technical University, Kota, Rajasthan with ISBN 978-93- 83828-44-9.

"Review on Material Science Research Characterization Techniques (Vol. I)", A Brief Introduction to FTIR, XRD, SEM, HDTCA, DMA, Electrometer & Optical Spectroscope Experimental Techniques, Published in 2014 through Lambert Academic Publishing with ISBN: 978-3-659-56482-6.

"A Textbook of Engineering Physics-I" published in 2011 through University Science Press, An Imprint of Laxmi Publications Pvt. Ltd., Delhi, as per prescribed syllabus of Rajasthan Technical University, Kota, Rajasthan, with ISBN 978-93-80856-75-9.

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Publication

Vishal Mathur, Dinesh Patidar, Kananbala Sharma, "Effect of nano CdS dispersion on thermal conductivity of PS/PVC and PS/PMMA polymeric blend nanocomposites", Applied Nanoscience, 1-6, DOI 10.1007/s13204-014-0357-7.

Vishal Mathur, Kananbala Sharma, "Probing Nanoscale Morphology of PS/PMMA/CdS & PS/PVC/CdS Polymeric Nanocomposites through Small Angle X-Ray Scattering Analysis", Modern Instrumentation, 3, 2014, 25-28.

Vishal Mathur, Kananbala Sharma, "Small Angle X-Ray Scattering Analysis of PS/CdS, PVC/CdS & PMMA/CdS Polymeric Nanocomposites", e-Journal of Surface Science and Nanotechnology 12,2014, 420-422.

Vishal Mathur, Manasvi Dixit and Kananbala Sharma, "Structural Characterization of PS, PVC and PS/PVC Polymeric Blend", SKIT Research Journal, An International Journal of Engineering, Science, Humanities And Management, 4(1) 2014, 76-77, ISSN 2278-2508

Abstract

"The New Normal-Teaching and Research Attributes"

Vishal Mathur

Assistant Professor, The ICFAI University, Jaipur, India

COVID-19 global pandemic triggered us towards "New Normal" where our formal education pattern of teaching and research stimulatory transformed to new ones that are more efficient, effective and appropriate from now onwards. Each one should be self-motivated towards developing new technical skills to normalize the New Normal life. The present talk covers the advantages of technology-based teaching and research modalities. It also brief about some online tools and ideas for teaching and research development.

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ABSTRACTS

Endocrine and Metabolic disorders relationship to Coronavirus infection

Aarushi and Shilpa Bhargava

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Abstract :

The enduring COVID-19 pandemic is produced by the novel coronavirus, SARS-CoV-2, and has shown a wonderful impact on our daily systematic practice and communal living organizations. Endocrine diseases are not an exception. Also, some endocrine organs are at high risk of straight or indirect lesions of COVID-19. Type 2 diabetes mellitus (T2DM) and hypertension are the most mutual comorbidities for coronavirus infections as SARS. The metabolic inflammation will also cooperation the protected system that decreases the body's aptitude to act against the disease. H1N1 Influenza and COVID-19 in heavy patients and severe overweightness is probably related to the damaging effects of obesity on pulmonary purpose. It can be postulated that individuals with severe COVID-19 have an imbalance in beginning of pathways like T2DM, hypertension, and insulin-resistant state. As human endocrine expresses ACE2, the virus might enter islets and cause acute β -cell dysfunction, leading to Hyperglycemia that may also disturb pulmonary function and transient T2DM. It's anticipated that glycemic control can be valuable in patients with coexisting diabetes and viral respiratory disease (COVID-19). Also, DM increases the risk of death and complications in COVID-19. COVID-19 is not primarily a metabolic disease, but metabolic control of glucose levels and blood pressure are factors in patients.

Keywords: COVID-19, Metabolic syndrome, Type 2 Diabetes.

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Impact of COVID-19 Pandemic and the Global Response

Agrima Bhatt and Tarun K. Kumawat

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Abstract :

COVID-19 outbreak has pushed the world into an economic crisis and heavily impacted major sectors of the world. Education sector was highly affected by the pandemic since the global lockdown was implemented in 185 countries resulting in the suspension of classes, examinations and internships affecting nearly 89.4% of the total student population. While in developed nations, e-learning has become the usual norm but in developing countries such as India 320 million learners have been affected with only 14.9% of rural and 42% of urban households having more than 12-hr internet access for digital education. Shutting down of academic institutes and non-essential services has led to rise in unemployment with the rate of 26.3% in

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urban sector and 23.7% in rural sector making every 4th person in India unemployed. Travelling restrictions has impacted tourism and aviation industry, putting 12-14% jobs at risk. 58% of India's population working in the agriculture sector suffered massive losses due to improper functioning of supply chains. Amid lockdown and social distancing guidelines, primary worries are job losses for daily wage earners, food insecurity, etc. The goal of this study is to develop ideas and discuss current and upcoming technologies for an effective solution. Recently, Government of India has initiated educational portals such as "e-PG Pathshala" which are accessible offline. Electronic data capture such as Elsevier's Veridata has been launched for easy analysis of COVID-19 data. Communication among researchers and countries can develop novel strategies. This review summarizes the impact and challenges of COVID-19 pandemic across different sectors.

Keywords: Pandemic**,** e-learning, Data capture, Unemployment, Innovation

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Heavy Metal Effect on Seed Germination, Root And Shoot Growth Of Fenugreek (*Trigonella Foenum-Graecum*)

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Abstract:

Fenugreek a medicinal plant as well as important spice which is used in our daily life. It is an essential spice in Indian food. Heavy metals (Copper and Zinc) affect the growth of plant adversely. Seeds were germinated in (duplicates) Petri plates using wet beds of Whatman filter paper No.1 and solution of Zn and Cu were prepared in ppm (parts per million) at different concentration of 10ppm, 50ppm, 100ppm, 250ppm, 500ppm. On alternate days these plants were given stress with heavy metal solution (Copper Sulphate and Zinc Sulphate) in Petri plates with 2ml of solution. Effect on seed germination, root and shoot growth was observed. Increase in concentration of heavy metals (Copper Sulphate and Zinc Sulphate) decreases seed gemination (shown by seed vigor index), root and shoot growth. Effects of both metal when compared showed that Copper above the permissible level is more adverse than Zinc. Heavy metals (Cu and Zn) accumulate in the root parts and reduces mineral uptake and growth of Fenugreek plant.

Keywords: Copper, Zinc, Fenugreek, germination.

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Inculcating Nature within to keep Corona apart

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Abstract:

In the past few months, the escalation of the latest SARS-CoV-2 coronavirus, the basis of the pandemic COVID-19, has arisen as a global topic of concern and emergency. It has been long since the world is fighting against the novel corona virus but there is no clinically approved antiviral drug or any vaccine against the COVID-19 till date. It can be therefore concluded that there is no promising treatment available yet and the only therapy accessible is to train ourselves with the phrase that 'Precaution is better than Cure'. The main enzymes that aid in the infection procedure are proteases (M^{pro}) and RNA dependent RNA polymerase.

Some natural products have bioactive compounds present in them that have shown possible antiviral effects and enhanced antiviral immune responses. Such compounds produce inhibitory effects on the receptors, inflammatory cytokines, bradykinin and chemokines that hinder cellular entry, replication and damage to the tissues.

The present SARS-CoV-2 situation proffers a brilliant opportunity to employ an alternate and conventional therapeutic method in the gloom of Western science to avoid COVID-19. The current review presents the 'In Silico' screening of the potent bioactive compounds found in the golden milk (turmeric milk), combination of clove powder and honey and in the herbal tea/decoction made from several nature's product involving tulsi, cinnamon, etc. These are some of the remedies known to almost every Indian home and are brought up by the traditions and cultures. The review summarizes the best possible mechanism of the bioactive compounds occuring in these mentioned remedies against the novel corona virus.

Keywords: SARS-CoV-2, Golden milk, Decoction, Antiviral effects, Antiviral immune response.

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COVID-19: Pandemic's Impact on Nature in the Future

Anuja Rajan and Vishnu Sharma
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Abstract:

The world spreading of Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) has generated a need for regular uses of personal protective equipment (such as disposable face masks, face shields, gloves, and gowns). During the pandemic, the PPE material among the general public, health care workers and

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service workers has helped to protect from the immense effect of the disease. Besides, Plastics have become a daily part and play a vital role in our daily lives. Mismanagement of personal protective equipment (PPE) during the COVID-19 pandemic is resulting in widespread environmental contamination. This poses a risk to public health as a vector for a further phase of the SARS-CoV-2 virus as well as impacts to ecosystems and organisms more broadly functions. Although the adverse use of plastic in any form has promoted plastic pollution. The main concern is that all types of plastics are non-degradable and their immense uses have become a great ecological threat to humankind. Since there are discovered some Polyethylene Terephthalate (PET) degrading microorganisms i.e. Ideonella sakaiensis & Rhodococcus rhodochrous. These bacteria can enzymatically break down the PET into terephthalic acid and ethylene glycol. So, there is an urgent need to encourage society to reduce the use of plastic and to aim for new up-gradation on the rapid degradation of all types' plastics.

Key words: COVID-19; Plastic; Ecosystem; Pollution

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Novel Coronavirus – 19 pandemic impact on private health-care services with special focus on factors determining its utilization

Anupama Goyal

Associate Professor, Department of Botany, Maharani Girls College, Kalwar Jaipur

Abstract:

The novel coronavirus disease (COVID-19) outbreak, caused by severe acute respiratory syndrome coronavirus 2, has rapidly escalated into a global pandemic which leads to declaration of national health emergency in several countries and is having a profound impact on private health-care systems globally including India in unprecedented manner. However, the impacts are very serious, especially on global economics and health care due to COVID-19 pandemic. During this pandemic, private hospitals and clinics are experiencing a reduction of in patient footfalls due to nationwide lockdown and several other factors as well which are leading to inadequate utilization of health-care services by the patients and decrease in medical services volumes which resulted in acute economic crisis. In this article, various factors that caused a significant reduction in utilization rates of private health-care systems such as hospitals and clinics were outlined and discussed.

Keywords: COVID-19, novel coronavirus, pandemic, private health-care systems

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Prevalence and effect of cardiovascular disease in the situation of the covid-19 pandemic

Bhoomika Sharma and Shilpa Bhargava

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Abstract:

The covid-19 pandemic situation stipulates a close relationship among coronavirus disease 2019 (COVID-19) and cardiovascular diseases (CVDs). More than 7% of patients involvement myocardial injury, showing a high prevalence of the cardiovascular disease. In Covid-19 patients, CVD was mutual comorbidity. Along with the elderly, the patients with pre-existing cardiovascular comorbidities appear to be at the highest risk for mortality from coronavirus disease 2019. In some cases, COVID causes thromboembolism, acute heart failure, myocarditis, etc. Age is measured to be the risk factor that links the two conditions closely. Chronic damage to the cardiovascular system can be caused due to the novel virus, so the cardiovascular system should be endangered during treatment for COVID-19. We can improve our understanding by combining our knowledge of the genetic features with clinical discoveries on the mechanisms of COVID-19 and to find out the preventive and curative solution.

Keywords: Covid-19, coronavirus, CVDs (cardiovascular diseases), heart failure.

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Isolation, Identification and Biochemical Characterization of Hydrocarbon Degrading Bacteria from Oil Contaminated Soil and their Gravimetric Analysis

Gargi Dubey[1] and Pratibha Dwivedi[2]

[1]Department of Science, Biyani Girls College, Jaipur, India

[2]Department of Botany, Research Scholar, University of Rajasthan, Jaipur, India

Abstract:

Soil which is made up of inorganic solids, organic solid gases and liquids and contaminated with hydrocarbon, oil spills are the release of liquid hydrocarbon. In present days, there is an excessive use of crude oils and from industries, tankers, automobiles etc. releases huge amount of oil spills causes environmental pollution by produces harmful gases at the time of burning which causes global warming, contaminates drinking water and food that causes serious damage to human health and have adverse effect on soil productivity, on plant growth, wildlife destruction. So, there is a necessity to remove these hydrocarbons from the soil. Mechanically and chemically these oil spills can be removed but of these methods are very costly. In place of it by using microorganism, hydrocarbons can be removed or degraded called bioremediation which is very eco-friendly and cost- effective. Soil sample were collected from three different areas of Bharatpur city (Nirmal Edible Oil Mill, Shyam Garage Area) and Jaipur city (Om Auto repair Service Centre) in Rajasthan which was coded as ES01, GS02, and GS03 and isolation of bacteria

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was done on Bushnell Hass media by enrichment process. Ten microbial strain were isolated that has the potential to degrade hydrocarbon diesel oil.

Keywords: Hydrocarbons, Bioremediation, BHMS, Microbial enrichment, Gravimetric analysis.

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Effect on Mental Health Due to COVID-19

Ishika Agarwal and Rajshri Nagar

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Abstract

With the outbreak of covid 19 Pandemic, Profound Psychological distress occurred worldwide. Due to this, the socio-economics crisis emerged which caused stress, frustration, anxiety, depression etc. in the public. Individuals have become vulnerable to the emotional impact of covid-19 and its consequences. The most common psychological problem that affected people is fear of contracting the virus. Within all these, people have neglected their mental health at times when they should make it their priority. Due to the worsening of mental health; consumption of tobacco, alcohol or drugs constantly increases. Along with certain kinds of infection and diseases, people with old age, blood pressure, heart problems or diabetes are more vulnerable to catch this virus, mental health has been badly affected from pre to post covid outbreak. The solution to this problem is to take some time out for our family members to talk, play games and indulge ourselves in other activities.

Keywords: Covid-19, Mental Health, Psychological distress, Socio- Economic stress.

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Stem Cell Therapy in treatment of Different Diseases

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Abstract:

Stem cells are the cells which lacks property of differentiation but contains the capacity to proliferate, regenerate, may convert into differentiated cells and various tissues. Stem cells had been categorized into two groups(based on origin)-embryonic(obtained from zygote)and adult stem cells(from non-embryonic cells hence called somatic stem cells).Based on potency stem cells had been categorized into- Multipotent, Pluripotent, Totipotent and Unipotent. Implementation of stem cells had been studied in the treatment of numerous blood diseases(like Sickle cell anemia, thalassemia, myeloid leukemia, lymphoblastic

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leukemia).We were aimed at stem cell therapy to be assessed in treatment of several diseases like Parkinson's, Alziemer, Stroke, Spinal Cord Injury, Multiple Sclerosis, Amyotrophic Lateral Sclerosis, Radiation Induced Intestinal Injury, Inflammatory Bowel Disease, Liver Disease, Duchene Muscular Dystrophy, Diabetes, Heart Disease, Bone Disease, Renal Disease, Chronic Wounds, Graft-Versus-Host Disease, Sepsis and respiratory diseases. We have evaluated the stem cell therapy in the treatment of above mentioned diseases.

