

Call For Papers

Abstract Submission Begins **November 1, 2020**

Abstract Deadline **February 5, 2021**

Registration Begins **February 5, 2021**

Early Registration Ends **May 14, 2021**

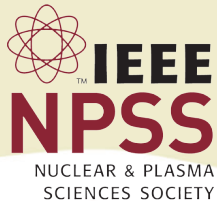
Conference Website: <https://uta.engineering/ppcsofe2021>

General Chair

David Wetz, The University of Texas at Arlington

Technical Chair

John Mankowski, Texas Tech University



Co-located with



General Chair

Kevin Freudenberg, Oak Ridge National Laboratory

Technical Chair

Valeria Riccardo, Princeton Plasma Physics Laboratory

2021 IEEE PULSED POWER CONFERENCE

The 23rd IEEE Pulsed Power Conference (PPC), organized by the IEEE Pulsed Power Science and Technology (PPST) Committee and sponsored by the IEEE Nuclear and Plasma Sciences Society (NPSS), is intended for engineers and scientists studying pulsed power science and its applications, plasma science, high voltage, and power electronics, among other government, industry, and university environments.

In 2021, the PPC will be co-locating with the 29th IEEE Symposium on Fusion Engineering (SOFE), which is also sponsored by IEEE NPSS and jointly organized this year by the IEEE PPST Committee and the Fusion Technology Committee (FTC). SOFE is intended for engineers and scientists dedicated to the scientific, technological and engineering issues of fusion energy research.

The events will be held May 31-June 4, 2021, in Denver, Colorado, USA. Over 600 combined attendees and more than 40 exhibitors are expected to participate, representing more than 25 countries worldwide. We anticipate having an exciting common night out, conference-specific receptions and multiple events for companions to participate in. We would very much appreciate having your technical contribution presented in the most applicable program.

CONFERENCE LOCATION

Denver is in the South Platte River Valley on the western edge of the High Plains just east of the Front Range of the Rocky Mountains. Because of its elevation, it is known as the 'Mile High City' and offers majestic views of mountains and valleys for all visitors. It is the most populous city in the state of Colorado and offers amazing exposure to the great outdoors, while still having a big-city feel.

The Denver Downtown Sheraton will be the conference site. The hotel is located just off the 16th Street Mall, offering world-class dining and shopping within easy walking distance. The organizing committee has negotiated a reduced rate of \$239 + tax for single/double rooms. Since the events will begin on Memorial Day, limited rooms are available over the weekend before and after for visitors who choose to explore Denver during that time. All conference attendees will enjoy free Wi-Fi internet access (both in the meeting spaces and in hotel rooms) for the duration of the event. We highly encourage conference attendees to reserve a room early to ensure availability.

Make your reservation on the conference website: <https://uta.engineering/ppcsofe2021/index.php>

ABSTRACT SUBMISSION

Abstracts will be accepted in the following topic areas starting on November 1, 2020, electronically submitted on the conference abstract website, <https://uta.engineering/ppcsofe2021/index.php>. Authors will be notified by February 28, 2021, if their abstract has been accepted into the technical program.

MAJOR TOPICAL AREAS

Pulsed Power Physics and Technology, Components and HV Insulation

- High-Energy Density Storage
- Opening and Closing Switches
- Power Conditioning
- Linear Transformer Drivers, Pulse Forming Lines and Transformers
- Pulsed Power Diagnostics
- Numerical Modelling and Computational Techniques
- High-Voltage Insulation and Dielectric Breakdown Phenomena
- Explosively-Driven Pulsed Power

Pulsed Power Industrial and Bio-Medical Applications

- Medical, Biological and Environmental Applications
- Industrial and Commercial Applications
- Space and Emerging Applications
- Modulators and Pulsed Magnets for Accelerators
- Electromagnetic Launchers

High Power Microwaves, RF Sources and Antennas

- High Power Microwave Systems and Sources
- Compact and Repetitive Pulsed Power Systems
- Antennas
- Numerical modelling of HPM Systems
- Non-Linear Transmission Lines (NLTL)

- Fast and Slow Wave Devices

High-Energy Density Physics and Technology

- Fusion Research
- Plasma Z-Pinches
- Imploding Solid Liners in Z-pinch and θ -pinch Geometries
- Pulsed X-ray Sources
- High-Power Diodes
- High-Power Lasers
- Wire Array Implosions
- Large High-Current and High-Energy Systems
- Equation of State and Isentropic Compression Experiments

Particle Beam and Accelerator Technologies

- High-Current Accelerators
- Plasma, Ion and Electron Sources
- Intense Electron and Ion Beams
- Free Electron Lasers

High Power Electronics

- Pulse Forming Networks and Alternate Technologies
- High-Voltage Power Supplies
- Thermal and Power Conditioning
- Prime Power and Power Systems

VISA ASSISTANCE

For international visitors requiring VISA assistance, please reach out to our VISA Assistance Coordinator, James Schrock at james.schrock.2@us.af.mil. We will make every effort to get you the paperwork you need to get your VISA. Please note that we cannot extend special ORAL presentation consideration for those requiring it to obtain travel permission or a VISA as all abstracts will be considered equally.

PROFESSIONAL AWARDS, STUDENT AWARDS AND TRAVEL GRANTS

ERWIN MARX AWARD

The Erwin Marx Award recognizes outstanding contributions to pulsed power technology by an individual over an extended period of time.

PETER HAAS AWARD

The Peter Haas Award recognizes outstanding contributions to pulsed power technology resulting from an individual's continued effort to develop programs of research education and information exchange that are the basis for progress in pulsed power.

ARTHUR H. GUENTHER PULSED POWER STUDENT AWARD

The Arthur H. Guenther Pulsed Power Student Award is designed to encourage student contributions and participation as principal or sole authors of papers and to recognize outstanding student contributions in pulsed power engineering, science or technology. Student awards for 2020 and 2021 will be awarded.

A list of prior award recipients from 1981 to 2019 is maintained on the IEEE NPSS PPST/TC website.

More information and nomination forms can be found at

<https://iee-npss.org/technical-committees/pulsed-power-science-and-technology>

Submit your nominations to by December 1, 2020, to Susan Heidger, PPC 2021 Awards Chair, at susan.heidger@ieee.org.

STUDENT TRAVEL GRANTS

A limited number of student travel grants will be available. The grant will support two nights of hotel accommodations and the student's registration to the conference. Send applications to Frank Hegeler, frank.hegeler@nrl.navy.mil. Please keep watch for important requirements, dates, and deadlines at <https://uta.engineering/ppcsofe2021/travel-grants.php>.