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(ICRTMD 2023)
 29-31 December, 2023

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 (Affiliated with M.D. University, Rohtak, Haryana, India)

Program Schedule (Final)

Date	Time	Event
29.12.2023	09:00 AM to 09:30 AM	Inaugural Function
29.12.2023	09:30 AM	Keynote Address – I Professor Raman Singh , FASM, FIEAust Department of Mechanical & Aerospace Engineering Department of Chemical & Biological Engineering Monash University - Clayton Campus (Melbourne), Australia
29.12.2023	10:05 AM	Keynote Address – II Professor Sib Krishna Ghoshal Physics Department and Ibnu Sina Institute for Scientific and Industrial Research (ISI-SIR), Faculty of Science, Universiti Teknologi Malaysia
29.12.2023	10:40 AM	Keynote Address – III Professor Anand Pathak , F Inst P, C Phys, FNA Sc. NASI Senior Scientist Platinum Jubilee Fellow School of Physics, University of Hyderabad Hyderabad, India
29.12.2023	11:15 AM	Keynote Address – IV Dr. Manjeet Singh Goyat Visiting Researcher University of Southern Denmark, Sonderborg, Denmark & Sr. Associate Professor, Applied Science Cluster, School of Advanced Engineering, UPES, Dehradun, India
29.12.2023	11:50 PM	Keynote Address – V Dr. Yogendra Kumar Mishra Professor MSO and Leader of Smart Materials group at Mads Clausen Institute, University of Southern Denmark (SDU), Sønderborg, Denmark
29.12.2023	01:30 PM to 04:00 PM	Technical Session: ICRTMD 01 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 02 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 03 [Students Talks]
29.12.2023	04:00 PM to 06:30 PM	Technical Session: ICRTMD 04 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 05 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 06 [Students Talks]

Date	Time	Event
30.12.2023	09:00 AM	Keynote Address – VI Dr. Surender Duhan Advanced Sensors Lab, Department of Physics, Deenbandhu Chhotu Ram University of Science and Technology, Murthal (Sonapat) Haryana, India
30.12.2023	9:35 AM	Keynote Address – VII Dr. Rehan Khan Institute of Nano Science and Technology, Knowledge City, Sector 81, Mohali, 140306, Punjab, India
30.12.2023	10:10 AM	Keynote Address – VIII Dr. Indra Sulania Inter University Accelerator Centre, Materials Science Group, India
30.12.2023	10:45 AM	Keynote Address – IX Dr. Santanu Ghosh Professor, Department of Physics IIT Delhi, New Delhi, India
30.12.2023	11:20 AM	Keynote Address – X Dr. Arif Kösemen Istanbul University-Cerrahpasa, Institute of Nanotechnology and Biotechnology, 34500, Istanbul, Türkiye
30.12.2023	11:55 AM	Keynote Address – XI Dr. Vinod Kumar Associate Professor, Department of Physics, Netaji Subhas University of Technology (NSUT), New Delhi, India
30.12.2023	12:30 PM	Keynote Address – XII Dr. Ajeet Kaushik Assistant Professor of Chemistry, NanoBioTech Laboratory, Department of Environmental Engineering, Florida Polytechnic University, USA
30.12.2023	01:30 PM to 04:00 PM	Technical Session: ICRTMD 07 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 08 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 09 [Students Talks]
30.12.2023	04:00 PM to 06:30 PM	Technical Session: ICRTMD 10 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 11 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 12 [Faculty/Scientist Talks]
30.12.2023	06:30 PM	Interactive Session

Date	Time	Event
31.12.2023	09:00 AM to 12:30 PM	Technical Session: ICRTMD 13 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 14 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 15 [Faculty/ Scientist Talks]
31.12.2023	01:00 PM to 03:00 PM	Technical Session: ICRTMD 16 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 17 [Students Talks]
		Technical Session: ICRTMD 18 [Students Talks]
31.12.2023	03:00 PM to 05:00 PM	Technical Session: ICRTMD 19 [Faculty/ Scientist (Invited) Talks]
		Technical Session: ICRTMD 20 [Students Talks]
		Technical Session: ICRTMD 21 [Students Talks]
31.12.2023	05:30 PM	Valedictory Function

Note:

1. Start time given above indicates Indian Standard Time (IST).
2. Presentation will be conducted using Google Meet.
3. Participants can join their respective sessions by clicking the Google Meet link (link will be provided on your email at least one day before the start of the conference).
4. The mode of presentation should be power point presentation (ppt or pptx).
5. Duration of presentation for invited faculties/faculties is 12 minutes (presentation) + 3 minutes (Queries). Maximum number of slides 20 only.
6. Duration of presentation for students is 8 minutes (presentation) + 2 minutes (Queries). Maximum number of slides 15 only.
7. Participants using Google Meet will be admitted at any time prior to their scheduled time.
8. Attendees / Listeners only can be admitted at any time using Google Meet link. (link will be provided on your email at least one day before the start of the conference).
9. Participants are requested to follow the scheduled time, especially regarding the time for your talk.
10. Participants are requested to contact the respective session chairs for presentation related queries.
11. If any problem connecting to session, please use the chat box on website and mention your problem and Paper ID. Our team will monitor the chatbox during the event and will try to resolve your issue as early as possible.

Technical Session: ICRTMD 01 [Faculty/ Scientist (Invited) Talks]

Date: 29.12.2023

Time: 01:30 PM to 04:00 PM

Time	Authors	Paper ID	Paper Title
01:30 pm	Ashwani Kumar Sood	ICRTMD-2023/FIT/SIT/101	Impact of various co-solvents on the micellar behavior of ionic surfactants
01:45 pm	Zeenat Arif	ICRTMD-2023/FIT/SIT/102	Mathematical modeling for the assessment of antifouling property of biogenic synthesized nanocomposite film
02:00 pm	Dr. L. Arunraja	ICRTMD-2023/FIT/SIT/103	Tuning Gas Sensing Properties in Chemically Synthesized Zinc Oxide-Doped Cadmium Sulfide Nanocomposites through Annealing Effects
02:15 pm	Manash Jyoti Deka	ICRTMD-2023/FIT/SIT/104	Investigating optical properties of biomass waste derived carbon quantum dots prepared by hydrothermal method
02:30 pm	Dan Bahadur Pal	ICRTMD-2023/FIT/SIT/106	Synthesis and Characterization of Copper Ceria Oxide Nanofibers for Catalyst & Wastewater Treatment
02:45 pm	Dr. Asim Kumar Roy Choudhury	ICRTMD-2023/FIT/SIT/108	Synthetic Textile Polymers and Their Modifications
03:00 pm	Madhulata Shukla	ICRTMD-2023/FIT/SIT/110	DFT Study of Molecular Interaction of Curcumin with Silver Nanocluster
03:15 pm	Chetan Chauhan	ICRTMD-2023/FIT/SIT/116	A Novel Spectrophotometric Method for Rapid Quantification of Oseltamivir Phosphate Using Dithiocarbamate Complexation
03:30 pm	Manvendra Kumar, Aartee Sharma, Parasmani Rajput	ICRTMD-2023/FIT/SIT/117	X-ray Absorption Spectroscopy (XAS) for the local structure determination of nano-dimensional materials
03:45 pm	Kifayat H. Mir, Tarun Garg	ICRTMD-2023/FIT/SIT/120	Resistive Switching in RF-Sputtered HfO _x Based Random Access Memories with Low Switching Voltage!!!

