

IEEE CPE-POWERENG 2024

18th International Conference on Compatibility, Power Electronics and Power Engineering

June 24 - 26, 2024 – GDYNIA, Poland

Special Session on

“Power Electronics for End-to-End DC Networks”

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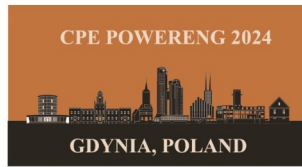
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Call for Papers

The move away from fossil fuels to reduce carbon emissions, alleviate airborne pollutants, create energy independence, increase efficiencies through DC transmission, and create long-term sustainability for humankind. Additionally, due to advancements of several diverse technologies, we can electrify almost everything. The electrification of transportation, heat pumps, commercial, and residential thermal load by electrified heat are a few applications which will dominate over the coming decades. Existing electrical infrastructure is century old and requires significant upgradation, and adopting DC seem to solve several issues and provides efficient solutions. So, this special session invites research articles which deal but not limited to, dc/dc converters, inverters for residential and commercial grids, intelligent protection systems both dc and ac, control of dc microgrids, fault tolerant power converter topologies, operation aspects and control emerging residential power network systems.





Topics of interest include, but are not limited to:

1	DC and hybrid AC/DC dc microgrid architectures and their optimal design methodologies
2	Power electronics converter topologies and control techniques for residential dc grids
3	Power electronics systems for efficient integration of distributed energy generators, energy storages and loads into residential microgrids
4	Active power filtering, load-sharing, islanding operation
5	Condition monitoring, intelligent protection, fault diagnosis and self-healing
6	Predictive maintenance, adaptive communication-based protection
7	Cyber security issues in residential microgrids
8	Power management strategies, distributed control and/or decentralized decision making
9	Operation and control of interconnected residential microgrids (i.e., microgrid communities)

Submissions Procedure:

All the instructions for paper submission are included in the conference website:

<https://cpe-powereng2024.umg.edu.pl>

Deadlines:

- Full paper submission: 14 January, 2024
- Notification of acceptance: 5 April, 2024
- Final paper submission and early bird payment deadline: 16 May, 2024

