

INTERNATIONAL MULTIDISCIPLINARY
CONFERENCE ON RECENT INNOVATION
IN SCIENCE, ENGINEERING,
MANAGEMENT AND HUMANITIES
(RISEMH-2022)

Organised by



J.S. UNIVERSITY

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22-23 November 2022

Editors

Dr. GauravYadav

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J. S. University, Shikohabad

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A.K. Degree College ,Shikohabad

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Preface

IARDO and AR Research Publication is fast growing group of academicians in Engineering, Social Sciences and Management. AR Research Publication is also known for fast reply and zero error work. Conference world has organized various conferences at renowned places namely Delhi University; New Delhi, Jawaharlal Nehru University; New Delhi, Ph.D. Chamber of Commerce and Industry New Delhi, YMCA New Delhi, India International Centre New Delhi Sri Venkateswara college of Engineering and Technology, Andhra Pradesh, DhananjayMahadik Group of Institutions (BIMAT), Shivaji University, Maharashtra, Vedant Engineering Kota and many more places across the country.

We are very pleased to introduce the proceedings of the International Multidisciplinary Conference on Recent Innovation in Science, Engineering, Management and Humanities (RISEMH-2022). As for previous conferences, the theme was the link between the information provided by conference world and the use made of this information in assessing structural integrity. These were the issues addressed by the papers presented at the conference. The level of interest in the subject matter of the conference was maintained from previous events and over 140 suitable papers were submitted for presentation at the conference.

Papers were well represented in the conference to arouse a high level of international interest. These countries were represented in the final program from Poland, Malaysia, Vietnam, Russia, Bulgaria, and Saudi Arabia. In the event, the conference was highly successful. The presented papers maintained the high promise suggested by the written abstracts and the program was chaired in a professional and efficient way by the session chairmen who were selected for their international standing in the subject. The number of delegates was also highly gratifying, showing the high level of international interest in the subject. This is also indicated by the large number of countries, 12 represented by the delegates. This Proceeding provides the permanent record of what was presented. They indicate the state of development at the time of writing of all aspects of this important topic and will be invaluable to all workers in the field for that reason. Finally, it is appropriate that we record our thanks to our fellow members of the Technical Organizing Committee for encouraging participation from those areas. We are also indebted to those who served as chairmen, without their support, the conference could not have been the success that it was. We also

acknowledge the authors themselves, without whose expert input there would have been no conference. Their efforts made a great contribution to its success.

About University

JS University, Shikohabad is the 'dream come true' of ShriJagdish Singh Ji, through Sri Jagdish Jan Kalyan Educational Trust which is working seriously in the field of quality education for rural area students since long back. Dynamic educationist Dr. Sukesh Kumar working vigorously in expanding the Colleges of this Trust in terms of a well planned University. The State Government under the leadership of ShriAkhileshYadav, the Honorable Chief Minister of Uttar Pradesh took cognizance and introduced a Bill to the status of a University in March 2015 and christened it as J.S. University, Shikohabad, Firozabad. Hon'ble Chief Minister proposed, "With a view to encourage infusion of philanthropic capital in private sector to participate in the field of higher education and encourage competition to attract high quality faculty and students and continuously enhance quality it has been decided to establish and incorporate a teaching University by the name of J.S. University, Shikohabad, Firozabad by ShriJagdish Jan Kalyan Educational Trust, Shikohabad, Firozabad.." We are working hard for this noble purpose. Our motto is -' विद्याविनोयोगदिवकासः' (Progress through proper application of knowledge.)

Vision

To be one of the leading international education providers and a research-led university of its own kind. Creating and disseminating knowledge, and providing students a unique learning experience in Science, Technology, Management and other areas of scholarship that will best serve the world and betterment of mankind.

Our ability to enhance the well-being of the people by Educating and Serving the Society by putting the knowledge to work with excellence. To advance the professional competence of youth and inculcate in them the urge to recognize challenges as opportunities

ABOUT IARDO:

International Association of Research and Developed Organization (IARDO) is a leading organization in the field of academic research activities under the banner of India Educational Charitable Trust (Regd).