Keywords: Stem cells, Multipotent, pluripotent, totipotent, unipotent.

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DNA Replication

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Abstract:

In human body each cell contain the same DNA. In the nucleus of the cell most of the DNA is present. It was thought that DNA is the simple molecule, having nucleotide strung together like beads on a string. But in late 1940s biochemist found that DNA was a very long polymer. DNA was made up of two strands, one is template strand and one is complementary strand. Fidelity of DNA replication was done by cellular proofreading and error checking mechanism. DNA was existed as double helix structure when both strands coiled together. A nucleotide contains deoxyribose sugar, a phosphate and a nucleobase. Nucleotides are of four types constituting their respective nitrogenous bases- adenine (A), thymine (T), guanine (G) and cytosine (C). This review was assumed to have historical background of DNA replication.

Keywords: Double- helix, nucleobase, nucleus and DNA replication.

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Outbreak of the Avian Coronavirus and consequences

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[1]Department of Biotechnology, Biyani Group of Colleges, Jaipur, Rajasthan, India
[2]Biyani BioSolutions Pvt. Ltd. Jaipur, Rajasthan, India
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Abstract:

The viruses of the family Coronaviridae are omnipresent in nature due to their presence in a wide variety of mammals and avian animals. Coronaviruses (CoVs) are a genus of single-stranded enveloped RNA viruses of medical and veterinary significance that cause respiratory or enteric diseases and infect mammals and

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birds. Coronaviridae's most distinguishing characteristic is the genomic size, having the largest genomes of all RNA viruses (26.4-31.7 kb in length) with a G+C content ranging from 32% to 43%. There are viruses in Group 3 of CoVs that infect a wide variety of fowl types. IBV (Infectious bronchitis virus) is an infectious virus that leads the poultry industry to experience big economic losses. Due to its replication in the upper respiratory tract and the epithelial surfaces of the food canal, as well as the kidneys, gonads, and bursa, it spreads through aerosols, causing a dramatic decrease in the development of eggs. CoVs, based on phylogenetic analysis, was categorised into four distinct genera: alpha, beta, gamma and delta-CoV. Alpha- and beta-CoVs are borne by humans, while gamma- and delta-CoVs mostly infect birds, with few exceptions.

A combination of high morbidity and loss of growth efficiency, followed by secondary bacterial infections, is the key explanation for the high losses in poultry production caused by IBV infection. Inactivated IBV and live attenuated vaccinations have been extensively manufactured. The inactivated vaccines are usually used in older, egg-laying chickens as a booster. Wide use of the vaccines contributed tremendously to the high variability of IBV through recombination between vaccine strains and the field viruses, as well as selection pressure due to extensive use of the vaccines, which induces partial immunity in the vaccinated birds

Keywords: Avian Coronavirus, Infectious bronchitis virus, bacterial infections, birds.

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Green Synthesis and Characterization of Silver Nanoparticles using Prosopis cineraria and Withania somnifera and Evaluation of Antimicrobial Activity.

Pooja Agarwal and Shalini Tailor

Department of Biotechnology, Biyani Girls College, Jaipur, Rajasthan, India

Abstract:

Nanoparticles are particles with a size range of 1-100nm. Biological synthesis of nanoparticles is an environment friendly, cost-effective and non-toxic approach. The green synthesis of silver nanoparticles using root extract of Withania somnifera and bark extract of Prosopis cineria has been reported. The formation of the bio-reduced silver nanoparticles were observed by using UV visible spectrophotometer. Crystalline nature of the metallic nanoparticles was confirmed by XRD analyzer. The surface morphology of nanoparticles was determined by SEM. The antimicrobial activity was evaluated with synthesized silver nanoparticles by well diffusion method.

Keywords: Prosopis cineraria, Withania somnifera, Characterization, Antimicrobial activity.

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Barren land reform and income generation through MAPs based industries in hilly regions of Uttarakhand

Prawal Pratap Singh Verma

CSIR- Central Institute of Medicinal and Aromatic Plants Research Centre Purara, PO Gagrigole, Bageshwar-263641 (Uttrakhand), India

prawalpratapsv@gmail.com

Abstract:

At present, only 14 % of the total land is available for cultivation in Kumaon and Garhwal regions of Uttarakhand. Currently 57,276 hectares of land is fallow 86,334 hectares is additional fallow land and 316,984 hectares is culturable wasteland. Rain-fed farming is prevalent in most parts of Uttarakhand; due to uncertainty in the rain farmers are slowly leaving farming. In most areas of the Kumaon zone, farmers are abandoning the cultivation of vegetables and fruits due to wild animals and monkeys. Land is becoming barren due to migration from the Uttarakhand hills. To overcome this problem, cultivation of MAPs should be encouraged. Lemongrass, Aloe, Rosemary and Oregano can be cultivated easily in these wastelands, wild animals and monkeys also do not harm these crops. These crops can also be adopted as rain-fed farming. Along with making the fertile land in the hilly areas of Uttarakhand by adopting the cultivation of MAPs and new jobs can also be created here. Good quality raw material can be obtained by giving technical knowledge of cultivation of MAPs as well as creating employment by developing medicinal and aromatic plants based industries in these areas.

Keywords: Oregano, Cultivation of MAPs, fertile land.

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The New Normal & Impact of Covid-19 on Nurses

Priya Chauhan

Department of Nursing, Biyani Nursing College, Jaipur

Abstract:

This presentation discusses about "What will the new normal look like for nursing?" after the pandemic and the impact of COVID-19 on nurses or healthcare delivery system across the globe.

The WHO last year in May confirmed that 2020 would be dedicated to nurses and midwives but after the outbreak of COVID-19 the nursing response to COVID-19 crisis has gone beyond the core purpose. The COVID-19 has posed great threat to public health worldwide and they might be under great physical and psychological distress.

The studies revealed that 25% of the frontline nurses experienced psychological distress. The prevalence of psychological distress among frontline nurses in this study was higher than 6.7% - 16.6% rate in general population. This outbreak will continue as society begins to reopen, resulting in more infection among nursing home staff.

But this outbreak is turning nurses innovative and allowing them to adopt both the traditional Indian medicine as well as new technologies and there are many new opportunities and high demand of nurses.

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Advanced emerging strategies in pandemic situations to enhance research oriented knowledge

Priyanka Dadupanthi
Associate Professor, S.S. Jain Subodh PG (Autonomous) College
drpriyankadadupanthi81@gmail.com

Abstract:

Presently many countries are focused on research to cope with pandemic situations like covid-19, SARS and pandemic influenza. Early knowledge and recent technologies has got quite attention to upgrade the gaps in scientific health oriented research. Different branches of science have been collaborated to find suitable approach for better outbreak results. Current efforts are mainly focused on resource based research so that without disturbing the environment a suitable approach can be offered to develop a better vaccine which would be affordable for developed countries as well as for developing countries. There are many available resources which can be used against these life threatening biological agents. A better understanding of soil structure, composition and microbiology can be offered as a research tool for upgrading the knowledge to face these pandemic like situations. Another approach is plant resources which have been already used for health care purposes from ancient time. Plant resources provide a good and safe approach with long term immunity against various kinds of disease causing agents. Thus in present pandemic situation research is mainly oriented to boost the immunity level as well as with suitable precautionary strategies. Upcoming research strategies are mainly focused on benefits of available resources with combination of developed technologies, so that the gap in early thoughts and present research can be filled up.

Keywords: Influenza, SARS, Biological agent.

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Isolation of Biosurfactant Producing Bacteria from Hydrocarbon Contaminated Soil

Rakhi Yadav
Department of Science, Biyani Girls College, Jaipur – 302039, Rajasthan, India
Email: rakhiy269@gmail.com

Abstract:

Bioaugumentation is a type of bioremediation technology which involves microorganisms which can remove contaminant compounds from the soil. Surfactant enhanced phytoremediation is green technology for the treatment of contaminated soil. The bacteria which produce biosurfactants use petroleum based hydrocarbons as their carbon source. These bacteria are very useful in bioremediation of pesticides, heavy metals and hydrocarbon contaminated site. The addition of native bacteria producing biosurfactants which may improve the rate of hydrocarbon biodegration at oil spill site. Biosurfactant are heterogeneous group of surface active molecules secreted extracellularly or adhere to the cell membrane by several bacterial and fungal species.These naturally occurring surface active molecules are amphiphilic in nature, it contain

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hydrophilic and hydrophobic moieties which reduce the surface and interfacial tension with high specificity, low toxicity and biodegradability.The addition of biosurfactant does not affect the retention of the contaminant in the soil demonstrating that the biosurfactants improved biodegradation without interfering in the adsorption process of the contaminant in the soil, which is important in order to avoid influencing the movement process of contamination plumes. Microbial biosurfactant are very useful as they have important application in industries, agriculture, food, cosmetics and pharmaceuticals.

Keywords: Biosurfactant, Bioremediation, Biodegradation

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Why India is Still on Second Place in terms of COVID-19

Rashi Garg and Tarun K. Kumawat

Department of Biotechnology, Biyani Girls College, Jaipur, India

Tarun K. Kumawat, Tel: +91-9509185127, dr.tarun@biyanicolleges.org*

Rashi Garg, Tel: +91-8745888777, rashigarg8599@gmail.com

Abstract:

Nowadays, COVID-19 has become a global pandemic. There is almost no country or nation left that is not affected due to its impact. It has taken away many lives without even making any differences between human beings. No matter whether the person is rich or poor, white or black, it causes destruction everywhere. In India, this virus is spreading very fast and places the country in the second position of total active cases of COVID-19. Every day the number of infected patients are increasing without taking a break. But there are also many other reasons due to which India is still in second place. The main reason is our healthcare system, many reports have claimed that how the doctors are preparing fake reports of patients which are COVID-19 Negative but only for money, they showed them positive. Also, the techniques used for the COVID-19 test are not sufficient. The government of India has currently approved several testing methods for COVID-19 like RT-PCR, TrueNAT, CBNAAT (Cartridge-based Nucleic Acid Amplification Test) but, these methods have various drawbacks due to which they sometimes give false results and lower down the accuracy rate. They only show the current situation, presence, or absence of the virus in the body, which is not sufficient for preparing a vaccine for COVID-19. So, to combat the present situation of the country there is an urgent need to improve our healthcare system first because then only we can flatten the curve.

Keywords: Pandemic, COVID-19, RT-PCR, TrueNAT, CBNAAT

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Use of Antiviral Herbs for developing Drug against Corona Virus using in Silico methods

Riya Jiyani* and Sreemoyee Chatterjee
Department of Biotechnology, IIS Deemed to be University, Jaipur, Rajasthan, India
Email: jiyaniriya.97@gmail.com ; Tel-7728955666

Abstract:

COVID-19, a new strain of coronavirus (CoV), was identified in Wuhan, China, in 2019. No specific drugs are available and vaccines are still in making. Liu et al. (2020) successfully crystallised the COVID-19 main protease (M^{pro}), which is a potential drug target. This study aimed to assess bioactive compounds found in medicinal plants as potential COVID-19 M^{pro} inhibitors, using a molecular docking study. Molecular docking was performed using Autodock Vina, to analyse the probability of docking. COVID-19 M^{pro} was docked with several compounds, and docking was analysed by Autodock 4.2, Pymol Visualization Tool.

The binding energies from the docking of 6LU7 with the ligands such as curcumin, rosemarinic acid, Withaferin A, and Indian Echinacea are obtained and analysed. Therefore, Rosemarinic acid appeared to have the best potential to act as COVID-19 M^{pro} inhibitors. However, further research is necessary to investigate their potential medicinal use.

Keywords: COVID-2019, M^{pro}, 6LU7, Medicinal Plant Compounds, Docking

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Drug repurposing for SARS-COV-2 using Molecular Docking

Snehal Gupta* and Sreemoyee Chatterjee
Department of Biotechnology, IIS (Deemed To Be University) Jaipur, Rajasthan, India
Email- snehalgupta31178@iisuniv.ac.in., Tel- 9649110258

Abstract:

Novel beta-coronavirus referred as SARS-CoV-2 or COVID-19, a severe viral pneumonia, was first reported on December 31, 2019, from the city of Wuhan, China. This novel coronavirus has presented itself as potent human respiratory pathogen due to mutation in the Receptor Binding Domain (RBD) of its spike protein that enables high affinity to the Angiotensin converting enzyme 2(ACE2) receptor in humans and a polybasic furin cleavage site at the junction of the S1 and S2 subunits of the spike protein. In this present pandemic condition, where no drug or vaccine is available for coping with the disease, drug repurposing proves to be of great importance as fact that the repurposed drug has been already evaluated for its safety by pre-clinical and clinical trials, which would save significant amount of time and money. For this high throughput virtual screening approach was used to check the FDA approved LOPAC library drugs against both the receptor binding domain of spike protein (S-RBD) and ACE2 host cell receptor. After primary screening further analysis was done using molecular docking. Molecules were found to bound ACE2 receptors and receptor binding site on the viral S- protein. These identified molecule may prove effective in controlling SARS-

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CoV-2 by potentially inhibiting the virus at entry step and also act as anti-inflammatory agents, which could impart relief in lung inflammation. Timely identification of an effective drug to combat the pandemic is the need of an hour and hence would save lives.

Keywords: ACE2 receptor, Spike protein (S-RBD), drug repurposing, docking

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Isolation of rhizobia from velvet beans (Mucuna pruriens) and Soybean (Glycine max)

Suhana Khan[1] and Anita Mishra[2]
Department of Biotechnology, Biyani Girls College, Jaipur, India
suhanak436@gmail.com

Abstract:

Symbiotic systems for biological nitrogen fixation (BNF) in agriculture are most important. The present study was conducted for the isolation of rhizobia from leguminous plants. Rhizobia is an important nitrogen fixing bacteria and in this study the rhizobia is isolated from two different plants Soybean (Glycine max) and Velvet beans (Mucuna pruriens). Nitrogen fixation is the conversion of atmospheric nitrogen into ammonia. The rhizobium isolates were rod shaped, gram negative, acid and mucous producing. They were found to be temperature and pH sensitive. These bacterias were also sensitive for the antibiotics Erythromycin, Norfloxacin and Penicillin-G. These bacterias were isolated on Yeast Extract Mannitol Agar media with Congo red. After confirmation test with CR-YEMA, these isolates were collected for morphological and biochemical characterisation. Rhizobia is also called a natural bio-fertilizer. It traps nitrogen and give it to the plants so it is a beneficial bacteria for agriculture.

