

Call for Papers

Following the success of the past IEEE International Symposium on Power Electronics for Distributed Generation Systems (PEDG), the 16th IEEE PEDG will be held on June 22 - 25, 2025 in Nanjing, China. This conference, sponsored by IEEE Power Electronics Society (PELS) and organized by the PELS Technical Committee on Sustainable Energy Systems, Nanjing University of Aeronautics and Astronautics, and Jiangsu Power Supply Society, will provide an international visible platform for presenting innovative and cutting-edge results in the area of power electronics and distributed generation systems.

Topics

Prospective participants are invited to submit an extended abstract of their original work. The topics included but not limited to:

Track 1: Power Electronics for Sustainable Energies

- a. New power converters and controls for wind, solar PV, CHP, wave and tidal, and fuel cell
- b. High efficiency power conversion for sustainable sources: efficiency improvements using new topologies, WBG power semiconductor devices and magnetic materials
- c. Grid integration using solid state transformers, and medium voltage DC distribution
- d. Islanding detection, protection and standards of DG systems

Track 2: Energy Storage Systems

- a. Power electronics for battery, super capacitor, and hybrid energy storage systems
- b. Power electronics for charging and operation of electric, hybrid electric, and plug-in hybrid electric vehicles
- c. Energy management, optimal sizing of energy storage, and power converter systems for various cases including peak shaving, intermittency mitigation etc.

Track 3: Distributed Generation Interacting with Power Transmission and Distribution Systems

- a. Microgrids and nanogrids – grid interconnected and islanded operation
- b. Distributed generation power electronics and electric power quality – voltage, frequency, harmonics impacts and mitigation
- c. Power electronics as power stations: demand response, high penetration of distributed, generation power electronics in the grid, and renewables generation forecasting applied to power electronics

Track 4: Other Emerging Topics

- a. Power semiconductor modules development for distributed generation power electronics
- b. Power electronics and cybersecurity issues
- c. Energy policy and public policy issues relating to power electronics based distributed and sustainable generation systems

Special Sessions

Organization and paper submission to Special Sessions on power electronics and distributed generation systems are cordially welcomed.

Important Dates

- Deadline for digest submission: Jan. 31, 2025
- Notification of acceptance: Mar. 31, 2025
- Final paper submission: May 01, 2025

Digest Submission

Prospective authors are invited to submit a digest no longer than five pages, single column, double-spaced, that summarized the proposed paper. The digest should include key equations, figures, tables, major results and references, but no author names and affiliations. Papers presented at IEEE PEDG must be original material and not have been previously presented or published. All digests will go through a double-blind peer review process to ensure confidentiality and fair review.

Information for Tutorials

- Proposal Submission Deadline: Feb. 15, 2025
- Notification of Acceptance: Mar. 31, 2025
- Final Tutorial Submission: May 31, 2025

Publication

All of the conference papers will be EI-indexed and included in IEEE Xplore. Selected papers will be invited for possible publications in special issues/special sections of IEEE PELS journals including JESTPE and TPEL.

Industry Sessions

Industry participants are encouraged to present and exchange their latest achievements on power electronics and distributed generation systems. Presenters can submit either an individual presentation proposal or an overall session proposal. Detailed information will be provided on the website.