ITEC Asia-Pacific 2017: Toward a Sustainable Future

THE INTERNATIONAL Transportation Electrification Conference, Asia-Pacific, 2017 (ITEC Asia-Pacific 2017) was held successfully 7–20 August in Harbin, Heilongjiang, China. ITEC Asia-Pacific is part of the global series of IEEE ITEC conferences promoting the development of electrical technologies for transportation, including land, rail, air, and sea. ITEC Asia-Pacific is sponsored by the China Electrotechnical Society (CES), the Korea Institute of Electrical Engineering, the IEEE Industry Application Society, the IEEE Power Electronics Society (PELS), and the IEEE Power & Energy Society. The Harbin Institute of Technology (HIT) organized the ITEC Asia-Pacific 2017.

This year, a total of 516 papers were received, with 314 of them being accepted. There were also five keynote speeches, five tutorials, 35 oral sessions, and one poster session in parallel. More than 300 delegates

Digital Object Identifier 10.1109/MELE.2017.2755269
Date of publication: 26 December 2017

Figure 1. Welcoming and keynote speeches by (a) Prof. Z. Yu, president of HIT; (b) Prof. D. Xu, ITEC Asia-Pacific 2017 General chair; (c) X. Pei, Secretary General of the CES; and (d) Prof. D. Tan, IEEE Division II Director and PELS senior past president.

Figure 2. Photographs from ITEC Asia-Pacific 2017: (a) the plenary session, (b) a poster session, (c) the industry exhibits, and (d) a participant discussion.

from more than ten countries, including the United States, Sweden, Denmark, Korea, Thailand, and India, participated in this conference.

This year's technical discussion focused on 1) ultrafast charging infrastructure, 2) capacitive wireless energy transfer feasibility, 3) high-level integration of power electronics devices, 4) sensorless permanent magnetic synchronous motor drives, and 5) an overview of commercial electric vehicle development in China.

This year's best paper awards included the following: "A Novel Modulation and Demodulation Method for Wireless Power and Data Transmission," by Yijie Wang, Yousu Yao, Yueshi Guan, Xiaosheng Liu, Mengyu Liu, and Dianguo Xu; "A Design and Control of Rail Mover with a Hall Sensor Based BLDC Motor," by Jongnam Bae, Yeongjun Jo, Yunchang Kwak, and Dong-Hee Lee; "Dynamic Modeling for Electric Vehicle Land Speed Record Performance Prediction," by Matilde D'Arpino, Martin Villingy, Jeffrey P. Chrstos, and Giorgio Rizzoni; "Analysis of Cogging Torque and Flux Weakening Capability of a Novel Multistator Hybrid Excitation Permanent Magnet Synchronous Motor," by Daohan Wang, Dengxu Zhang, and Xiuhe Wang; "Fault Diagnosis and System Reconfiguration Strategy of Single-phase Cascaded Inverter," by Yi Wang, Xiaoqiong He, Pengcheng Han, Xu Peng, and Zhen Qin; and "Sliding-Mode Observer based Rotor Resistance Updating Method for Indirect Vector Controlled Induction Motor," by Shuying Yang, Rui Sun, Pengpeng Cao, Zhen Xie, and Xing Zhang.

The ITEC Asia-Pacific Steering Committee had a meeting in conjunction with the conference. The committee decided the conference sites for future meetings: IETC Asia-Pacific 2018 will be hosted in Bangkok, Thailand; ITEC Asia-Pacific 2019 will be hosted in Jeju Island, Korea; and ITEC Asia-Pacific 2021 will be back in China. The committee is working on the potential to host ITEC Asia-Pacific 2020 in Japan. Having conference sites selected a few years ahead is a strong indicator of a successful conference series. ITEC Asia-Pacific is apparently on a strong path to future success.