Keywords: Bacteria, Erythromycin, soybeans.

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Review of Science in the Future Strategies for Post Pandemic

Vishnu Sharma and Tarun Kr. Kumawat
Department of Biotechnology, Biyani Girls College, Jaipur, Rajasthan, India;
Dr.tarun@biyanicolleges.org

Abstract:

Severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) has impacted several Scientific and technology associations and government agencies globally. The human and corporate systems are broadly concerned by this pandemic period. Although, the guidelines of controlling agencies are challenging the

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community spread of disease by directing physical distancing, use of face masks, hand and respiratory sanitation, and by prohibiting crowds and poorly ventilated spaces. In this crucial period, we are looking forward to the strategic relevance of providing young people with skills for employment, decent work, and entrepreneurship. There is expected to develop rapid techniques/tools for the detection of patients and drug strategies for improvement. In the new normal of post COVID 19, there is require to enhancing the skills of the youth to successfully address the socio-economic effects of the pandemic on the youth. For it, we need to go for expressing the need for skilling, reskilling, and upskilling the youth. There is a necessity for innovative systematic endeavors to cover the way for better prevention and medication strategies for the current rapidly-spreading disease. Later have to decide that science should be stronger in society as part of the readiness and prevention of upcoming emergencies. Science would not be only one of the most powerful drivers of economic strength but also is one of the finest manifestations of humanity. The relation with science would have a better opportunity to face the future. For it, we require to take our attention to how growing up scientific structure and distribution of scientific culture are critically significant to tackling a pandemic of this scale. It will help us make progress in treating and preventing a pandemic.

Key words: Respiratory, Syndrome, COVID, Pandemic, Economic

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Sub- Acute Respiratory Distress Syndrome-Coronavirus Disease 2019: An Extraordinary Pandemic

Yashika Maheshwari and Shilpa Bhargava
Department of Science, Biyani Girls College, Jaipur, India

Abstract:

Covid-19 is a pandemic, distribution vigorously all over the world. The character of the pandemic is vigorous for the earth. COVID-19 could be an extremely transmissible disease foremost to disturb, mainly respiratory and physical, emotional, and overall universal functions. Although the route of supper, diagnosis, clinical features, and conduct and inhibition of COVID-19 haven't been fully elucidated yet, a growing number of experiences are increased and available day by day. Individuals surviving the disease may require pulmonary rehabilitation (PR) either additional to treatment or after completing their treatment. Designated as a novel coronavirus disease 2019 by the World Health Organization (WHO), COVID-19 is an area infection caused by SARS-CoV-2, a coronavirus. COVID-19 ARDS reasons the ordinary ARDS pathological changes of diffuse alveolar injury within the lung. COVID-19 ARDS is an expectable thoughtful hurdle of COVID-19 that involves early recognition and whole management. Severe COVID-19 characterizes viral contamination from severe serious respiratory syndrome coronavirus 2 (SARS-CoV-2) infection consequential in ARDS. It's likely caused by the zoonotic spillover of a β-coronavirus type 2b that's now communicated between humans.

Keywords: Transmission, Respiratory Syndrome, COVID-19.

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Programme Schedule

Date: 18-12-2020 (Day-2)

Theme: Challenges and Re-foundation for entrepreneurs post COVID-19 in the New Normal

Time	Schedule
Inaugural Session	
09:00 AM-09:10 AM	Welcome address by Prof Manish Biayni (Organizing Chair, BICON-2020)
09:10 AM-09:20 AM	Address by Chief Guest - Prof Rajesh Kothari , Vice Chancellor, The ICFAI University
09:20 AM-09:30 AM	Presidential Address- Dr. Sanjay Biyani(Director , Biyani Group of College)
09:30 AM-09:40 AM	Vote of Thanks- Dr. Neha Pandey (Principal, Biyani Girls College)
Break 10 min.	
Technical Session 1	
9:50 AM-10:10 AM	Invited Talk : Prof. Rajeshwari Narendran, Indian Institute of Management Topic: Challenges of Entrepreneur –Post COVID-19
10:10 AM-10:30 AM	Invited Talk : Mr. Satyen Modi, Senior Vice President and Zonal head HDFC Bank Topic: Banking Career Opportunities and Challenges in Banking Sector-New Normal
10:30 AM-10:50 AM	Invited Talk : Prof. Pankaj Srivastav, Motilal Nehru National Institute of Technology Topic: Design and Development of Intelligent Diagnostic System
10:50 AM-11:10 AM	Invited Talk : Dr. Gunjan Soni, Assistant Professor, MNIT Topic Challenges in Supply chain Management: Post COVID-19
11:10 AM-11:30 AM	Invited Talk: Prof. Uma Shanker, Great Lake Management Institute, Gurgaon Topic: Challenges for Digitalizing Education in India.
Technical Session 2	
11:30 AM-11:40 AM	**Address by Guest of Honour**- Shri Om Thanvi ji, Vice-Chancellor, Haridev Joshi University of Journalism and Mass Communication & Rajasthan ILD Skills University.
11:40 AM-11:50 AM	Invited Talk :Ms. Kanako Yoneda, Well Group, Japan Topic: Aging Society with DX -Option to work in Japan as a caregiver or an IT engineer
11:50 AM-12:10 PM	Invited Talk : Dr. Subalalitha C. N, Associate Professor, SRM Institute of Science & Technology, Tamil Nadu Topic: Recent Trends in Natural Language Processing and Machine Learning
12:10 AM-12:40 PM	Invited Talk : Dr. Pilli Emmanuel Shubhakar, Associate Professor, Head of Computer Science & Engineering Department, MNIT, Jaipur Topic: Emerging Technologies and New Normal

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12:40 PM-1:00 PM	Invited Talk : Dr. Sachin Gupta, Assistant Professor, MLSU Topic: Challenges and opportunities for startups post COVID 19
01:00 PM-01:20 PM	Invited Talk : Dr. Santosh Kumar Vipparthi, Assistant Professor, MNIT Topic: Change Detection in a video using Deep Learning
01:20 PM-01:40 PM	Invited Talk : Dr. Madhu Sharma, Associate professor, St. Xavier's College Topic: Security and Privacy Issues of Big Data Management.
01:40 PM-01:50 PM	Invited Talk : Prof. Manvinder Singh Pahwa, Manipal University Jaipur Sustaining Business in New Norms: Some Tactics for Personal and professonal wellbeing
Break 10 min.	
Virtual Presentation **Judge1: Dr. Pawan Patodiya** **Judge2: Dr. Poonam Sharma**	
02:00 PM-02:40 PM	Oral Presentations Presenter 1- Mr. Chirag Choudhary Presenter 2-Ms. Gunjan Choudhary Presenter 3-Ms. Neha Dhabhai Presenter 4- Ms Simran Sharma Presenter 5- Ms. Shreya
02:40 PM-02:50 PM	Award Ceremony (**Chair by: Dr. B N Gaur**)
02:50 PM-03:00 PM	Closing Session by Dr. Pawan Patodiya (Asso. Professor, Biyani Girls College)

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Day -2

Challenges and Re-foundation for entrepreneurs post COVID-19 in the New Normal

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)
- Ms. Sujata Biyani (Asst. Director)
- Ms. Priyanka Biyani (Asst. Director)
- Dr. Madhu Biyani (Asst. Director)
- Dr. Neha Pandey (Principal)
- Dr. Dhyan Singh Gothwal (Dean, Administratin & Vice-Principal)
- Ms. Taravati Chaudhary (Principal, Nursing)
- Dr. Archana Yadav (Principal, Law)
- Ms. Renu Tandon (HR Manager)
- Dr. Tarun Sharma (HOD, Science)
- Mr. Charanjeet Sigh (HOD, Pharmacy)
- Dr. B.N. Gaur (HOD, Commerce & Mangement)
- Ms. Jishu B George (HOD, Nursing)
- Dr. Poonam sharma(HOD, IT)
- Dr. Rehana Khan (HOD, Law)
- Dr. Ekta Pareek (HOD, Education)
- Ms. Malti Saxena (HOD, Humanities)
- Dr. Tarun K Kumawat (R&D Coordinator)
- Ms. Anju Bhatt (Skill Coordinator)

ORGANIZING COMMITTEE:

- Dr. Pawan Patodiya
- Dr. Medha Gupta
- Dr. Anupam Gupa
- Ms. Richa Khunteta
- Ms. Shikha Dugar
- Dr. Anita Rathore
- Ms. Yashu Srivastav
- Ms. Bhawna Jha
- Mr. Kapil Kasliwal
- Dr. Poonam Sharma
- Ms. Anju Bhatt
- Dr. Swati Agrawal
- Mr. Rahul Agrawal
- Mr. Sachin Bagoria
- Mr. Kamlesh Kumar
- Ms. Ranu Sewada
- Ms. Kamini Pareek
- Ms. Rajshree
- Ms. Sanjana
- Mr. Ashish Sharma
- Modh. Rafiq Qureshi
- Mr. Madan Bajiya
- Ms. Nisha

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Invited Lecture- 1

Challenges and Re-foundation for Entrepreneurs (Post COVID 19)

Prof. Rajeshwari Narendran

Head of Department, Department of Business Administration MLSU Udaipur

Distinction of being the first ever and youngest National President of Indian Society for Training & Development, New Delhi, India (2013-14)

- Professor HR/OB, M L Sukhadia University, Udaipur and Visiting Professor to IIM Udaipur , IIM Ahmedabad and many Universities across the globe
- Work for emancipation of rural and tribal women and Make a difference (MAD) initiative for rural and youth development have been greatly appreciated by Government of Rajasthan, India DrRajeshwari is a popular trainer/ HRD Consultant and so far trained 55000 plus aspirants in India and abroad.
- Board Member International Federation for Training and Development Organizations (IFTDO) and also currently member, Developing Countries Concern Committee, representing in UN Board and working for development of Women in Leadership and Diversity policies at Global Level.

Abstract

Every crisis brings challenges and threats to entrepreneurs and their organizations, no matter if initiated by human behavior, natural disasters or economic mechanisms. The impact of the coronavirus (COVID-19) is being felt by all businesses around the world. While the impacts of the economic crisis reach across multiple sectors and stakeholders, they've been particularly devastating for a sector that's often touted as the backbone of the economy – entrepreneurs. Entrepreneurs were not an exception. They had to start moving their business activities online. However, not everything could be solved conveniently online. COVID-19 has significantly influenced the entrepreneurial engagement of self-employed persons. Some entrepreneurs had to close their businesses temporarily as a result of governmental restrictions; others had to impose precautions and to run their activities in reduced extent. They also needed to find innovative solutions in all aspects of their entrepreneurial endeavor as the consequences of the pandemic linger on. Pandemic very likely influenced traditional entrepreneurial decision-making processes, communication and conflict management, well-being and entrepreneurial outcomes. It took time before the entrepreneurs got oriented in the new situation, and governments started helping them out with particular policy-actions aiming to deliver information, advisory and financial support. This calls for entrepreneurs to adopt new frameworks which allow for short-term growth, while building a foundation of long-term resilience.

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Invited Lecture- 2

Design and Development of Intelligent Diagnostic System

Dr. Pankaj Srivastava
M.Sc., Ph.D.
Professor Formerly Head, Departmentof Mathematics
M. N. National Institute of Technology (An Institution of National Importance) Prayagraj – 211004, INDIA.
drpankajsrivastava23@gmail.com; +91 9696030005

Field of Research Activities: Design and Development of Soft Computing Intelligent Systems with reference to Medical diagnosis and Tourism, Ramanujan's Computational systems, Fuzzy Engineering, Tensor Analysis and Market Research

Honours / Awards / Recognitions:

IMRF Excellence Award 2016 for Mathematics Given by International Multidisciplinary Research Foundation at Kerla University November 25, 2016

Honored by The National Academy of Sciences India for outstanding Science Communication programmes on The National Science Day Feb28, 2011 at NASI Head Office, Prayagraj

Eminent Academician Award 2018 Given by Indian Academic Researchers Association, April 20, 2018, Tiruchirappalli, Taminadu

General Secretary –FATER Academy of India (FAI) (An International Organization)

Life Membership of Professional Bodies

- The National Academy of Sciences India.
- Society for Special Functions and their applications.
- The Indian Academy of Mathematics
- Indian society for History of Mathematics.
- Indian society of Mathematics and Mathematical Sciences.

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Abstract

The present Talk deals with the design and development of an intelligent Diagnostic System using the concept of non-conventional Mathematical Tools for detecting the classification criterion of Diabetes. The proposed system, on one hand, will help the patient in adopting a proper strategy to evaluate his present sugar level and follow a balanced lifestyle on the other hand it will provide a quantitative base to medical experts in detecting the disease and suggesting proper action to the patients, The proposed information system is tested on real-life data with a satisfactory result as per the medical experts.

Keywords: Decision Making, Diabetes, Fuzzy Set, Information System, Medical Diagnosis, Soft Computing.

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Invited Lecture- 3

Challenges in Supply Chain Management Post Covid -19

Dr Gunjan Soni

Assistant Professor, Dept. of Mechanical Engineering, MNIT, Jaipur
gsoni.mech@mnit.ac.in D

Research Interests

Agent based modelling, Supply Chain Risk Management, Supply Chain Quality, Artificial Intelligence in Manufacturing.

Professional Affiliation:

- Senior Member of Indian Institute of Industrial Engineering.
- Reviewer of Benchmarking: An International Journal.
- Reviewer of Journal of Manufacturing Technology and Management.
- Reviewer of Measuring Business Excellence.
- Hon. Secretary - Jaipur chapter of Indian Institute of Industrial Engineering.
- Reviewer of International Journal of Production Research.
- Reviewer of Production Planning and Control, Taylor & Francis.
- Lean Manufacturing Consultant of National Productivity Counsel.
- Guest editor of International Journal of Intelligent Enterprise.

Abstract

Today, COVID-19 has become one of the biggest crises in the world. Along with this US-China trade war is also acting as catalyst, especially for manufacturing organizations. Due to uncertainty in demand and supply, organizations are facing political and competitive pressures by increasing production and employment in their home countries along with reducing or eliminating dependency on other countries. In the upcoming time, countries will have to work on their resiliency of supply chains by reducing their dependency on other countries without losing their competitiveness. In this presentation, I will discuss multiple aspects of supply chains that are being exposed to vulnerabilities and address the methods to overcome or replace such risk with alternatives. Along with this, I will also highlight how technology advancements such as automation, 3D printing, continuous manufacturing, artificial intelligence etc. can help in reducing these direct or indirect sources of vulnerabilities. Here, the focus is basically on making their supply chain robust by exploring new areas.