International Association of Research and Developed Organization (IARDO) is an apex body that promotes and encourages commendable achievements from all over the

country. The organization under conference world regularly organizes national and International level conferences with the help of its members to promote socially responsible education practices and sustainable development in economic as well social front in India.

In past, we have organized international conferences in different universities and colleges of the country like JNU New Delhi, University of Delhi, Punjab University, Pune University and many other renowned organizations in India.

Aim & Objective of the Conference

The conference is aimed to bring together innovative academics and industrial experts in the field of Science, Engineering and Technology to a common forum. International Multidisciplinary Conference on Recent Innovation in Science, Engineering, Management and Humanities (RISEMH-2022) addresses the rapid strides and technological advancements currently witnessed in the fields of Science, Engineering and Technology. The conference aspires to exhibit the technical excellence of budding technocrats, research scholars, representatives from the academia and industry.

All papers will undergo a double-blind peer review process and the criteria for acceptance will be based on quality, originality, technical content and relevance.

International Multidisciplinary Conference on Recent Innovation in Science, Engineering, Management and Humanities (RISEMH-2022) organized by JS University, Mainpuri Road, Shikohabad Distt. Firozabad (U.P) with the collaboration of IARDO and Conference World on **22-23 November 2022**

Total 214 papers were received for the conference and 112 papers were shortlisted by the committee for the book chapter and 50 papers are selected in Scopus Journal.

1. Accepted papers will be published in the peer reviewed international journals having ISSN & High Impact factor.
2. Selected Papers will be published in the UGC Care listed international journals having ISSN & High Impact factor.
3. Few very good quality Papers will be published in the Scopus indexed journal having ISSN & High Impact factor.
4. Author will get certificates, one for paper publication in Journal other for paper presentation in conference as per their choice
5. All the papers of the conference will be published in the conference proceeding with ISBN.
6. All the accepted and presented/Non-Presented papers will be indexed in Google scholar & IDIIF.

MESSAGE FROM CHANCELLOR'S DESK



I extend my hearty vote of thanks to the organizers for inviting me to address the “International Multidisciplinary Conference on Recent innovations in Science, Engineering, Management and Humanities (RISEMH -2022)”. This conference is aimed to disseminating new inventions, recent trends, novel findings and their applications in real-world to serve society by meeting social challenges and needs. This conference provided the platform for experts in their respective fields and budding researchers to share their experiences and findings which will explore futuristic interdisciplinary research areas. I would like to congratulate RISEMH-2022 organizers for the achievement of collecting 140 papers for this conference. We have received research papers from renowned National, International Universities and industrial companies is a great success for J.S. University. The foremost challenge for JSU is to remain competitive and relevant by providing top-notch technical academic programs and research activities that concentrate on its specific areas. On behalf of J.S. University, I would like to thank to all committee members of RISEMH-2022 for their effort and firm determination.

Dr. Sukesh Kumar

Chancellor

J.S. University

Shikohabad

MESSAGE FROM PRO CHANCELLOR'S DESK



It gives me immense pleasure that J.S. University has organized International Multidisciplinary Conference on Recent innovations in Science, Engineering, Management and Humanities (RISEMH -2022) and is also publishing "conference proceedings". This conference provided the chance to spur the interchange of ideas in the field of Science, Engineering and Humanities. It gives me great pleasure to share a few words about the conference proceedings, which is a huge effort of Team members of RISEMH-2022. This international conference is planned with the most recent discoveries and advancements in mind. This linkage within the different sectors of the corporate world is assist to produce efficient technocrats for the market. We exist to create transformative experiences for our students, getting them ready for better life and work and to help shape the world with research, innovation and teaching. This international conference was planned with the most recent discoveries and advancements; it gave participants access to intricate information crucial to modern survival. I express hearty congratulations to the RISEMH-2022 team for their commendable effort and also thanks to the participants for being an active part of the conference.

