Australasian Universities Power Engineering Conference-2017 (AUPEC2017)

19 – 22 November 2017, Melbourne Park Function Centre, Melbourne, Australia

https://www.vu.edu.au/australasian-universities-power-engineering-conference-2017-aupec2017

Australasian Universities Power Engineering Conference (AUPEC) is an annual flagship conference with an outstanding history of over 20 years as the top power-engineering forum for the Australasia and Asian regions. In 2017, the main theme of the conference is *Smart Power Grid in the 21st Century*.

AUPEC 2017 will provide a common forum for researchers, engineers, students, policy makers and stakeholders all around the world to share and exchange experiences along with new ideas and latest advancements in power engineering. The conference will feature high quality technical papers, tutorial sessions, panel discussions and distinguished keynote talks by experts covering the breadth and depth of power engineering.



AUPEC 2017 will be held at the Melbourne Park Functions Centre, Melbourne, Australia. The venue is located in the heart of beautiful and vibrant Melbourne: the city of beauty. Over the years, Melbourne has been a city of tourist attraction because of its multi-cultural society, mix of modern and retro architectures, stunning land and streetscapes, and diverse range of fine dining. Other tourist attractions of Melbourne city include sports, live music, art, cultural, festival and fashion events, which have earned the city a reputation as the "cultural and sporting capital" of Australia. The city of Melbourne, which has been regarded as the world's most liveable city for seven years in a row, from 2011 to 2017, offers the visitor an experience of a lifetime.

KEYNOTE PRESENTATIONS

Keynote speeches will be delivered by world renowned speakers addressing the challenges for electrical power systems in the 21st century. **TUTORIALS**

Tutorials will cover a range of topics including inverter management in smart grids, integration of renewable energy into electrical networks, and advanced control issues for high renewable penetration power systems.



KEY DATES

Paper Submission System Opens: 10 April 2017 Paper Submission Closing Date: 3 July 2017 28 July 17 Notification of Paper Acceptance: 14 August 2017 Conference Date: 19 to 22 November 2017





Host University







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Conference Theme: Smart Power Grid in the 21st Century

Smart energy is the application of digital information technology to optimize the electrical power system. The smart grid is the product of applying smart energy technology to electrical power delivery and generation. Smart energy technologies are beginning to transform the power network into a smart grid capable of meeting 21st century economic, security and environmental challenges.

But the smart grid still faces hurdles, in particular the need for extensive field testing to prove new energy systems and regulatory reform to remove financial disincentives to adopting new technologies. A host of new smart energy devices and systems are emerging that can take pressure off overloaded grid infrastructure and power costs, dramatically improve grid reliability and security, and accelerate the growth of cleaner power generation. The main focuses of AUPEC2017 are to address the challenges in smart grids of the 21st century.

Call for Papers

It is a great pleasure to invite you to attend and participate AUPEC 2017 in Melbourne. Researchers, engineers, students, and stakeholders all around the world are invited to submit original research with innovative solutions (which are not currently under consideration for publication at other venues). The conference is aimed to cover all aspects of power engineering and particularly submissions are highly encouraged, but not limited to, in the following areas:

- Dever system operation and planning
- Power system stability & control
- Electricity market
- Asset management
- **Condition monitoring**
- Power system stability
- □ Fault diagnosis in power systems
- Power quality issues
- □ Smart grid including smart buildings & cities
- □ Smart metering & phasor measurement
- □ Wide area monitoring & control
- □ Renewable energy systems
- □ Microgrids (DC, AC, & AC/DC)
- □ Remote power systems
- □ Grid integration of electric vehicles

- Different types of energy storage technologies
- Small- and large-scale integration of energy storage systems
- **Cyber security of smart grids**
- □ Transactive energy management
- Data analytics in smart grids
- □ Resiliency of power grids
- □ Multi-agent frameworks for power systems
- □ Substation automation of power systems
- Dever system protections
- □ Application of power electronics in power systems
- □ High voltage engineering
- □ FACT Devices
- Power engineering education
- Electrical machine and drives

API Travel Grant

The API is awarding travel grants of up to \$1,000 for the best paper authored or co-authored by an employee (residing outside of Melbourne) of an API member company. The author must prepare and present their paper at AUPEC, and be registered for this conference.

Up to five of these grants will be awarded on the basis of best papers judged by a panel of conference organisers. The payment will be made on provision of travel receipts to the API.

For more information please visit: <u>https://www.vu.edu.au/australasian-universities-power-engineering-conference-2017-aupec2017</u> or