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Invited Lecture 4

Challenges for Digitalizing Education in India

Prof. Venkatesh Umashankar
Professor & Director PGPM at Great Lakes Institute of Management, Gurgaon.

It is pertinent to note that he was one of three Founder faculty members of the Dept. of Business Administration, at VBSPU.

*Professor & Area Chair Marketing at the International Management Institute, New Delhi between 2012 and 2014; *Founding Dean/Professor, GDGWI – Lancaster University, India (2009-12);

* Vice Chancellor (Designate) ITM University, Gwalior, (2008-09); * Founding Dean & Professor, IIMT-Oxford Brookes Univ., India (2000-08); *Dean, NIILM, New Delhi (1998-2000). *Professor/Chair-Marketing & Program Director (Graduate/Exec Programs) IILM, New Delhi (1995-98); *Assistant Professor – VBSPU, between 1990-95.

Areas of interests are– Consumer Behavior, International Marketing, Services Marketing, Rural Marketing, and Strategic Marketing.

Professional Attachments—

- Advisor to Miebach Logistics (India) Pvt. Ltd., a supply-chain consultancy based at Frankfurt, Germany;
- Advisor to Ethnosphere Switzerland.
- Brand & Strategy Advisor to Bunkaari India.
- Executive Council Member VBSPU.
- Faculty Board Member, FMS, AMU.
- Governing Council Member Ansal University.

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Abstract

For long the challenges that the Higher Education sector in India has faced, is manifested in the three issues of Access; Equity and Quality. The context of the current pandemic and the ensuing pressure to maintain teaching/learning processes in the higher education sector poses a great challenge, which may further accentuate the existing problems for the Indian Higher Education Institutions (HEIs).

The current seminar is focused on defining the progress that India has made on the three parameters of - Access; Equity and Quality as far as the HEIs are concerned and what digitalization can do to specifically to alleviate these problems. The biggest stumbling block is identified is not really availability of and access to technology and tech-infrastructure, but the willingness and alacrity with which the HEI regulatory setup in India engages with digitalization and creates mechanisms of validation and accreditation of innovative programs and program structures such that digital delivery is accorded the same status as conventional education.

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Invited Lecture- 5

Recent Trends in Natural Language Processing and Machine Learning

Dr. Subalalitha C.N

Associate Professor, Department of Computer Science and Engineering, SRM Institute of Science and Technology, Chennai
subalaln@srmist.edu.in;09003264357

Research Interest:

Natural Language Processing (NLP), Tamil Computing and Machine Learning (ML).

Publication :

Subalalitha C.N & E. Poovammal (2018) Automatic Bilingual Dictionary Construction for Tirukural, Applied Artificial Intelligence, DOI: 10.1080/08839514.2018.1481590

Subalalitha C.N, Aarthi Venkataraman, BasimShahidBaqui (2018) Statistical Machine Translation From English To Hindi, International Journal of Pure and Applied Mathematics Volume 118 No. 20 2018, 1649-1655. Indexed in Scopus.

Anita R., Subalalitha C. N., Abhilash Dorle and Karthick Venkatesh(2017). Semantic Search Using Latent Semantic Indexing and Wordnet. ARPN Journal of Engineering and Applied Sciences Vol. 12, No. 2, January 2017. Indexed in SCOPUS.

Subalalitha CN and Ranjani Parthasarathi(2017), Query Focused Summary Generation System using Unique Discourse Structure, International Journal of Retrieval Research, Volume 7, Issue 1. Pages 49-69 .2017. Indexed in Web Of Science (Emerging Source Citation Index).

Subalalitha Chinnaudayar Navaneethakrishnan and Anita Ramalingam(2016), An Approach to Page Ranking Based on Discourse Structures, Journal of Communications Software and Systems, Volume 12, Issue 4,Pages 195-200, December 2016. Indexed in Scopus.

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Abstract

Machine Learning (ML) has become the buzz word these days. With the invent of smart phones, people depend highly on internet for almost all information right from weather, job, education, business, shopping and much more. This Covid 19 has got it's hands high on this scenario. Industries like Google, Amazon, IBM, Facebook Twitter are serving their customers with high end machine learning techniques. Researchers on the other hand are digging more on finding efficient machine learning algorithms.

Natural Language Processing (NLP) is one of the interesting applications of Machine Learning. They both are always found tied together and have made the life easier for us. Google, Search, Google Translate, Alexa, Google assistant, google Maps are few popular applications most of us know. Numerous language technologies and ML techniques are running behind these applications to cater our needs on time. We will get to know much more on these techniques in the talk.

Keywords : Natural language, Machine Language, Covid-19

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Invited Lecture- 6

Emerging Technologies and New Normal

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Research Interest: Security, Privacy and Forensics, Computer Networks, Cloud Computing, Big Data, Internet of Things.

Publication :

Anita Choudhary, M. C. Govil, G. Singh, L. K. Awasthi, Emmanuel S. Pilli ,"Energy-efficient fuzzy-based approach for dynamic virtual machine consolidation", **International Journal of Grid and Utility Computing** Volume :10 / 308 - 325 / 2019

Maheep Singh, M. C. Govil, E. S. Pilli, and S. K. Vipparthi , "SOD-CED: Salient Object Detection for Noisy Images Using Convolutional Encoder Decoder" , **Computer Vision** Volume :13 / 1-6 / 2019

Preeti Mishra, Vijay Varadharajan, Emmanuel S. Pilli, and Udaya Tupakula, "VMGuard: A VMI-based Security Architecture for Intrusion Detection in Cloud Environment", **IEEE Transactions on Cloud Computing** Volume :7 / 1-10 / 2018

Sameer Singh Chauhan, Emmanuel S. Pilli, R. C. Joshi, Girdhari Singh, and M. C. Govil, "Brokering in Interconnected Cloud Computing Environments: A Survey", **Journal of Parallel and Distributed Computing** Volume :122 / 1-20 / 2018

T. Goyal, R. Rathi, V. K. Jain, E. S. Pilli and A. P. Mazumdar ,"Big Data Handling Over Cloud for Internet of Things" , **International Journal of Information Technology and Web Engineering** Volume :13 / 37-47 / 2018

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Invited Lecture- 7

Challenges and Opportunities for Startups Post COVID-19

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Profile: Dr. Sachin Gupta has a brilliant academic Record. His professional activities include roles as Associate Editor, Editorial Board Member, Advisory Board Member and Reviewer for many Journals and Conferences. He has been invited as Chief Guest/Resource Person/Keynote Plenary speaker in many reputed universities and colleges. He has written more than 50 Research Papers in ISSN/ISBN Numbered Journals and has presented papers in more than 25 National and International Conferences and Seminars. He has also contributed chapters for various edited books. Dr. Gupta is a author of Book on "Tourism Marketing" ISBN No: 978-81-8182-575-9 which has been published by RBD Publications, Jaipur, Second one is on "Managing Socio-Economic Development of Rajasthan By NGOs (A Comprehensive Textbook Designed For Students of Business Management) ISBN No:- 978-3-639-71381-7**,** published from Scholars Press, Germany (An International Publication), Third book is on "Project Management" for MBA IVth Semester students, published by Thakur Publications, Jaipur, ISBN No:- 978-93-5163-455-3 as per the syllabus of Rajasthan Technical University, Kota. Fourth Book is on "Business Economics" for BBA, B.COM & MBA students published by RBD Publications Jaipur, ISBN No: 978-93-87178-09-0. Fifth book is on "International Trade & Finance" for B.COM, BBA and MBA Degree Courses, published by RBD Publications, Jaipur, ISBN No: 978-93-87178-11-3. He is continuously engaged in the Research Work. Prior to joining Mohanlal Sukhadia University, Udaipur Dr. Gupta has served as Associate Professor & Head, Chairperson-Doctoral Research in JECRC University, Jaipur (Rajasthan), Assistant Professor & Programme- Coordinator MBA-Executive FMS-The IIS University, Jaipur, visiting faculty in University Commerce College, University of Rajasthan, Jaipur, visiting faculty in PTU (Master Somnath Technical College) for B.Sc and M.Sc Hotel Management Students.

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Abstract

Start-ups have come as key drivers of socio-economic growth and an innovative job creation, and are often a catalyst for radical innovation. During the crisis of COVID-19 start-ups have continued to play a critical role for economies. Some innovative young start-ups firms have reacted fast and flexibly to the pandemic, and have been serious in helping many countries shift towards fully digital work, health services and health services, and have provided great innovations in medical goods and services.

An example of Mumbai-based start-up can be seen in this regard, which is offering emergency rides to medical patients, frontline helpers and essential service providers. These innovative start-ups have responded fast to the pandemic and are helping India shift towards maintaining economic activities by digitizing work, health services and education, and are also providing innovations in various activities.

Today, start-ups have opportunities to innovate and create a new business model, which can be used for short and long terms profit motives. Innovations that can help in the short run include medical equipment, tele-medicine, remote personal care, home delivery, food processing, teleworking, online education etc. However, an address towards these innovations and specific activities is an immediate need.

Keywords: Start-ups, Socio-Economic Growth, New Business Model

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Invited Lecture- 8

Change Detection in a Video Using Deep Learning

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Education & Professional Career :

Ph.D.(Systems Engineering) from IIT-BHU

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Major Publication:

Murari Mandal, Santosh Kumar Vipparthi, "Scene Independency Matters: An Empirical Study of Scene Dependent and Scene Independent Evaluation for CNN based Change Detection", **IEEE Transactions on Intelligent Transportation Systems** Volume: 0 / 00-00 / 2020

Monu Verma, Santosh Kumar Vipparthi, Girdhari Singh,"AffectiveNet: Affective-Motion Feature Learning for Micro Expression Recognition" , **IEEE Multimedia** Volume :0 / 1-9 / 2020

Murari Mandal, Vansh Dhar, Abhishek Mishra, Santosh Kumar Vipparthi, Mohamed Abdel-Mottaleb ,"3DCD: A Scene Independent End-to-End Spatiotemporal Feature Learning Framework for Change Detection in Unseen Videos" , **IEEE Transactions on Image Processing (IEEE-TIP)** Volume :0 / 00-00 / 2020

Murari Mandal, Monu Verma, Sonakshi Mathur, Santosh Kumar Vipparthi, Subrahmanyam Murala, Deveerasetty Kranthi Kumar ,"Regional adaptive affinitive patterns (RADAP) with logical operators for facial expression recognition" , **IEEE/IET Image Processing** Volume :13 / 850-861 / 2019 ISBN: 1751-9667

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Abstract

Advances in computer vision and the falling costs of camera hardware has fuelled the deployment of cameras en masse for the monitoring of physical premises. The extensive deployment of fixed as well as movable cameras for control and safety has resulted in collection of visual data for online and post-event analysis. To obtain high-level information from the visual data, several image/video analytics algorithms are developed inthe literature. Moving object detection (MOD) or change detection is one of the fundamental low-level tasks in many computer vision and video processing applications. The MOD algorithm provides the basis for some of the video analytics applications such as behaviour analysis, traffic monitoring, video synopsis, action recognition, visual surveillance, anomaly detection, and object tracking. However, dynamic background changes, illumination variations, extreme weather, variable object densities, complex backgrounds, and object shape variations, pose significant challenges to effective moving object detection. Moreover, the fluctuation and noise in the background appearance make it very difficult to accurately distinguish between moving and non-moving objects. Further more, the MOD algorithms are designed to handle both the conventional and aerial view videos.

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Invited Lecture- 9

Security and Privacy Issues of Big Data Management

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Publications: Patent Published, "A Method to Secure Online Transaction", Field of Invention - Computer Science, Filed on 29.03.2016, Published on 12.01.2018

Sharma M, Sharma C, A Review on Diverse Applications of Case Based Reasoning, Algorithms for Intelligent Systems, Springer, 2019,Pg 511-517.

Sharma M, Sharma C, Petrinet Modeling and Analysis of SMART ATM, Algorithms for Intelligent Systems, Springer, 2019, Pg 519-530.

Sharma M, Sharma C, Khan A, SMART ATM: Technology Acceptance Modeling and Analysis, 2019, Elsevier

M Sharma, VS Rathore, C Sharma, System Modeling and Design of Smart for ATM, 2019, Available at Elsevier

Sharma M, Singh K, Sharma C, A Relative Study on Image Eminence while Sharing via Different Apps, 2019, Available at Elsevier-SSRN Digital Library

Abstract

With the ever expanding technological shifts and interference of technology in almost every sphere of lifestyle, Big Data is the one of the fastest growing entity, moving outwards from the boundaries of quintillion of bytes. This is all due to the excessive data creation and storing data by persons of all age, groups, profession and region through different electronic gadgets. This data expansion opens variety of challenges and issues in front of the technocrats. The biggest challenge of the big data is the fact that, it's very big in size, so managing big data while maintaining security is a big issue.

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Big data security includes all the methods, techniques and tools that could be utilized to safeguard the data and the related analytical processes from malicious activities originate from the online or offline spheres through different applications, users and devices. Few of the big data and its management related security and privacy issues are concerned with distributed frameworks, storage, end-points, real time security, Data mining solutions, Data access controls-validation and authentication, Data Monitoring, Auditing and many more. The remedies for every issue need continuous upgrading with the continually expanding data and hence open new research avenues for the researchers.

Key words: Big Data, Real Time security, Data Mining

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ABSRACTS

Future of Education in Digital Education System

Anupam Gupta
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Abstract

This paper aims to describe the digitalization of education system due to Covid-19. The basic challenges in education system are money constraint, teacher's resistance to change, motivation level of students, technological skills of faculties, evaluation Inadequate network infrastructure, unreliable device options, lack of teacher students contact etc. Therefore, a new way of education is required to handle such issues arising as a result of Covid-19 in a systematic manner. Through this research paper, an attempt has been made to upcoming trends in digital education system that will shape the future of our education industry.

