

MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY

Department of Applied Sciences, 2nd shift

Report of Expert Lecture

On

Understanding charges and their role in Technology Development

The Department of Applied Sciences (Second Shift), Maharaja Surajmal Institute of Technology (MSIT), New Delhi, organized an Expert Lecture on March 28, 2025, from 12:30 PM to 1:30 PM. The event featured a talk on "Understanding Charges and Their Role in Technology Development," delivered by Dr. H.K. Malik, Professor, Department of Physics, Indian Institute of Technology (IIT) Delhi. The session was attended by students and faculty members, making it a highly engaging and insightful experience.



The lecture focused on charges and their fundamental role in technology. This topic has immense relevance in modern scientific advancements.

- Dr. Malik explained the concept of plasma as an electrically charged gas and its industrial applications.
- The significance of charge neutrality in plasma and its applications in semiconductor technology and medical devices.

Benefits to Students & Faculty

- The lecture reinforced students' knowledge of fundamental physics concepts applied in real-world technologies.



- Students gained insights into cutting-edge research areas like plasma physics, smart materials, and high-energy physics.
- The session highlighted research opportunities and career paths in engineering, scientific research, and industrial applications.
- Engaging with an expert helped students develop critical thinking skills necessary for innovation and problem-solving.
- Faculty members benefited from recent developments in charge dynamics and plasma technology.

Students and faculty asked questions related to energy storage, electromagnetism, sources of plasma and its applications etc.



Prof. A. K. Singh
(Event Coordinator)

Dr. Rekha Tripathi
(HoD Applied Sciences- IInd shift)