



IEEE PEAC'2018

The 2nd IEEE International Power Electronics and Application Conference and Exposition

November 4–7, 2018 Shenzhen, China

www.peac-conf.org

Honorary Chair

Fred C. Lee, *Virginia Tech.*

General Chairs

Dehong Xu, *Zhejiang Univ.*

Alan Mantooth, *Univ. of Arkansas*

Technical Program Chairs

Hao Ma, *Zhejiang Univ.*

Frede Blaabjerg, *Aalborg Univ.*

Toshihisa Shimizu, *Tokyo Metropolitan Univ.*

Jaeho Choi, *Chungbuk National Univ.*

Yen Shin Lai, *National Taipei Tech.*

Michael Chi Kong Tse, *Hong Kong Polytechnic Univ.*

International Steering Committee Chairs

Don Tan, *Northrop Grumman*

Braham Ferreira, *Delft Univ. of Tech.*

Dianguo Xu, *Harbin Institute of Tech.*

Hirofumi Akagi, *Tokyo Institute of Tech.*

National Steering Committee Chairs

An Luo, *Hunan Univ.*

Zhengming Zhao, *Qinghua Univ.*

Xiangning He, *Zhejiang Univ.*

Invited Session Committee Chair

Jinjun Liu, *Xi'an Jiaotong Univ.*

Tutorial Committee Chairs

Xinbo Ruan, *Nanjing Univ. of Aeronautics and Astronautics*

Sewan Choi, *Seoul National Univ. of Sci. and Tech.*

Yunwei Li, *Univ. of Alberta*

Industry Session Committee Chairs

Jinfa Zhang, *Delta Electronics*

Stephen Oliver, *Navitas Semiconductor*

Tatsuhiko Fujihira, *Fuji Electric*

Tianhao Tang, *Shanghai Maritime Univ.*

Publications Committee Chair

Bo Zhang, *South China Univ. of Tech.*

Sponsored by

China Power Supply Society
IEEE Power Electronics Society



Technically sponsored by

Power Sources Manufacturers Association

Korean Institute of Power Electronics

IEEJ Industry Applications Society

National Natural Science Foundation of China

Call for Papers

IEEE International Power Electronics and Application Conference and Exposition (PEAC) is an international conference for presentation and discussion of the state-of-the-art in power electronics, energy conversion and its applications. The IEEE PEAC'2018 is the second meeting of PEAC, which will be held in Shenzhen, China, during November 4-7, 2018.

The worldwide power electronic industry, research, and academia are cordially invited to participate in an array of presentations, tutorials, exhibitions and social activities for the advancement of science, technology, engineering education, and fellowship. Technical interests of the conference include, but are not limited to:

- **Switching Power Supply: DC/DC converter, Power Factor Correction converter**
- **Inverter and control: DC/AC Inverter, Modulation and Control**
- **Power Devices and applications: Si, SiC, and GaN devices**
- **Magnetics, Passive Integration, Magnetics for Wireless and EMI**
- **Control, Modeling, Simulation, System Stability and Reliability**
- **Conversion Technologies for Renewable Energy and Energy Saving**
- **Power Electronics for Transmission and Distribution**
- **Power Electronics for Electric Vehicles, Railway, Marine, Airplane etc.**
- **Power Electronics for Lighting and Consumer Electronics**
- **Power Electronics for Data center and Telecom**

Paper Submission

The working language of the conference is English. Prospective authors are invited to electronically submit digests of their work in English (Maximum 6 pages in double space, in pdf format), following the instructions available on the website: <http://www.peac-conf.org/>. The digest is a summary of your paper including the digest title, abstract, digest text and references.

Accepted and presented papers will be published in the conference proceedings, and submitted to the IEEE Xplore on-line digital library and EI Compendex.

Important Deadlines

Submission of digests	May 30th, 2018
Submission of tutorial proposals	June 30th, 2018
Notification of paper acceptance	July 15th, 2018
Submission of final papers	Aug. 30th, 2018

Secretariat of PEAC'2018

Email: peac@cpss.org.cn

Phone: +86-22-87574852 Fax: +86-22-27687886

Address: China Power Supply Society

16th Floor, Datong Building, No.467 Huanghe Road, Nankai District, Tianjin, 300110, China





Welcome to Shenzhen China

Shenzhen is a coastal city in South China, situated immediately north of Hong Kong. The city has a subtropical marine climate with plenty of sunshine and is rich in tropical fruit.

