



## 3<sup>rd</sup> International Conference on Recent Advances in Nanoscience and Nanotechnology-2025 (ICRANN-2025)

December 20-21, 2025

Organized by

Special Centre for Nanoscience (SCNS)

Jawaharlal Nehru University (JNU), New Delhi-110067

# Technical Session Schedule



ICRANN-2025

Special Centre for Nanoscience (SCNS)

Jawaharlal Nehru University (JNU), New Delhi-110067

Venue: Auditorium # 1; JNU Convention Centre

[www.jnu.ac.in](http://www.jnu.ac.in)



Anusandhan  
National  
Research  
Foundation  
(ANRF)

भारत सरकार  
GOVERNMENT OF INDIA  
विज्ञान और प्रौद्योगिकी मंत्रालय  
MINISTRY OF SCIENCE AND TECHNOLOGY



जैवप्रौद्योगिकी विभाग  
DEPARTMENT OF  
BIOTECHNOLOGY





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**Day 1 Date: 20-12-2025**

**Oral Session-1**

**Time : 14:45 to 16:15**

Date: 20-12-2025

Parallel Session I

Track I: Physical Sciences

Venue: Auditorium # I, Convention Centre, JNU

ID	Time Slot	Paper Title
OL-01-01	14:45-14:55	All printed electrochromic devices <i>Authors:</i> Hemant and Vipin Amoli
OL-01-02	14:55-15:05	Mechanically Robust, Stretchable Polymer for High-Performance Energy Harvester Triboelectric Nanogenerator <i>Authors:</i> Vishu Verma, Kaushik Parida
OL-01-03	15:05-15:15	Modulating the polymerization rate of dopamine: Effect on size, antioxidant activity, and antibacterial activity of zein-laponite-dopamine complexes <i>Authors:</i> Sara Dua, Sonam Gupta, Shama Parveen, Najmul Arfin
OL-01-04	15:15-15:25	Synthesis and fabrication of Ti <sub>3</sub> C <sub>2</sub> Tx MXene-ZnO nanosheet-based flexible Triboelectric nanogenerator <i>Authors:</i> Sheetal Sharma, Vinod Kumar Singh, Manoj Kumar Gupta
OL-01-05	15:25-15:35	Sulfur Quantum Dots as Visible-light-activated Antibacterial Agent <i>Authors:</i> Farwa Arshad, Md Palashuddin Sk
OL-01-06	15:35-15:45	Development of IOT-Enabled Robotic Platform for Lunar Soil and Subsurface Analysis <i>Authors:</i> Dr. Shubhro Chakrabartty and Dr. Debjani Dutta
OL-01-07	15:45-15:55	KINETICS OF PROTEIN NANOPARTICLE AGGREGATION AND SELF-ASSEMBLY <i>Authors:</i> Amishi, Himadri. B. Bohidar
OL-01-08	15:55-16:05	Study of dephasing in one and two-dimensional channels for a nanoscale device <i>Authors:</i> Amishi, Himadri. B. Bohidar
OL-01-09	16:05 – 16:15	Enhanced microwave absorption properties of g-C <sub>3</sub> N <sub>4</sub> /cobalt ferrite nanocomposite in high frequency band <i>Authors:</i> Deepti Chaudhary, Pooja Pantola, Sunil Kumar, Pooja Agarwal & Bijoy Kumar Kuann



