



Call For Papers

General Chair

Kevin Freudenberg

Oak Ridge National Laboratory

Technical Chair

Valeria Riccardo

Princeton Plasma Physics Laboratory

Registration Begins

February 5, 2021

Abstract Submission Begins

November 1, 2020

Early Registration Ends

May 14, 2021

Abstract Deadline

August 15, 2021

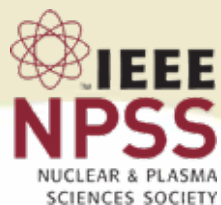
Mini-Courses

May 31, 2021

Mini-Course Registration Ends

April 6, 2021

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



Co-located with



General Chair

David Wetz, The University of Texas at Arlington

Technical Chair

John Mankowski, Texas Tech University

2021 IEEE SYMPOSIUM ON FUSION ENGINEERING

The 29th IEEE Symposium on Fusion Engineering (SOFE), organized by the IEEE Fusion Technology Committee (FTC) and sponsored by the IEEE Nuclear and Plasma Sciences Society (NPSS), is intended for engineers and scientists dedicated to the scientific, technological and engineering issues of fusion energy research.

In 2021, the SOFE will be co-locating with the 23rd IEEE Pulsed Power Conference (PPC), which is also sponsored by IEEE NPSS, but organized by the IEEE Pulsed Power Science and Technology (PPST) Committee. PPC is intended for engineers and scientists studying pulsed power science and its applications, plasma science, high voltage, and power electronics, among others government, industry, and university environments.

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

- Experimental devices
- Next step devices and power plants
- MFE and IFE Alternate Concepts
- Innovative and disruptive technologies
- Divertors and high heat flux components
- Chambers, blankets, and shields
- Fueling, exhaust and vacuum systems
- IFE fusion studies and technologies
- Plasma facing materials and surface engineering
- Diagnostics engineering and integration
- Safety and neutronics
- Materials
- Heating and current drive
- Disruption mitigation and control
- Operation and maintenance, remote handling, RAMI
- Magnet Engineering
- Power and Control
- Process simulation and plant simulators
- Systems engineering and large scale integration

MINI COURSES

PLASMA-MATERIAL INTERACTIONS: FUNDAMENTALS AND APPLICATIONS

NEUTRONICS IN FUSION

Mini-courses will be held on Monday, May 31. Conference participants can take advantage of this opportunity to learn about emerging sub-fields of fusion engineering and science. The courses run in parallel and will be certified as continuing education units with certificates being given to participants completing the course.

The cost is \$450 for regular participants, \$350 for students. Registration deadline is Monday, April 6, 2021. If there are not enough participants for a course then it will not be offered and registrants will be refunded the money paid for the course.

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

FUSION TECHNOLOGY AWARD

The Fusion Technology Award recognizes outstanding contributions to research and development in the field of fusion technology. Two awards are presented at each biennial Symposium on Fusion Engineering, one for each calendar year of the two-year cycle, with the first year corresponding to the year between SOFE conferences and the second year corresponding to the year of the SOFE conference at which the presentation is made.

FUSION TECHNOLOGY BEST STUDENT PAPER AWARD

The Fusion Technology Best Student Paper Award is sponsored by the Fusion Technology Standing Committee of NPSS and recognizes outstanding student papers presented at the Symposium on Fusion Engineering in the field of fusion technology. Up to two awards can be made at each Symposium. 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/fusion-technology>.

Submit your nominations by XXX 1, 2020 to

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>.

PAUL PHELPS CONTINUING EDUCATION GRANT

The purpose of the Paul Phelps Continuing Education Grant is to promote continuing education and encourage membership in NPSS. The funds can be used to cover tuition costs and/or travel costs to attend Short Courses. Actual award amounts for individual grants and use of funds for applicable travel expenses are decided by each NPSS Conference.