Technical Session: ICRTMD 02 [Faculty/ Scientist (Invited) Talks]

Date: 29.12.2023

Time: 01:30 PM to 04:00 PM

Time	Authors	Paper ID	Paper Title
01:30 pm	Mahatta Oza, P.D.Solanki, M.J. Joshi	ICRTMD- 2023/FIT/SIT/121	Photocatalytic application and Cyclic Voltammetry Study of Nickel Pyrophosphate Nano-Particles
01:45 pm	Rishi Pal	ICRTMD- 2023/FIT/SIT/124	Reduction in Environmental Electromagnetic Pollution using Conjugated Polymers
02:00 pm	Kumar Gaurav	ICRTMD- 2023/FIT/SIT/127	Catalyzing Sustainability: Transesterification with Heterogeneous Catalysts forefficientBiodiesel Production
02:15 pm	Aman Shukla, Sachin Kumar, Priyank Purohit	ICRTMD- 2023/FIT/SIT/128	Polyscharide polymer-linked Barium sulphate nano material for selective tumor cell diagnosis and treatment
02:30 pm	Bijan Kumar Gangopadhyay	ICRTMD- 2023/FIT/SIT/129	Exploring a Spectrum of Size and Shape Effects: Melting Point and Lattice Parameter Dependencies in Gold and Copper Nanoparticles
02:45 pm	Dr. Malay K Das	ICRTMD- 2023/FIT/SIT/131	Potential of Pharmaceutical Nanotechnology in the management of Neuro AIDS
03:00 pm	Prasun Mukherjee	ICRTMD- 2023/FIT/SIT/133	Guiding Selection of Correct Ingredients to Realize Host Sensitized Dopant Emission
03:15 pm	Priyanka Singh, Meena Choudhary	ICRTMD- 2023/FIT/SIT/134	Valorization of Dried Flowers of Medicinal Plant into Natural Dye
03:30 pm	Madan Lal, Kamal Kishore, Navdeep Sharma	ICRTMD- 2023/FIT/SIT/136	Sol-gel derived Fe-doped ZnO NPs: Structural, Morphological and Magnetic Properties
03:45 pm	Suma ND, Sari R Pillai	ICRTMD- 2023/FIT/SIT/143	Conductometric method for the determination of corrosion of Aluminium metal in hydrochloric acid medium

Technical Session: ICRTMD 03 [Students Talks]

Date: 29.12.2023

Time: 01:30 PM to 04:00 PM

Time	Authors	Paper ID	Paper Title
01:30 pm	Surender , Chandra Mohan, Rakesh Kumar	ICRTMD-2023/ST/105	Novel Modification of Activated Charcoal Sheet with Polypyrrole and Silver Nanoparticles for Removal of Hexavalent Chromium in Water Treatment Processes
01:40 pm	Nimitha K C , Jiji Abraham, Titto Varughese	ICRTMD-2023/ST/109	MXene- Polymer Nanocomposites for Energy Applications
01:50 pm	Peeyush Phogat , Shreya, Ranjana Jha, Sukhvir Singh	ICRTMD-2023/ST/111	Co-existing Dual Morphology of Single-Phase Molybdenum Trioxide: Unlocking Enhanced Electron Transfer Characteristics
02:00 pm	Neeraj Dhariwal , Preety Yadav, Manju Kumari, Amit Sanger, Vinod Kumar, O.P. Thakur	ICRTMD-2023/ST/112	Room-Temperature Ethanol Sensor based on novel ZnFe ₂ O ₄ gel
02:10 pm	Shreya , Peeyush Phogat, Ranjana Jha, Sukhvir Singh	ICRTMD-2023/ST/113	Exploring the Potential of Tin-Doped Barium Hydride for Advanced Optoelectronic and Catalytic Applications
02:20 pm	Shahid Ahmad Shah , Hammesh Mahajan	ICRTMD-2023/ST/114	Sintering and Its Role in Modifying Magnesium-Zinc Spinel Ferrite: An Analysis of Structural, Morphological, and Magnetic Traits
02:30 pm	Ravinder Kundu , Prabhakar Kaushik	ICRTMD-2023/ST/115	Optimizing Solar Panel Efficiency Through Active Cooling Techniques: A Comprehensive Research Exploration
02:40 pm	Ravindra Kumar , Gurupad Maity, Susanta Singha Roy, Ashish Kumar Keshari	ICRTMD-2023/ST/125	Hydrothermally Synthesized Nickel-Doped FeS ₂ /WS ₂ nanocomposite as Supercapacitor Electrode Materials
02:50 pm	Ruksana Sirach , Pragnesh N Dave	ICRTMD-2023/ST/132	Carboxymethyl cellulose/ β -Cyclodextrin/nickel cobaltite-based nanocomposite for the removal of malachite green
03:00 pm	Akanksha Bhatti , Shashank Kailkhura, Priyank Purohit	ICRTMD-2023/ST/135	Salt's function in creating brick-shaped nanoparticles based on carrageenan
03:10 pm	Pranav Menon K , G. Pavan Akhil, Ajmal Ameen S, Jagadeesha. T	ICRTMD-2023/ST/138	Fracture Properties and computational characterization of cracks in Internal combustion engine crank shaft
03:30 pm	Talib Raza , Prathmesh Malavekar, Dr. Jagadeesha T	ICRTMD-2023/ST/139	Creep materials characterisation under high stress and high temperature conditions of AI6061 alloy
03:40 pm	Sanket Dinkar Borle , Manas Ajay Pandey, Jagadeesha T	ICRTMD-2023/ST/140	Light Material Selection and Dynamic Analysis of Differential Gerabox for four wheeler automobile
03:50 pm	Arpit Tripathi , Dr. Jagadeesha T	ICRTMD-2023/ST/141	Computational Stability Analysis of Francis Turbine Impeller Using Finite Element Method

Technical Session: ICRTMD 04 [Faculty/ Scientist (Invited) Talks]

Date: 29.12.2023

Time: 04:00 PM to 06:30 PM

Time	Authors	Paper ID	Paper Title
04:00 pm	Chhavi Sharma, Puneet Pathak	ICRTMD-2023/FIT/SIT/280	Bacterial Nanocellulose in Synergy with Herbal Extracts: Production and Characterization
04:15 pm	Rishibrind Kumar Upadhyay	ICRTMD-2023/FIT/SIT/144	Solution-processed UV-visible-Near Infrared (NIR) broadband Photodetector based on ZnO/CH ₃ NH ₃ PbI ₃ heterojunction
04:30 pm	Ravi Shankar Rai, Vivek Bajpai	ICRTMD-2023/FIT/SIT/145	Development of metal-oxide nanostructured interphase in basalt fiber reinforced polymer composites for structural applications
04:45 pm	Manorama Singh	ICRTMD-2023/FIT/SIT/147	Nanomaterials-based Electrochemical Sensors for p-Phenylenediamine (An organic dye)
05:00 pm	Dimpi Paul	ICRTMD-2023/FIT/SIT/150	Displacement Sensor by Conventional Optical Fiber with Different Reflectometer for dissimilar Media
05:15 pm	Dr. Sonali Bhatnagar	ICRTMD-2023/FIT/SIT/154	Polymer Based Detectors Throw Light on Astroparticle Physics and Medical Physics
05:30 pm	Richa Srivastava	ICRTMD-2023/FIT/SIT/156	Synthesis of Proton Exchange Membranes for Microbial Fuel Cell
05:45 pm	M. Pradeepa, D. Illakkiam, N. Geetha	ICRTMD-2023/FIT/SIT/165	Green Synthesis and Photocatalytic Activity of Chitosan coated Iron Oxide Nanoparticles
06:00 pm	Dr. M. Razia	ICRTMD-2023/FIT/SIT/167	Biosynthesis of Silver Nanoparticles Using Psidium cattleianum Leaf extract and their Antimicrobial activity
06:15 pm	Nitu Katariya, Ratnawali Verma, Pragya Agar Palod, R. Venkatesh, V.Ganesan	ICRTMD-2023/FIT/SIT/176	Effect of doping on CuCrO ₂ prepared by solid state reaction method

Technical Session: ICRTMD 05 [Faculty/ Scientist (Invited) Talks]

