



IEEE COMPEL 2025



University of Tennessee Knoxville

June 23-26, 2025

<https://ieeecompel.org>



This workshop brings together researchers, engineers and students from academia and industry for an interactive discussion on the latest advances in modeling, simulation, analysis, and control of power electronic devices, circuits, and systems.

COMPEL 2025 places special emphasis on modeling and control of power electronics for renewable energy and electrified transportation, and intelligent design and optimization techniques for power electronics.

Workshop themes include (but are not limited to):

- **Modeling and Simulation for Power Electronics Converters** Advanced modeling and simulation techniques for power electronics converters, systems and components; hardware-in-the-loop testing systems, virtual prototyping tools and techniques, software solutions for reliability, diagnostics and EMI assessment.
- **Control of Power Converters** Advanced control and power management solutions for ac-dc, dc-dc and dc-ac power converters and systems, including analog or digital implementations.
- **Intelligent Design and Optimization Techniques for Power Electronics** design analysis and verification tools, design and control techniques for advanced topologies, new designs, novel components, or miniaturized/integrated converters.
- **Power Electronics for Electric Vehicles and Renewable Energy** grid-interactive and microgrid converters, electrified transportation including naval and aviation, wireless power transfer.
- **Education** Laboratories and equipment for teaching power electronic; innovative teaching methodologies, multimedia tools, interactive and virtual laboratories; techniques and approaches to expand access to power electronics education

Preparations of submissions Prospective authors should submit a digest not exceeding five single-column double-spaced pages, including references, in PDF format. Information about the paper, including title, topic of interest, authors' names, affiliations, complete mailing addresses, telephone and e-mail addresses of the corresponding author, and a 100-word abstract must be provided in the submission system. No indication of authors' names or affiliation should be included in the 5-page digest. Further details will be posted on the website: <https://ieeecompel.org>

Venue COMPEL 2025 is hosted by The University of Tennessee Knoxville and Oak Ridge National Laboratory

General Chair Daniel Costinett, daniel.costinett@utk.edu; General inquiries: compel2025@utk.edu

Important dates and deadlines

Digest submission deadline:	March 21, 2025
Notification of acceptance:	April 18, 2025
Early registration closes:	May 9, 2025
Final paper submission deadline:	June 16, 2025