Keywords: Challenges, Digitalization, Education

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New Era of Business for Post Covid-19

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Abstract

The COVID-19 pandemic has presented the world with one of the most perplexing challenges in recent times. This introductory paper shed light on the importance of utilising this moment to help the humanity to be more resilient to overcome the obstacles that would lead us to a radical socioeconomic transformation. This paper aims to examine the post-COVID-19 future of work through the prism of these three pillars (digital transformation, resilience of the workforce and redesigning the workspace) that are key to ensuring a smooth recovery, and the attendant opportunities and challenges. First, driving digital transformation, fuelled by universal, high-speed and affordable connectivity, cross-border collaboration(s) with strong data security standards and government policies that support working in a remote economy. Second, building a resilient and healthy workforce, centred on employee wellness and workforce development. Third, evolving a new paradigm of work and workspaces, including a permanent transition to a hybrid work model of office and work-from-home, and a powerful digital command centre that enables a work-anywhere, live anywhere, all-digital environment. These 3 pillars will only help to a new normal Era of Business.

Keyword: Connectivity, Digital transformation, Paradigm, Workforce

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A Study on the New Era of Business for Post Covid-19

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Abstract

COVID-19 pandemic has totally disrupted the people's normal life and most countries have imposed many restrictions on social congregations or even people working in close proximity to each other. Seeing the situation, the priorities of the people have changed from normal to beyond. As the needs of the people are changed with the ups and downs of the pandemic, companies also need to focus on their customers' expectations and prepare to thrive in the future. In spite of the ongoing uncertainties, reopening of businesses has begun. However the rules of industries and economies are no longer the same, reopening of businesses has to be more than a restart rather it must be to reinvent the business. It clearly means for restructuring of operations to continuously respond to the unpredictable. It calls for the businesses to be designed for disruption. For running their businesses successfully, the companies need to build competencies they wish they had invested in before, they need to be more digital, data driven and need to have more variable cost structure. Businesses need to pay attention on the following key strategies: Put people first, design spaces that work, solve in phases, commit to an elastic cost structure and get future ready.

Keywords: Disruption, Competencies, Variable cost structure.

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The Role of Microfinance in Women empowerment and Poverty reduction: A case study

Sonali Chouhan, Neeta Maheshwari
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Abstract

Microfinance is a helpful tool in development of our country, as it is provision for financial services to the poor. It's outreach is vulnerable section of society with objective to reduce poverty and enhance standard of living. It is characterized with improving literacy level, employment level, income and saving level of the people in backward areas, so looking at the problems of poverty after aspect of microfinance increases the positivity and reduces the impacts of poverty. One of the biggest development of microfinance is 'Self-help group' ,it is small homogeneous group of similar social or economic background who come together to improve saving, establish business & avail low cost loan. The basic approach of SHG is to create and utilizes the common resources for achieving the objective of group members.

Keywords : Self-help group, Women empowerment, Microfinance, poverty reduction, living standard.

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Challenges of digitalizing education for entrepreneurs due to COVID-19

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Abstract

We are passing through a very tough and unpredictable phase in our life. COVID 19 has changed substantially, the way we live. Many newly emerged burning issues stare at us. In "live with COVID" era, many alternatives will be forced to develop to substitute the old style of functioning of man-machine and knowledge delivery. Field of education too cannot insulate itself from such alternatives and drastic changes are taking place in the educational field too at a rapid pace.

Virtual classrooms have already become a popular reality.This trend of edtech which means combining education and technology is gaining momentum now a days and has become a hot potato due to Covid 19.Simultaneously,it is posing some serious challenges.

Keywords: Software, Mobile devices, Infrastructure, Digital Device

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Impact of pandemic sector with special reference to Punjab

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Abstract:

Agriculture is not only the occupation of any farmer but it also indicated the prosperity of any country. In India Punjab and Haryana are powerhouses for this sector. Their land and other climatic factors make them favorable for this occupation. Wheat, Rice, Cotton, Maize, Sugarcane, Mustard and barely are major production of these states. Every farmer not only rope seed into the ground but also rope hope for bright future with upcoming crop. Every Year Indian farmers faces various challenges like- Flood, Low rainfall, Depts. (Public or Personalized), Price Volatility and other more but this year when lockdown was announced in the India on 24 March 2020, it was pitiful time for the farmers. It was the time when Rabi crop (wheat) was about to harvest. This study will try to throw light on the problems faced by the farmers and impact of government relief policies available for them at crucial time. The study is based on primary and secondary data collection through structure interview and questionnaire.

Keywords: Agriculture, Pandemic

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Challenges for Digitalizing Education in the Context of Maths Learning Applications

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Abstract:

The whole world is plagued by an invisible virus outbreak. Humanity is trampling. Its effects are being reflected in all the areas of life. The entire landscape of the world has been changed.

If we talk about the education system, then it has been strongly influenced by it. In such a situation, online education has emerged as a mainstay. Different types of learning apps. hold an important place in online education. There are many challenges in-front of the digitalizing, the education system. Various challenges the online education system from the perspective of educational applications are mentioned in this research paper. Its purpose is to throw light on various problems and challenges that affect online studies, teachers, and students in the reference of maths learning apps and to give some solution regarding this.

Keywords: Online education, maths Learning application challenges.

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Challenges for Digitalizing Education (Higher Education)

Simran Sharma
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Abstract:

This chapter focuses on the challenges and changes that the introduction of digital technologies into higher education teaching has brought about. To date the response to the possibilities of digital media in higher education has been mainly reactive and consisted mostly of 'managing after the fact' rather than a proactive approach with visions for the future. Many universities still seem to be in a state of 'catching up' but not always 'catching on' which in part can also be attributed to generational differences between faculty and students. I propose that the most fundamental and challenging of all the changes related to the digitalization of higher education is the way that academics relate to and interact with their students, rather than the technologies themselves. I also propose that in the future we will see the emergence of two distinct ways of teaching: Mostly online courses for lectures and seminars on the one hand and highly individualized face to face tutoring and supervision on the other hand. The most successful universities will be those that manage to integrate both modes of teaching, and who have the staff with the competencies to do both successfully.

Keywords: Digital Technologies, Higher Education, Digital media.

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Issues, Trends & Challenges of Digital Education

Anupama Goyal
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Abstract:

With passage of time, the education system all over the world has gone through a dramatic change. The traditional education system no longer fulfils the modern day complex needs where everything is dynamic and evolving at a very fast pace.There is a huge amount of transformation that takes place in the present world in every nanosecond. Therefore, a new and modern way of education is required to handle such transformation arising as a result of creation of huge amount of information in a systematic manner Thus, to resolve the shortcomings of the traditional education system, the world is moving towards digital education which addresses all the issues and challenges of traditional education .Digital Education can be defined as the use of a combination of technology, digital content and instruction in the education system to make it more effective and efficient than the traditional education system.

Keywords: Education System, Digital Learning, Technology, Digital Education

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Big Data Analytics Importance and Need

Rahul Agarwal
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Abstract:

The universal data collection is growing day by day and moving towards a tipping or extreme point. At each smallest fraction of time huge and diversity data is being produced like on social platforms like Facebook, Instagram, Twitter etc. By these complexities of data are increasing in sense of data'svelocity, volume, and variety.To handle these huge amounts of complex datawe need Big Data Analytics technologies. Big Data Analytics includes highly scalable algorithms and systems to integrate the data and to discover large hidden patterns and values from datasets that are used in decision making and planning for the future policies and growth of organisation.

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Conclusion:

In this abstract;I discussed innovative topics of big data, big data analytics, importance of big data, tools used for it and how it is fulfilling our modern requirements in this era of data wherewe have to deal with huge amount of data and have to manage that.

In the information or data era,huge varieties of high and complex velocity data are being generatedon daily basis on every fraction on time andto store and manage that high velocity data and within them find hiddenpatterns, knowledgefor decision making data analytics is must.

Keywords: big data, data mining, analytics, decision making.

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Data Warehouse and Big Data Integration

Sachin Bagoria
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Abstract:

Large Information set off advanced an inundation of exploration and forthcoming on ideas and cycles relating already to the Information Distribution center field. Some reason that Information Distribution center as such will vanish; others present Enormous Information as the normal Information Stockroom advancement (maybe without recognizing an unmistakable division between the two); lastly, some others represent a fate of intermingling, mostly investigating the conceivable mix of both. In this paper, we overhaul the fundamental innovative highlights of Huge Information and Information Distribution center, featuring their disparities and territories of combination. In any event, when a few contrasts exist, the two advances could (and should) be coordinated in light of the fact that the two of them focus on a similar reason: information investigation and dynamic help. We investigate some union procedures, in view of the basic components in the two advances. We present a correction of the best in class in joining recommendations from the perspective of the reason, technique, design and basic innovation, featuring the regular components that help the two advances that may fill in as a beginning stage for full mix and we propose a proposition of joining between the two advances.

The measure of information in world is detonating. Information is being gathered and put away at exceptional rates. The test isn't just to store and deal with the immense volume of information, yet in addition to break down and extricate significant incentive from it. In the most recent decade Data Warehousing innovation has been advanced for effectively putting away the information from various hotspots for business knowledge reason. In the Age of the Big Data, it is essential to redesign the current stockroom framework that will help you and your association benefit as much as possible from unstructured information with your current Data Warehouse. As Big Data keeps on upsetting how we use information, this paper delivers how to use huge information by viably coordinating it to your information distribution centre.

Keywords: Big data, distributed programming, authentication, encryption, Data Warehouse, Covid-19 Research Paper.

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Land use and Land cover change detection using Machine learning

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Abstract:

Land use/land cover (LULC) change has serious inferences for environment as LULC is directly related to land degradation over a period of time and results in many changes in the environment. Monitoring the locations and distributions of LULC changes is vital for establishing links between regulatory actions, policy decisions, and subsequent LULC activities. The normalized difference vegetation index (NDVI) has the potential ability to spot the vegetation features of varied eco-regions and provides valuable information as a remote sensing tool in studying vegetation penology cycles.

This study focuses on the use of Landsat satellite imagery to assess the precise impact of LULC changes on the ecosystem services so that they can be monitored. Numbers of machine learning algorithms including some supervised techniques like Support Vector Machine (SVM), Radom Forest (RF), Maximum Likelihood, Ensemble techniques and some unsupervised techniques like K-Mean Clustering, Fuzzy Clustering techniques are available which can be used to detect and classify the land use and land cover changes from satellite images.

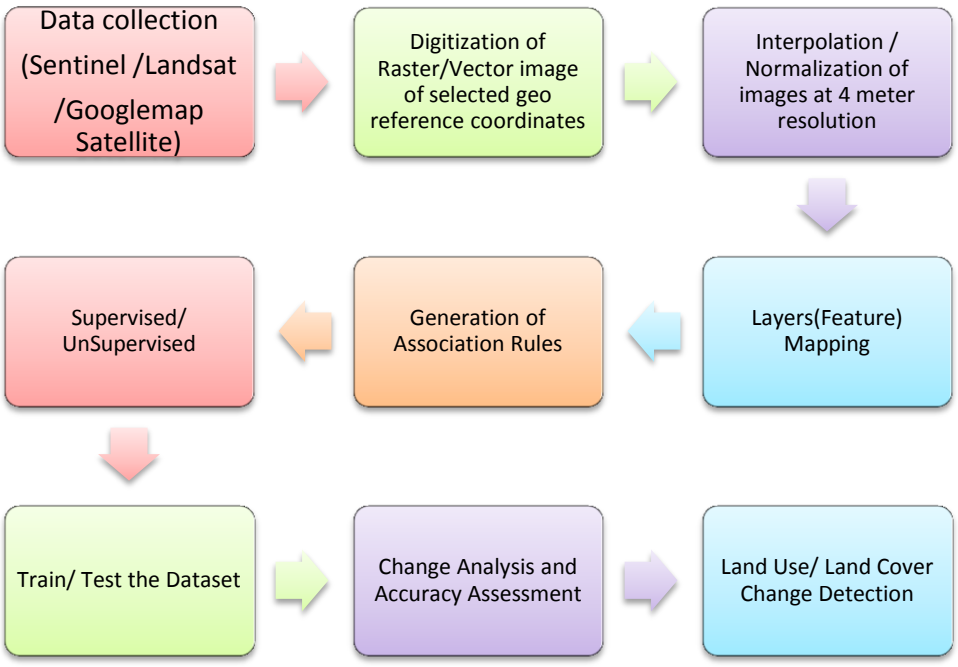

Fig 1.Proposed Methodology for LULC Change Detection

Keywords: K-Mean Clustering, Support Vector Machine, Random Forest, Maximum Likelihood

Conclusion:

This study provides the land use land change classification output in the analytical form that would help government bodies and society to monitor the ecosystem. Further, LULC trend analysis and periodical change detection are performed for the study area by applying various machine learning techniques. This study is being performed by exploiting the high resolution Landsat sensors' images and Sentinel images for longterm LULC monitoring and periodical change detection.

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Analysis of big data Security: The big challenges

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Abstract:

Big data is a field that preferences ways to investigate, systematically extract information from, or otherwise deal with data sets that are too huge or complex to be allocated with by traditional data processing application software. Data with many cases (rows) offer greater algebraic power, while data with higher complexity may lead to a higher false discovery amount. Big data challenges include seizing data, data storage, data analysis, search, sharing, transfer, imagining, querying, updating, information privacy and data source.

Some of the main challenges in securing Big data are:

•**Secure Computations**: Big data technologies use distributed programming frameworks to process huge amounts of data. These distributed frameworks like MapReduce don't have decent security protections. In MapReduce, the data is split, then processed by a mapper and assigned storage. If someone can modification the mapper settings as it doesn't have any other security layer, it can manipulate the data being processed. Also, it is very difficult to notice these untrusted mappers. It is very important to secure the additions being handled in these distributed programming frameworks so as to ensure that the veracity of data is maintained.

•**Protective Data and Transaction logs**: Due to the size of data and transaction logs, these are kept in multi-tiered storage environments with auto-tiering functionality. Auto-tiering does not preserve track of the data location. Auto-tiering systems can expose new exposures because of unknown physical data locations, untrusted storage devices which can result in administrations losing control over data. Data transmission between tiers can also provide information about user activities and data assets which can be used by attackers. Data and transaction logs need to be protected to preserve the confidentiality, integrity, and availability of data.

•**Authentication of Inputs from Endpoints**: Big data assembles data from a variety of input devices including endpoints. It may be collecting logs beginning a massive number of devices and applications. The data which Big data is receiving to contain reprobate data being sent by an untrusted endpoint. This can touch the organization's logical outputs. A challenge here is to authenticate all the inputs the Big data is receiving to ensure that it came from a reliable source.

•**Protected Non-Relational Data Stores**: Non-Relational data stores like NoSQL are quickly being used in Big data technologies. These data stores are not developed and secure enough, as of today. They have many security issues corresponding no encryption support for the data files, weak authentication between client and server, data at rest is unencrypted which can reason privacy threats.

