About the University

Launched in 2011, Manipal University Jaipur (MUJ) is a co-educational, residential, private research university located in the city of Jaipur in Rajasthan, India. MUJ has redefined academic excellence in the region, with the Manipal way of learning; one that inspires students of all disciplines to learn and innovate through hands on practical experience. The multi-disciplinary university offers career-oriented courses at all levels, i.e., UG, PG and doctoral and across diverse streams, including Engineering, Architecture, Planning, Fashion Design, Interior Design, Fine Arts, Hospitality, Humanities, Journalism and Mass Communication, Basic Sciences, Law, Commerce, Computer Applications, Management, etc. Some PG programmes are also available in the research mode.

Department of Physics

The Department of Physics at Manipal University Jaipur comes under the umbrella of School of Basic Sciences. The department was established since the inception of the university in 2011 with a vision to provide excellence in the higher education in Physics and to pursue research in interdisciplinary science. Apart from teaching, the department continuously puts major efforts in conducting research work in the thrust areas of materials science, nanoscience, plasma physics and nuclear physics. Currently there are 13 faculty members who are highly qualified and hail from the globally recognized best institutions with rich experience in teaching and have made significant contribution to their respective areas of research. The department also hosts several research projects sponsored by SERB, DST, UGC, DAE and DST Rajasthan.

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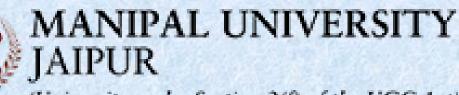


International Conference on Multifunctional Nanomaterials

(ICMN 2020)

(28-30 December, 2020)





(University under Section 2(f) of the UGC Act)



Organized by; Department of Physics, Manipal University Jaipur Jaipur – 303007 Rajasthan, India https://jaipur.manipal.edu/ Conference Website https://icmn2020.com/

Theme

Multifunctional nanomaterials have greater ability than conventional materials, to perform several goals synergistically. They are gradually attracting more and more attention because of their ability to combine numerous properties, such as electronic, magnetic, optical, and catalytic. Their highly functional behaviour with modified properties is often observed to be quite different from those of the individual materials. The distinctive properties of these materials employed materials or through together with other meet the functionalization, diverse application requirements. The purpose of the functionalization is manyfold, such as surface modification, the ability to increase the functionality, dispersibility, and stability, controlled release of the single nanoparticles, reduction in consumption of materials, etc. Therefore, it is an appropriate time to open a forum where a high quality and an exceptional knowledge exchange can take place among students, academics and industry researchers.

International Conference on Multifunctional Nanomaterials (ICMN 2020) aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Multifunctional Nanomaterials. It also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the field of Materials science.

Call for Contributions

Prospective authors are kindly encouraged to contribute to and help shape the conference through submissions of high quality research contributions describing original and unpublished results of conceptual, constructive, empirical, experimental, or theoretical work in all areas of Multifunctional Nanomaterials. The researchers. academics and industry representatives are cordially invited for presentation at the conference. The ICMN 2020 solicits contributions of abstracts as well as full papers that address its topics and theme.

Registration Fee

| Category | Fee | Fee |
|--------------------------|-------------------|-----------------------------|
| (Indian | Delegates)INR (₹) | (Foreign Delegates) USD(\$) |
| Student /Faculty/Scholar | 3500 | 75 |
| (With Publications) | | |
| Student /Faculty/Scholar | 1000 | 50 |
| (Without Publications; | | |
| only participation) | | |
| Industry Person | 5,000 | 150 |

Topics to be covered

 Advances in Functional and Multifunctional **Nanomaterials**

- •Hybrid Nanomaterials
- •Shape Memory Materials: State-of-the-art Research
- and Applications
- Advances in Multiferroic and Magnetoelectric Nanomaterials and Applications
- Advances in Inorganic Luminescent Nanomaterials and Applications
- •Catalytic Nanomaterials
- Photocatalytic Nanomaterials for Energy and **Environmental Applications**
- •Energy Harvesting via Smart Nanomaterials
- Nanomaterials for Superconductivity
- Stretchable and Flexible Electronic Nanomaterials & Devices
- Bioinspired Nanomaterials
- •Biomimetic bioactive biomaterials the novel materials of implantable devices
- Stimuli Responsive Nanomaterials
- Intelligent drug delivery and release systems
- •New Nanomaterials for sensors and actuators: Sensing
- the Future with New Materials
- Intelligent Nanomaterials for Textiles
- •Fire Retardant Nanomaterials and surfaces
- Smart Materials & Nanosystems
- •Graphene and Other Emerging 2D-layered Nanomaterials

Important Deadlines

| Submission of abstract & full paper: | 10.12.2020 |
|--------------------------------------|------------|
| Acceptance notification: | 15.12.2020 |
| Registration deadline: | 25.12.2020 |
| Outra Destatuates | |

Online Registration

Participants can submit online registration form through the conference website. https://icmn2020.com/

Guidelines for Participants

Instructions for Poster Presentation:

A poster should be prepared in such a way that the delegates are able to quickly read and grasp the idea. Hence, these should be visually appealing and legible. The contents should be easily readable.

