International Workshop on Cold Plasma Technology and Applications

(CPTA-2025)

6-8 February 2025

Organized By: Department of Sciences Birla Institute of Technology Mesra, Off-Campus Jaipur

Workshop Website: https://conference.bitmesra.ac.in/cpta-2025/

The International Workshop on Cold Plasma Technology and Application (CPTA-2025) is being organized in hybrid mode during 6-8 February 2025. The workshop will be organised by Department of Sciences (Physics Division), BIT Mesra, Off-Campus Jaipur Campus, Rajasthan, India.

This workshop aims to provide an exposure to young scientists and students about different dimensions of Plasma Science and Technology Research specially in Cold Plasma Technology applications. The workshop would cover a wide range of participants from Universities, Institutions, Research Organizations, and Industries across the globe. The scope of the symposium includes research in Basic Plasma & Gas Discharges as Energy Sources as well as significant advancement in Cold Plasma Technology for societal applications in the sector like Healthcare, Food Industry, Agriculture, Surface Coatings, Sterilization, Pollution Control, UV Disinfection and in Nuclear Fusion etc. This 3-days workshop will consist of technical sessions by eminent expert scientists, academicians & industrialists and oral presentations by scientists & scholars working in various fields of Plasma Science and Technology. Technical sessions of the workshop will be in online mode.

Workshop registration is open for attendees and abstract submission for oral presentations. Best research paper awards will be selected from oral presentations of the workshop.

We request for your participation in this workshop and make this event a grand success.

Kindly refer the attached information brochure for more details.

Contact Person:

Dr. Anand Kumar Srivastava Convener, CPTA-2025 Associate Professor in Physics Department of Sciences BIT Mesra, Jaipur Campus Mobile No. 8107005029, 6377439408 E-Mail: <u>cpta2025@bitmesra.ac.in</u>, <u>aksrivastava@bitmesra.ac.in</u> Worksop Website: <u>https://conference.bitmesra.ac.in/cpta-2025/</u>

Important Links:

Links to download the Brochure:: brochure for workshop Links for Registration Form: https://forms.gle/Bx4NyZab39MokP8J7 Link to download abstract format: <u>Abstract format</u> Link for Abstract Submission (for oral presentation): https://forms.gle/Tqz9ZrurRc6SCJzC8

Important Dates:

First Announcement : Online Registration Starts : Abstract submission Deadline : (for oral presentation only) Abstract Acceptance : Online Registration Deadline : Workshop Dates : 14 December 2024 17 December 2024 20 January 2025

nce : 25 January 2025 n Deadline : 30 January 2025 6-8 February 2025

Workshop Website: https://conference.bitmesra.ac.in/cpta-2025

Abstract Submission: Abstract Submission link for Oral Presentations is available on the website.

Registration:

Registration is necessary for all participants of the workshop. The online registration will be done through a link available on workshop website (https://conference.bitmesra.ac.in/cpta-2025)

Registration Fee:

For Indian Delegates and Participants: ₹500 (incl. GST) - Attendee Only ₹1,000 (incl. GST) - Attendee with Paper Presentation For International Delegates and Participants: \$50 USD



Scan QR Code for UPI Payment, or use the following account details.

Account Name: Birla Institute of Technology Bank: Union Bank of India, Malviya Nagar, Jaipur Account No. 496501010081299 IFSC: UBIN0549657

Certification: Participation Certificates would be provided to all the registered participants.

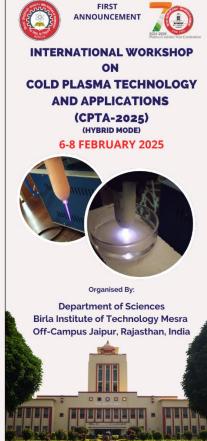
About Jaipur City

Jaipur, popularly known as the Pink City of India was founded by king Sawai Jai Singh. It is one of the most popular tourist places of northwest India. It is famous for precious stones, handicrafts, cloths, jewellery, miniatures, traditional food and hospitality. It is at the corner of the triangle of other two historic cities i.e. Agra and Delhi. Jaipur has beautifully laid out and well decorated bazaars. It is hub of many Institutions. Universities, and Industries. Some of the historic locations that can catch the fancy of the visitors are. Nawa Mahal, Citly Palace, Amber Fort, Jal Mahal, Jai Garh, Nahar Garh, Birla Temple, B. M. Birla Auditorium etc.



