Pre-Conference Workshop On

Research Techniques in Photonics and Materials Science (RTPMS-2025)

ORGANIZED BY



Department of Physics Chaudhary Charan Singh University, Meerut, Uttar Pradesh, INDIA

Date: November 12, 2025



Patron

Prof. Sangeeta Shukla
(Hon'ble Vice Chancellor)

Co-Patron

Prof. Sanjeev Kumar Sharma

(Director, Academics)

Prof. Jaimala

(Dean of Science)

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Organizing Secretary

Dr. Neeraj Panwar

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Organizing Joint Secretary

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Dr. Kavita Sharma

Dr. Vivek Kumar Nautiyal

About Workshop

Aim of the workshop on "Research Techniques in Photonics and Materials Science" (RTPMS-2025) is to update the young researchers about advanced research techniques being used in Photonics and Materials Science. The eminent speakers will share their knowledge provide fundamental insights about various sophisticated research techniques used in Photonics and Materials Science. The research scholars and young faculty members will be benefited from this workshop. The topics XRD, XPS. PPMS. include Raman Spectroscopy, Ultrafast spectroscopy, and Scanning Probe Microscopy techniques.

Resource Persons

Prof. Akhilesh Kumar Singh (IIT-BHU)

Prof. Rajendra S. Dhaka (IIT Delhi)

Prof. Vivek Kumar Malik (IIT Roorkee)

Prof. Satish Dube (IIT Delhi)

Prof. S. Murugavel (University of Delhi)

Prof. Swapna Nair (CU Kerala)

Dr. Mukesh Jewariya (CSIR-NPL)

International Conference

Photonics and Emerging Materials for Futuristic **Technology** (PEMFT-2025)

ORGANIZED BY



NAAC A++ Accredited

Department of Physics Chaudhary Charan Singh University, Meerut, Uttar Pradesh, INDIA

Date: November 13-15, 2025



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Dr. Kavita Sharma, CCSU Meerut

Dr. Vivek Kumar Nautiyal, CCSU Meerut

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Prof. Anil Bhardwaj, ISRO India

Prof. S. P. Khare, CCSU Meerut

Prof. Dino Jaroszynski, SUPA Scotland

Prof. Carmen Vega, USA

Prof. X. C. Zhang, Uni. of Rochester, USA

Prof. Ram S. Katiyar, USA

Prof. Pramod Kumar, UAE

Prof. Sejoon Li, Dongguk Uni. S. Korea

Prof. Vikas Rana, Peter Grunberg Institute Germany

Prof. Anton Gradišek, JSI, Slovenia

Prof. Sujeet Chaudhary, IIT Delhi

Prof. H. K. Malik, IIT Delhi

Prof. Rajan Jha, IIT Bhubaneshwar

Prof. M. K. Gupta, CCSU Meerut

Prof. Shivaraj Singh, CCSU Meerut

Prof. Mukesh K. Sharma, CCSU Meerut

Prof. R. K. Soni, CCSU Meerut

Prof. Vijai Malik, CCSU Meerut

Prof. Hare Krishna, CCSU Meerut

Prof. Bhupendra Kumar, CCSU Meerut

Prof. S. S. Gaurav, CCSU Meerut

Prof. Bindu Sharma, CCSU Meerut

Prof. Jitendra Kumar, CCSU Meerut

Dr. Sachin Kumar, CCSU Meerut

Dr. Pardeep Chaudhary, CCSU Meerut

Dr. Saru Kumari, CCSU Meerut Dr. Nazia Tarunnam, CCSU Meerut

About Conference

The conference theme "Photonics and Emerging Materials for Futuristic Technology" (PEMFT-2025) ties together the pressing need for sustainability with the potential of materials science to drive transformative technological solutions. It aims to explore innovative research and development that contributes to a greener, more sustainable future through cutting-edge advancements in both photonic and material design applications. Moreover, this conference serves as pivotal forum for academicians, researchers, industry professionals across the globe to come together and explore the most recent developments in photonics and materials science. This academic forum serves as a catalyst for the exchange of innovative ideas, research findings, and collaborative initiatives aimed addressing contemporary challenges for sustainable technology. Participants will have the opportunity to network with leading global experts and gain insights into cutting-edge research. The conference also aims to foster partnerships focusing towards sustainable photonics and materials science.

About CCS University Meerut

Chaudhary Charan Singh University (CCSU), established in 1965, is one of the premier educational institutions of India encompassing a vast, beautiful, and pollution-free campus sprawling over 222 acres of land having vast playgrounds and experimental facilities, a botanical garden, a rose garden with lifesize statues of the Bharat Ratna & former Prime Minister of India late Chaudhary Charan Singh and Swami Vivekananda, Central Instrumental Facility, Gymnasium, Indoor Stadium, well equipped Library, Hostels for both girls and boys, Administrative Block, Spacious Auditorium, Guest House, Community Centre, Medical Centre, Residential Quarters for faculty members and employees, Canteen, Bank, and Post office. The University affiliates 714 aided, government and self financial colleges/institutions, catering more than 5.25 lakh students. The motto of the University 'Yatra Satyasya Paramam Nidhanam' (Where the truth has its supreme adobe) is reflected in its vision and mission. The teaching departments are housed in spacious buildings and have wellequipped laboratories and advanced research facilities. The University also has a separate engineering college, which offers courses leading to B.Tech. degree in different branches of engineering and M.Tech. in Computer Science & IT. The University was recently awarded A++ grade (CGPA 3.66) by NAAC. The University achieved 41 rank among top 100 state universities in India as per NIRF-2025 ranking. The University achieved 222 rank in QS-2025 ranking among Southern Asian Universities. The University has been awarded "The Best State University" in research citation award-2023 by Clarivate (Web of Science).