Instructions for Oral Presentations:

Power point presentations will be made by the presenting author in a pertinent Scientific Session. Time duration for each presentation will be 10 min., followed by discussions, if any.

School on Material Characterization Techniques

A winter school will be held on 26 and 27 December, 2020 for senior UG, PG students and Research scholars on various characterization techniques used in multifunctional nanomaterials.

Due to the current grave scenario of COVID-19 pandemic, this conferencee ICMN2020 will be organized ONLINE. Participants will give their talks and join in online conversations during the conference using an online conference platform. The virtual conference program will be announced before the conference dates and the online conference platform will be available for all registered authors and listeners. All the registered participants will get an e-certificate.





For more details please visit the conference website.

Online Conference Platform

Note: The accepted papers will be published in Journal of Nano- and **Electronic Physics (Scopus Indexed,** Impact Factor 0.570) and in Materials **Today: Proceedings (Scopus Indexed)**

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Report

Activity name: International Conference on Multifunctional Nanomaterials (ICMN2020) at Manipal University Jaipur

Date of activity: December 28-30, 2020 **Organizer:** Department of Physics, Manipal University Jaipur (MUJ), Jaipur, Rajasthan, India.

Convener: Dr. Ashima Bagaria, MUJ and Dr. Kamakhya Prakash Misra, MUJ

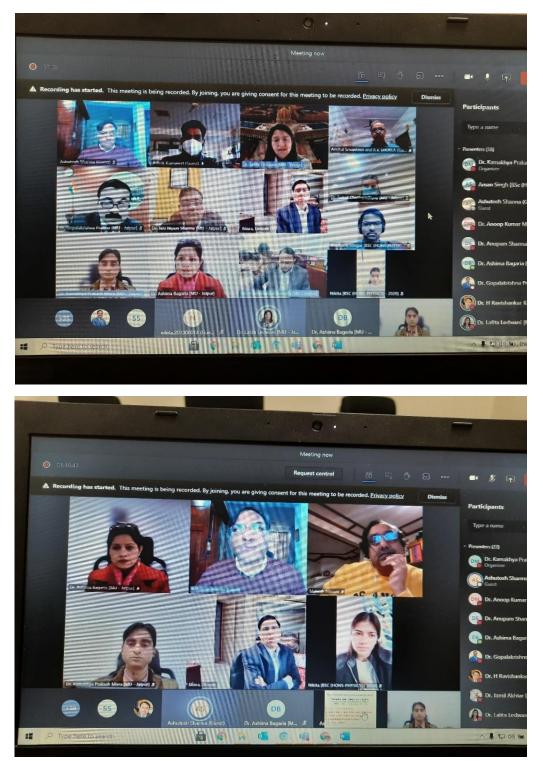
The International Conference on Multifunctional Nanomaterials was inaugurated at the Department of Physics, Manipal University Jaipur on December 28, 2020 by Prof. Ashutosh Sharma, Secretary, Department of Science and Technology, Government of India. Speaking at the event, Prof. Sharma mentioned that the problem solving must be driven by the common sense. In today's world we must think of solving the problems by innovative ways. The plenary speaker Prof. R.D.K. Misra from University of Texas, USA explained how nanomaterials have come into existence and taken over the current generation research. President of the university, Prof. G.K. Prabhu told about the evolution and growth of Manipal group. The other dignitaries of the university like Pro-president Prof. N. N. Sharma, registrar Prof. H R Kamath, Dean, faculty of science Prof. A. K. Mukhopadhyay, director Prof. Lalita Ledwani head Physics department Dr. Ashima Bagaria were also present during the inaugural ceremony. Renowned scientists, scholars and academics from across the world were available online to witness the inaugural ceremony. The international conference continued for three days from December 28 to 30, 2020. Distinguished invited speakers from USA, UK, France, China, Denmark, Finland, Iran and India shared their ideas and latest research on multifunctional nanomaterials within the span of this three days event. Young research scholars presented their research work on the online platform. Out of total 70 presentations, ten best oral presentation were awarded with certificates. The conference proceedings were published in Journal of Nano and Electronic Physics and Materials Today: Proceedings.