It is a popular tourist destination renowned for pleasant seashore, well-preserved forests, and various theme parks such as Dameisha beach, Xichong Beach, China Folk Culture Village, Window of the World, Ecoventure Valley, Tea Stream Resort Valley theme parks.

Besides joining the activities of the conference please plan your time to visit the city and enjoy the culture and local food.



■ More Participation Opportunities

Tutorials

Several high-quality tutorials will be offered on Sunday, November 4, 2018.

Prospective lecturers are invited to send a proposal before June 30, 2018 to the Tutorial Chair: Xinbo Ruan, ruanxb@nuaa.edu.cn

The proposal should be no more than 3 pages including:

- Tutorial title
- Name, affiliation, and short bio(s) of the lecturer(s)
- Objectives and audience
- Synopsis

Industry Session Presentations

In order to strengthen the cooperation among industries with academics, PEAC'2018 will arrange industry sessions during the conference. Speakers are invited to make a presentation only without submitting a formal paper. These presentations will be included in the PEAC'2018 conference proceeding. Each presentation should be limited within 30 minutes (25 minutes for presentation, plus 5 minutes for questions and discussions). We seek technical presentations rather than marketing-oriented talks.

Please send the proposal before June 30, 2018 to peac@cpss.org.cn including:

- Title of the presentation
- Summary of the presentation content
- Description of the target audience
- Short professional biography of the speaker

Other wonderful content

- **Plenary Session:** Leading experts from academia, industry, and research institutes will be invited to share their insights on technology developments and future trends.
- **Exhibition:** A limited number of booths will be available during the conference which will show the latest technologies, solutions, and products from industry.
- **Social Event:** Welcome reception and gala dinner with Chinese traditional performance will be included in the conference program.



IEEE PEAC'2018

International Steering Committee Members

Liuchen Chang, *Univ. of New Brunswick*
Tatsuhiko Fujihira, *Fuji Electric Co., Ltd.*
Gerard Hurley, *National Univ. of Ireland, Galway*
Adrian Ioinovici, *Sun Yat-sen Univ.*
Rajashekara Kaushik, *Univ. of Texas at Dallas*

J. W. Kolar, *ETH Zurich*
Fujio Kurokawa, *Nagasaki Univ.*
Tsorng-Juu Liang, *National Cheng-Kung Univ.*
Yanfei Liu, *Queens Univ.*
Leo Lorenz, *Infineon Technologies*
Gourab Majumdar, *Mitsubishi Electric Corp.*
Meiqin Mao, *Hefei Univ. of Tech.*

Kouki Matsuse, *Meiji Univ.*
Yasuyuki Nishida, *Chiba Inst. of Tech.*
Ching-Tsai Pan, *National Tsing Hua Univ.*
John Shen, *Illinois Inst. of Tech.*
Kuang Sheng, *Zhejiang Univ.*
Jian Sun, *Rensselaer Polytechnic Inst.*
Paolo Tenti, *Univ. of Padova*

Tsai-Fu Wu, *National Tsing Hua Univ.*
Qingchang Zhong, *Illinois Inst. of Tech.*
Zhiqiang Zhu, *Sheffield Univ.*

National Steering Committee Members

Wei Chen, *Fuzhou Univ.*
Jianguo Jiang, *Shanghai Jiaotong Univ.*
Yong Kang, *Huazhong Univ. of Sci. & Tech.*
Yaohua Li, *Inst. of Electrical Eng. of the Chinese Acad. of Sci.*
Yongdong Li, *Tsinghua Univ.*
Xiaosheng Liu, *Harbin Inst. of Tech.*

Yimin Lu, *Guangxi Univ.*
Zhengyu Lv, *Zhejiang Univ.*
Yi Ruan, *Shanghai Univ.*
Tianhao Tang, *Shanghai Maritime Univ.*
Cong Wang, *China Univ. of Mining Tech.*
Ping Wang, *Tianjin Univ.*

Shaojun Xie, *Nanjing Univ. of Aeronautics and Astronautics*
Jianping Xu, *Southwest Jiaotong Univ.*
Xu Yang, *Xi'an Jiaotong Univ.*
Xiaoming Zha, *Wuhan Univ.*
Chenghui Zhang, *Shandong Univ.*
Chunjiang Zhang, *Yanshan Univ.*
Dairun Zhang, *Sichuan Univ.*