Dr. P. S. Yadav

Pro Chancellor

J. S. University

Shikohabad

MESSAGE FROM VICE CHANCELLOR'S DESK



I am pleased that J. S. University organized International Multidisciplinary Conference on Recent innovations in Science, Engineering, Management and Humanities (RISEMH -2022), in association with conference world on 22nd - 23rd November 2022. This International conference offers an education deeply grounded in ideas and cross-disciplinary understanding, applied through innovative, enterprising practice for solving problems. It provided an opportunity to researchers and academicians to enhance the information of various area of research. Regardless of disparities in time and place, our conference served as a global platform for -sharing research experiences. Huge numbers of quality papers have been presented at the conference. I convey my best wishes to the RISEMH -2022 organizing committee and the participants for the success of the conference.

Prof. Hari Mohan

Vice Chancellor

J.S. University

Shikohabad

MESSAGE FROM VICE CHAIRPERSON'S DESK



I am profusely elated that our J.S. University has organized an International Multidisciplinary Conference on Recent innovations in Science, Engineering, Management and Humanities (RISEMH-2022). RISEMH offers practioners and educators a multidisciplinary forum where they present and discuss current innovations, trends and issues as well as real-world difficulties and solutions. This event also served society by addressing social concerns and demands. I am honoured of stating that this conference has provided solutions to social needs. I express my thanks to all committee members of RISEMH-2022 who had worked from almost a year ago with so much passion, zeal, dedication and accomplished successful conference.

Dr. GeetaYadav

Vice Chairperson

J.S.University

Shikohabad

MESSAGE FROM DIRECTOR GENERAL'S DESK



The conference entitled “International Multidisciplinary Conference on Recent innovations in Science, Engineering, Management and Humanities (RISEMH -2022)” offered a forum for discussions on numerous latest research areas associated with the field of Science, Engineering, Management, Humanities and Technology. In proceedings, national and international research papers of various fields are presented. It is believed that sharing of knowledge and experiences help us to update and further enables us to associate with the new field of research areas. This conference aimed to support and motivates researchers to think out of the box and spread their wings in a new field of research. My best wishes to all committee members of RISEMH-2022 who work tirelessly and make this event successful. As Chief Patron of RISEMH-2022, I forecast that these proceedings would be of enormous worth and will be beneficial to researchers in their practices or thinking process. This will lead to opening new window for novel perspectives in the direction of research. I hope this conference will be very interesting, informative and exposed new avenue for all the researchers.

Dr. Gaurav Yadav

Director General

J. S. University

Shikohabad

GUEST OF HONOR

Dr. Anup Kumar Mudgal

Former Indian Ambassador Mauritius, IFS retd.

Dr. AseemChandel

Dean, Rajkiya Engineering College, Mainpuri

KEYNOTE SPEAKERS

Dr. Thanh-Dong-Pham,

Vietnam National University.

Dr. Thanh-Dong-Pham is working as a Research Scientist in the Department of Chemistry, Vietnam National University. He received his Ph.D. degree in Chemistry from University of Ulsan, Korea. He worked as postdoctoral fellow under Korea Research Fellowship Program. His areas of interest are: Synthesis of efficient Photocatalysts for air purification, environmental and energy applications He has published numerous research papers in reputed journals.

Prof. Veronica Yarnykh,

Russian State University for Humanities (Moscow)

Prof. Veronica Yarnykh received her Ph.D. in economy in the year of 2003. She is an Associate Professor of Media Communication, Head of Master's program, Host of MIL Talk. She is also a Co-leader of UNESCO Global Gown & Town Initiative and Visiting professor of Milan State University. Her professional interest in the various fields like global media communication, global corporate communication, corporate media education and brand journalism.

Prof. DevduttChaturvedi,

Mahatma Gandhi Central University, Bihar.