•**Privacy protective data analytics**: Privacy is an significant issue in put on Big data technologies for analytics. As more and more data is actuality collected, this data collection along with data analytics could result in user privacy violation. If the data analytics is outsourced, an untrusted third- party employee can suppose personal information of users. The organizations want to use Big data analytics tools to improve customer satisfaction, but they need to ensure protecting user secrecy while doing so.

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•**Access control**: Big data holders a variety of data including sensitive data such as Generally Identifiable Data of users. There are many authorized and compliance requirements to protect those data. Granular access control policies must be implemented so that only authorized users to have contact to sensitive user data and analytics done on individuals data sets. This is needed to ensure the secrecy data.

•**Real-time safety monitoring**: Real-time safety monitoring is wanted for Big data infrastructure and the analytics it is handling. It has always been a difficult task because of the number of warnings generated by devices. These signals have a large number of wrong positives as well. Due to this reason, companies frequently struggle to monitor real-time data.

So encryption can help in conduct data guard in Big data technologies at several stages to ensure privacy, integrity, and availability of data is maintained.

Keywords: Big data, distributed programming, authentication, encryption.

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Real-Time Big Data Analytics: Applications, Tools & Challenges

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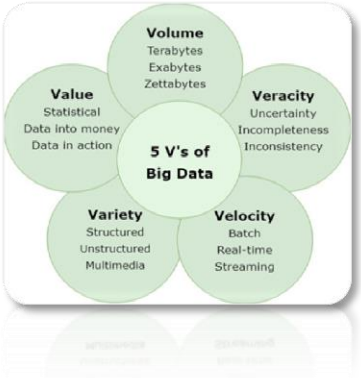
Abstract:

Large & huge amount of data has been generated everyday where traditional data processing applications are deal with them. Real-time big data analytics is software feature which analyze largeamount of volumes in a incoming data that are stored in IT infrastructure. This paper surveys different approaches in Real – Time analytics of Big Data & discuss about some of technical challenges & applications& tools. Big Data applications are fast & timely analytics to make quality decisions based on data. The survey results indicate what technologies have been used in the fields of application & what the reason for choice.



Keywords: Big Data, Data Analytics, Applications & Challenges& tools, Real- Time Analytic.

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Big Data Analytics: Introduction, Advantages

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Abstract:

Massive amount of data which cannot be stored, processed and analysed through traditional tools / techniques like Relational Database Management System (RDBMS). Millions of data are generated every day & every second from a variety of data sources. Social networking websites generate millions of data. For eg. Facebook generates over 500 tera bytes data, these kinds of data actually generates through images, text , video etc. Management of such big data is a challenging task now a days.

Hadoop is a solution for big data management. Storing and processing of big data can be easily done with Hadoop but not analysis. For data analysis, Big data analytics is used.Many E-Commerce websites such as amazon uses big data analytics. These websites actually analyse& monitor their data. Big data analytics is actually a procedure through which we can extract only important, useful, desired information from a huge amount of data.

It has many advantages such as protection from unauthorised access , location compatibility, better decision making etc.

Keywords: Big data, RDBMS, HADOOP

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Block Chain Technology in Big Data

Reema Choudhary
Biyani Girls College, Jaipur

Abstract:

Blockchain is a transaction which is decentralized.Blockchain is a data base management technology which was developed to introduce new Bitcoin cryptocurrency. The importance and use of Blockchain technology has been increasing sincethe idea was coined in 2008.It is very popular now a days. The reason for the growth and popularity of Blockchain is its central attributes which provide data integrity, data security, data anonymity without any third-partyassociation in controlling and management of the transactions. In this abstract, weintroduce a systematic mapping study with the objective of collecting all relevant research tools on this new Blockchain technology. Our purpose is to getting the current research topics, challenges and future directions regarding Blockchain technology from the technical perspective. The results show thatfocus in over 80% of the papers is on Bitcoin system and less than 20% deals with otherBlockchain applications including e.g., smart contracts and licensing. The majority ofresearch is focusing on revealing and improving limitations of Blockchain from privacy andsecurity perspectives, but many of the proposed solutions lack concrete evaluation on theireffectiveness. Many other Blockchain scalability related challenges including throughputand latency have been left unstudied. On the basis of this study, recommendations onfuture research directions are provided for researchers.

Keywords: Block chain, Bitcoin cryptocurrency, Blockchain technology

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A Review on Security and Privacy Issues of Big Data Management

Priyanka Dadhich
Biyani Group of colleges, Jaipur, INDIA

Abstract:

Big Data and its analysis play a major role in the world of Information Technology with the applications of Cloud Technology, Data Mining. The term "Big Data" is related with managing (manipulating) high amount of data exist in digitalized form that is collected by various companies or organization. As everyday data are being collected from applications, networks, social media and other sources Big Data is emerging. The analysis of Big Data involves multiple distinct phases which include data acquisition and recording, information extraction and cleaning, data integration, aggregation and representation, query processing, data modelling and analysis and interpretation.

The Big Data is an emerging area applied to manage datasets whose size is beyond the ability of commonly used software tools to capture, manage, and timely analyse that amount of data. The quantity of data to be analysed is expected to double every two years (IDC, 2012). All these data are very often unstructured and from various sources such as social media, sensors, scientific applications, surveillance, video and image archives, Internet search indexing, medical records, business transactions and system logs.

Keywords: Big Data, Data Analysis, Cloud, Data Mining, Security and Privacy Methodologies, Social Applications.

Conclusion: An overview about the 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 oblivious data structures that hide data access patterns to data anonymization techniques that transform the data to make more difficult to link specific data records to specific individuals and Big data handles a petabyte of data or more.

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 ISBN: **978-93-83462-98-8**

The repercussions of COVID 19 on the economies of the world

Lavina Dasani
Biyani Institute of Science and Management, Jaipur

Abstracts:

The more we were excited to welcome the year "2020", considering it as a special number, courtesy 20-20 cricket matches, the more it has brought chaos in the world. Today we find the whole world in shackles of Corona Virus and the "Mighty Human" was locked down in his own house. The economies function on the concept of demand and supply and this lockdown has had a great impact on the functioning of economies all around the globe. There had been a forced alteration in buying behaviour of the people which has resulted into the economic downfall. The Indian Economy for the first time showed a double-digit negative growth! Amidst the chaos we saw that the digital industry had grown by 70%, which can be considered as a silver lining in terms of making a world a "Digital Platform". It has its own set of pros and cons since the "Human Touch" to the business world would eventually diminish. E-Commerce and digitalization would conquer the world and will make mankind a slave of the technology. This pandemic has given us a "New Normal" which has changed the way humans function. We can say that it will take time for life to get back to the "original normal", where people used to move around freely without any fear. And then finally we will be able to see the nations getting back to normal with equilibrium in their demand and supply cycles. May be by then we would learn to respect the environment and the surroundings which help us to flourish.

Keywords: Business, Covid 19, Demand-Supply, Digitalization, Economy

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 ISBN: **978-93-83462-98-8**

Programme Schedule

Date: 19-12-2020 (Day-3)

Theme: Re-Discovering Career Passion, Training and Job opportunities in Social Sciences, Law and Education

Time	Schedule
Inaugural Session	
09.00 AM - 09.10 AM	Welcome remarks- Dr. Neha Pandey (Principal, Biyani Girls College)
09.10 AM - 09.20 AM	Presidential Address- Dr. Sanjay Biyani (Director, Biyani Group of Colleges)
09.20 AM - 09.30 AM	**Address by Hon'ble Guest of Honour:** Prof. Naveen Mathur (Ex- Vice Chancellor, Jagannath University, Jaipur, Rajasthan)
09.30 AM - 09.40 AM	**Address by Hon'ble Guest of Honour:** Mr. Syed Shahid Hasan (Chairperson, Law Bar Council of Rajasthan) **Title: Future of Law Education Specifically For Women.**
09:40AM - 09:50 AM	Vote of Thanks by Ms. Malti Saxena (Convener, Social Science)
Break: 10 Minutes	
Session-I (Invited Talk)	
10:00 AM - 10:20 AM	Prof. Ramesh H. Makwana (Prof. & Head P.G. Dept. of Sociology S.P. University, Gujarat) **Title: Teaching as a Carrier Opportunities**
10:20 AM - 10:40 AM	Mr. Prasant Pal (Founder & CEO of Pure India Trust, NGO) **Title: Education for Employable Skill Development**
10:40 AM - 11:00 AM	Ms. Anila Choraria (Assistant Director, MSME, Jaipur) **Title: Empowering MSMEs and their role to Strengthen Bilateral Relations**
Break: 15 Minutes	

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Session-II (Invited Talk)	
11:15 AM -11:35 AM	Dr. K.K. Rattu (Director, Journalism and Mass Communication, JNU) **Title: New Avenue and changing Trends in Media Industry**
11:35 AM -11:55 AM	**Address by Hon'ble Chief Guest:** Shree Om Thanvi (Hon'ble Vice Chancellor, Haridev Joshi University of Journalism and Mass Communication, Jaipur, Rajasthan)
11:55 AM -12:15PM	Mr. Chiranji Lal Saini (Additional Advocate General) **Title: Re- Discovery Profession of Law:- Practical challenges and opportunities.**
12:15 PM -12:35PM	Ms. Shobha Gupta (Senior Advocate, Supreme Court, Delhi) **Title: Rediscovering Career Passion, Training and Job- opportunities in Law and Legal Education.**
Break: 15 Minutes	
Virtual Presentations **Judge 1: Dr. EktaPareek (Principal, BGBC)** **Judge 2:Ms. MaltiSaxena (HOD, Humanities)** **Judge 3:Dr. Rehana Khan (HOD, Law)**	
12:50 PM -01:35 PM	**Oral Presentation :** OPP 01: Ms. Neha Sharma OPP 02 : Ms. NeelamKumari OPP 03 : Ms. SunitaKumari Sharma OPP 04 : Ms. Pinky Sankhala OPP 05 : Dr. Binu Singh OPP 06 : Ms. RidhiJajoo OPP 07 : Mr. Nishant OPP 08 : Mr. Honhar OPP 09 : Ms. Tannu
01:35 PM - 01:45 PM	**E-Poster Presentation** EPP 01 : Ms. Raveena & Shivantika EPP 02 : Ms. Shaheen & Aditi
01:45 PM -01:55 PM	**Valedictory Ceremony** Shri K.M. Dhuriya, (Registrar, University of Rajasthan, Jaipur)
01:55 PM -02:00 PM	**Closing Remarks** by Dr. Tarun K. Kumawat (Convener, BICON 2020)

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Day- 3

Re-Discovering Career Passion, Training and Job Opportunities

CORE COMMITTEE :

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- Dr. Rehana Khan (HOD, Law)
- Dr. Ekta Pareek (HOD, Education)
- Ms. Malti Saxena (HOD, Humanities)
- Dr. Tarun K Kumawat (R&D Coordinator)
- Ms. Anju Bhatt (Skill Coordinator)

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- Ms. Ritu Sharma Soni
- Ms. Sarika Gupta
- Ms. Sarita Pareek
- Ms. Sunita Sharma
- Ms. Tripty Saini
- Ms. Vijaylaxmi Shekhawat
- Ms.Sunita Kumari

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INVITED LECTURES

ABSTRACTS

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Invited Lecture- 1

Future of Law Education Specifically For Women

Syed Shahid Hasan

Chairperson, Law Bar Council of Rajasthan
B.Com, LLB, 9829055603, A-6-B, Suraj Nagar (West)
Civil Lines, Jaipur – 302006, sshahidhasan@gmail.com

Abstract:

Women's education in India plays a very important role in the overall development of the country. It not only helps in the development of half of the human resources, but in improving the quality of life at home and outside.

Law as a profession is in great demand these days. Due to the changing social and economic circumstances and the ever-increasing regulatory role being undertaken by the Government there is a rising demand for the women lawyers. Besides being financially lucrative, Law is an adventurous exciting career option.

There are various areas for specialization in this field for women, which one can choose from like, Civil Law, Criminal Law, Corporate Law, Taxation Law, Labour Law, International Law, Family Law, Constitutional Law, Administration Law, Patent Law etc.,

The need for law education specifically for women is required in near future to gather the information of I.T. Crimes against women which is the most devastating factor against women in near future, because our society is heading towards the cyber law and regarding to this fact we need much more awarded women in our society who needs to know the legal aspects of cyber-crimes as there are various National Women Commissions and State Women Commissions to help the needy womens, but in recent times, we need much more law educated women in future, so we need to develop our law education structure more authenticative law structure which could be done only when women empowers with more law education in near future.

In past the law field was dictated by the men education and there was no enough base for women to get the basic law education, but in recent times, the era has totally been changed and it is more demanding need to make a basic structure of law education in future for educated women whom could well cover the needs of society and welfare of needy women which only a law graduate women could understand and is not possible for men dominating society.

In India the need of education of women in law sector has bright future and it will help Indian Law Society leaps and bounce in various law sectors. The helping hand of women in this law society inter alia will cover the utmost adversities of the needy women and also in various legal sectors.

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 ISBN: 978-93-83462-98-8

Invited Lecture - 2

Job Opportunities in Social Sciences

Ramesh H. Makwana

(MA Gold Medallist, M.Phil. Ph.D. NET, GSET),
Professor & Head, Department of Sociology, Sardar Patel University
Vallabh Vidhyanagar-388120, Gujarat, India, 98241 55903 / 92653 55883

Abstract:

If you are curious about how humans interact within a society you may consider a job in social services. Working in the social sciences gives you the chance to make a difference in the world by influencing public policy or helping people. There are many ways to enter the field of social sciences. If you have an interest in politics, then a career as a political scientist might be the right choice for you. This is the highest paid job in the social sciences profession. Political scientists investigate how political systems originated and progressed and how they currently operate. They follow political trends and develop new political policies and ideas. As scientists, they collect and analyze data.

The job of an economist is growing at a faster than average rate. Economists study how goods, services, and resources are produced and distributed. They create and conduct surveys and compile and analyze the results. They use spreadsheets, databases and statistical analysis software. Economists draw from current data and historical trends to predict changes and patterns in the economy. They help companies, individuals, and government weather economic changes.

Industrial-organizational psychology is dedicated to studying human behavior in the workplace. Industrial-organizational psychologists take the same principles and research methods used in the field and put them to use in the work environment. Industrial-organizational psychology has a place in a wide range of departments including; administration, marketing, human resources and sales etc. They seek to solve workplace problems, such as improving productivity and increasing morale.

