

Call for Papers

2023 ASEE Annual Conference

INSTRUMENTATION DIVISION

June 23—26, 2024

Portland, Oregon

The INSTRUMENTATION DIVISION of ASEE seeks abstracts on all instrumentation related activities. The committee is interested in papers which present the results of a research, educational activities, innovative applications, and state-of-the-art instrumentation solution on any topic falling within the broad scope of Instrumentation in industry, laboratory, research, and controls.

Topics for papers include, but are not limited to innovative education usage of all forms of instruments and instrumentation systems:

- ✓ Educational experience in instrumentation in Engineering and Engineering Technology programs
- ✓ Successful Instrumentation methods in Laboratory and Projects for on-line and distance education
- ✓ Instrumentation for research activities
- ✓ Instrumentation aspects of industrial control applications
- ✓ Data acquisition and processing instrumentations
- ✓ Computer-based measurements and controls
- ✓ Computer-based direct control applications
- ✓ Internet-based and online measurements and controls
- ✓ Applications of virtual instrumentation for laboratory, research and developments activities
- ✓ Embedded control and related instrumentation
- ✓ Applications of software tools for industrial controls
- ✓ Industrial process control instrumentation systems
- ✓ Wireless control instrumentation
- ✓ Industrial networking and controlling instrumentation and control buses
- ✓ Instrumentation in packaging and machinery industry especially for high-speed applications
- ✓ Applications of Mechatronics systems in controls
- ✓ Remote monitoring and controlling of industrial processes
- ✓ Human Machine Interface (HMI) and its applications in industry
- ✓ Programmable Logic Controllers (PLCs) and its applications in industry
- ✓ Instrumentation-related technologies for educational institutions
- ✓ Modeling and simulation of mechatronics devices and systems
- ✓ High speed camera vision systems and their industrial applications
- ✓ Industry 4.0 technologies such as Internet of Things (IoT), Industrial Internet of Things (IIoT), digital twins, or machine learning

The deadline for submitting abstracts on the ASEE website is November 1, 2023.

Abstracts of 200-300 words in length should be submitted via the ASEE web site. For formatting and submission instructions and important details and updates, please visit: <https://nemo.asee.org/> Log

into the system using your ASEE login credentials. Then click on 2024 Annual Conference. Then select Author's Webpage. For a paper to be published in the conference proceedings, at least one author for each paper must register for the conference.

The Instrumentation Division also seeks proposals for Instrumentation education-related workshops, panel sessions, special sessions, and topical plenary speakers for the 2024 Annual Conference. Proposals containing the following information are due November 1, 2023 by email to the Program Chair (hhess@uidaho.edu):

- Describe the purpose, format, learning goals, content, and activities.
- Explain why a workshop or special session is necessary to achieve the learning goals.
- Propose a schedule or agenda for the session, describing its general flow.
- Identify presenters, facilitators, and their contact information and appropriate qualifications; Include a brief appropriate justification of their ability to successfully accomplish the session's purpose, goals, and activities.
- Limited to two pages.

The Instrumentation Division will sponsor session(s) where instrument manufacturers and vendors who are registered for the Annual Conference may present new products for educational use, improvements in Instrumentation technology and methods, and programs to encourage educational use of their products. These sessions may be up to the conference session length of 90 minutes.

The Instrumentation Division sponsors a Best Paper Award consisting of an instrument from a sponsor and a cash prize. All presented papers submitted to the division are considered for the award. Individuals interested in participating in the peer-review process should contact the program chair (e-mail is preferred).

Please direct questions to the Instrumentation Division Program Chair:

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