

June 8-11, 2020 Dubrovnik, Croatia

2020 IEEE 11th International Symposium on Power Electronics for Distributed Generation System



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Call for Papers **IEEE PEDG 2020**

Extended abstract submission
February 16, 2020
Notification of acceptance
March 22, 2020
Final papers
May 5, 2020

With increasing demand on electrical energy with low carbon emission and high quality of supply, the 2020 IEEE 11th International Symposium on Power Electronics for Distributed Generation Systems (PEDG 2020) will be held June 8th - 11th, 2020 in Dubrovnik, Croatia.

This international symposium, sponsored by the IEEE Power Electronics Society and organized by the PELS Technical Committee on Sustainable Energy Systems, will provide a venue for experts to present the results of their cutting-edge research in power electronics and distributed generation systems. PEDG 2020 will feature plenary speeches, tutorials, and regular technical sessions on theory, analysis, design and development, testing, deployment, and impact of power electronics for distributed generation, energy storage, and sustainable sources.

SUBMISSION

Prospective participants are invited to submit an extended abstract of their original work. The document should be in English and should not exceed five single-column double-spaced pages. The submitted abstracts will be subject to a peer-review process. Detailed instructions on preparation of the abstracts and the submission process will be available on the symposium website. Technical papers are solicited on any subject pertaining to the scope of the symposium that includes, but is not limited to, the following major topics:

Track 1: Power Electronics for Sustainable Sources

- a. New power converters and controls for wind, solar PV, CHP, wave and tidal, and fuel cell
- b. High efficiency power conversion for sustainable sources: efficiency improvements using new topologies, WBG power semiconductor devices and magnetic materials
- c. Grid integration using solid state transformers, and medium voltage DC distribution
- d. Islanding detection, protection and standards of DG systems

Track 2: Energy Storage Systems

- a. Power electronics for battery, super capacitor, and hybrid energy storage systems
- b. Power electronics for charging and operation of electric, hybrid electric, and plug-in hybrid electric vehicles
- c. Energy management, optimal sizing of energy storage, and power converter systems for various cases including peak shaving, intermittency mitigation etc.

Track 3: Distributed Generation Interacting with Power Transmission and Distribution Systems

- a. Microgrids and nanogrids grid interconnected and islanded operation
- b. Distributed generation power electronics and electric power quality voltage, frequency, harmonics impacts and mitigation
- c. Power electronics as power stations: demand response, high penetration of distributed, generation power electronics in the grid, and renewables generation forecasting applied to power electronics

Track 4: Other Advanced Topics

- a. Power semiconductor modules development for distributed generation power electronics
- b. Power electronics and Cybersecurity issues
- $c.\ Energy\ policy\ and\ public\ policy\ issues\ relating\ to\ power\ electronics\ based\ distributed\ and\ sustainable\ generation\ systems$

PUBLICATION

All papers presented at PEDG 2020 will appear in IEEE Xplore.

LOCATION

Dubrovnik is a city in southern Croatia fronting the Adriatic Sea. It is known for its distinctive Old Town, encircled by massive stone walls completed in the 16th century. Its well-preserved buildings range from the baroque St. Blaise Church to the Renaissance Sponza Palace and Gothic Rector's Palace, now a history museum. Paved with limestone, the pedestrianized Stradun (or Placa) is lined with shops and restaurants.



The Republic of Croatia is a crescent-shaped country in Europe bordering the Mediterranean, Central Europe and Balkans. It provides visitors with the opportunity to ski in the winter and swim during the summer months, all within driving distance. Croatia has 1186 islands, islets and reefs.

Croatia has been a member of the European Union since 2013 and will take the presidency of the Council of the European Union in January 2020.

SOCIAL PROGRAM

A social program will be organized for symposium attendees and accompanying persons as an opportunity to better network with their colleagues and to experience the attractions in Dubrovnik.