

CALL FOR PAPERS

ECCE ASIA 2025 IEEE ENERGY CONVERSION CONGRESS & EXPO BENGALURU, MAY 11TH - 14TH, 2025

The 17th IEEE ECCE Asia scheduled to take place from May 11th to 14th, 2025, in Bengaluru, India. This event is organized by the IEEE Power Electronics Society (PELS). Since its inception, ECCE Asia has evolved into a highly respected conference that significantly contributes to the progress of power electronics technologies. The conference will offer diverse programs, including notable presentations, industry exhibitions, networking opportunities, and tours, fostering productive discussions and facilitating interdisciplinary collaborations to advance your research endeavors.

IMPORTANT DATES

15th November, 2024 - Digest Submission Deadline

01st January, 2025 - Author Notification Deadline

01st **February, 2025** - Final Paper Submission with IEEE Copyright Forms

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 AND 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. please visit our website at **www.ecceasia2025.org**

CONFERENCE COMMITTEE



www.ecceasia2025.org

Plenary Speakers



Sanjib Kumar Panda NUS, Singapore



Dragan Maksimovic University of Colarado Boulder, USA



Bhim Singh IIT Delhi, India



Dushan Boroyevich Virginia Polytechnic Institute and State University, USA



Sudip Mazumder Illinois Institute of Technology, USA



Jinjun Liu Xi'an Jiaotong University, China



Jun-ichi Itoh Nagaoka University, Japan



G Narayanan IISc Bengaluru, India



Partha Sarathi

Sensarma

IIT Kanpur, India

Johanan Kolar

ETH Zurich,

Switzerland

Udaya Madawala University of Auckland, New Zealand



Deepak Divan Georgia Tech, USA



Prasad Enjeti TAMU, USA



Marco Liserre University of Kiel, Germany



Jose Rodriguez Universidad San Sebastián, Chile

IMAR



Frede Blaabjerg Aalborg University, Denmark



Akshay Kumar Rathore Singapore Institute of Technology, Singapore



B G Fernandes IIT Bombay, India



Seoul National University of Science and Technology, Korea

TAL SIG

Tutorial Speakers



Vinod John IISc Bengaluru, India



Brad Lehman Northeastern University, USA



Sarasij Das IISc Bengaluru, India



Marco Rivera University of Nottingham, UK



Subhashish Bhattacharya North Carolina State University, USA



Ke Ma Shanghai Jiao Tong University, China



Liuchen Chang University of New Brunswick, Canada



Mukul Chandorkar IIT Bombay, India



Sheldon Williamson Ontario Tech University, Canada



Paolo Mattavelli University of Padova, Italy



Shuang Xu University of New Brunswick, Canada



Johan Enslin Clemson University, USA



Patrick Wheeler University of Nottingham, UK



Anvesha Mukhopadhyay University of Tennessee, Knoxville, USA



www.ecceasia2025.org



ΗΑΜΡΙ

Hampi, the city of ruins, is a UNESCO World Heritage site. Nestled amid a cratons and hills, the city is home to 500 ancient monuments, beautiful temples, bustling street markets. bastions, treasury building and captivating remains of Vijayanagara Empire, Hampi is a backpacker's delight. Hampi was the capital of Vijaynagara Empire around 1500 AD, and by some accounts was the largest city in the world.

MYSORE

Famous around the world for the Mysore Dussera festival, Mysore served as the capital of the Wodeyar dynasty. The palace is one of the most famous tourist attractions in the country after Taj Mahal. Apart from the palace, one could visit the famous Mysore zoo and many ancient temples nearby such as Srirangapatna and Nanjangud. The city is also famous for its rich and delicious Mysore Pak, a sweet made of clarified butter, sugar and gram flour.

BANDIPUR NATIONAL PARK

Bandipur National Park highest second Tiaer population in India. Bandipur National Park is located in Gundulpet taluk, Chamarajanagar district. Park is the part of Nilgiri Biosphere Reserve making it largest protected area in Southern India and largest habitant of Wild Elephants in South Asia.Tigers, Indian Elephants, Leopard, Dhole, Sambar, Sloth bear, Chital many more animals and Birds can be spotted in the Bandipur National park.

BELUR - HALEBIDU

Belur is a town and taluk in Hassan district in the state of Karnataka, India. The town is renowned for its Chennakeshava Temple dedicated to Vishnu, one of the finest examples of Hoysala architecture and the largest Hindu temple complex that has survived from pre-14th-century Karnata-Dravida tradition.

Halebidu is a town located in Hassan District, Karnataka, India. Historically known as Dwarasamudra, Halebidu became the regal capital of the Hoysala Empire in the 11th century CE.



Hilton gateway Manyata Business Park, adjacent to Karle Centre Town and within 10 minutes of Hebbal, Bhartiya City, Brigade Magnum, Brigade Opus, and shopping destinations in North Bengaluru. Kempegowda International Airport is minutes 30 away. Enjoy our two restaurants and stylish lobby bar, as well as a rooftop pool and fitness center.

Mavalli Tiffin Rooms, known more popularly as MTR, was established in 1924 and is one of Bangalore's oldest and most well known restaurants.



INTERNATIONAL FLIGHT CONNECTIVITY FROM BENGALURU