As an integral event of the conference, a winter school on Materials Characterization Techniques was also organized during December 26-27, 2020. Nearly 100 PG and PhD students participated in the school.



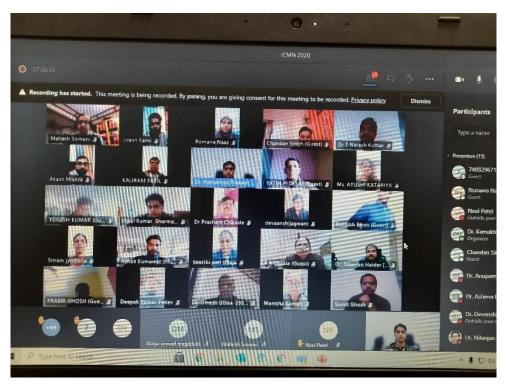
Photographs: ICMN2020

Inaugural Ceremony





Technical Session





Winter School on Materials Characterization Technique





MANIPAL UNIVERSITY JAIPUR (University under Section 2(f) of the UGC Act)





List of Participants

International Conference on Multifunctional Nanomaterials (ICMN2020) at Manipal University Jaipur

| Salutati on | Full Name | Designation | Organization | City Name | Count ry |
|----------------|---------------------------------|--|---|------------|------------------|
| Mr. | Ajay A V | Assistant Professor | Pillai HOC College of Engineering and Technology, Rasayani, Maharashtra | New Panvel | |
| Dr. | ARIF RASHID SHAH | Guest lecture | Jiwaji University Gwalior M.P | Gwalior | INDIA |
| Ms | KAVITA SHARMA | RESEARCH SCHOLAR | CENTRAL UNIVERSITY OF RAJASTHAN | AJMER | India |
| Ms | Romana Naaz | Research Scholar | Jamia Millia Islamia | New Delhi | India |
| Mr. | Shankar Kumar Vijay | PhD. Scholar | AMITY University Rajasthan, Jaipur, India | Jaipur | India |
| Dr. | Anita Rajkumar Ghandhe | Assistant professor of Nanotechnology | University of Horticulture Science Bagalkot -587104 | Bagalkot | India |
| Dr. | Sumit Ghosh | Post Doctoral Researcher | University of Oulu | Oulu | Finlan d |
| Ms | Anam Zaidi | Research Scholar | BBD University | lucknow | India |
| Dr. | T Naresh Kumar | Associate Professor | Annamacharya Institute of Technology and Sciences(Autonomous)Raj ampet | RAJAMPET | India |
| Ms | Shivi Saxena | Research Scholar | Western Michigan University | Kalamazoo | United States |
| Dr. | Uvais Valiyaneerilakka I | Assistant Professor | Manipal University Jaipur | Jaipur | India |
| Mr. | KASIBHATLA VISHNU VARDHAN | PG Scholar | Annamacharya Institue of Technology and Sciences | Kadapa | India |
| Dr. | P HARI KRISHNA | ASSISTANT PROFESSOR, PHYSICS | MEDI-CAPS UNIVERSITY, INDORE | INDORE | INDIA |
| Ms | anjali shrivastava | Research Scholar | Jiwaji University | Gwalior | India |
| Mr. | Raj Kumar | Ph. D. Scholar (Part- Time) | Jaypee University of Information Technology (JUIT), Waknaghat Distt. Solan Himachal Pradesh (India) -173234 | Solan | India |
| Mr. | N. A. Patel | Students | Department of Physics, Veer Narmad South Gujarat University, Surat 395007 | Surat | India |
| Ms | Romana Naaz | Research scholar | Jamia Millia Islamia | New Delhi | India |