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**Day 1 Date: 20-12-2025**

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**Time : 14:45 to 16:15**

Date: 20-12-2025

Parallel Session 2

Track II: Chemical and Biological Sciences

Venue: Committee Hall, Convention Centre, JNU

ID	Time Slot	Paper Title
OL-01-01	14:45-14:55	<b>Enhanced removal of Benzo(a)pyrene from marine water under the guidance of Titanium dioxide nano particle</b> <b>Authors:</b> Alakananda Chatterjee Banerjee, Dr. Mahua Ghosh Chaudhuri, Dr. Saswati Saha
OL-01-02	14:55-15:05	<b>Designing a Genetically Encoded FRET Based Nanosensor for the Real time Monitoring of Heparin in Living Cells</b> <b>Authors:</b> Sana Masroor and Mohd. Mohsin
OL-01-03	15:05-15:15	<b>Enhanced Photodegradation of LDPE Using BiOCl, ÄìZrO<sub>2</sub> Nanocomposites for Eco-Friendly Waste Management</b> <b>Authors:</b> Dr. Bharat Kumar Allam
OL-01-04	15:15-15:25	<b>Development of MoSe<sub>2</sub>/PVA Based Wearable Dry Electrodes for Continuous ECG Monitoring</b> <b>Authors:</b> Nevedhaa P, S. Arun Karthick
OL-01-05	15:25-15:35	<b>Structural Analysis of Yttrium Aluminum Borate (YAB) Nanomaterials using low-cost non-traditional chemical method</b> <b>Authors:</b> Aradhana, Rakesh Kumar Singh, Manoranjan kar, Abhay Kumar Aman, Bibhuti Bikramaditya
OL-01-06	15:35-15:45	<b>Design and Synthesis of Magnetic Graphene Oxide for Oxidative Desulfurization of Liquid Fuels</b> <b>Authors:</b> Melanny Desouza, Akash Zalke, Laxmi Gayatri Sorokhaibam
OL-01-07	15:45-15:55	<b>DFT, molecular docking and GC ,Äì MS analysis of silver nanoparticles and copper oxide nanoparticles prepared from the combination of Capsicum annum and Eugenia caryophyllata targeting cancer matrix metalloproteinases (MMPs) and cathepsins</b> <b>Authors:</b> Dr. Paratpar Sarkar, Dr. Mridula Guin and Dr. Vivek Srivastava
OL-01-08	15:55-16:05	<b>Citrus limon-Assisted Gold Nanocoating on Cotton</b> <b>Authors:</b> Savy Panamkuttyiel Minal and Soam Prakash
OL-01-09	16:05 – 16:15	<b>Magnetisation Dynamics of Fe80Co20 alloy thin film on Flexible Substrate</b> <b>Authors:</b> Prashant Kumar, Vipul Sharma, Manoj Kumar Khanna and Bijoy Kumar Kuanr



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**Day 2 Date: 21-12-2025**

**Oral Session-2**

**Time : 14:45 to 16:05**

Date: 21-12-2025

Parallel Session I

Track II: Physical Sciences

Venue: SCNS Committee Room, JNU

ID	Time Slot	Paper Title
OL-02-01	14:45-14:55	<b>Bandwidth Enhancement Of Asymmetrical Cpw Fed Slotted Patch Antenna</b> <b>Authors:</b> KORADA ROHIT, JAMPANI VAMSI KRISHNA, GANDHAM JAI RAM, BANDI ALEKYA, KUDUMU VARA PRASAD, KETAVATH KUMAR Naik
OL-02-02	14:55-15:05	<b>Design of high gain and Wide band inset fed patch antenna for THz Applications</b> <b>Authors:</b> Nagabhyru Sri Krishna Kaushik , Bandi Alekhya, Suravarapu Devaharsha, Lahori Venkata Lokesh Naik, Ketavath Kumar Naik, Kudumu varaprasad
OL-02-03	15:05-15:15	<b>Analysis Of Dual Band Cpw-fed Sloted Patch Antenna For Wireless Applications</b> <b>Authors:</b> Janam Taruni,Teja Siri Sai Chalamalasetty, Bandi Alekhya, Ketavath Kumar Naik, Settipalli Vinoothna, Dunesh Chavitipalli
OL-02-04	15:15-15:25	<b>Design and Analysis of a Low-Profile UWB MIMO Antenna for Body-Worn Applications</b> <b>Authors:</b> Bandi Alekya, Neelaveni Ammal Murugan
OL-02-05	15:25-15:35	<b>Comparative Study of 2D Material-Based TFETs for Ultra-Low Power Biomedical Sensing Applications</b> <b>Authors:</b> Mayurika Saxena, Dhandapani Vaithianathan, Manish Verma
OL-02-06	15:40-15:50	<b>Smart Plasmonic Sensors for Environmental Monitoring</b> <b>Authors:</b> Bhumi Gupta, Dr. Rina Singh
OL-02-07	15:50-16:00	<b>Construction of a Class of Positive Partial Transpose Entangled States and Its Application in Quantum Cryptography</b> <b>Authors:</b> Rohit Kumar, Satyabrata
OL-02-08	16:00-16:10	<b>Evaluating Mn-Zn Ferrites for High-Frequency Devices: Insights into Structural, Dielectric, and Magnetic Behavior</b> Shivani Jangra 1 , Preeti Thakur 1 , Satyendra Singh 2*



