

**Honorary chairs:**  
Georgi Mihov, Bulgaria  
Kamal Al-Haddad, Canada  
Leopoldo Franquelo, Spain  
Rosen Vasilev, Bulgaria

**General Co-Chairs:**  
Ivan Yatchev, Bulgaria  
Stanimir (Stan) Valtchev,  
Portugal and Bulgaria

**PEMC Council statutory  
representatives:**  
Pavol Bauer, The Netherlands  
and Peter Korondi, Hungary

**Chairs:**

**Technical program:**  
Mihai Cernat, Romania,  
assisted by the Track Chairs

**Social program:**  
Maria Arsova, Bulgaria

**Tutorials:**  
Frede Blaabjerg, Denmark

**Finances:**  
Yousef Ibrahim, Australia and  
Anastasia Krusteva, Bulgaria

**Industry forum:**  
Alex Van Den Bossche,  
Belgium and Georgy Todorov,  
Bulgaria

**Round table discussion:**  
Marian Kazmierkowski, Poland

**Exhibition:**  
Mariusz Malinowski, Poland  
and Rozalina Dimova, Bulgaria

**Publicity:**  
Kouhei Ohnishi, Japan,  
assisted by a Co-Chair: Isaak  
Y. Braslavskiy, Russia, with a  
large International Publicity  
Committee

**Technical tour:**  
Boyan Mednikarov, Bulgaria

**Special sessions:**  
Krzysztof Zawirski, Poland and  
Viliam Fedak, Slovak Republik

**Local Organizing Committee:**  
**Chair:** Marin HRISTOV

**Members:**  
Chavdar ALEXANDROV  
Dimitar ARNAUDOV  
Rumen ATANASOV  
Kostadin BRANDISKY  
Nikolay HINOV  
Veselin HOUBANOV  
Andon LAZAROV  
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Iliana MARINOVA  
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Vencislav VALCHEV  
Zahari ZARKOV



# The Power Electronics and Motion Control (IEEE-PEMC)

VARNA, BULGARIA | from 25 to 30 of September 2016

## Modern Power Electronics and Motion Control aiming at Intelligent Solutions

### BACKGROUND AND AIM:

The Power Electronics and Motion Control (PEMC) conference circulates in Europe as a direct continuation of the same field conferences held since 1970 mostly in Budapest, organized by the Hungarian Electro-technical Association with headquarter in Budapest. This makes this Conference the oldest one in this area in Europe. Now PEMC Council, involving representatives from many of the European countries, controls the organization of the PEMC conferences. In August 2015 the Industrial Electronics Society of the IEEE conferred to the PEMC conference the prestigious name of most important IEEE conference, naming it from now on, the IEEE-PEMC conference.

The main goal of IEEE-PEMC is to promote and co-ordinate the exchange and the publication of technical, scientific and economic information in the field of Power Electronics and Motion Control. One of the main objectives is the cooperation and integration between the long-time divided Western and Eastern European countries, also expressed in the conference logo. The conference attracts now a large number (roughly 500+) of participants from overseas as well. An exhibition is organised in parallel with every PEMC Conference, offering space for the industry to present their latest products in the field of Power Electronics and Motion Control. In addition to the regular oral sessions, key notes, round tables, tutorials, workshops, seminars, exhibitions, the dialogue sessions (enlarged "poster" presentations) present to the speakers a better cooperation among the participants.

### CALL FOR PAPERS

The aim of this 17th IEEE-PEMC conference is to stimulate the findings of intelligent solutions (intelligent power electronics, intelligent control), in order to achieve the Intelligent Motion, Intelligent Mechatronics, Intelligent Sensors and Actuators, Intelligent Robots, Intelligent (more than smart) Micro Grids, Intelligent Power System, Intelligent Energy Generation, Processing, Distributing and Consuming, steadily walking to a better world.

#### The PEMC Council:

- This is the international, elected scientific authority, which serves as an advisory board and makes the PEMC activities to correspond to the approved standards and rules. The PEMC secretariat in Budapest has large amount of useful knowledge, keeping the tradition in PEMC conferences, controlling their scientific content and quality.

The IEEE-PEMC 2016 conference in Varna, Bulgaria honors the memory of Professor Istvan Nagy, who left us unexpectedly after giving all his life to the creation and successful implementations of the PEMC Conference. The world lost an extraordinary, both strong and kind person, an enthusiast in power electronics, electric drives and motion control. We shall remember his deeds as a tireless organizer, true friend, colleague and advisor and we shall follow his example. Considering that this conference is dedicated to the memory of the Late Prof Istvan Nagy, the PEMC Council announces, that from now on, the IEEE-PEMC award for valuable scientific and organizational achievements, is renamed to "Professor Istvan Nagy Award".



# IEEE-PEMC 2016 BULGARIA



### Main Tracks and Special Sessions:

PTT01. Power Electronic Converter Topologies, Design and Control, Power Supplies  
TT02. Power Electronics in Transportation (Road, Aerospace, Marine and Railway Vehicles, Electric and Hybrid Vehicles)  
TT03. Power Electronics in Electrical Energy Systems (Generation, Transmission and Distribution, Smart Grid Technologies, Renewable Energy Systems)  
TT04. Electrical Machines and Actuators  
TT05. Motion Control, Adjustable Speed Drives  
TT06. Robotics and Mechatronics  
TT07. Sensors, Measurement and Observation Techniques  
TT08. Active Filtering and Unity Power Factor Correction  
TT09. Semiconductor Devices Modelling, Packaging and Integration  
TT10. Education

SS02. Demand Response in Smart Grid  
SS03. Intelligent Fault Monitoring and Fault-Tolerant Control in Power Electronics and Electric Drives  
SS04. Power electronics and control technology application to railway power supply systems  
SS05. Application of nature-inspired approaches to motion control  
SS06. Multilevel Converters for Drives, Renewable Energy and Grid Power Quality Applications  
SS07. Efficient and Reliable Hybrid and Electric Propulsion Systems  
SS08. Electrical Energy Systems with High Temperature Superconducting Technology (HTS)  
SS09. Hybrid Solar Energy Conversion Aimed at Various Geographic Zones

#### Special Sessions and Tutorials

Special sessions are organized on highly specialized topics that were not included in the previous editions of the conference. The organizers of those sessions must observe the scope of the conference and follow the rules established by the conference committees. If a person or persons is (are) decided to organize a special session, he (they) must contact the Committee Chair responsible of the special sessions. The tutorials are subject to decision taken by the Committees and the Tutorials Chair.

#### Paper Submission

The working language of the conference is English. Prospective authors are requested to submit full papers (6 pages max) following the guidelines available on the conference website. Accepted and presented papers will be submitted for international publication through IEEE Xplore. Each accepted paper must be presented at the conference by one of the authors. Papers not presented will not be included in IEEE Xplore.

### Submission Schedule:

- Submission of Special Session Proposals: 10 March 2016
- Deadline for submission of full paper: 31 March 2016
- Notification of acceptance with publication instruction: 15 May 2016
- Full paper in final form: 1 July 2016

FOR FURTHER INFORMATION VISIT  
WWW.IEEE-PEMC2016.ORG

