

SERB SCHOOL ON "PLASMA DEVICES : SCIENCE & TECHNOLOGY"

4th to 22nd
DECEMBER, 2017

विज्ञान की धारा



Science and Engineering
Research Board (SERB)

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Organized by :
CSIR-Central Electronics Engineering
Research Institute
(CSIR-CEERI) Pilani-333 031, Raj.
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About SERB School

During the last few decades, research in plasma physics has opened numerous potential fields of studies in its theoretical and experimental domain and has been extensively studied and exploited for the benefit of mankind. Experimental plasma physics of late has drawn considerable attention of scientists and technologists towards design and development of techniques and methods which essentially cater to their need in diversified fields, such as, Fusion research, Laboratory plasma research, Defense, Space, Material science, Nano-technology, Plasma Medicine, etc. The importance of the subject was realized and appreciated by the Government of India, which incorporated the subject under the thrust areas of research and education in its National Policy.

CSIR-CEERI is a pioneer research and development institute in the field of microwave tubes including plasma based devices for over last five decades. It has successfully designed, developed and also batch produced some of the vacuum and plasma filled devices to meet various national strategic and industrial requirements. With this School on "Plasma Devices: Science & Technology" it is planned to provide a focused training programme to the early stage Ph. D. scholars' by expert scientists, technologists, engineers and academicians where they will share their research experiences related to plasma devices and associated technologies and also their applications for the sustained growth of plasma field.

Aims & Objectives

Present an overview of commercially important Plasma Devices, including the fundamental principles of their operation. Develop good understanding of the concepts required for choosing plasma devices for various applications and evaluating source performance. Giving scholars' a sound basis for the specification of critical performance parameters.

Participation and Funding

Applications are invited from Research Scholars, Post Doctoral Fellows and Young Faculty Members from Institutions, Universities, Colleges, and young researchers from R & D Centres. A few bright and research motivated final year students of M. Sc./M. Tech. may also be considered. The total number of participants in the school is restricted to about forty. All the selected participants will be provided to-and-fro IIIAC train or bus fare, free lodging and boarding.

Self-financed participants

Few bright and young participants from Industry are permitted along with regular school attendees. Travel and lodging arrangements are to be made by the participants on their own.

Specialised Courses on

- Introduction of Plasma
- Gas Discharge Physics & Ionization Mechanisms
- Plasma Device Concepts & Geometries
- Enabling Technologies for Plasmas: Vacuum & Power Supplies
- Development of Different Types of Plasma Devices
- Plasma Device Diagnostics
- Plasma Devices Modelling

Hands on Experiences and realization of devices will be arranged in the followings

- Device Specific Plasma Discharges
- Plasma Diagnostics
- Plasma Vacuum Techniques
- Plasma Devices Simulations

Probable list of Speakers :

- Prof. Amita Das, IPR, Gandhinagar
 - Prof. Kavita Dixit, BARC, Mumabi
 - Prof. S. Mukherjee, FCIPT-IPR, Gandhinagar
 - Prof. D. Chenna Reddy, IPR, Gandhinagar
 - Dr. S. K. Nema, FCIPT-IPR, Gandhinagar
 - Prof. H. Bailung, IASST, Guwahati
 - Prof. Arun Sharma, VIT, Chainai
 - Dr. G. Prasad, Ex-head FCIPT-IPR
 - Dr. Shantanu K. Karkari, IPR, Gandhinagar
 - Dr. Gurusharan Singh, BARC, Vizag
 - Dr. G. Ravi FCIPT-IPR, Gandhinagar
 - Dr. R. K. Sharma, CSIR-CEERI, Pilani
 - Dr. Ram Prakash, CSIR-CEERI, Pilani
 - Dr. Ayan Bandopadhyay, CSIR-CEERI, Pilani
 - Dr. Udit Narayan Pal, CSIR-CEERI, Pilani
- Additional popular evening lectures are also arranged from famous expert scientists across the country

Deadlines

Last date of application : September 10, 2017	Intimation to participants : September 15, 2017	Confirmation by participants : September 30, 2017
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Patron : Prof. Santanu Chaudhury, Director, CSIR-CEERI, Pilani

National Planning Committee

Prof. D. S. Patil, IIT Bombay, **Chairman**
Prof. Heremba Bailung, IASST, Guwahati
Prof. Prasad A. Naik, Director, RRCAT, Indore
Prof. Manoranjan Khan, Jadavpur University, Jadavpur, Kolkata
Prof. Kandaswamy Subramanian, Pune University, Pune
Prof. Pallavi Jha, Lucknow University, Lucknow
Dr. Sudhir Kumar Nema, FCIPT-IPR, Gandhinagar
Dr. Amitava Roy, SERB, DST, **Programme Coordinator**
Dr. Nilotpal Ghosh, SERB, DST, **Member Secretary**

Directors of the School

Dr. Ram Prakash, CSIR-CEERI
Dr. Niraj Kumar, CSIR-CEERI

Interested persons should send their applications, duly forwarded by Head of the institutions / research supervisor to **Dr. Ram Prakash**, SERB School Director, **by post on or before September 10, 2017**. The selected candidates will be intimated by Sept. 15, 2017.

For Further
details,
Contact :

Dr. Ram Prakash

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