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**Time : 14:45 to 16:05**

Date: 21-12-2025

Parallel Session II

Track II: Chemical and Biological Sciences

Venue: Auditorium # 1, Convention Centre, JNU

ID	Time Slot	Paper Title
OL-02-01	14:45-14:55	<b>KINETICS OF PROTEIN NANOPARTICLE AGGREGATION AND SELF-ASSEMBLY</b> <i>Authors:</i> Amishi, Himadri. B. Bohidar
OL-02-02	14:55-15:05	<b>Hydrophobic Aggregation of Nanoparticles of Biological Origin</b> <i>Authors:</i> Neha V K and Himadri B Bohidar
OL-02-03	15:05-15:15	<b>Translational Design of a Portable 2D MXene-DNA Nanohybrid Hydrogel-Based Biosensor for Rapid Point-of-Care Detection of Blood Disorder Biomarker</b> <i>Authors:</i> Amit K. Yadav, Dhiraj Bhatia
OL-02-04	15:15-15:25	<b>Synthesis of Phase Pure Nickel Telluride(s)</b> <i>Authors:</i> Deevanshi Bhatt
OL-02-05	15:25-15:35	<b>Comparative Structural, Morphological , Optical Studies on Europium Oxide (EuO) and Europium Sulphide (EuS) Thin Films Deposited via Spray Pyrolysis</b> <i>Authors:</i> REKHA SHIVKUMAR BHALEKAR
OL-02-06	15:35-15:45	<b>Nanoemulsion-based delivery system enhances the anticancer activity of pumpkin seed oil against prostate cancer</b> <i>Authors:</i> Dr. Saima Wajid, Rupali Ghosh
OL-02-07	15:45-15:55	<b>Cu2S Quantum Dots-Based Fluorescent Nanosensor For Monitoring Nitrofurazone Residues In Food Products</b> <i>Authors:</i> Kriti Novel, Reena K. Sajwan, G.B.V.S. Lakshmi, Partima R. Solanki
OL-02-08	15:55-16:05	<b>Carbon-based Nanomaterial's for Heavy Metal Remediation: Current Status and Future Prospects</b> <i>Authors:</i> Dr. Kalpana Katiyar
OL-02-09	16:05-16:15	<b>DNA Tetrahedral Nanocages as a Targeted Delivery Platform for Enhanced Glioblastoma Therapy</b> <i>Authors:</i> Raghu Solanki1, SK Shahvej, Nisha Bharti and Dhiraj Bhatia
OL-02-10	16:15-16:25	<b>Green Synthesis of Cobalt ferrite for Targeted Drug Delivery</b> <i>Authors:</i> Tehreen Sherwani



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Track II: Chemical and Biological Sciences

