



DAE-BRNS 1st National Conference on Pulsed Power Science, Technology and Applications

(PPSTA-2024)

12th – 14th September 2024

Venue: Seminar Hall, BARCF, Visakhapatnam - 531011



In association with



Pulsed Power research involves advanced techniques of energy storage, pulse compression, switching and transmitting of high voltage, high current pulses of amplitudes up to MV and MA range being delivered to various loads in microsecond to nanosecond regime. This conditioned pulsed electrical input is of great importance in driving many applications such as particle accelerators, high power microwave generators, EMP simulators, electromagnetic launchers laser drivers, high energy density physics studies, generation of mega-gauss fields, nuclear fusion and in industrial manufacturing technology. This conference aims to provide a comprehensive overview of recent advancements in the field of pulsed power science, technology and applications and facilitate the exchange of knowledge among research organizations, academic institutions and industry across various current and emerging domains in pulsed power.

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Topics

■ Pulsed Power Systems, Components and Diagnostics

Energy Storage, Pulse Compression and Switching, Pulsed High Voltage and High Current Generators, Repetitive Pulsed Power Systems, High Voltage Power Supplies and Modulators, Pulsed Power Diagnostics, High Voltage Insulation and Dielectrics, Grounding and Safety of Pulsed Power Systems

■ High Power Electromagnetics and Wave Propagation

Narrow and Wideband Radiation Generators, Fast and Slow Wave devices, Antenna's, Mode Converters, Solid State GHz Amplifiers, Electromagnetic Interference Effects and Shielding, THz Technology

■ High Energy Density Physics and Technology

Z and X Plasma Pinches, Liner Implosions, Fusion related physics and technology, Flash X-Ray Sources, Dense Plasma Focus

■ Particle Beam Accelerators and Technologies

Particle acceleration techniques and trends, Intense Electron and Ion beams, Ion and Electron Sources, Free Electron Lasers

■ Pulsed Power Applications

Electromagnetic Launchers, Electromagnetic Welding, Explosively Driven Pulsed Power, Plasma Torches, Plasma Thrusters, Emerging Applications of Pulsed Power in Medical, Environmental and Industry

■ Numerical Modeling and Computational Techniques

Pulsed power generator design and output optimization, Microwave sources, Antenna's and sub-systems, Dense Plasma's, Equation-of-State, Isentropic Compression Dynamics, Breakdown Mechanisms

Sponsorships & Products Exhibition

For details on sponsorships and products exhibition, industry partners may email at ppsta2024@barc.gov.in

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Abstracts, Papers & Registration Forms

shall be mailed to
ppsta2024@barc.gov.in

Registration Fees

1. Scientists from R&D/ Faculty : Rs. 2000/-
2. Student delegates : Rs. 1000/-
3. Industry participants : Rs. 5000/-

*Registration is compulsory for authors presenting papers.

Important Deadlines

1. Abstract Submission : 31st August 2024
2. Intimation of Acceptance : 2nd September 2024
3. Submission of Paper : 8th September 2024

