

Powering Progress: The International Conference on Energy, Functional Materials and Photonics (PPICEFP-2024)

01-02 March, 2024

Technical Session-I

Time: 12:00 to 14:00

Date: 01.03.2024

Venue: Seminar Hall, ITRC

Chaired By: Prof. L. N. Hazra

S. No.	Paper ID	Title and Authors
1.	IT-01	High Performance Photodetectors based in visible spectral range <i>Dr. Anuj K. Sharma, NIT Delhi, New Delhi</i>
2.	IT-02	Semiconducting Quantum Dots: Synthesis and Energy Storage Device Applications <i>Prof. Kedar Singh, JNU, New Delhi</i>
3.	OP-01	Numerical Study of surface Plasmon based sensor for early pregnancy detection by urine samples. <i>Prof. Lalit Kumar Dwivedi, KNIPSS Sultanpur</i>
4.	OP-02	Sustainable synthesis of amorphous MnO_x for supercapacitor application <i>Dr. Prashant Dubey, University of Allahabad, Prayagraj</i>

Technical Session-II

Time: 15:00 to 17:00

Date: 01.03.2024

Venue: Seminar Hall, ITRC

Chaired By: Prof. Kedar Singh

S. No.	Paper ID	Title and Authors
1.	IT-03	Future energy storage materials for supercapacitor application <i>Prof. S. N. Pandey, MNNIT Prayagraj</i>
2.	IT-04	Exploring 2D Polymer Physics through Single-Molecule Kinetoplast DNA <i>Dr. Indresh Yadav, IIT Bhubaneshwar</i>
3.	OP-03	Security patrolling BOT based on IoT <i>Dr. Puspendra Singh, Rajkiya Engineering College, Banda</i>
4.	OP-04	Analytical Study: The impact of deep and reinforcement learning in IoV <i>Dr. Motashim Rasool, Integral University, Lucknow</i>

Technical Session-III

Time: 17:30 to 19:00

Date: 01.03.2024

Venue: Seminar Hall, ITRC

Chaired By: Dr. Indresh Yadav & Dr. S. P. Singh

S. No.	Paper ID	Title and Authors
1.	OP-05	A Secure Framework based on Sensor-Cloud architecture for Healthcare data using enhanced Elliptic Curve Encryption <i>Munish Saran, DDUGU Gorakhpur</i>
2.	OP-06	Studies of Phase Transition of Some Superionic Solids <i>Praveen Kumar Pandey, DDUGU Gorakhpur</i>
3.	OP-07	Optimized Routing for IoT devices using Machine learning techniques <i>Pranjal Maurya, DDUGU Gorakhpur</i>
4.	OP-08	A Low-Voltage Two-Stage CMOS OTA-C Filter With Enhanced DC-Gain <i>Sachchida Nand Singh, RMLAU University, Ayodhya</i>
5.	OP-09	Leveraging Federated Learning for Optimizing Photonic Sensor Design Optimization in Biosensing <i>Yogendra Swaroop Dwivedi, NIT Delhi</i>
6.	OP-10	High gain low distortion small signal wide band tuned amplifier <i>Pratima Soni, RML Avadh University, Ayodhya</i>
7.	OP-11	Study of ZnO Nanorod-Based Perovskite Solar Cell Using AZO as a Buffer Layer <i>Ankita Kumari, MMMUT Gorakhpur</i>
8.	OP-12	Efficiency Optimization and simulation of Full Adder Using Quantum Dot Cellular Automata <i>Garima, RML Avadh University, Ayodhya</i>
9.	OP-13	Effect of Al doping on the optical and thermal properties of sol-gel synthesized ZnO:PEDOT/PSS <i>Shivam Kumar Singh, VBSPU, Jaunpur</i>
10.	OP-14	Studies of Phase Transition of Some Superionic Solids <i>Praveen Kumar Pandey, DDUGU Gorakhpur</i>