Miao Zhang, *Guangdong Univ. of Tech.*
Weiping Zhang, *Beijing Univ. of Tech.*
Xing Zhang, *Hefei Univ. of Tech.*
Trillion Q Zheng, *Beijing Jiaotong Univ.*
Yanru Zhong, *Xi'an Univ. of Tech.*

Technical Program Committee Members

Kan Akatsu Akatsu, *Shibaura Inst. of Tech.*
Ivo Barbi, *Univ. Fed De Santa Catarina*
Mohamed Benbouzid, *Universite de Bretagne Occidentale*
Liuchen Chang, *Univ. of New Brunswick*
Jean-Frederic Charpentier, *French Naval Academy*
Guozhu Chen, *Zhejiang Univ.*
Yaow-Ming Chen, *National Taiwan Univ.*
Zhe Chen, *Aalborg Univ.*
Huang-Jen Chiu, *National Taiwan Univ. of Sci. and Tech.*
Sewan Choi, *Seoul National Univ. of Sci. and Tech.*
Xiong Du, *Chongqing Univ.*
Yan Du, *Hefei Univ. of Tech.*
Zhuo Fang, *Xi'an Jiaotong Univ.*
Jung-Ik Ha, *Seoul Nat'l Univ.*
Joachim Holtz, *Univ. of Wuppertal*

Yoichi Hori, *Univ. of Tokyo*
Kyeon Hur, *Yonsei Univ.*
Fuka Ikeda, *Yamaguchi Univ.*
Jun-ichi Itoh, *Nagaoka Univ. of Tech.*
Herbert H.C. Iu, *the Univ. of Western Australia*
Praveen K. Jain, *Queen's Univ.*
Dong Jiang, *Huazhong Univ. of Sci. & Tech.*
Jinsong Kang, *Tongji Univ.*
Seiichiro Katsura, *Keio Univ.*
Rae-Young Kim, *Hanyang Univ.*
Keiichiro Kondo, *Chiba*
Dong-Choon Lee, *Yeungnam Univ.*
Ching-Shan Leu, *Taiwan Univ. of Sci. and Tech.*
Fei Li, *Hefei Univ. of Tech.*
Hongmei Li, *Hefei Univ. of Tech.*
Qiang Li, *Virginia Tech.*
Yunwei (Ryan) Li, *Univ. of Alberta*
Bor-Ren Lin, *National Yunlin Univ. of Sci. and Tech.*
Jinjun Liu, *Xi'an Jiaotong Univ.*

Xiaodong Liu, *Anhui Univ. of Tech.*
Udaya K. Madawala, *the Univ. of Auckland*
Denizar Cruz Martins, *Federal Univ. of Santa Catarina*
Joseph Ojo, *Tennessee Tech Univ.*
Jos é Renes Pinheiro, *Universidade Federal de Santa Maria*
M. F. Rahman, *Univ. of New South Wales*
Chuntaek Rim, *KAIST*
Gang Shi, *Shanghai Jiaotong Univ.*
Toshihisa Shimizu, *Tokyo Metropolitan Univ.*
Zhikang Shuai, *Hunan Univ.*
Yongsug Suh, *Chonbuk Nat'l Univ.*
Seung-Ki Sul, *Seoul National Univ.*
Kai Sun, *Tsinghua Univ.*
Toshihiko Tanaka, *Yamaguchi Univ.*
Hamid A. Toliyat, *Texas A&M Univ.*
Yin Yu Tzou, *National Chiao Tung Univ.*
Keiji Wada, *Tokyo Metropolitan Univ.*

Fei "Fred" Wang, *Univ. of Tennessee*
Fei Wang, *Shanghai Univ.*
Jianing Wang, *Hefei Univ. of Tech.*
Jin Wang, *Ohio State Univ.*
Xiongfei Wang, *Aalborg Univ.*
Yijie Wang, *Harbin Inst. of Tech.*
Xinke Wu, *Zhejiang Univ.*
Shaojun Xie, *Nanjing Univ. of Aeronautics and Astronautics*
Yan Xing, *Nanjing Univ. of Aeronautics and Astronautics*
Longya Xu, *Ohio State Univ.*
Hiroaki Yamada, *Yamaguchi Univ.*
Xiangzhen Yang, *Hefei Univ. of Tech.*
Yugang Yang, *Liaoning Technical Univ.*
Ping Zeng, *China Electric Power Research Inst.*
Junming Zhang, *Zhejiang Univ.*
Zhenbin Zhang, *Shandong Univ.*
Miao Zhu, *Shanghai Jiaotong Univ.*