If you're interested in the way people interact, a career in sociology could be right for you. Sociologists investigate social interactions in humans. They observe social interactions in; cultures, organizations, social institutions, groups and relationships etc. They develop theories to explain these interactions and social processes. Sociologists test their theories through research. They use surveys, interviews with subjects, and their own observations to gather data. Sociologists present their findings through reports, journal articles, and presentations. Often, the work of sociologists becomes the basis for public policy reforms. Sociologists may work with educators, lawmakers, policymakers, administrators, and social workers.

Key word: political scientist, interactions, public policy, cultures, Industrial

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Invited Lecture - 3

Re-discovering Profession of Law: Practical Challenges and Opportunities

Chiranji Lal Saini
Addl. Advocate General, Govt. of Rajasthan
Former Chairman, Bar Council of Rajasthan
Phone: +919414043151 E-Mail: clsainiadvocate@gmail.com

Abstract:

Legal Profession is considered as one of the noblest profession. At the same time, it is also one of the toughest and challenging job. A lawyer has to be always on his/her toes as law is being updated every hour. This profession allows one to act with independent mind and a sense of boldness comes in the person with the acquisition of knowledge and skills. Apart from fighting for the cause of justice before the Hon'ble Courts, the profession allows a lawyer to benefit the society with his/her services through various kinds of roles, whether being elevated as a Judge, becoming a leader in Politics or as a contributor in the Corporate sector. Now in the near future, even foreign lawyers are going to be allowed to practice in India. This shows the competition that lies ahead for the younger generation. Moreover, due to the current pandemic situation around the world, the 'New Normal' strategies need to be adopted. However, where there is a will, there is a way and same is applicable for this profession.

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Invited Lecture - 4

Re-Discovering Career Passion, Training and Job Opportunities in Law and Legal Education

Adv. Shobha Gupta

Senior Counsel, Supreme Court of India

97, Gyan Vihar, Ajmer Road, Jaipur, Rajasthan, +91 9811512794

Abstract:

24th March, 2020 was the day when the Nationwide Lockdown was declared in India. None of us had a clue then that where we were leading to from there. Most of us thought that it is a matter of few days. Lockdown would be lifted after sometime and things would be back to normal as they were before. But, how hugely wrong and innocent we were. Its been more than 8 months since then. After a small break, we all got geared up, geared up for an altogether 'New World', for a 'New Normal'. Before 24th March 2020, if we were to be told even by a genius that in future a time would when we all would be mostly meeting world over through virtual, even the kids would be studying through virtual, the big business meetings would be happening through virtual, invitations would travel only through online, etc. Etc., then nobody would have believed that and would have considered that genius as some foolishly and mindlessly dreaming. But, now we all are living that 'Virtual Life'. Not inhaling pollution, especially if you are in place like Delhi, be it noise or air pollution. You are eating good and hot food at your comforts. Those who have no option but to go to offices are now less disturbed because there are no visitors. As a result, we all have become more relaxed, more oriented, more polite and more courteous.

Things have become far more transparent. In fact the best part is that we are finishing our work in a much better manner and still we have so much time left that we can attend our other activities which as serious professionals we used to miss a lot. I can now simultaneously attend several webinars and talk shows. Best part is that most of the offices are asking you to work from home. In that case if you are a very hard working and your office permits you, then you can certainly work simultaneously for two different offices. You can pursue your other activities, like group discussions as students, etc. I mean now things are dependent only on how far and big you can think. The whole world virtually is on your palm or laptop at your disposal. It's an amazing time of peaceful growth at your comforts. Grab the time and opportunities. Spread your wings and fly high. Now one can say "even sky is not the limit".

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 ISBN: **978-93-83462-98-8**

Abstracts

Status of CSA in India and World, the Objectives and Need of Legal Education in the Context of Good and Bad Touch

Neha Sharma

Research Scholar, Bansthali Vidyapith, Tonk, Rajasthan, India

Abstract:

Today Child sexed abuse is one of the most serious problems. Then whether it is matter of India's Perspective or of the global world. In view of the increasing these kind of crimes in the present, it is very important to be given legal education to everyone, thus they can be aware of their rights. The main motive of that law is to aware people or especially children that how should they react at the situation of good and bad touch. This research paper mainly focus on the legal education in the relation to good and bad touch, its objective and need for the children or general people and also the status of legal education in India or in Global context (laws).These days, there are frequent cases that are increasing related to child sexual abuse in India as well as in global world

This convention applies to every child under the age of 18 without any dis crimination. Under article 34 of the convention, every child has the right to before from sexual misconduct. In India the most prominent law against child sexual abuse, that is protection of children against sexual offenses act (POCSO) passed in 2012.There are some objectives of Legal education in India as well as in the world for child sexual abuse like- Knowing the signs : How to identify child maltreatment, Legal information is necessary for awareness of crimes related to child sexual abuse or good and bad touch, To get the offender punished appropriately, To create a fear free environment of children, To increase knowledge and skills regarding law, For information about the rights against child sexual abuse.

In view of the increasing these kind of crimes in the present, It is needful and also very important that all children and their parents, teachers are aware of the laws, that they can protect themselves and their children and students from CSA. And also they can explain to the children that how should they react at the situation of good and bad touch.

CSA or good and bad touch, is not a new problem for the world. These crimes occur equally in India as well as abroad. Such crimes with children increases while individuals are not aware of the laws and they suppress the incidents on spot So today, there is a strong need that everyone should be given the Legal education that they can control such crimes in society. It is very important to know that the law is to protect of rights. India being a common law country has an advantage of having a legal system which is similar to many other countries of the world. Legal education is an investment, which if wisely made will produce most beneficial results for the nation and accelerate the pace of development.

Keywords: Criminals, Child sexual abuse, Good and bad touch, Legal education

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महिला सशक्तिकरण में कौशल शिक्षा की भूमिका

नीलम कुमारी एवं वेद प्रकाश

शिक्षा विभाग, महाराज विनायक ग्लोबल यूनिवर्सिटी, ढंढ, आमेर (जयपुर)

सारांशः

मनु का कहना है–

''यत्र नार्यस्तु पूज्यन्ते, रमते तत्र देवता
यत्रैतास्तु न पूज्यन्तें, सर्वास्तत्रा फलाः क्रिया''

अर्थात् जहां नारियों की पूजा होती है, वहाँ देवता वास करते है। पूजा का अर्थ है, सम्मान से। जहाँ इनका सम्मान नहीं होता, वहाँ प्रगति, उन्नति की सारी क्रियाएं निष्फल हो जाती है।

वर्तमान परिपेक्ष्य में महिलाओं को पुरूषों के समान अधिकार एवं स्थान प्राप्त है। वर्तमान समय में महिलाओं के शैक्षिक स्तर में सुधार व बालिकाओं की गुणवत्तापूर्ण शिक्षा के लिए महिला सशक्तिकरण के आयामों के बारे में जानना आवश्यक है।

महिला सशक्तिकरण के आयामः सामाजिक सशक्तिकरण, आर्थिक सशक्तिकरण, राजनैतिक सशक्तिकरण, पारिवारिक सशक्तिकरण, सवैंधानिक सशक्तिकरण, शैक्षिक सशक्तिकरण

जब नारी इन सभी सशक्तिकरणां में सशक्त होगी तो उसका सर्वागीण विकास सम्भव है, क्योंकि शैक्षिक सशक्तिकरण को सभी आयामों का आधार कहा जाता है। शैक्षिक सशक्तिकरण से महिलाओं को विभिन्न क्षेत्रों में क्रियाशील, विवेकशील व प्रभावी बनाकर अपने स्वरोजगार हेतु प्रेरित कर सकते है। आर्थिक रूप से सशक्त महिलाओं की स्थिति भी सुदृढ़ होती है। वह अपने साथ–साथ परिवार व देश के विकास में भी अपनी भागीदारी निभाती है।

महिलाओं को सशक्त बनाने के लिए केन्द्र व राज्य सरकार द्वारा अनेक कौशल व स्वरोजगार के कार्यक्रम चलाये जा रहे है, जिनमें प्रमुख है– संचार कौशल, सिलाई प्रशिक्षण, ब्यूटीशियन, कम्प्यूटर, विभिन्न भाषाओं का विकास, महिला ई–हाट डिजिटल मंच., प्रधानमंत्री कौशल विकास योजना, स्वावलंबन, राष्ट्रीय मातृत्व लाभ योजना।

इस प्रकार महिलाओं को कौशल शिक्षा प्रदान करने से वह अपना स्वय का रोजगार प्राप्त कर सकती है, तथा आर्थिक रूप से सशक्त हो जाती है।

मुख्य बिन्दुः सशक्तिकरण कौशल, आयाम, कार्यक्रम

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कौशल शिक्षा में साइबर जागरूकता की भूमिका

सुनीता कुमारी शर्मा, वेद प्रकाश शर्मा

शिक्षा विभाग, महाराज विनायक ग्लोबल यूनिवर्सिटी, ढंढ, आमेर (जयपुर)

सारांशः

S

K

A B I L I T I E S

L

K N O W L E D G E

वर्तमान समय में हम इन्टरनेट का प्रयोग, सम्प्रेषण का प्रयोग खोजने के लिए, मनोरंजन के लिए, खरीददारी के लिए और शिक्षा के क्षेत्र में करते है। प्रत्येक व्यक्ति इन्टरनेट का प्रयोग किसी न किसी रूप में अपनी आवश्यकताओं की पूर्ति के लिए कर रहा है, लेकिन इन्टरनेट की पूर्ण जानकारी न होने के कारण, वह जाने–अनजाने में कई अपराधों को अंजाम देता है। जिससे वह बेखबर रहता है। इन्हीं इन्टरनेट अपराधों में साइबर क्राइम शामिल है।

हमारा भारत देश युवाओं का देश कहा जाता है, ऐसे में ये बेहद जरूरी हो जाता है कि युवा वर्ग अपने कौशल का विकास करे ताकि उन कोशलों के माध्यम से वे खुद के जीवन में बदलाव ला सके, साथ ही साथ देश को भी आर्थिक रूप से मजबूती प्रदान कर सकें, लेकिन हमारा युवा अपने कौशल का दुरूपयोग कर रहे है। और अपने कौशल का उपयोग लोगों को हानि पहुंचाने में कर रहे है। इसलिए यह जरूरी है कि हमारे युवाओं को जीवन कौशल शिक्षा प्रदान की जाए ताकि वे समझ सकें कि उनके लिए क्या सही है और क्या गलत है? कौशल योजना का उद्देश्य यही है कि वे लोगों में जागरूकता और आत्मविश्वास जगा सकें, जिससे कि उनके उत्पादन में वृद्धि हो सकें। एक ओर कौशल विकास के लाभ है तो वहीं कुछ सावधानियां भी जरूरी है, क्योंकि जिस प्रकार हर सिक्के के दो पहलू होते है, उसी प्रकार तमाम साइबर ठग भोले–भाले लोगों को चूना लगाने की फिराक में बैठे रहते है। अगर इनसे न बचा जाये तो न सिर्फ बड़ी हानि होने की सम्भावना रहती है, बल्कि भविष्य में अच्छी योजनाओं पर शक होने लगता है। इसलिए इन अपराधियों से निपटने के लिए जरूरी है– **जागरूकता।**

मुख्य बिन्दुः अपराध, साइबर अपराध, जागरूकता, कौशल।

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सामाजिक विज्ञान के छात्रों के लिए कैरियर विकल्प के रूप में शिक्षण

पिंकी सांखला एवं भावना कुलश्रेष्ठ

शिक्षा विभाग, सुरेश ज्ञान विहार विश्वविद्यालय, जयपुर

सारांशः

सामाजिक विज्ञान विषय की ऊपरी परत हटाकर देखें तो हम पाएंगे कि उसकी बुनियादी प्रकृति का सरोकार लोगों, जगहों और संस्थाओं के किस्से कहानियों से ही होता है। उन्हें हम अपने चारों ओर कहानियों में बदलता हुआ देखते हैं। चाहे टीवी हो या फिल्म पर्दे पर हो या फिर अखबारों में।

सामाजिक विज्ञान विषय हमारे अपने जीवन के बारे में होता है। सामाजिक विज्ञान के अंतर्गत जो विषय होते हैं अतीत से हमारा संबंध जोड़ते हैं ताकि हम यह समझे और उसकी कदर करें कि हम जहां अभी हैं वहां तक कैसे आए। यह विषय हम पर शासन करने वाली संस्थाओं के माध्यम से हमें वर्तमान से भी जोड़ते हैं तथा हम जिस पारिस्थितिकी तंत्र का हिस्सा है,उसकी समझ हमारे भीतर विकसित करके अतीत और वर्तमान को परिचित संदर्भ में हमारे सामने लाते हैं। वास्तविकता यह है कि सामाजिक विज्ञान एक बेहतर दुनिया बनाने का सपना देखने में हमारी मदद करता है। जीवन जीना एक सुंदर कला है, जो सामाजिक अध्ययन की विषय वस्तु से आती है।

सामाजिक विज्ञान विषय में ग्रेजुएशन और पोस्ट ग्रेजुएशन के बाद आप किसी भी प्राइवेट स्कूल में शिक्षण कार्य करवा सकते हैं। B.Ed. करने के बाद आप राज्य द्वारा प्रायोजित अध्यापक पात्रता परीक्षा उत्तीर्ण कर के सरकारी अध्यापक बन सकते हैं। सामाजिक विज्ञान विषय में नेट उत्तीर्ण करने के बाद आप किसी भी कॉलेज में असिस्टेंट प्रोफेसर बन सकते हैं। सामाजिक विज्ञान विषय में पीएचडी धारक एसोसिएट प्रोफेसर बन सकते हैं।और प्रिंसिपल भी। फिर जैसे–जैसे आपको अनुभव होता जाएगा आप शोध के क्षेत्र में और लोगों को भी शोध कार्य में आगे बढ़ा सकते हैं।

जो भी शिक्षार्थी नाइंथ क्लास से लेकर पोस्ट ग्रेजुएशन तक सामाजिक विज्ञान का बहुत गंभीरता से अध्ययन करते हैं वही विद्यार्थी आगे चलकर IAS, RAS, Social Worker, मीडिया, कॉर्पोरेट घराने में नौकरी रिसर्च इंस्टीट्यूट में प्रवेश,एनजीओ से जुड़कर समाज से जुड़े विषय जैसे पर्यावरण, लिंग भेद पर काम कर सकते हैं। सरकारी संगठनों से जुड़ सकते हैं। वर्तमान में कैरियर के ऑप्शन ने सामाजिक विज्ञान विषय के महत्व को बढ़ा दिया है।

मुख्य बिन्दु : मूल्य, लोकतांत्रिक, तर्कस्वरूप, संस्कृति।

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Teaching During COVID-19 in Gujarat : The new normal

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The Maharaja Sayajirao University of Baroda, Vadodara.