Technical Session-IV
Date: 02.03.24
Venue: Seminar Hall, ITRC

Time: 09:30 to 11:00
Chaired By: Prof. S. N. Pandey

S. No.	Paper ID	Title and Authors
1.	IT-05	Synthesis and Characterization of Graphene Oxide and its sensing ability to humidity <i>Prof. R. K. Shukla, University of Lucknow</i>
2.	IT-06	Extra-ordinary Transmission through an Apertureless Plasmonic Metagrating <i>Dr. Sachin Kumar Srivastava, IIT Roorkee</i>

Technical Session-V
Date: 02.03.24
Venue: Seminar Hall, ITRC

Time: 11:30 to 13:00
Chaired By: Prof. R. K. Shukla

S. No.	Paper ID	Title and Authors
1.	IT-07	Flexible Piezoelectric Nanogenerator: A Self-Sustainable Green Energy Devices For Powering Portable Electronics <i>Dr. Manoj Kumar Gupta, CSIR Bhopal</i>
2.	IT-08	FBG based sensors and Effect of nano-material coating on the performance of etched FBG based sensors for chemical sensing <i>Dr. Yadvendra Singh, IIT (ISM) Dhanbad</i>

Technical Session-VI
Date: 02.03.24
Venue: Seminar Hall, ITRC

Time: 11:30 to 13:00
Chaired By: Dr. Sachin Kumar Srivastava & Dr. Manoj Gupta

S. No.	Paper ID	Title and Authors
1.	IT-09	Photonic Spin Hall effect and its applications in Piezoelectric & Plexcitonic System <i>Dr. Yogendra Kumar Prajapati, MNNIT, Allahabad, Prayagraj</i>
2.	IT-10	Excess Current due to Multiple Andreev Reflections in Constriction based Weak Links and Nano-Superconducting Quantum Interference Devices <i>Dr. Nikhil Kumar, DDU Gorakhpur</i>
3.	OP-15	A Circularly Polarized Fork shape Patch antenna for 5G Mid-band Application <i>Shivani Anand, MMMUT, Gorakhpur</i>

4.	OP-16	A Sustainable cold atmospheric plasma technology for feed processing <i>Shivani Bhardwaj, DDUGU, Gorakhpur</i>
5.	OP-17	Effects of Drift Tube Magnetic Field Detuning on Gyrokystron performance <i>Nazish Fatima Siddiqui, DDUGU, Gorakhpur</i>
6.	OP-18	Modification in structural and optical properties of GdF₃:Ho³⁺ /Yb³⁺ upconversion nano particles via Zn²⁺ and Ca²⁺ codoping concentration variation <i>Dr. Abhishek Kumar, KNIPSS, Sultanpur</i>
7.	OP-19	Advancements in Load Frequency Control for Hybrid Power Systems: A Comprehensive Analysis of Renewable Energy Integration and Intelligent Control Strategies <i>Gaurav Pandey, MMMUT, Gorakhpur</i>
8.	OP-20	Enhancing reliability of nano-sculptured thin film-based SERS sensors by using self-referencing technique <i>Arti Yadav, IIT Roorkee</i>
9.	OP-21	Investigation of Electrical and Structural Properties of CdSe Chalcogenide Bulk Material for Optoelectronic Applications <i>Deepak Kumar Singh, RML Avadh University, Ayodhya</i>
10.	OP-22	Amalgamation of two different sizes of gold nanoparticles in discotic liquid crystals <i>Mukesh Mishra, Shri Ramswaroop Momerial University, Lucknow</i>
11.	OP-23	Towards Sustainable Photovoltaics: Investigating KGeCl₃ as a Lead-Free Perovskite Alternative <i>Jaya Madan, Chitkara University, Panjab</i>
12.	OP-24	Sensitivity Improvement of Photonic Crystal fiber for refractive index sensing <i>Shivam Kumar Singh, IERT, Prayagraj</i>
13.	OP-25	Synthesis and characterization of XGmX-g-ploy (AA-co-AAm)@Fe₃O₄ nanocomposite and its application in methylene blue dye adsorption <i>Nandita Kushwaha, MMMUT, Gorakhpur</i>