Venue: Committee Hall, Convention Centre, JNU

ID	Time Slot	Paper Title
OL-02-01	14:45-14:55	<b>Label-free WS2 Field Effect Transistor-based Genosensor for the Early Diagnosis of Prostate Cancer through Methylated gene</b> <i>Authors:</i> Debashree Kar, Sumit Sharma, Samaresh Das and Prashant Mishra
OL-02-02	14:55-15:05	<b>Engineering Metal-Doped Nanozymes for Site-Specific Prodrug Activation and Receptor-Mediated Uptake in Breast Cancer.</b> <i>Authors:</i> Surbhi Chauhan, Prashant Mishra
OL-02-03	15:05-15:15	<b>Design and synthesis of FA-tagged cubosomes as nanocarriers for the targeted delivery in triple-negative breast cancer</b> <i>Authors:</i> Riya Rani, Prashant Mishra
OL-02-04	15:15-15:25	<b>Design, Engineer and Evaluate Redox-responsive Carbon Nanodot-capped Pt-Mesoporous Janus Nanomotors for drug delivery and biosensing in Breast cancer cells</b> <i>Authors:</i> Preetha Ganguly, Prashant Mishra
OL-02-05	15:25-15:35	<b>Self-Assembled Nanocomposite of HKUST-1 and Laponite: Towards Hydrogel with High Mechanical Strength for Selective Dye Adsorption and Column Chromatographic Separation</b> <i>Authors:</i> Anindita Chakraborty, Jyoti, Chhaya, Vinod Kumar
OL-02-06	15:35-15:45	<b>Polycaprolactone particles as carriers of doxorubicin</b> <i>Authors:</i> Kamil Rusztyn, Maciej Mazur
OL-02-07	15:45-15:55	<b>Cu2S Quantum Dots-Based Fluorescent Probe for Monitoring Nitrofurazone Residues in Food Samples</b> <i>Authors:</i> Reena K. Sajwan, Kriti Novel, G.B.V.S. Lakshmi, and Pratima R. Solanki
OL-02-08	15:55-16:05	<b>Study of dephasing in one and two-dimensional channels for a nanoscale device</b> <i>Authors:</i> Bharti Dua and Niladri Sarkar
OL-02-09	16:05-16:15	<b>Bovine serum albumin consolidated Carbenoxolone nanoparticles for Experimental Pulmonary Fibrosis</b> <i>Authors:</i> Lakshmi Kanth Kotarkonda, Vijay Pal Singh and Subhashini Bharathala
OL-02-10	16:15-16:25	<b>Rationally Engineered Hybrid Peptide Nanostructures: A Potent Antifungal agent against Fungal Pathogens</b> <i>Authors:</i> Preeti Chand, S. Sharma, P. Mishra, T. Prasad



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**Poster Session-1**

**Time : 16:20 to 18:30**

Date: 20-12-2025

16:20 to 18:30 PM

Parallel Session I

Venue: Convention Centre, JNU

Track 1: Physical Sciences

ID	Time Slot	Paper Title
PS-01-01	16:20-18:30	<b>Green synthesis of pure and rare-earth doped ZnO nanoparticles for energy harvesting applications</b> <i>Authors:</i> Vudit Verma and Binay Kumar
PS-01-02	16:20-18:30	<b>Studies on Nanostructured Cu/W Bilayer System</b> <i>Authors:</i> Sakshi Tyagi, Shilpa Thakur
PS-01-03	16:20-18:30	<b>Energy Enhancement of a Nickel-Cobalt-Mixed Metallic Metal,Organic Framework Electrode and a Potassium Iodide Redox Mediator Bound with an Aqueous Electrolyte for High Performance Redox-Aided Asymmetric Supercapacitors</b> <i>Authors:</i> Dr. S. Ganesan
PS-01-04	16:20-18:30	<b>Flexible solid-state interdigitated micro supercapacitor based on activated carbon microfibers</b> <i>Authors :</i> Mariyarthinam Vinoth Inbaraj, and Govindhan Maduraiveeran
PS-01-05	16:20-18:30	<b>Phase Engineering of 1T-MoS<sub>2</sub> via Tungsten Doping and PEDOT:PSS for Binder-Free Cathodes in Coin Cell Asymmetric Supercapacitors</b> <i>Authors:</i> Chandru Gunasekaran, Ganesan Shanmugam
PS-01-06	16:20-18:30	<b>Structural, magnetic, and ferroelectric study on lead-free (1-x)[(0.5)Ba(Zr0.2Ti0.8)O<sub>3</sub> (0.5)(Ba0.7Ca0.3)TiO<sub>3</sub>]-xHo] Ceramics</b> <i>Authors:</i> Sahil Kumar, Sasmita Otta and Bhagaban kisan
PS-01-07	16:20-18:30	<b>Microwave absorbing properties of Polyaniline/Carbon/CoFe<sub>2</sub>O<sub>4</sub> nanocomposite based microwave absorber in the high frequency band</b> <i>Authors:</i> Pooja Pantola:, Deepti Chaudhary, Sunil Kumar, Pooja Agarwa & Bijoy Kumar Kuanr
PS-01-08	16:20-18:30	<b>Tailoring Photon-Magnon multiband Interactions via Ni Substitution in YIG for Qubit transmission</b> <i>Authors:</i> Pushpendra Kumar, Sheetal Yadav, & Bijoy Kumar Kuanr