Chaudhary Charan Singh University Meerut, **Uttar Pradesh, INDIA**

Department of Physics,

The Department of Physics, established in 1969, is a research-oriented DST-FIST funded academic unit of Chaudhary Charan Singh University Meerut. The Department offers NEP-2020 based programs in Ph.D., M.Sc. with four specializations: Electronics, Nanoscience and Nanotechnology, Optoelectronics and Advanced Solid State Physics, and B.Sc. (Honors with research) for young and dynamic minds. More than 30 students are pursuing Ph.D. in the thrust areas of material science and photonics. The Department has been awarded with three center of excellence by the Higher Education department, Government of Uttar Pradesh (India) and actively involved in research covering a wide variety of frontier areas in Materials Science and photonics such as Renewable Energy, Hydrogen storage and Gas sensors, Superconductors, Biomaterials & Bio-/Chemo-Sensors, Energy storage devices, Photocatalysis. Antimicrobial, Waste-water treatment, Photonics and Metamaterials. The Department has several ongoing projects

supported by various funding agencies and has active

research collaborations at National and International levels.



Meerut: Historical background The historic city of Meerut dating back from Ramayana

and with relics from Mahabharata period is located in

the western part of the state Uttar Pradesh, India.

Meerut is known as the gateway to Hastinapur-the

quintessential site of the epic Mahabharata. Relics and remains dating back to this period prove that this region was the capital of the Kauravas and Pandavas. Meerut city is located 80 km northeast of the national capital New Delhi, and 480 km west of the state capital, Lucknow. Meerut is one of the largest manufacturers of sports goods in the country, known as the "Sports City of India". The city is also known as the largest manufacturer of musical instruments in the country, as well as one of the Asia's biggest gold markets. The city is also an education hub in western Uttar Pradesh. Meerut is famously associated with the 1857 the first freedom struggle against the Company rule in India. The famous slogan "Dilli Chalo" ("Let's march to Delhi!") was first spoken in the city, and the Meerut cantonment was the place where the rebellion started. The city is surrounded by beautiful farmland and has a very pleasant weather in March. Historic towns such as Sardhana, Haridwar, Rishikesh, Garhmuketshwar are situated within 100 Km radius from Meerut. The city has beautiful and historical places nearby. India's first Regional Rapid Transit System (RRTS) connects the National capital New Delhi to Meerut. **Conference Topics**

- Quantum Photonics and Quantum Materials
- Photonics and Materials for Sensors and Imaging
- Nonlinear Optics and Ultrafast Photonics
- Nanophotonics and Metamaterials
- Optoelectronic & Luminescent Materials
- Smart Materials for Renewable Energy
- Advanced Functional Materials
- Advanced Nanomaterials for Energy Storage and Conversion
- Catalysts for Environment Remediation
- 2D Materials/Sensors
- Next-Generation Materials for Carbon Capture and Utilization
- High performance Structural Materials
- Spintronic and Multiferroic Materials
- Computational Modeling and Simulations

Mode of Presentation Plenary/Invited/Oral/Poster

Conference Venue

CAMPUS, MEERUT, Account Name: Main SB A/c CCSU

Notification of Acceptance: September 30, 2025

Atal Sabhagar, Chaudhary Charan Singh University

Meerut, Uttar Pardesh (INDIA)

Contact Details

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+91-7726031844 (Dr. Neeraj Panwar) +91-9149324785 (Dr. Yogendra K. Gautam)

Bank Details

Branch: INDIAN BANK, MEERUT UNIVERSITY

Meerut, Account No: 20195822291; IFSC Code: IDIB0000M690

Important Dates

Abstract Submission Deadline: September 30, 2025

(Extended)

Registration Fee

INR 3000/-

INR 5000/-

INR 10000/-

USD 150/-

INR 2000/-

USD 50/-

Last date of registration: October 15, 2025 Full Paper Submission: October 30, 2025

Useful Links

Conference Webpage:

https://pemft-2025-physics.ccsuniversity.ac.in

Abstract submission:

https://forms.gle/yqeGYEFrkKFhJUWf9

Registration Fee Details

Category

Scholars/Students

Faculty/Scientists

Industry **International Participants**

Accompanying person (India)

Accompanying person (Int'l)

Note

- ✓ Registration fee includes conference kit and meals ✓ Accommodation charges will be borne by
 - participants
- ✓ Fee registration payment link will be available on conference webpage