Dr. DevduttChaturvedi is working as Professor & Dean, School of physical & material sciences Mahatma Gandhi Central University, Bihar. He received his Ph.D. degree, from the Medicinal Chemistry Division of the Central Drug Research Institute (CSIR), Lucknow, India. Thereafter, He worked as a Postdoctoral Fellow at the University of Georgia, USA & Institute of Organic Chemistry, University of Goettingen, Germany. He has worked on several areas of organic synthesis and medicinal chemistry. He has published more than 100 research publications in reputed international journals and filed 11 patents. His work has further been recognized from the various kinds of awards such as Most Cited Paper Award (2006-2009) for one of his Tetrahedron Letters publication, Young Scientist Award (2008-2009) from the Govt. of Uttar Pradesh,

Highest Impact Factor Award (2009-2010) for publishing a review article in Chemical Society Reviews (IF: 54.56) and DST-Fast Track Young Scientist Award (2010) from the Govt. of India.

Dr. Adel Al-Gheethi,

Universiti Tun Hussein Onn, Malaysia

Dr. Adel Al-Gheethi received Ph.D. degree in Environmental Technology, in the year of 2014. He is currently working as Professor in the Department of Water and Environmental Engineering, University Tun Hussein Onn Malaysia Johor, Malaysia. He is also associated with the Department of Civil Engineering and Built Environment of this University. He was the Young Ambassador of American Society of Microbiology (ASM) for Malaysia (2020). He is expertise in various areas of research like pharmaceutical microbiology, waste water treatment, antimicrobial resistance, phycoremediation, bio-nanotechnology, photocatalysis. He has received many national and international awards in the field of water remediation.

Prof. Michal Piasecki,

Jan Długosz University, Poland

Dr. Michal Piasecki received his Ph.D. from Institute of Low Temperature and Structural Research Polish Academy of Sciences in Wroclaw (Poland) and habilitation in Zielona Gora University. Now, he is working as Professor and Head of Theoretical Physics Department, Jan Długosz University (Poland) and LesyaUkrainka Eastern European National University, Ukraine. His areas of research cover phase transitions, ferroelectricity, thermoelectricity, luminescence and non-linear optics. He conducted several EU projects utilising ultra-UV (synchrotron) spectroscopic ellipsometry for investigations of novel photonic materials and bilateral research projects between Poland and France, Portugal, Taiwan as partner countries. He is author of 190 publications in SCI journals, H-index=27, more than 2700 citations. He has received numerous awards : Polish Academy of Sciences -2 times; Polish Ministry of Sciences and Higher Education; Rector of J.Długosz University.

INVITED SPEAKERS:

Dr. Margarita Milanova,

Bulgarian Academy of sciences, Bulgaria.

TOPIC: Tungsten and niobium modified zinc borate glasses doped with Eu³⁺ ions with improved luminescence properties

Prof. Atul Khanna,
Guru Nanak Dev University, Punjab

TOPIC: Oxide Glass and Crystalline Phosphors

Dr. Shahnawaz Ansari,
King Abdulaziz University, Jeddah, Saudi Arabia.

TOPIC: Reactively sputtered magnetite thin films on Polymer substrates for flexible and wearable spintronics

Prof. Ajit K Sharma,
Lovely Professional University, Punjab

TOPIC: Functional photocatalytic materials for energy and environmental applications

Dr. Praveen Kumar,
University of Medical sciences, Saifai

TOPIC: Recent Trends in Anti-epileptic drug development.

Prof. V. Elangovan,
Babasaheb Bhimrao Ambedkar University, Lucknow

TOPIC: Diversity & Ecology of bats

Dr. Kumari Sunita,
Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur

TOPIC: HT-PGPR Pseudomonas fluorescence strain DTPF3 in Kala Namak rice to a strengthen plant growth and soil health under salinity stress

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TECHNICAL SESSION-2: Dr. Prakash Singh, Rajkiya Engineering College, Mainpuri

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mode online (Googlemeet platform) & offline. 5 tracks were run in parallel in two sessions during these two days.

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