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Parallel Session I

Track I: Physical Sciences

Venue: Convention Centre, JNU

ID	Time Slot	Paper Title
PS-01-09	16:20-18:30	<b>Green synthesis of multifunctional silver nanoparticles using synergistic plant extract combination for catalytic reduction and environmental remediation</b> <i>Authors:</i> Manisha Yadav, Pankaj Thakur
PS-01-10	16:20-18:30	<b>Modifications Induced in the Structural, Electronic, and Optical Properties of BiVO<sub>4</sub> using Gamma Irradiation for Electrochemical Application</b> <i>Authors:</i> Shilpa Chauhan, Richa Saini, Thanigai Arul Kumaravelu, C.L. Dong, Asokan Kandasami
PS-01-11	16:20-18:30	<b>Influence of sintering temperature on the structural, electrical, magnetic, and magnetoelectric properties of 70_BaTiO<sub>3</sub>- 30_ Co(1+x)TixFe2(1-x)O<sub>4</sub> multiferroic composites</b> <i>Authors:</i> Rajeev Dwivedi <sup>1</sup> , D. K. Shukla <sup>2</sup> , S. Gupta <sup>1</sup>
PS-01-12	16:20-18:30	
PS-01-13	16:20-18:30	<b>Binary nanocomposite of metal oxide-polymer based electrode material for supercapacitor application</b> <i>Authors:</i> Jamal Uddin, Hema Bhardwaj, Pratima R. Solanki, Anju Dhillon, Azher M. Siddique
PS-01-14	16:20-18:30	<b>IoT-Assisted rGO-In<sub>2</sub>O<sub>3</sub> Nanocomposite Chemiresistive Sensor for High Performance Detection of Binary Gas Mixtures in Industrial Applications</b> <i>Authors:</i> Tanya Sood, P. Poornesh



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Parallel Session I

Track I: Physical Sciences

Venue: Convention Centre, JNU

ID	Time Slot	Paper Title
PS-01-15	16:20-18:30	<b>Growth, characterization and electrochemical study of bismuth-doped strontium hydroxide thin films grown via SILAR method for supercapacitor applications</b> <i>Authors:</i> Jyoti Yadav , Satyendra Singh
PS-01-16	16:20-18:30	<b>Synthesis, structural, dielectric and ferroelectric properties of lead-free Sn doped AgNbO<sub>3</sub> antiferroelectric ceramics</b> <i>Authors:</i> Aayushi Singh and Satyendra Singh
PS-01-17	16:20-18:30	<b>Influence of Ca and Ti co-doping on the super capacitive performance of bismuth ferrite nanoparticles</b> <i>Authors:</i> Raina Nandal and Satyendra Singh
PS-01-18	16:20-18:30	<b>Structural, dielectric and energy storage performance of lead-free K<sub>0.5</sub>Bi<sub>0.5</sub>Ti<sub>1-x</sub>(Zn<sub>1/3</sub>Nb<sub>2/3</sub>)<sub>x</sub>O<sub>3</sub> ceramics.</b> <i>Authors:</i> Utkarsh Gupta and Prof. Satyendra Singh
PS-01-19	16:20-18:30	<b>Investigation on structural, morphological and electrical properties of perovskites ceramics</b> <i>Authors:</i> Anil Kumar, Pooja Nehra, Satyendra Singh
PS-01-20	16:20-18:30	



