

Applied Computing and Cutting-Edge Solutions in Power Electronics and Control for Industry 5.0

17th SEMINAR ON POWER ELECTRONICS AND CONTROL



November 09 -12th, 2025 | Format Hybrid



University of Itajaí Valley Balneário Comboriú, SC, Brazil

IMPORTANT DATES

May 1st, 2025

July 13th, 2025

Paper Accepta September 1st, 2025

Final Par October 3rd, 2025

PRELIMINARY CALL FOR PAPERS

The 17th Seminar on Power Electronics and Control, SEPOC 2025, organized by the University of Itajai Valley, SC, Brazil, it will happen in hybrid format on November 09 - 12th, 2025.

SEPOC 2025 will feature panel and plenary sessions, as well as technical papers presented in hybrid and posters sessions. This year, the conference's special topics will cover:

- i) The role of Applied Computing, Control Systems, Power Electronics and Smart Grids in Reliability and Energy Quality in Electrical Systems.
- ii) Applied Computing, Power Electronics, Control Systems and Electrical Power Systems in the context of Microgrids.
- iii) Applied Computing, Power Electronics and Control and Automation to meet the commitment between Performance and Energy Efficiency in Industrial Processes.

The Organizing Committee of SEPOC 2025 invites researchers worldwide to submit full papers written in English concerning their original research work to the Seminar.

General Topics:

- 1. Intelligent Systems and Industrial Applications
- 2. Converter Topologies for Energy Processing and/or Connection to the Power System
- 3. Smart Grids, Renewable Energy and Distributed Generation
- 4. Industrial Automation and Control Systems
- 5. Smart Lighting Systems
- 6. Drive and Control of Electrical Machines
- 7. Modeling, Simulation and Analysis of Power Systems
- 8. Operation and Control of Power Systems
- 9. Planning of Expansion of Power Systems
- 10. Power Systems Digitalization and Protection

8kG Wheel

11. Quality of Electrical Power

- 12. Energy Efficiency and Load Management
- 13. Device and Equipment Technologies
- 14. Communication Networks and Cybersecurity
- 15. Efficiency and Reliability of Electronic Equipment
- 16. Electromagnetic Compatibility and Electromagnetic Interference
- 17. Energy storage
- 18. Embedded systems, semiconductor devices, passive and magnetic components
- 19. Electronic ballasts for lighting
- 20. Applications in the automotive, aerospace and transportation industries
- 21. Applied Computer Systems Engineering
- 22. Identification, control theory and applications
- 23. Education in Engineering and Computing

Publication:

Accepted and presented papers written in English may be submitted to the IEEE Xplore online digital library. Best papers (up to 20%) will be recommended for submission to IEEE IAS journals. Accepted and presented papers written in portuguese will be submitted to Manancial (UFSM). The 10 best papers, written in Portuguese, will be recommended for submission to the Brazilian Journal of Power Electronics of SOBRAEP (Brazilian - Renewable and alternative energy systems Power Electronics Society).

Special topics:

- Performance and Energy Efficiency in Industrial Processes
- Reliability and Power Quality in Electrical & Electronic Systems
- Terminal & Port Technology and Applied Computing
- Microgrids and Environment Decarbonization



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