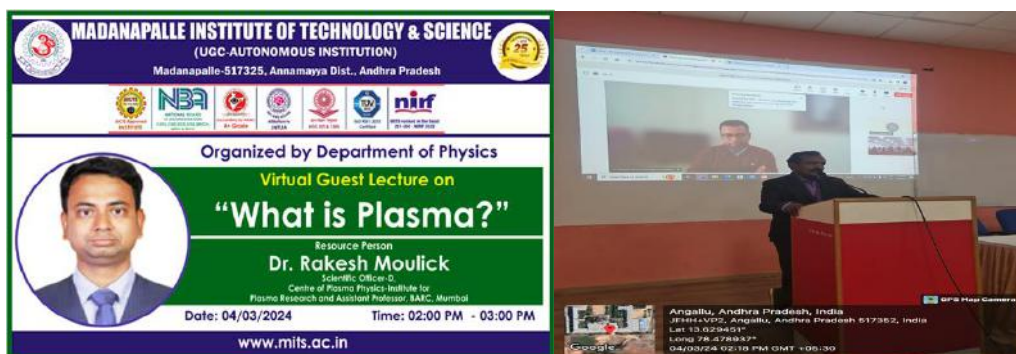


**A Report on Virtual Guest Lecture on
"What is Plasma?"
Organized by Department of Physics
on 04.03.2024**



Resource Person: Dr. Rakesh Moulick, Scientific Officer-D, Centre of Plasma Physics-Institute for Plasma Research and Assistant Professor, BARC, Mumbai

Report Submitted By: Dr. Agnibha Das Majumdar, Asst. Professor, Department of Physics

Report Received on 11.03.2024

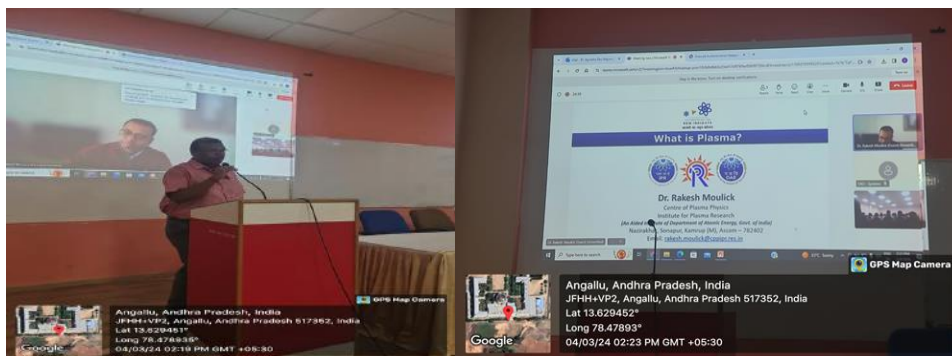
Mode of Conduct: Online

Attendance: 120 participants (Internal)

The event started at 02:00 PM, Dr. P. Ramanathan, Vice Principal (Academics), along with Dr. M Chandra Sekhar, Associate Professor & Head of the Department of Physics, presided over the Guest Lecture conducted by the Department of Physics, followed which programme was organized by the Convener Dr. Agnibha Das Majumdar, Assistant Professor, and welcome address was delivered to the gatherings by him, The resource person of the event Dr. Rakesh Moulick, was introduced by Dr. Agnibha Das Majumdar, Assistant Professor, Department of Physics.

The resource person of the event Dr. Rakesh Moulick, Scientific Officer-D, Centre of Plasma Physics-Institute for Plasma Research and Assistant Professor, BARC, Mumbai joined through online (Microsoft Team).

The resource person started the session by extending his hearty thanks to the participants, organizing members, HOD, Principal and Management for giving him opportunity to share his knowledge and experience in **Plasma Science and Technology related to Plasma**.



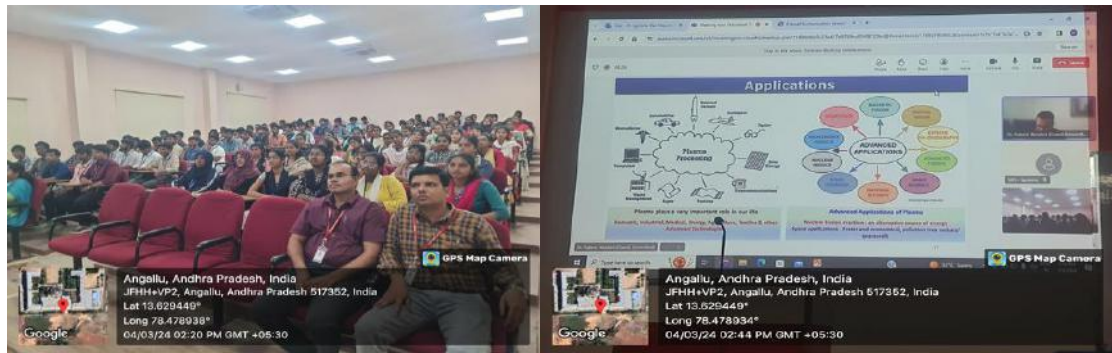
PROGRAMME OBJECTIVES:

The objective of this guest lecture was to motivate the students towards the research of laser technology and to give them a platform to interact with the eminent scientists. Also, the purpose was to explore the summer internship or training possibilities for engineering students by visiting the Centre of Plasma Physics-Institute for Plasma Research.

PROGRAMME OUTCOMES:

He has introduced about the plasma and the natural resources of plasma by stating the "4th State of matter". After that he explained about the working principles of Plasma and the related technology.

After stating about the basics of Plasma, the speaker introduced the discoveries of the plasma. For that he talked about the discovery of Sir William Crookes in the year 1879. After that he was delivered the invention of Irving Langmuir (1928). He briefly explained about the Saha ionization equation which tells us about the fundamental things about Plasma.



After that speaker informed various applications of the Plasma Technology and specifically, he talked about the role of engineers in the Plasma Technology. He has explained about application of plasma technology in optical operations, in development of aerospace technology, in biomedical approach, automobile engineering, in waste management and many more.

Finally, he concluded the session by giving the information to the students about the scope for engineers to this field and also motivated students to apply and join for summer school at his institution Centre for Plasma Research – Institute of Plasma Physics.

The lecture was then followed by a question & answer session. The session was concluded at 03:00 PM followed by a vote of thanks, given by Convener of the Webinar, Dr. Agnibha Das Majumdar, Assistant Professor, Department of Physics, MITS, Andhra Pradesh.