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Parallel Session I

Track I: Physical Sciences

Venue: Convention Centre, JNU

ID	Time Slot	Paper Title
PS-01-21	16:20-18:30	<b>Design of Split Ring Resonator srr Patch Antenna With Graphene Material For THz communication</b> <i>Authors:</i> Anuj kumar, Dr. Sandeep kumar, Prof. Ketavath Kumar Naik
PS-01-22	16:20-18:30	<b>Design of a compact slits patch antenna with quantum material Graphene for 6G communication.</b> <i>Authors:</i> Ganesh shankar Vidyarthi , Dr. Sandeep kumar, Prof. Ketavath Kumar Naik
PS-01-23	16:20-18:30	<b>Investigation of Magnetic Properties in Ultrathin a-CoFeB Films</b> <i>Authors:</i> Baisali Ghadai, Kirti Kirti, Abinash Mishra, Sucheta Mondal
PS-01-24	16:20-18:30	<b>Role of Ta buffer layer in thickness-dependent Gilbert damping of sputtered FeAl thin films</b> <i>Authors:</i> Sunayana Bhardwaj, Prashant Kumar, Ram Krishna Ghosh, Bijoy K. Kuanr
PS-01-25	16:20-18:30	<b>Tailoring Ferromagnetic Resonance in Mn-Doped Co-Ni Spinel Ferrites</b> <i>Authors:</i> Manisha Dabla, Sanskriti Kaushik, Monika Sharma, Bijoy Kumar Kuanr,
PS-01-26	16:20-18:30	<b>Effect of the direction of an external magnetic field on the spin dynamics of CoFe cuboids</b> <i>Authors:</i> Mohammad Asif, Prashant Kumar, Mirza T. Beg, M. Nizamuddin, Bijoy Kumar Kuanr
PS-01-27	16:20-18:30	<b>Magnetoelectric coupling in Zn-Zr doped SrFe<sub>12</sub>O<sub>19</sub></b> <i>Authors:</i> Pardeep Kumar, Satyabrata Patnaik and Bijoy Kumar Kuanr
PS-01-28	16:20-18:30	<b>Effect of synthesis method on microstructural and microwave absorption properties of SrFe<sub>12</sub>O<sub>19</sub>/ZnFe<sub>2</sub>O<sub>4</sub> nanocomposite.</b> <i>Authors:</i> Sanskriti Kaushik, Manisha Dabla, Monika Sharma, Bijoy Kumar Kuanr
PS-01-29	16:20-18:30	<b>Substrate-Dependent Structural and Magnetic Properties of PLD-Deposited Sn-Zn Substituted YIG Thin Films</b> <i>Authors:</i> Sunil Kumar, Sachin Singh and Bijoy Kumar Kuanr
PS-01-30	16:20-18:30	<b>Experimental Investigation of the Spin Diffusion Length of Tungsten in Co<sub>2</sub>FeSi/W heterostructures</b> <i>Authors:</i> Sachin Singh and Bijoy Kumar Kuanr



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Parallel Session 2

Track II: Chemical and Biological Sciences

Venue: Convention Centre, JNU

ID	Time Slot	Paper Title
PS-01-01	16:20-18:30	<b>Rare earth doped tungsten trioxide as a photocatalyst for the abatement of dye pollutants in water</b> <i>Authors:</i> Pooja Nehra, Anupama, Anil Kumar, Satyendra Singh
PS-01-02	16:20-18:30	<b>Assessment and Remediation of Heavy Metal Contamination in Groundwater Using Graphene Oxide</b> <i>Authors:</i> Shakebul Hasan, Venus Dillu
PS-01-03	16:20-18:30	<b>Study of Langmuir monolayers of magnetic nanoparticles</b> <i>Authors :</i> Pavitrakumar Sarang and V. N. Lad
PS-01-04	16:20-18:30	<b>Arginine accelerates the fibrillation of TDP-43 low complexity domain</b> <i>Authors:</i> Neha and Prof. Rajesh Mishra NEHA
PS-01-05	16:20-18:30	<b>Application of magnetic nanoparticles in biomedicine</b> <i>Authors:</i> Archana, Ishaan Pershad, Riya Mehta, Megha Pant, Kapil Dev, Ajit K. Mahapatro, Susmita Saha
PS-01-06	16:20-18:30	Magnetoluminescent based ferrite lanthanide complex core-shell nanocomposite as efficient biomaging and cancer therapy platform <i>Authors:</i> Ravindra Meena, Anindita Das, Bijoy K. Kuann
PS-01-07	16:20-18:30	<b>Nano-silver doped CdTe Quantum dots and their applications.</b> <i>Authors:</i> Tuhina Chakravarty , Devanshi Bhatt, PK Khanna
PS-01-08	16:20-18:30	<b>Fabrication of Bismuth-based nanocomposite as a dual functional material: Efficient iodine capture and photocatalytic hydrogen production</b> <i>Authors:</i> Zainab Zahid, Azam Raza, Suzain, Mohtaram Danish, Wan K Jo, Dong eun Lee, Kaseed Anwar