Date: 29.12.2023

Time: 04:00 PM to 06:30 PM

Time	Authors	Paper ID	Paper Title
04:00 pm	Prithiviraj Khakhlary , Uddit Narayan Hazarika, Jhorna Borah, Arobinda Kakoti, Rinki Brahm, Kangkan Sarmah, Ankur Kanti Guha	ICRTMD-2023/FIT/SIT/179	3-D conductive metal organic frameworks (MOFs): Next generation conductive materials
04:15 pm	Jyoti Prakash Singh , Jyoti Srivastava, Mayank Dwivedi	ICRTMD-2023/FIT/SIT/181	Experimental Investigation of Optical and Nanocooling Features of Silver Nanoparticles-Graphene Hybrid Material
04:30 pm	Jesly Jacob , Simitha S, Devika Mohan, Vibin Ipe Thomas	ICRTMD-2023/FIT/SIT/183	High-Performance SERS Substrates for Biomolecular Detections
04:45 pm	K. Prabha	ICRTMD-2023/FIT/SIT/184	Structural, Optical and Magnetic Properties of Transition metals doped Metal Oxide Nanoparticles
05:00 pm	Anji Reddy Polu , Aseel A. Kareem, Hussein Kh. Rasheed	ICRTMD-2023/FIT/SIT/186	Effect of POSS Hybrid Nanomaterials and MXenes on Solid Polymer Electrolytes for Rechargeable Lithium Batteries
05:15 pm	Rubiya Samad , Saima Jahan	ICRTMD-2023/FIT/SIT/187	Temperature dependent electric and magnetic properties of Pr doped BTO-NFO core-shell multiferroic nanocomposite
05:30 pm	K. Nomita Devi , L. Anju Chanu	ICRTMD-2023/FIT/SIT/189	Enhanced Photocatalytic Activity of Gd ³⁺ Doped ZnO Nanoparticles for Malachite Green Dye Degradation
05:45 pm	Sigamani Saravanan , Raghvendra S. Dubey	ICRTMD-2023/FIT/SIT/190	Silicon nitride (Si ₃ N ₄) anti-reflection coating thin film on silicon using chemical vapor deposition (CVD) techniques
06:00 pm	Ashok Kumar	ICRTMD-2023/FIT/SIT/200	Sol-Gel Synthesis of La-SnO ₂ NPs for Efficient Removal of dyes in Wastewater Treatment
06:15 pm	Saroj Rani	ICRTMD-2023/FIT/SIT/202	Methodology used for crystallization kinetics, optical properties and electrical behavior of heavy metal doped glasses

Technical Session: ICRTMD 06 [Students Talks]

Date: 29.12.2023

Time: 04:00 PM to 06:30 PM

Time	Authors	Paper ID	Paper Title
04:00 pm	Vishvaa J, Muhammed Shafeeh, Jagadeesha T	ICRTMD-2023/ST/142	Enhancement of Structural strength and stability Analysis of Trellis Bike Chassis using Finite element method
04:10 pm	Shantanu Kumar Sahu	ICRTMD-2023/ST/157	Development of Nano Bio Fertilizer via Chemical and Biological Synthesis
04:20 pm	Rashi Bhardwaj, Tinku Basu	ICRTMD-2023/ST/159	MOF-Engineered Janus Micromotors: Pioneering the Future of Antibiotic Waste Management
04:30 pm	Lipsa Leena Panigrahi, Manoranjan Arakha	ICRTMD-2023/ST/161	Antimicrobial peptide-functionalized iron oxide nanocomposite for effective remediation against microorganisms
04:40 pm	P Shakkaewal, T Sharma, G Singh, R. Sharma	ICRTMD-2023/ST/163	Design and fabrication of 23×15×11 CNC router machine for Milling
04:50 pm	Hemlata Deolal, Prashant Raturi, Sanjeev Kimothi, Sameer Rawat	ICRTMD-2023/ST/168	Thermodynamically Simulating Cool Thermal Energy Storage System (CTESS) with Encapsulation of Phase Change Material (PCM)
05:00 pm	Tanmay Medhekar, Rajendra Kumar Gupta, Sunil Nimje	ICRTMD-2023/ST/169	Finite Element Analysis of CFRP Composite Laminates with Ply- Discontinuities
05:10 pm	Shristi Mishra, B.K. Pandey, Ratan Lal Jaiswal, Jyoti Gupta	ICRTMD-2023/ST/170	Unified model for the studies of band gap of nanosolids with their varying shape and size
05:20 pm	Karan Hadwani, Tinku Basu	ICRTMD-2023/ST/172	Biocompatible and Targeted Nanocomposites for Enhanced Magnetic Resonance Imaging Applications: A Comprehensive Synthesis and Characterization Approach
05:30 pm	T. Suma Chanu, K. Jugeshwar Singh, K. Nomita Devi	ICRTMD-2023/ST/173	Investigation on the optical, dielectric properties and AC conductivity of PVA/PVP/ZnO blend based polymer nanocomposites for optoelectronic and electronic device applications
05:40 pm	Preety Yadav, Neeraj Dhariwal, Manju Kumari, Vinod Kumar, O.P. Thakur	ICRTMD-2023/ST/175	Enhanced degradation of Congo-red dye by La ³⁺ doped Fe ₂ O ₃ nanoparticles under sunlight
05:50 pm	Anita Singh, Ekta, Manisha	ICRTMD-2023/ST/177	Preparation of Ficus religiosa leaves extract and its applications in green synthesis of zinc oxide nanoparticles and antimicrobial activity
06:00 pm	R.S. Bemina, T. Joselin Beaula	ICRTMD-2023/ST/180	Structural, Electronic and RDG Analysis on Cadmium Chloride Adipic Acid by DFT Approach
06:10 pm	Reena Pathak, B.K. Pandey, Jyoti Gupta	ICRTMD-2023/ST/182	Study of Thermal Expansion Coefficient of Nanomaterials using different equation of state with varying Shape and Size
06:20 pm	Ravi Kumar, Reenu, Ashok Kumar	ICRTMD-2023/ST/191	Synthesis and Characterization of Mn _{0.5} Zn _{0.5} Fe ₂ O ₄ mixed ferrite nanocomposites with CNT

Technical Session: ICRTMD 07 [Faculty/ Scientist (Invited) Talks]

Date: 30.12.2023

Time: 01:30 PM to 04:00 PM

Time	Authors	Paper ID	Paper Title
01:30 pm	Sucheta Sengupta, Rinki Aggarwal	ICRTMD-2023/FIT/SIT/118	Fabrication of metal chalcogenide /p-Si NW heterostructured thin films for advanced applications
01:45 pm	Diptonil Banerjee	ICRTMD-2023/FIT/SIT/130	Defect Rich Carbon Nanostructures Based Hybrids: Possible Cold Cathodes in Electron Microscope
02:00 pm	Debasree Saha	ICRTMD-2023/FIT/SIT/204	Potential of solid supported copper catalyst in sustainable organic synthesis
02:15 pm	Pratibha Kumari	ICRTMD-2023/FIT/SIT/205	Synthesis of cellulose-based materials for sensing and environmental remediation
02:30 pm	Ranimol Stephen	ICRTMD-2023/FIT/SIT/206	Polymer Membranes for Separation Application
02:45 pm	Nayan Mani Das	ICRTMD-2023/FIT/SIT/208	Kelvin Probe Force Microscopy (KPFM) study on Antibacterial Behaviour of Graphene Oxide nanohybrid
03:00 pm	Anand Kumar, Sushil Kumar	ICRTMD-2023/FIT/SIT/211	Structural and Electrical changes investigations in aged copper sulphate doped poly (o-toluidine)
03:15 pm	Priyanka Chhabra, Amit Tyagi	ICRTMD-2023/FIT/SIT/215	Augmented healing of full thickness chronic excision wound by antimicrobial loaded chitosan encapsulated graphene nanocomposite
03:30 pm	Anita Gupta, Rohit Babu Aniyery, Harminder Kaur	ICRTMD-2023/FIT/SIT/216	Antimicrobial, anti-fungal and anticancer activity of N-(5-(N-((Z)-2-((Z)-(((5-acetamido-1,3,4-thiadiazol-2-yl)sulfonyl)imino)methyl)-6-methoxyphenoxy)diocetylstannyl)oxy)-3-methoxybenzylidene)sulfamoyl)-1,3,4-thiadiazol-2-yl)acetamide
03:45 pm	Subhasis Roy	ICRTMD-2023/FIT/SIT/218	Architecture of inorganic-organic hybrid perovskites for enhanced stable photovoltaic performance