Technical Session: For Poster Presentation-1

Time: 1st March (2.00-3.00 pm)

Venue: Multi-Purpose Hall, MMMUT, Gorakhpur

Chaired By: Prof. R. K. Yadav, Dr. S. P. Singh, and Dr. Pooja Lohia

S. No.	Paper ID	<i>Title and Authors</i>
1.	PP-01:	Integrated Artificial Photosynthesis Platform for Solar Energy In Formation of Solar Fuel From CO₂ Ankita Singh, MMMUT, Gorakhpur
2.	PP-02:	Hybridized NenG/ZSM-5 Towards Highly Selective and Efficient Photocatalysis for Generation of Leucodopamine and Gluconic Acid Under Solar Light. Anurag Rai, MMMUT, Gorakhpur
3.	PP-03:	Synergistic Effects of Covalently Coupled Eosin-Y with Ben-Graphitic Carbon Nitride Framework for Improved Photocatalytic Activity in Solar Light-Driven Biginelli Product Generation Anurah Prajapati, MMMUT, Gorakhpur
4.	PP-04:	Crafting In Situ Boron and Selenium-Doped Carbon Nitride Nanosheets for Turbocharged benzaldehyde to benzyl alcohol Under Solar Spectrum Harshita Gautam, MMMUT, Gorakhpur
5.	PP-05:	Fabricating Artificial Solar Light Harvesting Multifunctional Organogel as a Photocatalysts for Activation of C-N /C-S Bonds Geeta Shrivastava, MMMUT, Gorakhpur
6.	PP-06:	Synthesis of Newly designed TBA based Polymeric Framework by Ullman Coupling as Photocatalyst for Boosting the selective Bio-reduction of Furfural Under Solar light illumination Mansi Singh, MMMUT, Gorakhpur
7.	PP-07:	Graphitic Carbon Nitride-PTD as a Catalyst for Catalytic Oxidative Coupling of Arylamine for the Production of Azoaromatic under Visible Light Nidhi Singh, MMMUT, Gorakhpur
8.	PP-08:	Shining Bright: B@S-Codoped Graphitic Carbon Nitride Nanorods Illuminate Enhanced Catalytic C-N Bond Formation Under Visible-Light Neha Chaurasia, MMMUT, Gorakhpur
9.	PP-09:	Green Innovation Unleashed: Aerobic Acetalization of Ethylene Glycol by Newly Designed Highly Efficient Soft NiO@B@GCN Nanocubes Catalyst Neha Dubey, MMMUT, Gorakhpur

10.	PP-10:	Solar Synergy: Crafting In Situ g-C 3 N 4 -RB Photocatalyst for Harmonious 1,4-NADPH Regeneration and Sulfide Oxygenation Shrishti Mishra, MMMUT, Gorakhpur
11.	PP-11:	Highly Efficient Organic AF-Infused-Ben-g-C 3 N 4 with a Tailored Electronic Harmony for Enhanced Photocatalytic Activity Zeeshan Shaquib, MMMUT, Gorakhpur
12.	PP-12:	Solar Transformation: Empowering the Power with Ultra-Resilient CdS@ACC Nanocomposite Photocatalyst for Revolutionary Artificial Photosynthesis Raj Gupta, MMMUT, Gorakhpur
13.	PP-13:	In-Situ Fabrication of Highly Efficient Nitrogen Doped Graphene Coupled Eosin-B Photocatalyst for Atmospheric N 2 Fixation and Regeneration of NADH Cofactors Under Visible Light Farheen bano, MMMUT, Gorakhpur
14.	PP-14:	Sun Powered synthesis: Harnessing multiwall carbon nanotube-EB photocatalytic magic in a unified photocatalytic-biocatalytic system for solar-driven L-glutamate production from α-ketoglutarate Abhishek Mishra, MMMUT, Gorakhpur
15.	PP-15:	Dual Core Photonic Crystal fiber for Water Pathogen Detection Vikash Maurya, MMMUT Gorakhpur
16.	PP-16:	Detection of Hazardous Chemicals using Photonic crystal Fiber sensor Pratishtha Pandey, MMMUT Gorakhpur
17.	PP-17:	COMSOL Multiphysics Modeling of Nanofluids for thermal Conductivity Using 3ω Method Jyoti Gupta, MMMUT, Gorakhpur
18.	PP-18:	Enhanced efficiency of the PbS Quantum Dot Solar Cell by the selection of suitable ETL through numerical simulation Km Pragya Mishra, MMMUT, Gorakhpur
19.	PP-19:	Effect of MgO NPs on the Vibrational and Electrochemical Behaviour of Polyethylene Oxide (PEO) Nanocomposite Polymer Electrolyte Sweta Agrahari, MMMUT, Gorakhpur
20	PP-20:	Application of 2F as hole selective contact in wide band gap perovskite solar cells Ajeet Kumar Singh, DDUGU, Gorakhpur