Abstract:

Novel Corona virus has brought world to halt. Almost all countries closed all schools, colleges and universities. According to pearson.com more than 300 million learners worldwide are affected by the spread of coronavirus, and educators are striving to ensure that learning continues, in spite of massive disruption. But this did not stop the teachers doing their teaching. Almost all starting working from home and it became new normal. Teaching is being done online, on an untested and unprecedented scale. The move to remote learning has been enabled by several online tech stacks such as Google Classroom, Blackboard, Zoom and Microsoft Teams, all of which play an important role in this transformation. With the development of ICT in education, online video-based micro-courses, e-books, simulations, models, graphics, animations, quizzes, games, and e-notes are making learning more accessible, engaging, and contextualized. With this pandemic situation the online digital learning and teaching acted as supplementary tool. But most of them faced the difficulty in streaming it due to lack of infrastructure or were not well trained for it. This paper understands the online activities by teachers and how much this can be a new normal. Will the COVID- 19 make the online teaching and learning as one of the major change in education? What are the threats due to online teaching and what could be the remedial solutions?

Keywords: Teaching, Learning, Online, Internet, Education, Students

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Teaching as a Career : For Social Science Students

Ridhi Jajoo
Ex-Faculty in Biyani Girls College

Abstract:

Teaching has always held a pride place in Indian society. It has always been regarded that teachers are boon to society who by making use of their intelligence, patience and wisdom attempt to polish the learners' intellect and aptitude. Social science is an interdisciplinary subject which includes the study of various disciplines. All its career paths require developing analytical, critical thinking, research skills, interpersonal communication, presentation and writing abilities.

To become a prominent social science teacher one must require passion and commitment towards the discipline as well as depth knowledge, training and planning. Outstanding candidates need to set the schedules of the lesson plans and to select appropriate learning materials, teaching aids and resources which will help them to achieve their curriculum objectives. They need to establish such a classroom where rules

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and play-way learning is combined. Teaching as a career choice for Social Science not only requires the master or professional degrees. Many teacher training Institutions have also been set up to meet these minimum standards. The teaching must carry deep and abiding interest in the teacher which he teaches.

To conclude an abstract "**The best education is not given to students; it is drawn out of theme. Good teaching is more a giving of right questions than a giving of right answers."**

Keywords: Interdisciplinary, Curriculum, Discipline, Commitment and Interest

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Career in Law

Nishant Rathore

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Abstract:

What is Law?

Law is an official rule of country that says what people may or may not do. Law is the binding force on people to do what is to be done and what not to be done i.e. Put restriction on from full acts. Our constitution is the Supreme law of the country which governs and dispense the powers to the legislature executive and judiciary.

Scope & Career:

In older days the scope of studying law was very limited as not much options were available to lawyers (a person studying law).Since the modernization and advancement of people the scope of law has become everlasting Because every individual, every organization, be it a private or a government Department and even defense forces require lawyers. One can become an advocate, practicing privately, help people solving the legal issues they have or by becoming a public prosecutor, can help to the needy people. Corporates also are in need for the people who can take their stand legally and advise them about the implementation of processes, these people are called corporate lawyers and legal advisors respectively.

Money Matters:

It is rightly said that money is not everything but we need money for everything. Talking about the income, government positions like judge, public prosecutor, and lawyer and defense forces pays a handsome amount of money as salary. Private practicing lawyers and advocates can make even crores of rupees

Advantages of Studying Law:

Exposure is one of the most important advantage of studying law. You meet various types of people, handles various types of cases and come to know in depth observations of human behavior and psychology. Aspirants of examinations like UPSC, CA and CS Get an edge over other aspirants because low exams and quality which are the subjects of heavy Weighting in these competitive examinations get covered while studying law.

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Conclusion:

Career in any field is not the matter of subjects or marks, it is the matter of hard work, knowledge and experience. Success in law like any other field requires dedication and efforts full stop so, work hard with smartness.

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Abstract on Law carrier Options : Job, Courses and Opportunities

Honhar Sharma
Biyani Law College, India

Abstract:

What is law?

Law is the body of principal recognized and applies by the state in the administration of justice. Full form of LL.B Latin Legume Baccalaureus.

Benefits after completing law degree. Multitudes of carrier options, Finical stability, Respect and prestige, Awareness of rights and responsibilities, Development of self-confidence, An intellectual challenges.

Courses offered by law:

Bachelor of Laws (LL.B.) – 3 years, Integrated undergraduate degrees – B.A. LL.B., B.Sc. LL.B., BBA LLB– 5 years, Master of Laws (LL.M.) – one/two years, Master of Business Law, Doctor of Philosophy (PhD).

Jobs after completing the law:

Advocate, Judiciary, Private companies, Writer of law books, Legal advisor, teaching.

Opportunities after completing law:

Lawyer, Paralegal, Legal Secretary, Compliance Specialist, Conflicts Analyst, Legal Recruiter, Court Messenger, Contract Administrator.

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Status of Legal Education in India in a Global Context

Tanu Galyan
Biyani Law College, India

Abstract:

Legal education has traditionally been a neglected area, in India. Even in schools no one talks about how to become a lawyer except those who had a legal background. It is one area where there has not been any fundamental change during the last 150 years. Except for the duration of the courses, addition of some fundamental subjects, there has not been innovation in legal education scenario during all these years.

In India, legal education is more based on theoretical study rather than practical exposure. Being a law student I personally recommend the experimental learning. Even in examination point of view there must be more practical question more than theoretical question. It will help to give a back bench in actual practice.

National Law School experiment in India which must an extent revived the interest in legal education has remained elitist and out of the reach for children from middle and lower income group.

Since, the past few years the roles of lawyers' have drastically changed in the society. Their roles demand specialised knowledge and skills not ordinary available in the existing profession. Thus, a new genre of globalised legal professionals has evolved who while having a firm understanding of local legal scenario, could extend its principles to a global context.

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Status of Legal Education in India in a Global Context

Rehana Khan and Nehal Mittal
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Abstract:

Traditionally in India legal Education was a neglected field. But today, roles of lawyers have drastically changed in the world. Many additional roles are envisaged in this profession such as, Policy planner, Business Advisor, Negotiator among interest groups, expert in articulation and communication of ideas, Mediator, Law Reformer, etc. These roles demand specialized knowledge and skills which is not available in an ordinary profession. Also these roles are moving towards national boundaries and gaining Importance in global context. Therefore, new genre of globalized legal profession has evolved and the demand for these professionals has extended to the principles of global context rather than just having a firm understanding of local legal scenario. Therefore, it has necessitated the evolution of law schools to equip the students with the essential skills required from a new generation law graduate in order to produce the expected output.

Conclusion: India is a major global player country. It cannot afford to have distinct classes of incumbents in the legal profession. Abundance of cross border legal issues are not far away and therefore legal education requires to be addressed with a broader outlook. Much like the same way as standards of medical treatment

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cannot be distinguished in a country as rural or urban, legal profession also cannot be distinguished as local, national or global. The need of the hour is to create uniform standards of education and at the same to enable qualitative competition among students. This would require revisiting the current models of legal education and equipping the third category of law schools to come up and maintained by national and global law schools.

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Changing Nature of Legal Education Due to Globalization

Anupama Goyal

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Abstract

Legal Education is essentially a multi-disciplined, multi-purpose education which can develop the human resources and idealism needed to strengthen the legal system. A lawyer is a product of such education that would be able to contribute to national development and social change in a much more constructive manner."

Globalisation has been a subject of debates and discussions from numerous perspectives. There is no doubt that globalisation has profound implications for the future of higher education worldwide. Globalisation has posed multiple challenges to the future of legal education in India, but it has provided an opportunity to challenge the status quo, which is an essential condition for seeking any reform. India has huge challenges to confront in promoting legal and judicial reforms, with a view to establishing a rule-of-law society. The role of lawyers and judges will become critical for addressing future challenges of governance. In this regard, the training that is imparted to future lawyers and judges in our law schools needs to be thoroughly re-examined to suit the social and economic transformation that is underway in the country. The present law has to meet the requirements of the society. Law has to deal with problems of diverse magnitudes. A student of law and an Advocate has to be trained in Professional skills to meet the challenges of globalization and universalization of law. With the advent of multinationals in India as anywhere else, the task of lawyers would be highly technical and an imperative need would arise to have competent lawyers who would be trained in the right culture of Legal Education. This makes a sound case for introducing reforms in Legal Education.

Keywords: Legal Education, Globalisation, Judicial reforms, Advocate, Professional Skills

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Legal Career Options: Job, Opportunities and Courses

Kunjal Palawat
Biyani Law College, India

Abstract

Law is considered as a noble and respectable profession. Building a career in law requires a lot of discipline and knowledge in its field. Today, there are plethora of opportunities for a law graduate to consider. With the increase in globalization and liberalization in the world demand for a law graduate in increasing day by day in various fields. These are:

Litigation

This is the most common and traditional career path for a law graduate to practice as an advocate in a court of law. In order to be successful in this career one should have good analytical and communication skills. There is an exam conducted by Bar council of India which is to be cleared to practice as an advocate. Once this exam is clear as graduate is registered as an advocate in Bar Council of India according to the Advocates Act, 1961. it is an open book test and the questions are based on analytical skills and basic knowledge of law. Before Registering yourself for this examination one has to first get registered as an advocate in their respective states as an advocate. An advocate can practice either in criminal law or in civil law.

Legal Process Outsourcing

This is a high paying profession in an early start. LPO is a practice where law firms and other organizations outsource legal work from other places or other legal support services companies. It includes a various legal service such as litigation research, drafting contracts, patent services etc.

Non-Government Organization

Social work is another field that can be chosen after law graduation. This field is not explored much and it has a huge scope. A law graduate who is interested in socio legal issues can work under this field. They can also get an opportunity to work in international tribunals such as international court of justice, International criminal court and international organizations such as United Nations.

Judiciary

The position of a judge is a huge responsibility. It is the most respected and noble position. To become a judge, one has to clear the state judicial examination which is conducted by the public service commission of their respective state. One should also be enrolled as an advocate. Age criteria various in different states.

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Career in Public Administration

Ayushi Verma and Vithika Gupta
Biyani Law College, India

Abstract:

Public Administration is one among those few courses which are multifaceted and hooked into other courses and subjects for its theories and ideas. The course is synonymous to policies and frameworks of economics, politics, administrative, management, law, sociology and lots of other such related subjects. This field is especially concerned with development and implementation of State Policies.

Working in this field requires the person to possess good Administration Skills along with a concrete understanding of finance, accounts and an apt knowledge of how the government works around its policies. After completion its study, individuals from this field can consider working with a nonprofit and welfare agencies also, aside from government bodies, government and public service organizations.

Eligibility for Public Administration course:

For admission to Public Administration course during a Bachelor's Degree the candidate is required to finish higher education or 10+2 examination. Mostly, the duration for the bachelor's course to study Public Administration is three years.

For pursuing of Public Administration course for his or her Master's degree the candidate is required to finish his/her graduation in any discipline. Usually, the duration for the Master' course to study Public Administration is 2 years.

Keywords: Personnel, Hooked, Correctional Treatment Specialist

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लॉ में रोजगार के विकल्प

जय कुमार जैन
विद्यार्थी, एल.एल.बी.प्रथम वर्ष, बियानी लॉ कॉलेज, जयपुर

डिग्री एक, विकल्प अनेक:

लॉ में ग्रेजुएशन करने के बाद आपके पास सिर्फ वकील बनने का ही विकल्प नहीं है, बल्कि आप अपनी इच्छानुसार देश–विदेश की मल्टीनेशनल कंपनियों में भी नौकरी कर सकते हैं। अनुभव के बाद सरकारी विभागों और निजी कंपनियों के लिए लीगल कंसल्टेंट का काम भी कर सकते हैं। राज्य और केंद्र सरकारों में अटॉर्नी जनरल भी लीगल सेक्टर के एक्सपर्ट और बेहद अनुभवी होते हैं। एजुकेशन और रिसर्च से जुडे रहने के इच्छुक युवा एलएलएम और एलएलडी करने के बाद टीचिंग के प्रोफेशन में भी जा सकते हैं। लॉ को कॅरियर के रूप में

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चुनने वाले अधिकांश विद्यार्थियों का सपना होता है न्यायिक सेवा परीक्षा (Judicial Service Examination) में चयनित होकर सिविल न्यायाधीश (Civil Judge) का पद प्राप्त करना। आप परीक्षा पास करके प्राप्त कर सकते हैं। सिविल जज के प्रतिष्ठापूर्ण पद के अतिरिक्त वकीलों (Lawyers) को संघ लोक सेवा आयोग (Union Public Service Commission) द्वारा उनके अनुभव के आधार पर केंद्रीय सेवाओं में भी नियुक्त किया जाता है। केंद्रीय स्तर पर लॉ ऑफिसर, लीगल एडवाइजर, डिप्टी लीगल एडवाइजर आदि के पद हैं। राज्यों में राज्य पुलिस, राजस्व एवं न्यायिक विभागों में वकीलों की नियुक्ति की जाती है। विभिन्न स्तर के अधीनस्थ न्यायालयों (Subordinate Courts) में न्यायिक दंडाधिकारी (Judicial Magistrate), जिला एवं सत्र न्यायाधीश, सब मजिस्ट्रेट, लोक अभियोजक, एडवोकेट जनरल, नोटरी एवं शपथ पत्र आयुक्त के पद उपलब्ध हैं। शिक्षण और रक्षा सेवा में भी जाने के विकल्प इस पेशे में हैं। लॉ कोर्स के तहत सिविल लॉ, क्रिमिनल लॉ, कॉरपोरेट लॉ, प्रॉपर्टी लॉ, इन्कम टैक्स लॉ, इंटरनेशनल लॉ, फैमिली लॉ, लेबर लॉ, प्रेस लॉ, एक्साइज लॉ, कॉन्स्टीटयूशनल लॉ, एडमिनिस्ट्रेशन लॉ, सेल ऑफ गुड्स लॉ, ट्रेड मार्क, कॉपीराइट, पेटेंट लॉ आदि के बारे में पढाया जाता है। लॉ के इन विभिन्न क्षेत्रों में विशेषज्ञता हासिल कर इनमें भी करियर बनाया जा सकता है। LL.B कानूनी शिक्षा की सबसे आम डिग्री है।

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