IPMHVC Call for Papers

Abstract Due Date: February 1, 2022

The IEEE International Power Modulator and High Voltage Conference (IPMHVC), sponsored by the IEEE Dielectrics and Electrical Insulation Society (DEIS) and technically co-sponsored by IEEE NPSS, is intended for engineers and scientists involved with high voltage and repetitive pulsed power equipment in government, industry, and university environments.

This year we are co-locating the IEEE International Power Modulator and High Voltage Conference (IPMHVC) with the Electrical Insulation Conference (EIC), June 19-23 at the Knoxville Convention Center, Knoxville, Tennessee, USA. Attendees will have full access to both technical programs, exhibitions, and social events. We are expecting over 400 attendees and more than 30 exhibitors to participate, representing more than 25 countries worldwide. In addition to the technical program, social events will include a welcome reception in the conference Exhibitors area on Sunday Evening, June 19, Night Out at the Women's Basketball Hall of Fame Monday night, June 20, a conference banquet Tuesday June 21, and multiple events for companions.

Conference Location

On behalf of the IPMHVC and EIC organizing committee, we would like to invite you to attend the co-located 2022 IEEE International Power Modulator and High Voltage Conference (IPMHVC) and the Electrical Insulation Conference (EIC), to be held June 19-23 at the Knoxville Convention Center, Knoxville, Tennessee, USA.

Knoxville is in the heart of East Tennessee located in the foothills of the nearby Smoky Mountains. It is one of the most beautiful areas in the United States. Guests can visit the Great Smoky Mountains National Park, the most popular national park in the country. Knoxville's revitalized urban center is teeming with local shops, restaurants and entertainment venues, all within easy walking distance of the Convention Center. The 2022 IPMHVC Organizing Committee has negotiated a reduced rate at two hotels, the Marriott Knoxville Downtown ($135/night) and Hyatt Place Knoxville/Downtown ($140/night). This rate extends three days before and three days after the conference, so we encourage attendees to come early or stay late to explore the surrounding national parks. All conference attendees will enjoy free Wi-Fi internet access (both in the meeting space and in hotel rooms) for the duration of the event. We highly encourage conference attendees to make reservations early to ensure availability. Reservations may be generated through the link on the conference website: http://www.ipmhvc-eic-2022.com/

Abstract Submission

Abstracts will be accepted in the following topic areas starting on November 8, 2021, electronically submitted on the conference abstract website, https://ipmhvc-eic-2022.com/abstract-submission/. Authors will be notified by March 31, 2022, if their abstract has been accepted into the technical program.

Dielectrics and Electromagnetic Phenomena

- Dielectrics, Insulation, and Breakdown
- Plasmas, Discharges, and Electromagnetic Phenomena
- Lasers, X-Rays, EUV, Partial Discharge Testing, and Other Emitters

High Voltage and Power Modulator Components

- Power Electronics, Power Supplies, Prime Power, Rotating Machines, and Energy Converters
- Solid State Power Modulators, Components, Switches, and Systems
- Power Electronics and High Voltage
- High Voltage Design, Devices, Testing, and Diagnostics
- Opening, Closing, and Solid-State Switches

Power Modulator Systems and Applications

- Repetitive Pulsed Power Systems, Repetitive Pulsed Magnetics, Accelerators, Beams, High Power Microwaves, and High-Power Pulse Antennas
- Electromagnetic Launchers, High Current Systems, High Rep-Rate Systems, Thermal Management, and Applications
- Power Modulator Configurations, Systems, Diagnostics, and Applications in Vacuum and Low Pressure
- New and Novel Applications of Power Modulators
- Analytical Methods, Modeling, and Simulation
- Biological, Medical, and Environmental Applications of Power Modulators

Short Courses

It is expected that the EIC will host 2-3 short courses on Sunday, June 19 and the IPMHVC will host 2-3 short courses on Thursday, June 23 at the Marriott Knoxville Downtown hotel. IPMHVC short course topics for the 2022 IPMHVC are yet to be determined. Previous courses have included:

- Fast Transient Sensors
- Solid-state Pulsed Power and Civil Applications
- Power Electronics
- RF and HPM Sources
- Overview of Power Semiconductor Devices
- Science of Electrical Insulation

Attendees are welcome to register for courses in either program. Please visit the website for more information. https://ipmhvc-eic-2022.com/technical-program/ipmhvc-short-courses/.

Professional Awards, Student Awards, and Travel Grants

The IPMHVC is accepting nominations for the three professional awards including the Kenneth J. Germeshausen award, the William G. Dunbar award, and the Sol Schneider award. These include monetary awards, plaques, and recognition at the conference banquet. The IPMHVC is also accepting nominations for the High Voltage Association Student Excellence Award and the Tom R. Burkes Student Award and for student travel grants of $500-$1000. Additional information can be found on the conference website. https://ipmhvc-eic-2022.com/awards/

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