ICHQP 2026

22nd International Conference on Harmonics and Quality of Power August 31 – September 3, 2026 Dresden, Germany



Call for Papers

ICHQP is one of the premier international conferences in the field of electrical power engineering, and the only **IEEE Power & Energy Society (PES)** conference exclusively dedicated to the area of Power Quality. ICHQP 2026 continues this tradition, offering an excellent opportunity for professionals from **academia** and **industry** to meet, exchange ideas, and advance the state of the art. In this spirit the conference highlights technical excellence at the forefront of **Power Quality**.

The conference covers all network disturbance phenomena including lower-frequency distortion (harmonics, interharmonics, subharmonics), higher-frequency distortion (supraharmonics), flicker, unbalance, slow voltage variations, rapid voltage changes, voltage sags, voltage swells, notching and transients. Classical as well as modern technologies, like e-mobility, inverter-based generation, battery storage systems, FACTS, HVDC converters and heat pumps are addressed. Relevant **topics** include, but are not limited to:

Measurement and data analysis

- Design aspects of measurement campaigns
- New metrics and measurement methods including advanced signal processing
- Measurement uncertainty
- Data mining and analysis techniques including Artificial Intelligence
- Visualization and reporting methods
- Forecasting techniques

Equipment and installations

- Emission characteristics
- Modelling approaches and parameter identification methods
- Aggregation techniques
- Immunity and thermal stress
- Compliance assessment

System studies

- Probabilistic and time-varying aspects
- State estimation techniques
- Advanced simulation and validation methods
- Interactions and propagation across the network

Standardization and regulation

- Emission limits and allocation techniques
- (Conducted) EMC coordination in the context of energy transition and prosumers
- · Power Quality in liberalized energy markets
- Economic impact and (regulatory) managament

Case studies (and other topics)

- Implementation experiences and results from large measurement campaigns
- Interference and mitigation examples
- Connection studies for large installations
- Integration of Power Quality functionalities in other equipment

New technologies and trends

- Power Quality in grids supplied by 100% inverter-based resources
- Requirements on grid forming inverters
- · Power Quality in DC grids
- Challenges beyond 150 kHz



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Submit a Research Paper

Prospective authors are invited to submit original unpublished manuscripts on any topic within the conference scope. All papers will be peer-reviewed in terms of relevance, originality and quality of the technical content. Accepted papers must be presented at the conference to be included in the proceedings and on IEEE Xplore.

Presentation of IEEE Transactions Papers

A limited number of recently accepted IEEE Transactions papers will be considered for presentation at the conference.

Tutorials, Panel Sessions and Special Sessions

All experts are encouraged to submit proposals for tutorials, panel sessions and special sessions.

Best Paper Awards

The **Constantin Budeanu Best Paper Award** recognizes work of outstanding value in the field of Power Quality. The **Alex Emanuel Best Student Paper Award** is specifically dedicated to extraordinary research work submitted and presented by a student. The winners will be announced during the conference gala dinner.

Art of Power Quality Exhibition

Participants are invited to submit their most beautiful and expressive pictures related to Power Quality. The winning picture will be announced during the conference gala dinner.

Supporters and Exhibitors

A range of opportunities to support or exhibit at the conference are available.

Conference Schedule

Aug 31 Tutorials (afternoon), Welcome reception

Sep 01 Main conference, Women in Power Quality reception

Sep 02 Main conference, Gala dinner

Sep 03 Main conference (morning), Sightseeing tour (afternoon)

Sep 04 Sightseeing tour (full-day, seperate registration required)

Steering Committee

Roberto Langella (Co-Chair), Italy Cristian Lazaroiu (Co-Chair), Romania Yahia Baghzouz, USA Gary Chang, Taiwan Mark Halpin, USA Sakis Meliopoulos, USA Alex McEachern, USA William Mack Grady, USA Thomas Ortmeyer, USA Josè Policarpo G. Abreu, Brazil Mark McGranaghan, USA Igor Papič, Slovenia Paulo Ribeiro, Brazil Duane Robinson, Australia Dan Sabin, USA Wilsun Xu, Canada Yang Wang, China Dario Zaninelli, Italy

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