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Track II: Chemical and Biological Sciences

Venue: Convention Centre, JNU

ID	Time Slot	Paper Title
PS-01-09	16:20-18:30	<b>Eco-Friendly Synthesis and Comprehensive Evaluation of Terminalia bellirica Leaf, ÄiMediated Silver Nanoparticles for Antimalarial Applications</b> <i>Authors:</i> Dr.Tarun Kumar Bhatt, Sujeet Singh, Dr. Surendra NImesh
PS-01-10	16:20-18:30	<b>Elucidating Nanoâ€“Cell Interactions via Advanced Imaging and Omics: Implications for Precision Nanomedicine</b> <i>Authors:</i> Sania YasminÂ <sup>1</sup> , Suneel KateriyaÂ <sup>2</sup> and Subhash C.Yadav
PS-01-11	16:20-18:30	<b>Microwave-assisted one-pot Synthesis of Zn Carbon quantum dots and their application for the degradation of methylene blue dye and moxifloxacin antibiotic</b> <i>Authors:</i> Zimad Hashmi,Amit Ahlawat, Reena K.Sajwan, Pratima Solanki
PS-01-12	16:20-18:30	<b>Fe<sub>3</sub>O<sub>4</sub>/Zr-BDC binary magnetic nanocomposite for efficient adsorption and magnetic removal of Congo red azo dye and its effect on Cicer arietinum germination</b> <i>Authors:</i> Rinku Nayak,Archana, Janhavi Manu, Amit Ahlawat, Zimad Hashmi, Anees Ahmed Ansari, Pratima R. Solanki
PS-01-13	16:20-18:30	<b>Multiplexed impedimetric zinc oxide modified aptasensor on carbon ink inscribed paper electrodes for the specific and sensitive co detection of Alzheimer and Parkinson disease</b> <i>Authors:</i> Saumitra Singh, Osheen Ansari,Anam Ayaz and Jagriti Narang
PS-01-14	16:20-18:30	<b>A Theranostic Mn, ÄiAu, ÄiDendrimer Platform for MMP-1, ÄiMediated Drug Delivery and Imaging</b> <i>Authors:</i> Dr. Sejal Rathod*, Shivani Bhave, Dr.Akhilesh Prajapati
PS-01-15	16:20-18:30	<b>Sustainable Silver Nanoparticles Synthesized from Portulaca oleracea for Advanced Chromosomal Diagnostics</b> <i>Authors:</i> R Chithral, Ojasvi Brahme, Vidhu Sankar Babu
PS-01-16	16:20-18:30	<b>A Novel Green Synthesis of Fe@Ag Core-Shell Magnetic Nanoparticles and their Antibacterial Evaluation</b> <i>Authors:</i> Shifa Shaikh(1), Saurabh Pandey(1)*, Kamla Rawat(2)



# 3<sup>rd</sup> International Conference on Recent Advances in Nanoscience and Nanotechnology-2025 (ICRANN-2025)

December 20-21, 2025

Organized by

Special Centre for Nanoscience (SCNS)

