

Call for Papers

1st International Colloquium "Power generation and electromechanical energy conversion"
Dubrovnik, Croatia, October 12 – 15, 2025



The Croatian National CIGRE branch in cooperation with the Zagreb University of Applied Sciences are organizing the **1st International Colloquium "Power generation and electromechanical energy conversion 2025"**

<https://icpgeec.org/>

VENUE

The Colloquium will take place in the Hotel Kompas Dubrovnik, Dubrovnik, Croatia. Magnificent views, modern-event spaces, five-star facilities and skilled technical support make Hotel Kompas Dubrovnik conference centre the perfect meeting venue in this region. Hotel's spacious sun terraces overlooking the crystal-clear waters of the Adriatic are ideal for memorable informal gatherings, cocktails and coffee breaks.



ABOUT DUBROVNIK

The city of Dubrovnik is situated in the very south of the Republic of Croatia. The geographical position of the area is typical of the classic Mediterranean climate with mild and damp winters, and hot dry summers at quite low air humidity. Average temperature in October is 20°C.

Dubrovnik is rich in cultural and historical monuments and is included in UNESCO World Heritage List. The most recognizable feature which defines the history of Dubrovnik are its intact city walls which run uninterrupted for 1940 meters encircling

the city. This complex structure, one of the most beautiful and strongest fort systems in Europe is the main attraction to the city's visitors. The prosperity of Dubrovnik has



always been based on maritime trade. In the Middle Ages, as the Republic of Ragusa, also known as Maritime Republic (together with Amalfi, Pisa, Genoa, Venice and other cities), it became the only eastern Adriatic city-state to rival Venice. Supported by its wealth and skilled diplomacy, the city achieved a remarkable level of development, particularly during the 15th and 16th century.

The city is surrounded by the tiny Elaphite archipelago (Šipan, Lopud, Koločep, Tajan, Olipa, Jakljan and Daksa).

BACKGROUND AND SCOPE

Croatian National Committee of CIGRE (www.hro-cigre.hr) together with the Zagreb University of Applied Sciences in Zagreb are organizing the 1st Colloquium on Power generation and electromechanical energy conversion which will gather specialists from the academic community, research institutes, original equipment manufacturers, electric utilities and industrial world. The Colloquium is supported by the CIGRE A1 committee.

The event is the perfect place to exchange ideas, ask questions and express opinions, renew old acquaintances and make new friendships. The aim is to bring together researchers from the rotating machines production, universities, and utilities in order to present and discuss their research results and latest advances in the fields of design, development and maintenance of generators (hydro and turbo), electrical motors, renewable energy sources and vehicles.

PROGRAM & MAIN TOPICS

The Colloquium will last for four days. The papers will be presented in the morning and afternoon, in oral sessions and poster sessions. The CIGRE tutorial will be held as well.

Papers regarding all aspects of rotating electrical machines (synchronous and asynchronous) and power generation are encouraged.

The papers will be divided into seven main topics:

Numerical Modeling:

- Electromagnetic field
- Coupled fields
- Electrical fields
- Numerical modeling in design, etc.

Electrical Rotating Machine Operation fed by power converters

- Losses and heating
- Insulation system
- Shaft current
- Machine efficiency map

Materials, Components and New Technologies

- Insulating material
- Magnetic material
- Rotating machine components
- Rotating machine new technologies, etc

Electrical Rotating Machine Life Management

- Diagnostics, monitoring and failures
- Asset management
- In-service experiences
- Recycling and circular economy
- Smart and Advanced Maintenance

The development, construction and revitalization of generators and motors of large power

Power generation from renewable energy sources

- Solar plants
- Wind plants
- Battery storage
- Green energy transition
- Maintenance

E – mobility

- Motor drives for electrical vehicles
- Batteries modeling, design and safety
- Grid integration and infrastructure
- Markets, trends and new technologies

IMPORTANT DATES

January 15, 2025:

extended abstract submission due date

February 15, 2025:

notification of acceptance

May 15, 2025:

full paper submission due date

October 12 – 15, 2025:

Colloquium at the Hotel Kompas
Dubrovnik, Dubrovnik, Croatia

More details are given on the following link: <https://icpgeec.org/call-for-papers>

TECHNICAL COMMITTEE

Vedad Bečirović (Bosnia and Herzegovina)
Nicola Bianchi (Italy)
Mario Brčić (Croatia)
Michele Degano (United Kingdom)
Eduard Doujak (Austria)
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Elena Vagnoni (Switzerland)
Babak Vaseghi (Canada)
Enes Zulović (Australia)
Damir Žarko (Croatia)
Dubravko Žigman (Croatia)

WORKING LANGUAGE

The working language for the Colloquium is English. All printed materials, presentations and discussions will be in English.

PAPER SUBMISSION

Participants who intend to present their written contributions are invited to submit a one-page extended abstract and full paper using the template and submission system at: <https://icpgeec.org/author-center/>

PUBLICATION OF PROCEEDINGS

All papers will be published in the proceedings and distributed to participants of the Colloquium. Selected number of papers will be published in Journal of Energy.