| | | | Manipal Institute of | | |
|-------|----------------------------------|-----------------------------|---|-----------------------------------|--------------|
| Mr. | Surai Mangavati | PhD scholar | Technology, MAHE, Manipal | UDUPI | India |
| IVII. | Suraj Mangavati DEEVANSHI | ASSOCIATE | IES - IPS ACADEMY | UDUPI | India |
| Dr. | JAGWANI | PROFESSOR | INDORE | INDORE | INDIA |
| Mr. | Suraj Mangavati | PhD scholar | Manipal Institute of Technology, MAHE, Manipal | UDUPI | India |
| Mr. | Suraj Mangavati | PhD scholar | Manipal Institute of Technology, MAHE, Manipal | UDUPI | India |
| Dr. | Dinesh Uthra | Assistant Professor | Department of Pure & Applied Physics , G.G.V. (A Central University) , Koni, Bilaspur (C.G.) | Bilaspur (C.G.) | India |
| Dr. | Ashima Bagaria | Associate Professor | Manipal University Jaipur | Jaipur | India |
| Ms | Jyoti Shukla | PhD Research Scholar | School of Physics, Devi Ahilya University | Indore | India |
| Ms | Anu Katiyar | Research Scholar | Department of Physics, University of Lucknow | Lucknow | India |
| Dr. | Shashank N. Kane | Professor | School of Physics, Devi Ahilya University | Indore | India |
| Ms | Ishrat | Technical Assistant | Sher-e-Kashmir University of Agricultural Sciences and Technology, Kashmir | Srinagar | India |
| Mr. | Nand Jee Kanu | PhD Research Scholar | S. V. National Institute of Technology, Surat, Gujarat-395007, India | Surat | India |
| Dr. | Gurumurthy B Ramaiah | Associate Professor | Federal TVET Institute | Addis Ababa | Ethiopi a |
| Mr. | Sunil Kumar Tiwari | Doctoral Research Fellow | University of Petroleum and Energy Studies | Dehradun | India |
| Mr. | Harsh Sharma | Assistant Professor | Dev Bhoomi Group of Institutions | Dehradun | India |
| Dr. | Prashant Parshuram Chikode | Assistant Professor | Jaysingpur College, Jaysingpur | Jaysingpur | India |
| Ms | Janset Öztemur | Researcher | Istanbul Technical University | Istanbul | Turkey |
| Dr. | NISHANT KUMAR | Assistant Professor | A. ISLAMIA DEGREE COLLEGE, LUCKNOW | LUCKNOW | India |
| Ms | Sreeja Keerthipati | PG Student | AITS, Rajampet | Kadapa | India |
| Dr. | PAYEL BANDYOPADH YAY | Assistant Professor | SRM Institute of Science and Technology, Kattankulathur | Kattankulath ur, Tamil Nadu | India |
| Mr. | Yatin P. Desai | Assistant Professor | Parvatibai Chowgule College, Gogol, Margao, Goa. 403602 | Margao - Goa | India |
| Ms | Nikita Chhetri | PhD Scholar | University of North Bengal | Siliguri | India |
| Mr. | KALIRAM PATIL | Research Scholar | School of Physics Devi Ahilya University Indore | Barwani | India |



| | | | Maulana Azad national | | |
|-----|-------------------------------|------------------------------------|--|------------------|-------|
| Ms | Ayushi Katariya | PG student | institute of technology, Bhopal | Bhopal | India |
| Ms | Parita Basnet | PhD Scholar | Sikkim Manipal Institute of Technology | Majitar | India |
| Mr. | Akash | Research Scholar | UIET, Maharshi Dayanand University | Rohtak | India |
| Ms | Manisha | M.Tech student | IIMT College of Engineering | Greater Noida | India |
| Mr. | KALIRAM PATIL | Research Scholar | School of Physics Devi Ahilya University Indore Madhya Pradesh,India | Barwani | India |
| Mr. | Sandeep | Ph.D Scholar | UIET MDU ROHTAK HARYANA | ROHTAK | INDIA |
| Dr. | Sushil Kumar Jain | Associate Professor (Sr. Scale) | Manipal University Jaipur | Jaipur | India |
| Mr. | Bhupesh Jain | Research Scholar | Manipal University Jaipur | Jaipur | India |
| Dr. | K SAKTHI VADIVEL | ASSOCIATE PROFESSOR | BUILDERS ENGINEERING COLLEGE | TIRUPUR | INDIA |
| Ms | Neeru Gupta | Research Scholar | Lovely Professional University | Jalandhar | India |
| Dr. | Kamakhya Prakash Misra | Assistant Professor | Manipal University Jaipur | Jaipur | India |
| Mr. | VAIBHAV JAIN | Research Scholar | Manipal University Jaipur | Jaipur | India |
| Ms | G Padmasree | Associate Professor | Stanley College of Engineering & Technology for Women | Hyderabad | India |
| Dr. | Rashi Nathawat | Assistant Professor | Manipal University Jaipur | JAIPUR | India |
| Ms | Sriram Jyothsna | Scholar | Kakatiya University | Warangal | India |
| Mr. | HARENDRA KUMAR SATYAPAL | Ph.D. scholar | ACNN, ARYABHATTA KNOWLEDGE UNIVERSITY | PATNA | INDIA |
| Ms | NIDHI | Research Scholar | Dr. Harisingh Gour University, Sagar(M.P.) | Sagar | India |
| Mr. | Dinesh Yadav | Research Scholar | DCRUST Murthal | Sonipat | India |
| Dr. | SAIKAT CHATTOPADH YAY | Assistant Professor | Manipal University Jaipur | Jaipur | India |
| Mr. | Harish | Research Scholar | Manipal University Jaipur | Jaipur | India |
| Dr. | Jyoti Sharma | Post Doctorate | Mumbai University | Mumbai | India |
| Dr. | Satyapal Singh Rathore | Assistant Professor | Manipal University Jaipur | Jaipur | India |
| Mr. | RISHI KANT SHARMA | JRF | IIT ROORKEE | ROORKEE | INDIA |
| Ms | Anam Zaidi | Research scholar | BBD University | Lucknow | India |
| Mr. | Rajat Singh | Student | Amity University Rajasthan | Jaipur | India |