Contact Details: Dr. Anand Kumar Srivastava Convener, CPTA-2025 Associate Professor - Physics Department of Sciences Birla Institute of Technology Mesra, Off-Campus Jaipur 27, Maiviya Industrial Area, Jaipur, Rajasthan, India – 302017

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Organizing Committee:

Parton Prof. Indranil Manna - Vice-Chancellor, BIT Mesra, Ranchi, India Chairman Dr. Peeyush Tewari - Director, BIT Jaipur Campus, India

Convener Dr. Anand Kumar Srivastava, BIT Jaipur Campus, India

Coordinator Dr. Ravindra Kumar, BIT Jaipur Campus, India

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About BIT Mesra, Ranchi, India:

BIT, Mesra is a 'beemed University' under Sec. 3 of the U.G.C. Act 1956. The Institute has a vision to be recognized as a world-class learning institution for Engineering, Technology and Research. Established in 1955 by visionary philanthropist-industrialist the late Mr. B.M. Birla, it is one of the premier engineering destinations in India. The Institute offers undergraduate, postgraduate and doctoral programmes in Engineering. Technology. Sciences, Pharmacy, and Management. An unquenchable thirst for innovation and disruption, and a commitment to nurturing leaders who make a difference to the world has been the credo of BIT Mesra in the nearly seven decades of its existence. It has many firsts to list credit. It was the first in the country to establish a department decidicated to Space Engineering & Rocketry way back in 1964. First, to establish a static rocket test firing facility. It was also the first king STEP. The first institution to be granted autonomous status in 1972 under the UGC Act.

About BIT Mesra, Off-Campus Jaipur:

Birta Institute of Technology. Off-campus Jaipur is an integral part of BIT Mesra. Ranchi. that was established in 1995. The focus of the institute is to provide quality education in Engineering. Applied Sciences. Animation and Management with technology and professional exposure through innovative programmes & practices.



About Department of Sciences:

The department of Sciences, combines Physics, Mathematics and Chemistry Divisions at BIT Mesra, Off-Campus Jajour and plays a vital role in the institute. It mainly supports the Engineering programs running in the institute. A group of highly motivated, well qualified and talented faculty members are actively engaged in teaching as well as research. The department is extensively engaged in Plasma research specially in Industrial Plasma applications. Faculties in the department have many research papers and R&D projects in their credit. Previously, some international and national level Plasma Science & Technology workshops and conferences have also been organized in the department.

About the Program:

International workshop on 'Cold Plasma Technology and Applications' is being organized by Department of Sciences, Birla Institute of Technology, Mesra, Jaipur Campus. This workshop is organized in hybrid mode (online & offline) under Platinum Jubilee Year celebration 2024-25 of BIT Mesra, Ranchi. The workshop is designed to provide a common platform for Faculty members, Research Scholars, Post-Graduate & Under-Graduate Scholars. Participants will interact with eminent Plasma scientists. Academicians and Plasma-Based Industry Personals of India & Abroad to explore the field of Plasma Technology applications. The scope of the workshop includes research in Basic Plasma & Gas Discharges as Energy Sources as well as significant advancement in Cold Plasma Technology for societal applications in the sector like Healthcare, Food Industry, Agriculture, Surface Coatings. Sterlizzation. Pollution Contol. UV Disinfection and in Nuclear Fusion etc. This 3-days workshop will consist of technical sessions by eminent expert scientists. academicians & industrialists and oral presentations by scientists & scholars working in various fields of Plasma

Plasma Science & Cold Plasma Technology:

Plasma is an ionised gas, popularly known as fourth state of matter. Plasmas are naturally occurring as well as produced in laboratories as non-thermal (cold or glow discharge) and thermal (hot or arc discharge) plasma. Cold Plasmas are versatile medium and is a rich source of energetic electrons. Ions, neutral particles, relacits, reactive chemical species. UV radiation, electro-magnetic fields etc. The cold plasma technology is proposed for various societal and industrial applications such as Healthcare. Agriculture, Food. Pollution control, Material Processing, Displays, Aerodynamics etc.

Workshop Topics:

- Gas Discharge Physics GDP
- Plasma Sources & Diagnostics PSD
- Plasma & Vacuum Systems PVS
- Energy from Plasma Sources EPS
- Plasma Surface Modification PSM
- Societal Plasma Applications SPA

Awards:

Best Research Paper Award will be given for oral presentations in the workshop.