IEEE 25th Workshop on Control and Modeling for Power Electronics

IEEE COMPEL 2024

Lahore University of Management Sciences, Lahore, Pakistan
June 24-27, 2024
https://ieee-compel.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 2024 places special emphasis on modeling and control of power electronics for renewable energy and electrified transportation, and applications of artificial intelligence and machine learning in power electronics.

Workshop themes include (but are not limited to):

- **Modeling, Simulation, Design and Optimization**
  Small and large-signal modeling; EMI, reliability and multi-physics modeling; real-time, multi-domain and HIL simulation; design methodologies; machine learning and artificial intelligence enabled optimization
- **Control of Power Electronics**
  Linear and nonlinear control; digital and predictive control; stability analysis; very-high-frequency converter control
- **Power Converter Topologies**
  Novel topologies; implementation strategies; WBG-tailored designs
- **Passive and Active Components and Integration**
  Emerging materials and devices; power ICs; system integration; rapid prototyping
- **Power Electronics Reliability**
  Reliability assessment techniques and methods; reliability modeling; failure mechanism and analysis; design for reliability and robustness; condition monitoring; prognostics and diagnostics
- **Power Electronic Energy Systems**
  Grid-forming converters; micro-grids; off-grid systems; renewable sources; energy harvesting; sustainable energy systems; storage systems
- **Emerging Applications of Power Electronics**
  Electric vehicles; all-electric aircraft; robotics; wireless power transfer
- **Education and Entrepreneurship**
  Innovative teaching; virtual laboratories; tech-to-market strategies

Preparation 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 are available at https://ieee-compel.org/

Important dates and deadlines:
Digest submission deadline: February 5, 2024
Notification of acceptance: March 18, 2024
Early registration closes: May 6, 2024
Late registration: May 7-June 23, 2024
Final paper submission deadline: June 17, 2024