Technical Session: ICRTMD 08 [Faculty/ Scientist (Invited) Talks]

Date: 30.12.2023

Time: 01:30 PM to 04:00 PM

Time	Authors	Paper ID	Paper Title
01:30 pm	Indranil Maity, Aritra Chakrabarty	ICRTMD-2023/FIT/SIT/221	Cadence Virtuoso Based Circuit Simulation of Universal Logic Gates: A Broad Tutorial
01:45 pm	Naveen Kumari, Vinod Kumar	ICRTMD-2023/FIT/SIT/225	Structural, Dielectric and magnetic studies on Al ³⁺ substituted ZnAl _x Fe _{2-x} O ₄ ferrites
02:00 pm	Mohammad Amir, Roohi	ICRTMD-2023/FIT/SIT/226	Utilization of agro-wastes as solid substrate for biodegradable PHB production using microbes for sustainable environment
02:15 pm	Aman Sen, Rajni, Ritika, Ravinder, Vikas Duggal, Manokamna, Surinder Paul	ICRTMD-2023/FIT/SIT/227	Role of Nd ³⁺ substitution on structural behaviour of Bi _{1-x} Nd _x MnO ₃
02:30 pm	Suresh Kumar Jakka, Pavani Krishnapuram	ICRTMD-2023/FIT/SIT/228	Revolutionizing illumination efficiency in horticulture through rare-earth and transition metal-doped Phosphors
02:45 pm	Umesh Kumar	ICRTMD-2023/FIT/SIT/231	Exploration of cost effective earth-abundant metals for enhanced electrocatalytic oxygen evolution reaction
03:00 pm	Tripti Richhariya, Nameeta Brahme	ICRTMD-2023/FIT/SIT/232	Exploring the applicability of phosphors in various fields
03:15 pm	Mridushmita Baruah, Dipak Sinha	ICRTMD-2023/FIT/SIT/235	Photocatalytic degradation of Phenol wastewater by co-doped TiO ₂ activated carbon nanocomposite
03:30 pm	S.S. Sarangi	ICRTMD-2023/FIT/SIT/236	Estimation of Glass Forming Ability and Mechanical Properties of AlZr ₃ alloy using Molecular Dynamics Simulations
03:45 pm	T. Mahalakshmi	ICRTMD-2023/FIT/SIT/237	Numerical Analysis of Convection of Nanofluids on Heat Transfer – An Overview

Technical Session: ICRTMD 09 [Students Talks]

Date: 30.12.2023

Time: 01:00 PM to 04:00 PM

Time	Authors	Paper ID	Paper Title
01:00 pm	Jaya Patel, B.K. Pandey, Jyoti Gupta	ICRTMD-2023/ST/164	Formulation of an appropriate equation of state to predict the melting temperature of metallic solids
01:10 pm	Km Neha Yadav, B.K. Pandey, Jyoti Gupta	ICRTMD-2023/ST/166	Modeling of the thermal conductivity of metal and metal oxide nanofluids with varying concentration
01:20 pm	Monika, Babankumar S. Bansod	ICRTMD-2023/ST/192	Applications of the platinum nanoparticle for Sensitively and Selectively Determination of lead ions using square wave Voltammetry
01:30 pm	R. Deepa, K.A. Vijayalakshmi, K.T. Maheswari	ICRTMD-2023/ST/194	An Outstanding electrochemical behavior of plasma exposed activated carbon derived cotton stalk
01:40 pm	Neetu Malik, Neeraj Kumari, Ruby Jindal	ICRTMD-2023/ST/195	Study of Zone Center Phonons in Double Perovskite Oxides
01:50 pm	Vaishali Rana, Ranjita Ghosh Moulick	ICRTMD-2023/ST/197	Probing external factors in Advanced Glycation Endproducts driven metal nanoparticle synthesis for development of a sensing system
02:00 pm	Preeti, Meena Bhandari, Neeraj Kumari	ICRTMD-2023/ST/198	Investigation of adsorption efficiencies of graphene oxide and graphene oxide Montmorillonite composite for the removal of organic dye
02:10 pm	Pradeep Gupta, Jyoti Prakash Singh, Jyoti Srivastava, Mayank Dwivedi	ICRTMD-2023/ST/199	Polymer Nanohybrid as Efficient Heat Dissipation Material for Effective Cooling Applications
02:20 pm	Mr. Manjeet Singh, Dr. Manoj Malik, Dr. Konica Sharma	ICRTMD-2023/ST/201	Unraveling the Cosmos: A Comprehensive Study of General Relativity and its Profound Implications
02:30 pm	Bhavna Rohilla, Aryan Boora, Surender Duhan	ICRTMD-2023/ST/207	Synthesis, Characterization and Application of GdMnFe ₂ O ₄ as an Advanced Humidity Sensor
02:40 pm	Sabina Yesmin, Sk Jahir Abbas, Shyue-Chu Ke	ICRTMD-2023/ST/214	Multifunctional Polymer supported Bimetallic Catalyst towards CO ₂ Utilisation, Organic Synthesis and Environmental Aspects
02:50 pm	Anandhakumar Renuka, Vallavan Rajkumar, kavumkunnel Rasack Sajinu, kalichamy Sasikala, Chinnappan Gunasekaran	ICRTMD-2023/ST/219	Nanoencapsulation of Cymbopogon nardus essential oil and their bioactive constituents: A novel strategy to control mycotoxin contamination in the food system
03:00 pm	Dharmendra Sharma, B.K.Pande, Jyoti Gupta	ICRTMD-2023/ST/224	Study of Thermal Conductivity of Metallic Nanoparticles varing shape and size
03:10 pm	Ritesh Yadav, Somvir Arya	ICRTMD-2023/ST/234	Coordination Between Recyclers and Pollution Control Board
03:20 pm	Anjika Rani, Deepa Sharma, Sanjay, Suresh Duggal	ICRTMD-2023/ST/238	Animation & Cartoons as learning tools in Physics: A perspective
03:30 pm	Umesh Parmar, Dr. Raj Kumar Verma	ICRTMD-2023/ST/239	Bandwidth Enhancement of Microstrip Array Antenna using Gap Coupled Parasitic Patches
03:40 pm	Ravi Sankar Reddy M, S Kaleemulla	ICRTMD-2023/ST/242	Effect of Fe dopant on ZnS nanoparticles synthesized from solid-state reaction
03:50 pm	Himani Chaudhary, Peeyush Phogat, Shreya, Ranjana Jha, Sukhvir Singh	ICRTMD-2023/ST/247	Morphological and Optical Studies of Hydrothermally Synthesized NiO/NiS Nanocomposite

Technical Session: ICRTMD 10 [Faculty/ Scientist (Invited) Talks]

