ICOPS/SOFE 2011

38th International Conference on Plasma Science and 24th Symposium on Fusion Engineering

June 26-30, 2011 Hyatt Regency McCormick Place Chicago, Illinois, USA





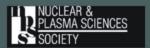
Conference Web: https://engineering.purdue.edu/ICOPS2011/ Email: icops2011@purdue.edu

ICOPS Conference Chair Ahmed Hassanein Purdue University SOFE Conference Chair Charles Neumeyer Princeton Plasma Physics Laboratory





















Welcome!

We cordially invite you to the 38th International Conference on Plasma Science (ICOPS) held jointly with the 24th Symposium on Fusion Engineering (SOFE) in Chicago, Illinois, USA, June 26-30, 2011.

The joint association of these two conferences follows a successful tradition of fostering of close interaction between the plasma science and fusion energy communities and provides a central gathering place for the international community of leading researchers in and plasma applications and fusion energy development.

In addition to the conference, a mini-course on Plasma-Material Interactions will be offered which will be of interest to both plasma science and fusion energy researchers.

Selected papers from both ICOPS and SOFE will be published in special issues of the IEEE Nuclear and Plasma Science Society (NPSS) journal *Transactions on Plasma Science*.

The conference venue is the Hyatt Regency McCormick Place hotel, adjacent to the McCormick Place Convention Center and just outside the hustle and bustle of Downtown Chicago.

Nearby attractions include the Navy Pier, Millenium Park, Art Institute, Shedd Aquarium, Adler Planetarium, Soldier Field, Michigan Avenue and State Street shopping, and more. Transportation is available via taxi, bus and train.



The organizing committee as well as the IEEE NPSS encourage you and your companions to attend ICOPS/SOFE 2011 in Chicago for a valuable technical experience and an enjoyable visit to an exciting city.

Ahmed Hassanein – Purdue University ICOPS Chair

Steven Gold - NRL ICOPS Technical Chair

John Luginsland, - NumerEx IEEE/NPSS PSAC Chair

Charles Neumeyer - PPPL SOFE Chair

Brad Nelson - ORNL SOFE Technical Chair

Dennis Youchison – SNL IEEE/NPSS FTC Chair



Conference Topics

Basic Processes in Fully and Partially Ionized Plasmas

- Basic Phenomena
- Computational Plasma Physics
- Space Plasmas
- Partially Ionized Plasmas
- Dusty Plasmas

Microwave Generation and Plasma Interactions

- Intense Beam Microwave Generation
- Fast Wave Devices
- Slow Wave Devices
- Vacuum Microelectronics
- Codes and Modeling
- Non-Fusion Microwave Systems
- Microwave Plasma Interactions
- THz Sources, Radiation, & Applications

Charged Particle Beams and Sources

- Plasma, Ion and Electron Sources
- Intense Electron and Ion Beams

High Energy Density Plasmas and Applications

- Fusion Inertial, Magnetic and Alternate Concepts
- Particle Acceleration with Lasers and Beams
- Radiation Physics
- High Energy Density Matter
- Laser Produced Plasmas
- Fast Z-Pinches, X-Ray Lasers
- Plasma Material Interactions

Industrial, Commercial, and Medical Plasma Applications

- Non-equilibrium Plasma Applications
- High Pressure and Thermal Plasma Processing
- Plasma Thrusters
- Plasma for Lighting and Flat Panel Displays
- Environmental and Industrial Applications
- Plasma Medicine

Plasma Diagnostics

- Optical and X-ray Diagnostics
- Microwave and FIR Diagnostics
- Charged Particle and Nuclear Diagnostics

Pulsed Power and Other Plasma Applications

- Compact Pulsed Power
- Insulation and Breakdown
- Switching
- Generators

ICOPS



- Experimental Devices
- Fusion Development: Pathways from Science to Practical Fusion Energy
- Plasma-Material Interface
- Neutronics, Blankets, and Shields
- Divertors, Plasma Fueling and Exhaust Processing
- Plasma Heating and Current Drive
- Magnets
- Power Supply Systems
- IFE: Drivers and Other Needed Technologies
- Diagnostics, Data Acquisition, Plasma Control and Protection
- Fabrication, Assembly, Remote Handling and Maintenance
- Safety & Environmental Engineering
- Systems Engineering, Project Management and Lessons Learned



Key Dates

Registration & Abstract Submission Opens	January 3, 2011
Abstract Submission Period Closes	February 15, 2011
Notice of Abstract Acceptance	April 1, 2011
Early Registration Period Closes	May 15, 2011

Registration

	On or before May 15	After May 15
IEEE Member	\$600	\$700
Non-Members	\$750	\$850
Student Members	\$250	\$350
Student Non-Members	\$350	\$450
IEEE Retiree	\$250	\$350

Please refer to the conference web site for updates and additional information: http://engineering.purdue.edu/ICOPS2011/



Conference Program

A joint ICOPS/SOFE reception will be held on Sunday evening.

A Joint ICOPS/SOFE Plenary Session will open the conference on Monday, June 26. Separate ICOPS and SOFE Plenary Sessions will be held on Tuesday, Wednesday, and Thursday.

Additional oral sessions will be held Monday through Thursday divided into invited and contributed talks. Poster sessions will be held Monday, Tuesday, and Wednesday afternoon.

The conference will conclude at noon on Thursday June 30th.

Social Events

Tuesday Evening, June 28th: <u>The House of Blues, Chicago</u> has grown into a premier live music club venue for touring bands. Nightly live music and southern-inspired cuisine define the venue "where music and food feed the soul." A limited number of tickets are available. Tickets can be purchased during on-line registration and at the Registration Desk on a first-come basis.

Wednesday Evening, June 29th: The ICOPS conference banquet will be held on *Wednesday (June 29) evening*, on <u>The Odyssey cruise ship</u>. A limited number of tickets are available. Tickets can be purchased during on-line registration and at the Registration Desk on a first-come basis.

Wednesday Evening, June 29th: The SOFE conference banquet and awards ceremony will be held on *Wednesday (June 29) evening*, at the <u>Alder Planetarium</u>. A limited number of tickets are available. Tickets can be purchased during on-line registration and at the Registration Desk on a first-come basis.



