





Important dates (deadlines):

Special sessions call:15.02.2022Full paper submission:15.04.2022Acceptance notification:15.06.2022Camera ready papers:15.07.2022Early registration:30.07.2022

Conference Committee: PEMC Council Chair Pavol Bauer, Netherlands **PEMC Council Co-chairs** Peter Korondi, Hungary, Viliam Fedak, Slovakia, Krzysztof Zawirski, Poland **Honorary Chair** Carmen Gerigan, Romania **General Co-chairs** Mihai Cernat, Romania Dan Lascu. Romania **Technical Program Chair** Gabor Sziebig, Norway **Financial Co-chairs** Yousef Ibrahim, Australia Carmen Gerigan, Romania **Special Sessions Chair** Viliam Fedak, Slovakia **Tutorial Chair** Frede Blaabjerg, Denmark **Publicity Co-chairs** Diana-Ileana Nicolae, Romania Cosmin Balaban, Romania **Industry liaison Chair** Dan Lascu, Romania **Publication Chair** Razvan-Ioan Dinita, UK **Student & Young Professionals:**

Mariusz Stepien, Poland Local Organizing Committee Mihai Ivanovici, Romania Lia Elena Aciu, Romania Ioan Serban, Romania Conference Secretariat: Ioan Serban, Romania Luminta Barote, Romania

Catalin Petrea Ion, Romania

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CALL FOR PAPERS

2022 IEEE 20th International Power Electronics and Motion Control Conference (IEEE-PEMC 2022) is the biennial conference initiated by the PEMC Council, focusing on contemporary research topics of power electronics, controls, electrical drives, robotics and related topics. This exciting event connects researchers and industry experts to share ideas and experiences surrounding frontier technologies, breakthrough and innovative solutions and applications.

Conference topics (Technical Tracks):

- Power Electronic Converter Topologies, Design and Control (TT01) Chair: Dan Lascu, Romania; D. Vinnikov, Estonia; D. Neacsu, Romania
- Power Electronics in Transportation (**TT02**) Chairs: B. Nahid-Mobarakeh, Canada; V. Prasanth, Netherlands
- Power Electronics in Smart Grid Technologies and Applications (**TT03**) Chair: Ilhami Colak, Turkey, Ramazan Bayindir, Turkey
- Power Electronics in Electrical Energy Generation and Distribution (**TT04**) Chair: V. Katic, Serbia; C. Mihai, Romania; J. Choi, Korea
- Power Electronics in Renewable Energy Systems, Power Supplies (**TT05**) Chair: S. Valtchev, Portugal; D. Fodor, Hungary
- Electrical Machines and Actuators (**TT06**) Chairs: G. Cvetkovski, Macedonia; J. Dong, Netherlands; T. Tudorache, Romania
- Motion Control, Adjustable Speed Drives and Robotics (**TT07**) Chairs: T. Orłowska-Kowalska, K. Zawirski, Poland; T. Wolbank, Austria
- Sensors, Measurement and Observation Technique (**TT08**) Chair: C. Ciufudean, Romania; L. Martinez-Salamero, Spain
- Active Filtering and Unity Power Factor Correction (**TT09**) Chair: M. Popescu, Romania; Z. Qin, Netherlands
- Semiconductor Devices Modeling, Packaging and Integration (**TT10**) Chair: J. Popovic, Netherlands;
- Education and other related topics (TT11) Chair: G. Arsov, Makedonia; V. Fedak, Slovakia

Call for Special Session Proposals

Special sessions are planned to be organized on highly specialized topics that are not included in the conference tracks. Prospective organizers of such sessions are invited to submit session proposal to the Conference Secretariat for acceptance. They must follow the rules established by the Conference Committee.

Tutorials and exhibition

Tutorials planned for organization prior to the conference will be announced at the website. Industrial partners are invited to contribute at the industrial exhibition during conference.

Submission of papers

The working language is English. Prospective participants are requested to electronically submit full papers of their work (up to 6 pages) following the instructions (available on the website). Accepted papers duly presented during the conference will be submitted to inclusion in IEEE Xplore online digital library database.

VENUE

Conference center of **Transilvania University of Brasov** (UniTBv) sponsored by UniTBv (co-organizer)



Address: Aula "Sergiu Chiriacescu", Str. Iuliu Maniu 41A, RO 500091 Brașov, Romania (15 minutes walk from the majority of hotels).



Potential excursions: Poiana Brasov and Peles Castle

Poiana Brasov (12 km away from Brasov) and Peles Castle (Sinaia, 40 km away from Brasov) are two of Romania's main attractions. Both lie in Brasov's neighbourhood and are most worthy a visit.

Poiana Brasov is the favourite tourist destination in Romania. Only 12 km away from Brasov, up in the mountains lies the unique winter and summer resort: "Poiana Brasov" with about ten major ski slopes, two cable rails, and lots of Romanian style restaurants. Tennis courts, and swimming



pools open in the warm season, and boat rides, mountain climbing, horse riding and many other great sports activities can be enjoyed. A public transportation service offers bus transport from near the Brasov County Library.

Peles Castle



Located in Sinaia (40 km, 1 hour drive or train trip from Brasov), Peles Castle, Romania's most famous royal castle, was built between 1875 and 1883, when

it was inaugurated as the summer residence of King Carol 1st of Romania. Both at the end of the 19th century, and nowadays, Peles Castle was and is considered to be one of the most beautiful castles in Europe. Its dominating architectural style is German neo-Renaissance. It was the first entirely electrified edifice on the continent. Its own power station was located on the banks of Peles Brook. Further, the building was equipped from the beginning with an interior elevator, vacuum cleaner, and centralheating system. The castle has 170 rooms, of which only 10 can be visited by tourists. It shelters various valuable collections of paintings, sculptures, armours, carpets, furniture, tapestries, statues, pottery, gold, silver and China dishes, stained-glasses and so on.

Technical Tour: The 11 buildings of the Institute are designed to be energetically autonomous. They host a modern and complex research infrastructure consisting of integrated lines of high-tech equipment for advanced research in the broad field of sustainable development. Given these endowments, the Institute can conduct large-scale national and international research projects and actively collaborate with the economic, industrial and institutional environment in Brasov, as well. Thereby the Institute fosters the competitiveness of Transilvania University in the international research.

By means of the multi- and interdisciplinary activities of its 29 research centers, the exploitation of the underlying multidisciplinary synergies, as well as by integrating Ph.D. and postdoctoral activities into the high-level research conducted within the research centers, the Institute aims at becoming a major pillar of research, development and innovation in the field of sustainable development.

Mountain Hiking Tour: Mount Postavaru (1800 m) Participants will travel by bus (40 minutes). Hiking up to Postavaru Mount (1800 m) - 3 hours Rest: 1 hour, Lunch at Iulius Römer Chalet - 1 hour Rest: 1 hour, Hiking down - 2 hours Bus travel 40 minutes