Date: 30.12.2023

Time: 04:00 PM to 06:30 PM

Time	Authors	Paper ID	Paper Title
04:00 pm	Meera R Gumaste	ICRTMD-2023/FIT/SIT/240	Comparative Study of Electrical Parameters of Cadmium Telluride and Zinc Telluride Nanoparticles by van der Pauw Hall Measurements
04:15 pm	Sandipan Chatterjee, Nayan Sarkar, Sumit Mandal, Murali Sathish	ICRTMD-2023/FIT/SIT/241	A simple scalable transformation of waste laser toner powder into the magnetic pigment for the development of magnetic leather finishing: An innovative waste utilization strategy
04:30 pm	Monika Tomar	ICRTMD-2023/FIT/SIT/243	Lamb wave based acoustic devices for wireless sensing applications
04:45 pm	Poonam Kumari Gautam	ICRTMD-2023/FIT/SIT/246	Influence of Rotational Effects of Natural Convection Embedded by Jeffrey Nanofluid Sheet in High Porosity
05:00 pm	Soumya Mukherjee, Atiar Rahaman Molla	ICRTMD-2023/FIT/SIT/249	Synthesis, characterization of Sodium Niobate based Glass-Ceramics for Energy applications
05:15 pm	Pranoti Kamble, C.D Lokhande, Arpita Pandey Tiwari, Dr. Arpita Pandey Tiwari	ICRTMD-2023/FIT/SIT/250	Quantum Dot Based Fluorescent Biosensing Device for early screening and detection of cancer biomarkers
05:30 pm	Mainak Ghosal	ICRTMD-2023/FIT/SIT/253	Behaviour of Cementitious Systems on Additions of Nano Silica
05:45 pm	Jyoti Dutta, Sourav Saikia, Sayeed Ashique Ahmed, Puspendu K. Das	ICRTMD-2023/FIT/SIT/255	Influence of size and composition on fluorescence properties of carbonaceous nanoparticles (CNPs)
06:00 pm	Jyoti Sharma, Monika Shukla, Subhasha Nigam, Monika Joshi	ICRTMD-2023/FIT/SIT/258	Ecofriendly and sustainable nanomaterials for the removal of hazardous contaminants from wastewater
06:15 pm	Krishnaprabha Mapala	ICRTMD-2023/FIT/SIT/259	Synthesis of Silver and Gold Nanoparticles using Syzygium samarangense Fruit Extract as Reducing Agent

Technical Session: ICRTMD 11 [Faculty/ Scientist (Invited) Talks]

Date: 30.12.2023

Time: 04:00 PM to 06:30 PM

Time	Authors	Paper ID	Paper Title
04:00 pm	D. Saritha, R. Sujithra	ICRTMD-2023/FIT/SIT/262	Advancements in Electrode Materials for Lithium-Ion Batteries: A Comprehensive Study
04:15 pm	Jyoti Katyal	ICRTMD-2023/FIT/SIT/263	Magnetoplasmon Core shell Nanostructure
04:30 pm	Dr. Sajid Babu Nalakatha, Dr. M. Abdul Khadar	ICRTMD-2023/FIT/SIT/266	Band-gap Engineering of Nanostructured CdSe-Cu ₂ Se Thin Films
04:45 pm	Pranati Purohit	ICRTMD-2023/FIT/SIT/269	Moving from Pb to Pb- Free Piezoceramics: A Review
05:00 pm	S C Rakesh Roshan, N Yedukondalu, R Rakesh Kumar	ICRTMD-2023/FIT/SIT/272	Design principles for materials with extreme Lattice Thermal Conductivity
05:15 pm	R. Parimaladevi	ICRTMD-2023/FIT/SIT/274	Detection and Degradation of Pharmaceutical waste using Bismuth Sulphide Nanoparticles incorporated reduced graphene oxide/Silver substrate
05:30 pm	Jyothilekshmi Indiramma, Kishore K. R. Tetala, Jayaprakash N.S.	ICRTMD-2023/FIT/SIT/275	Synthesis, characterization and biocompatibility of macroporous polyhydroxyethylmethacrylate based cryogel
05:45 pm	Vikas Kashyap, Sushil Kumar, Isha, Neeru Chaudhary, Navdeep Goyal	ICRTMD-2023/FIT/SIT/276	Structural analysis of Ag nanoparticles deposited on Si wafer and their influence on Si nanowire-based Gas Sensor
06:00 pm	Suvankar Chakraborty	ICRTMD-2023/FIT/SIT/278	Tin oxide thin films on Ag(111) : thickness and temperature dependent study
06:15 pm	Samit Kumar, Sundaram Khare, Dinesh Kumar Mishra	ICRTMD-2023/FIT/SIT/281	Studies on preparation and physico-chemical characterization of green hydrogels

Technical Session: ICRTMD 12 [Faculty/Scientist Talks]

Date: 30.12.2023

Time: 04:00 PM to 06:30 PM

Time	Authors	Paper ID	Paper Title
04:00 pm	Ketan Jagtap , Raju Pawade	ICRTMD-2023/FT/ST /119	Impact of Machining Environment on Surface Integrity of Co-Cr-Mo Biomaterial in CNC Precision Turning
04:15 pm	Sibasish Dutta	ICRTMD-2023/FT/ST /146	Design and Development of a Smartphone Spectrometer in Visible Domain
04:30 pm	Preetha K C , Bini S	ICRTMD-2023/FT/ST /148	Preparation of CuZnS thin films by Chemical bath deposition method and its Characterizations
04:45 pm	Kavitha M V , Anjali C K, Sudheer Sebastian K	ICRTMD-2023/FT/ST /149	Device simulation and optimization of HTL-free Perovskite solar cell with CH ₃ NH ₃ SnBr ₃ as the absorber layer by SCAPS -1D software
05:00 pm	Shikha Bathla , Diya Dawar, Tanu Singh, Pradeep Kumar, Leo Raj Solay	ICRTMD-2023/FT/ST /158	Design and analysis of SiGe source based Gate All Around core shell dopingless nanotube Tunnel FET
05:15 pm	Vinod D. Deotale , Madhukar G. Dhonde	ICRTMD-2023/FT/ST /160	UV-Visible Absorption Technique for Determination of Rate of Synthesis of Thiobarbituric Acids and their Knoevenagel Derivatives
05:30 pm	Thamaraiselvi C , S.T. Athira, P. Elsybai Sweety	ICRTMD-2023/FT/ST /162	Green polysaccharide material for the removal of colour, TDS, COD and chloride from Dyeing effluent
05:45 pm	Aartee Sharma , Manvendra Kumar ² , Parasmani Rajput	ICRTMD-2023/FT/ST /185	Tuning Surface Plasmon Resonance of Gold using Rippled Si Surface
06:00 pm	Navdeep Sharma , Madan Lal	ICRTMD-2023/FT/ST /193	Electrical Charge Transport Exploration I of CSA-doped poly (o- methylaniline); A Conducting Polymer
06:15 pm	Shailja Tiwari	ICRTMD-2023/FT/ST /210	Growth and properties of metallic and insulating molybdenum oxide thin films

Technical Session: ICRTMD 13 [Faculty/ Scientist (Invited) Talks]