| Ms | Rabina Bhujel | Research Scholar | SIKKIM MANIPAL INSTITUTE OF TECHNOLOGY | MAJITAR | India |
|------|---------------------------------------|---|---|------------------|-------|
| | | | Sikkim Manipal Institute of | | |
| Ms | Sadhna Rai | Ph.D. Scholar | Technology | Rangpo | India |
| Ms | Reenu Sara Jacob | MTech student | Amal Jyothi college of Engineering | kollam | India |
| Dr. | Archana Shivaji Patil | Assistant Professor | Rajarshi Chhatrapati Shahu College, Kolhapur. | Kolhapur | India |
| Mr. | Prabir Ghosh | Scholar | The University of Burdwan | Hooghly | India |
| Ms | Nikita Karma | Research Scholar | Govt. Holkar Science College | Indore (M.P.) | India |
| Dr. | Sanyog Rawat | Associate Professor (Senior Scale) | Manipal University Jaipur | Jaipur | India |
| Dr. | Dr. Anupam Kumar Sharma | Associate Professor | Manipal University Jaipur | Jaipur | India |
| Mr. | Deepak Kumar Yadav | Research Scholar | University of Rajasthan | Jaipur | India |
| Mr. | MOHD FARMAN | INTEGRATED DUAL DEGREE PROGRAM(M.Tech+ Ph.D) | AcSIR CSIR-CEERI PILANI | PILANI | INDIA |
| Ms | Kanika Chauhan | Project Assistant | CSIR-CEERI PILANI | Pilani | India |
| Mr. | JITESHKUMAR MUKESHBHAI RAMI | Research Scholar | Sankalchand Patel University | Visnagar | India |
| Ms | Richa Sharma | Research Scholar | Manipal University, Jaipur | Jaipur | India |
| Ms | AANCHAL SETHI | Ph.D. Research Scholar | Department of Chemistry | DELHI | India |
| Dr. | L. S. Chongad | Assistant Professror | Govt Arts and Science College Ratalm MP | Ratalm | India |
| Dr. | Ruchika Mehta | Associate Professor | Manipal University Jaipur | Jaipur | India |
| Dr. | Nilanjan Halder | Associate Professor | Manipal University Jaipur | Jaipur | India |
| Mr. | Akash MIshra | Student | IIT Bombay | Bombay | India |
| Dr. | SHAIK FAKRUDDIN BABAVALI | ASSISTANT PROFESSOR | V.R.SIDDHARTHA ENGINEERING COLLEGE | VIJAYAWA DA | INDIA |
| Mr. | Chandan Singh | Research scholar | Manipal University | Jaipur | India |
| Mr. | SRI DURGA VARA PRASAD MAGATHOTI | ASSISTANT PROFESSOR | PACE INSTITUTE OF TECHNOLOGY AND SCIENCES, VALLUR | ONGOLE | INDIA |
| Dr. | Anupam Kumar Sharma | Associate Professor | Manipal University Jaipur | Jaipur | India |
| Ms | Priyanka Yadav | Research scholar | lis (Deemed to be university) | Jaipur | India |
| Ms | R Mankamna Kumari | student | Central University of Rajasthan | Kishangarh | India |
| Prof | Ravi Kant gupta | professor | Manipal University Jaipur | Jaipur | India |



Feedback: Discussion took place during the valedictory function of the conference ICMN2020 on December 30, 2020. Participants enthusiastically shared positive aspects of the conference. Some of the critical suggestions also were shared by the participants. For improvement, some of the critical points are given below.

1. The timing of the conference should be limited to the daytime only. As the some of the lectures were extended till late night.

2. More experts should be invited for expert talks.