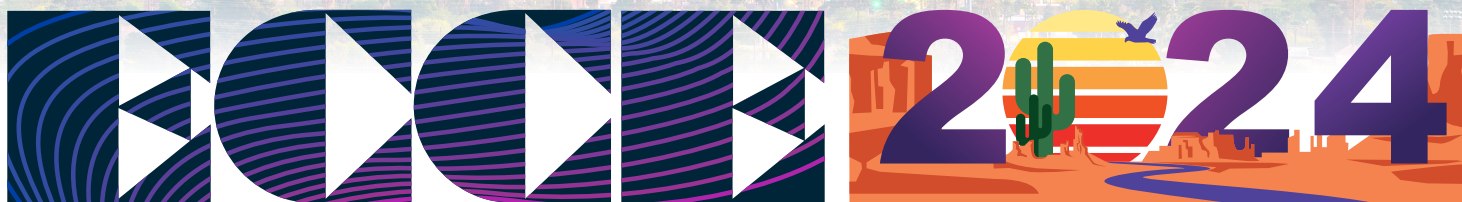




# CALL FOR PAPERS



IEEE ENERGY CONVERSION CONGRESS & EXPO PHOENIX, ARIZONA, USA ☀️ OCT. 20-24

## IMPORTANT DATES

**March 8, 2024**

☀️ Digest submission deadline

**May 24, 2024**

☀️ Author notification

**June 7, 2024**

☀️ 2-page Late Breaking Research Briefs

☀️ Post-Journal Paper ECCE Presentation

**July 22, 2024**

☀️ Final papers submission with IEEE copyright forms



<https://www.ieee-ecce.org/2024/>





The Sixteenth Annual IEEE Energy Conversion Congress and Exposition (ECCE 2024) will be held in Phoenix, Arizona, USA, from October 20 – 24, 2024. ECCE is a pivotal international event on energy conversion. ECCE 2024 will feature both industry-driven and application-oriented technical sessions as well as an exposition. The conference will bring together practicing engineers, researchers and other professionals for interactive and multidisciplinary discussions on the latest advances in areas related to energy conversion, including new and emerging applications.



Technical papers are solicited on any subject pertaining to the scope of the conference including, but not limited to, the following major topics:

### Energy Conversion Systems and Applications

- ▶ Renewable and alternative energy power electronics systems
- ▶ Critical power and energy storage systems
- ▶ Aerospace energy conversion systems
- ▶ Grid-forming technologies
- ▶ High power/voltage power conversion (HVDC, FACTS and multi-terminal DC systems)
- ▶ Microgrids, hybrid ac and dc grids, and dc grids
- ▶ Hydrogen systems for grid applications
- ▶ Energy Access and off-grid systems
- ▶ Energy conversion for information technology and communication systems
- ▶ Electrification for commercial, industrial and transportation applications
- ▶ Electric vehicles (EV) and charging infrastructure
- ▶ Big data and artificial intelligence in energy conversion
- ▶ Wireless power transfer
- ▶ Lighting applications and displays
- ▶ Industrial motor drives
- ▶ Medical, IoT and energy harvesting

### Component, Converter & Subsystem Technologies

- ▶ Power electronic devices, gate drivers, and integrated circuits
- ▶ Passive components and materials
- ▶ Power electronic packaging integration
- ▶ Reliability, advanced fault protection systems, diagnostics, prognostics, and health management
- ▶ Thermal management and advanced cooling technologies
- ▶ Innovative magnetic materials, alternative conductor and winding insulation technologies
- ▶ Electromagnetic interference and electromagnetic compatibility
- ▶ Power conversion topologies, modulation, and control
- ▶ Electrical drive systems and topologies and their control
- ▶ Rotating/linear electromechanical devices
- ▶ Advanced manufacturing
- ▶ Digital twins, cloud design and simulation techniques for energy conversion systems
- ▶ Cyber-and-physical security for power electronics systems

### Digest Submission

Prospective authors are requested to submit a single column digest, according to the provided template, no longer than five (5) pages (including references) summarizing the proposed paper. The digest should include key equations, figures, tables, and references as appropriate, but no author names or affiliations. Digests not conforming to these requirements will be rejected without review. The digests must clearly state the objectives of the work, its significance in advancing the state of the art, and the methods and specific results in sufficient detail. All digests will go through a double-blind peer review process to ensure a confidential and fair review. The papers presented at the conference will be included in the IEEE Xplore Digital Library. Please refer to the conference website for a detailed list of technical topics and the digest submission method.

#### GENERAL CHAIR

**Rolando Burgos**  
Virginia Tech, USA

#### GENERAL CO-CHAIRS

**Pedro Rodriguez**  
Luxembourg Institute of  
Science and Technology (LIST),  
Luxembourg

**Sudip Mazumder**  
University of Illinois  
Chicago (UIC), USA

#### TECHNICAL PROGRAM CHAIRS

**Pericle Zanchetta \*Lead TPC**  
University of Pavia, Italy

**Luca Solero**  
Roma Tre University, Italy

**Kevin Bai**  
University of Tennessee, Knoxville, USA

**Helen Li**  
Florida State University, USA

**Maryam Saeedifard**  
Georgia Tech, USA

**Fernando Briz**  
University of Oviedo