Date: 31.12.2023

Time: 09:30 AM to 12:30 PM

Time	Authors	Paper ID	Paper Title
09:00 am	Sayan Bayan	ICRTMD-2023/FIT/SIT/178	Development of Triboelectric Nanogenerators for self-powered sensing application
09:15 am	Swaroop K	ICRTMD-2023/FIT/SIT/252	Synthesis of Hydrogel Nanocomposites by Radiation Assistance for Biomedical Applications
09:30 am	S. Dey Sadhu, P. Jain, S. K. Jha, S. Sahoo	ICRTMD-2023/FIT/SIT/308	Preparation and characterization of NBR based composite of Polythiophene and Modified Carbon Black
09:45 am	Muralasetti Nookaraju, Prakash Gadepalli, Vaddadi Krishna	ICRTMD-2023/FIT/SIT/283	Synthesis, Electrochemical and Antimicrobial Studies of Ni(II) Complexes with New Macro Cyclic Schiff Base Ligands
10:00 am	Lipsa Nanda	ICRTMD-2023/FIT/SIT/284	Exact Solution of Optical Pulses in Nonlinear Meta-materials
10:15 am	Dr. Nandkishor B. Shirsath, Dr. T. S. Savale	ICRTMD-2023/FIT/SIT/286	Synthesis of Silver Nanoparticles using Plumeria plant and its Larvicidal Activity against Malaria Vectors
10:30 am	H. S. Mund	ICRTMD-2023/FIT/SIT/288	Magnetic Characteristics of $\text{La}_{0.7}\text{Ca}_{0.3}\text{MnO}_3$: Insights into the effects of Ni and Co doping through magnetic Compton spectroscopy
10:45 am	Konica Sharma, M. K. Malik M. S. Goyat	ICRTMD-2023/FIT/SIT/289	Recent progress in applications of superhydrophobic coatings and surfaces in various fields
11:00 am	Pankaj Chamoli	ICRTMD-2023/FIT/SIT/292	Anisotropic nanostructure hybrids for the removal of organic contaminants
11:15 am	Amit Rajput, Anuj Kumar Sharma, Suman K. Barman, Debasis Koley, Markus Steinert, Rabindranath Mukherjee	ICRTMD-2023/FIT/SIT/294	Low-Spin Iron(III) Complexes in Neutral, Monocation, and Monoanion Forms Stabilized by Azo-Appended Tridentate o Amidophenolate(2-) and o-Iminobenzosemiquinonate(1-) π Radical
11:30 am	Hari Shankar Biswas, Aniruddha Mondal, Amit Kumar Kundu, Dilip K. Maiti, Prasenjit Mandal	ICRTMD-2023/FIT/SIT/295	Advanced Characterization Techniques in Nanocarbon Materials: An Inclusive Review
11:45 am	Revathy C, Sunitha V R, Benson K Money, Radhakrishnan S	ICRTMD-2023/FIT/SIT/299	Lithium Ion Transport Studies in PEO - PMMA Based Blend Polymer Electrolyte Systems
12:00 Noon	Sayantana Guha	ICRTMD-2023/FIT/SIT/300	Natures of reflected waves generated due to incident qP/qSV waves at the stress-free surface of a micro-mechanically modeled PFRC half-space
12:15 pm	Neeraj Kumari	ICRTMD-2023/FIT/SIT/304	A Novel Approach for the Synthesis of Nano Pigments and Their Application in Polymer Matrix

Technical Session: ICRTMD 14 [Faculty/ Scientist (Invited) Talks]

Date: 31.12.2023

Time: 09:30 AM to 12:30 PM

Time	Authors	Paper ID	Paper Title
09:00 am	Dr. Krishna Vaddadi	ICRTMD-2023/FIT/SIT/306	Synthesis, Characterisation and Biological Activity Studies of Novel Series of Isomeric Pyridyl-Tetrazole Ligands and Bivalent Metal Complexes
09:15 am	Vinay Kumar, Kalpana R	ICRTMD-2023/FIT/SIT/307	Wound healing and regeneration properties of novel biocompatible chitosan biopolymer scaffold
09:30 am	Vaishali Mittal, Uttam Kumar Ghosh	ICRTMD-2023/FIT/SIT/310	Rice husk nano-catalyst for biodiesel production from microalgae using nanocatalytic transesterification process
09:45 am	Dr. Prakash Gadipelli, Dr. Muralasetti Nookaraju	ICRTMD-2023/FIT/SIT/314	Synergies of Synthesis: Recent Advances and Broader Significance in Chemistry
10:00 am	Ruma Das, P. K. Giri	ICRTMD-2023/FIT/SIT/325	Sensing of Fe ³⁺ ions with Nitrogen-doped Graphene Quantum Dots functionalized with Au Nanoparticles through Photodetection Method
10:15 am	Barnali Ghosh (Saha)	ICRTMD-2023/FIT/SIT/329	Low power Paper electronics based Wearable Radiation detector by Engineering Perovskite Halides
10:30 am	Shivananda C S, Sangappa Y	ICRTMD-2023/FIT/SIT/331	Size Modification of Green Synthesized Silver Nanoparticles under UV exposure and Its Bacterial Resistance
10:45 am	Sandip S. Pathade, Bapu S. Jagdale	ICRTMD-2023/FIT/SIT/333	Synthesis, Characterization and Computational Investigation of 4-(4-bromophenyl)-2-(4-chlorophenyl)-2,3-dihydro-1H-benzo[b] [1,4] diazepine
11:00 am	Mukesh Kumari	ICRTMD-2023/FIT/SIT/338	Synthesis and Characterization of Superparamagnetic NFO Nanoparticles using Hydrothermal Method
11:15 am	Medha Mili, Anju Singhwane, Manish Dhangar, Harsh Bajpai, Prasanth Nair, A.K. Srivastava, Sarika Verma	ICRTMD-2023/FIT/SIT/339	Designing of Flexible and Moldable Bamboo Fiber – Reinforced Brine Sludge PDMS Based Composites for Thermal Insulation Applications
11:30 am	Neena P	ICRTMD-2023/FIT/SIT/342	Mechanical study of Polymer composite reinforced with surface-modified Napier grass stem cellulose nanofibrils
11:45 am	Satya Pal Singh, Archana Kumari Singh	ICRTMD-2023/FIT/SIT/350	Hierarchical Nano and Micro Scale Structures formed by Selfassembled MgO and ZnO Quantum Dots in Presence of LC Media
12:00 Noon	Nithyaa N, Muralidharan M, Namagal S	ICRTMD-2023/FIT/SIT/352	Investigation on SnO ₂ /graphene-based nanocomposites for supercapacitor application
12:15 pm	Somnath Chowdhury, Tuya Dey, Sung Gu Kang, Jagadish Chandra Mahato, Bikash C. Gupta	ICRTMD-2023/FIT/SIT/353	Unveiling the potential of two-dimensional V ₂ S ₂ monolayer as a high-performance anode material for metal-ion batteries: A first-principles study

Technical Session: ICRTMD 15 [Faculty/ Scientist Talks]

Date: 31.12.2023

Time: 09:30 AM to 12:30 PM

Time	Authors	Paper ID	Paper Title
09:30 am	J.H. Markna, Sandhya Dodia, Gaurav Jadav, Pradhumansinh Kher, Tanvi Dudharejiya, Mayur Vala, Pankaj Solanki, Hitesh Ashani, Bharat Kataria	ICRTMD-2023/FT/ST /229	Enhancing Durability and Water Repellency of Cement Blocks through Nanostructured SiO ₂ Coating
09:45 am	B. Roshan, B. Ravi Teja, U. Krishna Prasad, K. Sahith, R. Venkateswara Rao , Prof. Y.V.S.S.S.V. Prasada Rao	ICRTMD-2023/FT/ST /244	Effect of Reinforced Particulates on mechanical properties of AA5059 Based Metal Matrix Composite
10:00 am	Palvinder Kaur	ICRTMD-2023/FT/ST /245	Magnetism in semiconductor nanomaterials (A comparative study)
10:15 am	Gudla Ramana, Yadavalli Sai Supraja, Tejavath Rajashekar, Adapally Rahul, Banothu Devender , Prof. YVSSSV Prasada Rao	ICRTMD-2023/FT/ST /257	Experimental Analysis of Metal Matrix Composite on AL6061/SiC/B4C/Fly-Ash
10:30 am	G. Sreekala , B. Beena	ICRTMD-2023/FT/ST /298	Nanocellulose Supported Copper Ferrite Nanoparticles: Synthesis from Simarouba glouca Leaf Extracts and Application
10:45 am	Anita Verma , Ravi Sharma, D.P. Bisen, Nameeta Brahme, Kanchan Tiwari	ICRTMD-2023/FT/ST /309	Synthesis and Photoluminescence Properties of Trivalent Rare Earth Doped MgY ₂ Al ₄ SiO ₁₂ Phosphor
11:00 am	Navanand B. Wadwale	ICRTMD-2023/FT/ST /312	Experimental and computational investigation of Imino-5-methylsulpanyl-1,7-dihydro-[1,2,4] triazolo[1,5-a] pyrimidine-6-carbonitrile
11:15 am	Soni Sharma , Jagat Pal Singh	ICRTMD-2023/FT/ST /316	Development of Size and Shape dependent model for vibrational frequency of nanaocrystals
11:30 am	Rajasekaran Saminathan , Abdulla Yahya Ali Nashali, Abdulrahman Ahmed Ali Haqawi, Shanmugasundaram Marappan, N. Shanmuga Priya, Farah Shakeel	ICRTMD-2023/FT/ST /330	Role of artificial intelligence (AI) and machine learning (ML) in the corrosion monitoring processes