Jawaharlal Nehru University (JNU), New Delhi-110067

**Day 1 Date: 20-12-2025**

**Poster Session-1**

**Time : 16:20 to 18:30**

Date: 20-12-2025

Parallel Session 2

Track II: Chemical and Biological Sciences

Venue: Convention Centre, JNU

ID	Time Slot	Paper Title
PS-01-17	16:20-18:30	<b>Integrated assessment of groundwater potential zones and artificial recharge sites using GIS and Fuzzy, ÄéAHP: a case study in Keonjhar District, Odisha, India</b> <i>Authors:</i> Bijaya Kumar Sethi, Biswajit Patra, Surya Narayan Pradhan
PS-01-18	16:20-18:30	<b>Biomass-Derived Carbon Dots: Dual Therapeutic and Diagnostic Nanomaterials Against MDR Fungal Pathogens</b> <i>Authors:</i> Vartika Joshi, Preeti Chand, Abhinav Abhinav, Tulika Prasad and Neha Paras
PS-01-19	16:20-18:30	<b>Development of Nanocomposite-Based formulation against Drug-Resistant Fungal Biofilms</b> <i>Authors:</i> Janhavi Manu, Preeti Chand and Tulika Prasad
PS-01-20	16:20-18:30	<b>Facile Solvothermal Synthesis of Green Emissive Carbon Quantum Dots: In vitro Microbial Nano imaging agent</b> <i>Authors:</i> Abhinav Abhinav, Preeti Chand, Vartika Joshi, Neha Paras and Tulika Prasad
PS-01-21	16:20-18:30	<b>Dual-Function Nucleic Acid-based Carbon Dots: Drug Nanocarrier and Multimodal Contrast Agent</b> <i>Authors:</i> Megha Malik, S. Sharma, P. Chand, A. Kumari, P. Mishra and T. Prasad
PS-01-22	16:20-18:30	<b>Synthesis and Characterization of Biopolymer stabilized Silver Nanoparticles for Electrochemical Vitamin D3 detection</b> <i>Authors:</i> Nisha, Hema Bhardwaj, Sakshi Rai and Pratima R. Solanki
PS-01-23	16:20-18:30	<b>Microwave-Assisted Fabrication of Nitrogen and Sulfur Co-Doped Carbon Quantum Dots with Enhanced Photoluminescence Efficiency</b> <i>Authors:</i> Fareen Zaidi and Tulika Prasad
PS-01-24	16:20-18:30	<b>Amino Acid-Derived Carbon Quantum Dots as Fluorescent Probes for Bioimaging: A Hydrothermal Approach</b> <i>Authors:</i> Danish Hussain, Itika Varshney, Megha Malik, Tulika Prasad and Pankaj Thakur



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ID	Time Slot	Paper Title
PS-01-25	16:20-18:30	<b>Synthesis and Biomedical Applications of Carbon Dots for Combating Bacterial Disease</b> <i>Authors:</i> Husnara Bano, Saurabh Pandey, Kamla Rawat
PS-01-26	16:20-18:30	<b>Comparative Evaluation of Nucleic Acid- and Amino Acid-Derived Carbon Quantum Dots: Cytocompatibility, Microbial Toxicity and Imaging Applications</b> <i>Authors:</i> Vimal Kumar, Megha Malik, Anam Rais, Prashant Mishra, Tulika Prasad, Pankaj Thakur
PS-01-27	16:20-18:30	<b>Blue-Emissive Zein Carbon Quantum Dots: A Green Nanoprobe for Imaging Mycobacteria and Immune Cell Lines</b> <i>Authors:</i> Itika Varshney, Preetha Ganguly, Prashant Mishra and Tulika Prasad
PS-01-28	16:20-18:30	<b>A modified rice straw-based nanocellulose for the removal of ciprofloxacin and norfloxacin from wastewater: Isotherm and kinetic studies</b> <i>Authors:</i> Garima Bhatnagar, Brij Bhushan and Arunima Nayak
PS-01-29	16:20-18:30	<b>Valorisation of wheat straw to a green, biogenic composite adsorbent for removal of pharmaceuticals from wastewater</b> <i>Authors:</i> Anshika Chauhan, Brij Bhushan and Arunima Nayak
PS-01-30	16:20-18:30	<b>Identification of Prognostic Hub Genes and Evaluation of Nanoformulated Combination Therapy in Ovarian Cancer</b> <i>Authors:</i> Nagma Moin and Ravi Verma
PS-01-31	16:20-18:30	<b>Rice husk-based nanosorbent for the removal of ciprofloxacin and norfloxacin from wastewater: Isotherm and kinetic studies</b> <i>Authors:</i> Deepika Kashyap, Arunima Nayak and Brij Bhushan