Technical Session: For Poster Presentation-2

Time: 2nd March (1.00-2.00 pm)

Venue: Multi-Purpose Hall, MMMUT, Gorakhpur

Chaired By: Prof. R. K. Yadav, Dr. S. P. Singh, and Dr. Ravi Shankar

S. No.	Paper ID	<i>Title and Authors</i>
21.	PP-21:	Cost-Efficient Carbon-Based Hybrid Double Perovskites Solar Cell for High Efficiency Shivangi Yadav, MMMUT, Gorakhpur
22.	PP-22:	Effect of multiple annealing on dual mode emission behavior of Tb 3+ /Yb 3+ doped self-activated LaNbO 4 phosphor Sumit Modanwal, BHU, Varanasi
23.	PP-23:	RAFT Grafting through Mode Utilizing Multiple Responsive Polymer Matrix Connectors for Preserved Urease Enzyme Activity Shailja Rai, MMMUT, Gorakhpur
24.	PP-24:	Fabrication of Chitosan based Microgel Enzyme Bioconjugates and Study their Catalytic Application Aradhana Chaudhary, MMMUT, Gorakhpur
25.	PP-25:	Variation in lattice parameter with size and shape of nanoparticles Ratan Lal Jaiswal, MMMUT, Gorakhpur
26.	PP-26:	Detection of β-LG Protein using Ag -TiO 2 coated Dual- Core PCF-based Plasmonic Biosensor Sapana Yadav, MMMUT, Gorakhpur
27.	PP-27:	Role of Site-Specific Doping in Stabilizing High-Nickel Cathodes for High-Performance Lithium- Ion -Batteries Mayank Shriwastav, MMMUT, Gorakhpur
28.	PP-28:	Sensitivity improvement of photonic crystal fiber for refractive index sensing Shivam Kumar Singh, IERT, Prayagraj
29.	PP-29:	Numerical Study of 2D Nanomaterial Based Surface Plasmon Resonance Biosensor Laxmi Jaiswal, MMMUT, Gorakhpur
30.	PP-30:	Current Matching and Filtered Spectrum Analysis of wide Bandgap Perovskite Tandem Solar Cells: A Numerical Study Yashwant Kumar Singh, MMMUT, Gorakhpur

31.	PP-31:	Crafting Organic Electron Transport Materials to Enhance the Stability and Efficiency of Perovskite Solar Cells Adheeti Pandey, MMMUT, Gorakhpur
32.	PP-32:	NIR Region Sensing of Colorectal Tissues using Ag and TiO₂ based SPR Sensor with Ultrahigh FOM Adarsh Chandra Mishra, MMMUT, Gorakhpur
33.	PP-33:	Ultra-High- Sensitive Surface Plasmon Resonance Sensor based on structure having PbTiO₃ and Germanene layers for the detection of Blood Cancer Yashaswini Singh, MMMUT, Gorakhpur
34.	PP-34:	Investigation of linear and nonlinear optical properties of GeTe (2-x) (SbSe) x glasses for optical storage applications Divakar singh, MMMUT, Gorakhpur