Technical Session: ICRTMD 16 [Faculty/ Scientist (Invited) Talks]

Date: 31.12.2023

Time: 01:00 PM to 03:00 PM

Time	Authors	Paper ID	Paper Title
01:00 pm	S.K. Nath, P.K. Kalita	ICRTMD-2023/FIT/SIT/354	Structural, Optical and Ionic conductivity Study of Copper Sulphide Quantum Dot Synthesized in Starch Matrix for Its Optoelectronic Device Applications
01:15 pm	Pooja Rani	ICRTMD-2023/FIT/SIT/358	Graphene the Wonder Material of 21st Century
01:30 pm	Rajni Bala	ICRTMD-2023/FIT/SIT/362	Design and fabrication of 2D photonic crystals 1 employing electron beam lithography
01:45 pm	Vinay Kumari	ICRTMD-2023/FIT/SIT/364	Unlocking the Potential: Scandium-Doped ZnO Thin Films for Advanced Optical Limiting Applications
02:00 pm	Raghav Sharma	ICRTMD-2023/FIT/SIT/365	Next generation high-frequency rectifiers using spin-torque and nonlinear Hall effect
02:15 pm	Surila	ICRTMD-2023/FIT/SIT/369	A paradox of pollution and purity of Ganga River in India
02:30 pm	Aman Dahiya	ICRTMD-2023/FIT/SIT /370	Systematic Study on Material Selection
02:45 pm	Anjali Sharma	ICRTMD-2023/FIT/SIT/372	In ₂ Se ₃ and Bi ₂ Te ₃ thin films based efficient TEGs for self-powering devices

Technical Session: ICRTMD 17 [Students Talks]

Date: 31.12.2023

Time: 01:00 PM to 03:00 PM

Time	Authors	Paper ID	Paper Title
01:00 pm	Tamanna Jindal, Peeyush Phogat, Shreya, Ranjana Jha, Sukhvir Singh	ICRTMD-2023/ST/248	Morphological and Optical Analysis of Tungsten Oxide Nanosheets for Gas Sensing Application
01:10 pm	Sumant Saurav, Satyam Saroj, Jagdeesha T	ICRTMD-2023/ST/251	Numerical Modelling and Simulation of Phase change material Melting
01:20 pm	Sanjeet Grewal, Peeyush Phogat, Shreya, Ranjana Jha, Sukhvir Singh	ICRTMD-2023/ST/256	CTAB-Assisted Hydrothermal Synthesis of MoO ₃ Nanoparticles: Multifaceted Characterization and Analysis
01:30 pm	Vijay Yadav, Dr. Pramod Kumar	ICRTMD-2023/ST/267	Fabrication and Characterization of Perovskite Oxides: Insights into Structural and Functional Properties
01:40 pm	Kuldeep T. Padhyar, Dr. R.S. Nirwan	ICRTMD-2023/ST/270	Synthesis, Characterisation and Computational study of Meldrum acid Chalcone Derivatives by using green base
01:50 pm	Shikha Yadav, Shreya, Peeyush Phogat, Ranjana Jha, Sukhvir Singh	ICRTMD-2023/ST/273	Hydrothermal Synthesis and Characterization of Tin Telluride
02:00 pm	Vinay Rawat, Pankaj Chamoli	ICRTMD-2023/ST/285	Activated Charcoal for the Elimination of Methylene Blue Dye from Aqueous
02:10 pm	Vigneshkumar Devaraj, Jeevanantham Murugasamy, Gayathri Bairaraju, Sneka Murugan, Jeevanantham Venkatesh, Soundara Balu, Vasudevan Mangottri	ICRTMD-2023/ST/287	Valorisation of Sand Hydrocyclone Washing Wastes (SHWW) as Flowable Fills for Sustainable Construction Practices
02:20 pm	A Jayaraman, M Vasudevan, S Sowsuriya	ICRTMD-2023/ST/290	Design Aspects of Lightweight Building Blocks using a Novel Mixture of Nanomaterials for Low-Cost Construction
02:30 pm	A Jayaraman, S Parthasarathy, S Vignesh, M Vasudevan	ICRTMD-2023/ST/291	A Comprehensive Structural Design-based Protocol for Energy-Efficient Buildings for Smart City Projects
02:40 pm	Garima, B.L. Choudhary	ICRTMD-2023/ST/293	Tuning the Structural and Dielectric Properties of ZnFe ₂ O ₄ through Varied Annealing Temperatures

Technical Session: ICRTMD 18 [Students Talks]

Date: 31.12.2023

Time: 01:00 PM to 03:00 PM

Time	Authors	Paper ID	Paper Title
01:00 pm	Chaithra R, Renuka C.G.	ICRTMD-2023/ST/296	Investigation and Comparison of the Optoelectronic Properties of Natural Dyes Derived From Methanol and Aqueous Extract of <i>Argyria cuneate</i> Flower
01:10 pm	Sapna, Chhavi Sharma, Puneet Pathak	ICRTMD-2023/ST/297	Nano-Innovations in Post-Harvest Preservation: A Holistic Approach to Fruits and Vegetables
01:20 pm	Vanshika Gairola, Pankaj Chamoli	ICRTMD-2023/ST/301	Activation of charcoal at low temperature for electric double layer supercapacitor
01:30 pm	Harshitha D., Renuka C.G.	ICRTMD-2023/ST/303	Natural Dyes To Light Harvesting Materials: A Study On Optoelectronic Properties Of <i>Carissa Carandas</i> Fruits
01:40 pm	Akhilesh K. Yadav, H. Tripathi, S. Rajput, P. Singh, Ashutosh K. Dubey, Krishan Kumar, R. Chawla, Chandana Rath	ICRTMD-2023/ST/305	Drug kinetics and antimicrobial properties of quaternary bioactive glasses 81S(81SiO ₂ -(16-x)CaO-2P ₂ O ₅ -1Na ₂ O-xMgO); an in-vitro study
01:50 pm	Afsana Khatoun, Shaziya Siddiqui	ICRTMD-2023/ST/313	Efficient Removal of Diclofenac Sodium using Cellulose-Based <i>Luffa Actangula</i> Peel Adsorbent: A Promising Approach for Water Treatment
02:00 pm	K. Mohammed Salman, Mohamed Zikriya, C.G. Renuka	ICRTMD-2023/ST/315	Band gap enhancement in Mg-Doped ZnO Thin films by sol-gel spin coating method for optoelectronic applications
02:10 pm	Ismail Sk, Nandan Pakhira	ICRTMD-2023/ST/317	Exploring the Impact of Strong Correlation and Spin-Orbit Coupling Effects in LuB ₄ : A First-Principles Study
02:20 pm	Chandra Shekhar Verma, Neelam Shukla, Purna Bose	ICRTMD-2023/ST/318	Study of Surface Morphology & Elemental investigation of Chemically Deposited Mixed Based (Cdx-Pby-Znz)S Films
02:30 pm	Anshika Dubey, B.K. Pandey, Priyanshu Srivasatva	ICRTMD-2023/ST/319	Study on the structural and electrical properties of Solid Oxide Fuel Cell (LaGaO ₃)
02:40 pm	Bhupali Deka, Dhanjit Talukdar, D. Mohanta	ICRTMD-2023/ST/320	Experimental and theoretical investigation into the effect of low energy C ²⁺ ion irradiation on few layer WS ₂
02:50 pm	Poonam Rani, Rita Dahiya, Sunil Kumar, Mamta Bulla, Vinay Kumar	ICRTMD-2023/ST/321	Thermal-Driven Formation of Reduced Graphene Oxide Nanosheets: A Novel Approach to Superior Supercapacitor Electrodes

Technical Session: ICRTMD 19 [Faculty/ Scientist (Invited) Talks]

Date: 31.12.2023

Time: 03:00 PM to 05:00 PM

Time	Authors	Paper ID	Paper Title
03:00 pm	Arijit Chowdhuri	ICRTMD-2023/FIT/SIT/373	Highly efficient low temperature operated NO ₂ gas sensors
03:15 pm	Gaurav Bajpai, Anuradha Bajpai, Rajesh Purohit	ICRTMD-2023/FIT/SIT/375	Development of Metal Matrix Composites by Powder Metallurgy using Cold Isostatic Compaction Chamber: A Review
03:30 pm	Kirandish Kaur, Anita Rani, Suresh Sharma	ICRTMD-2023/FIT/SIT/376	Structural Stability and Ferromagnetism in Ga _{0.875} Cr _{0.125} P : DFT Study
03:45 pm	Aruna Priya P, Lakshmi Thara R	ICRTMD-2023/FIT/SIT/379	Silver Coated 1D Random Photonic Crystals for Sensing of Cancer Cell
04:00 pm	Subhankar Das	ICRTMD-2023/FIT/SIT/382	Assessing the Fracture Toughness and Dynamic Crack Propagation behavior of Epoxy Composites Reinforced with Chopped Carbon Fibers
04:15 pm	Manjeet Singh	ICRTMD-2023/FIT/SIT/383	Nonlinear absorption coefficient and refractive index of scattered Stokes mode in n-type doped gallium arsenide

Technical Session: ICRTMD 20 [Students Talks]

Date: 31.12.2023

Time: 03:00 PM to 05:00 PM

Time	Authors	Paper ID	Paper Title
03:00 pm	Mini Yadav, Sandeep Yadav, Ajay Shankar, Renu Bala, Mamta Rani	ICRTMD-2023/ST/322	Effect of Thickness on Structural, Morphological and Optical Properties of thermally evaporated Nichrome thin film
03:10 pm	Anil Malpotra, Beant Singh, Lakhvir Singh	ICRTMD-2023/ST/323	Effect of Various Input Process Parameters on Surface Finishing and Material Removal Rate in Electrolytic Magnetic Abrasive Finishing
03:20 pm	Dhanjit Talukdar, Gazi Ameen Ahmed	ICRTMD-2023/ST/324	Investigation of structural, electronic, and optical properties of Li doped hexagonal boron nitride monolayer through Green's function
03:30 pm	Manish Kumar Manjhi, Abhishek Pathak, Chandrama Prakash Upadhyaya	ICRTMD-2023/ST/326	Encapsulation of Bioactive Organosulfur Compounds in Solid Lipid Nanoparticles to Combat Multi Drug Resistance Pathogen
03:40 pm	Kudzai Hamish Ruzvidzo, Manish Jain, Raminder Kaur	ICRTMD-2023/ST/328	Rheological, Physical, Thermal, Spectroscopical, Chemical and Electrical properties of novel organic draw solutes for forward osmosis desalination of brackish and seawater feed solutions
03:50 pm	Ayush Chaurasia, Km. Khushboo Singh, Satya Pal Singh, Archana Kumari Singh	ICRTMD-2023/ST/332	Preparation and Characterization of Self-Cleaning Hydrophobic Surfaces Using n(ZnO)Coated Glass
04:00 pm	Himanshi Chauhan, Himanshi Yadav, Satya Pal Singh, Vivek Hada	ICRTMD-2023/ST/334	Green Synthesis of Magnesium Oxide NPs Using Chea Seeds and Investigation of Their Antibacterial Effect
04:10 pm	Anil Rakshe, Sudam Chavhan	ICRTMD-2023/ST/335	Tailoring optoelectronic properties of hydrothermally synthesized Sn-doped nickel oxide thin films
04:20 pm	Ayush Yadav, Satya Pal Singh, Archana Kumari Singh	ICRTMD-2023/ST/336	Synthesis of Nano-crystalline Thin Ferromagnetic Films and Investigation of Their Thickness Dependent Magnetic Properties
04:30 pm	Milind C. Nagare	ICRTMD-2023/ST/337	Synthesis of silver Nanoparticles used in tridax procumbens leaf extract and their characterization
04:40 pm	Himanshi Yadav, Himanshi Chauhan, Satya Pal Singh, Amar Preet Kaur, Vivek Hada	ICRTMD-2023/ST/343	Synthesis of Carbon Nanodots via Green Routes and Investigation of Their Antiviral Effect

Technical Session: ICRTMD 21 [Students Talks]

Date: 31.12.2023

Time: 03:00 PM to 05:00 PM

Time	Authors	Paper ID	Paper Title
03:00 pm	Anjali Kumari, Savita Soni, Ajay Sharma, Anil Kumar Sharma	ICRTMD-2023/ST/344	M ^{II} [Zn/Mg/Ni]Al-NO ₃ /Cl Layered Double Hydroxide as Electrode Material for Dye Sensitized Solar Cell Application
03:10 pm	Divya Venu, Ayushi Jaiswal, Kajal Yadav, A.K. Srivastava, Sarika Verma	ICRTMD-2023/ST/345	Green Synthesis And Characterization Of Cow Dung/Bamboo Fibre Derived Polyaniline-Based Composite for Energy Application
03:20 pm	Naved Siraj, S.A.R. Hashmi, Sarika Verma	ICRTMD-2023/ST/346	Investigating the Thermal and Mechanical Synergy of PEEK/GNP Nanocomposites
03:30 pm	Kajal Yadav, Kamana Chaturvedi, Anju Singhwane, Avani Kumar Srivastava, Sarika Verma	ICRTMD-2023/ST/348	Robust Synthesis and Antimicrobial Applications of Bismuth Oxide/ Graphene Oxide Derived Poly(Vinyl Alcohol) based Nanocomposite as Biomedical Material
03:40 pm	Awantika Shahi, Satya Pal Singh, Manish Mishra, Shweta Agrahari	ICRTMD-2023/ST/349	Size Dependent Estimation of Bandgaps: From Synthesis to Formulation
03:50 pm	Md Imran, Manish Dhangar, Chandra Shekhar Nayak, Raju Khan, Sarika Verma	ICRTMD-2023/ST/356	Synthesis And Study Of Thermal Insulating Characteristics Of Bio Sludge / Fly Ash-Based Geopolymer Binder Composite Material For a Sustainable And Constructive Approach
04:00 pm	Vijayendra Kumar Tripathi, Manish Shrivastava, Raju Kumar Gupta, Jaya Dwivedi	ICRTMD-2023/ST/359	Photocatalytic Reaction Chemistry of Sustainable Graphene Aerogel for Sequestration of Pharmaceutical Residues
04:10 pm	Sriparna Paul, Harsh Bajpai, Medha Milli, Sarika Verma	ICRTMD-2023/ST/366	Study of Effort of Temperature and Binder on Brine Sludge Based Composite Material
04:20 pm	Dr. Nimish Shah, Uchitesh Shettyan, Heli Modi, Avadhi Jain, Arya Yadav	ICRTMD-2023/ST/367	Innovative Approach to Achieving Zero Liquid Discharge in the Dye Intermediate Sector
04:30 pm	Akash Ahlawat, Ashish Phogat, Watan Pal, Shivam Rohilla, Ravinder Kumar Sahdev, Deepak Chhabra, Ramesh Kumar Garg, Upender Punia	ICRTMD-2023/ST/368	A Neural Network Approach to Enhance FDM 3D Printing Parameters for PETG: Optimizing Compressive Strength and Surface Roughness with Validation Using MOGA-ANN
04:40 pm	B. Mamatha, N. Pradeep, V. Uma, S. Mahendra Kumar	ICRTMD-2023/ST/380	Nano Wear Circuits: Multiwalled Carbon Nanotubes Transforming Yarn into Strain Sensors
04:50 pm	Neetu Kumar, Bijoy Kumar Kuanr	ICRTMD-2023/ST/381	In today's High-Frequency Environments, Heterostructured 2D MoS ₂ /Ferrite Nanocomposites Serve as Exceptional Microwave Absorber Material