

Foreword

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Received: 19 May 2016 / Accepted: 23 May 2016 / Published online: 31 May 2016
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Electrochemical energy technologies have been considered as clean and sustainable approaches to mitigating the more and more serious global energy crisis. The widespread adoption of electrochemical energy conversion and storage devices, such as fuel cells, advanced batteries, photovoltaic cells, supercapacitors, and electrolyzers, etc., has been hindered by their high cost, low efficiency, short lifetime, and insufficient energy/power densities. In order to exchange and discuss recent research results, enhance collaboration between research groups/industries, and promote the commercialization of newly developed technologies, we organized an ISE Satellite Meeting on New Devices for Energy Conversion and Storage at the Hong Kong University of Science and Technology (HKUST) during October 1–3, 2015.

This conference was co-chaired by Profs. Guohua Chen (HKUST), Christos Comninellis (Ecole Polytechnique Fédérale de Lausanne, Switzerland) and Gerardine Botte (Ohio University, USA). Over 100 participants from 15 different countries attended this conference. Three plenary lectures were delivered by Profs. Nenad Markovic (Argonne National Laboratory, USA), Jean-Marie Tarascon

(College de France, France) and Hubert Girault (Ecole Polytechnique Fédérale de Lausanne, Switzerland). In addition, 10 keynote lectures, 19 invited talks, 17 oral presentations, and 20 poster presentations were given during the conference. All the presentations were related to one of the following electrochemical energy conversion and storage devices: fuel cells, lithium (sodium)-ion batteries, photovoltaic cells, electrolyzers, flow batteries, supercapacitors and metal-air batteries. High quality papers presented in the conference were selected and published in this Special Issue of *Journal of Applied Electrochemistry* after undergoing a rigorous peer-review process.

We would like to take this opportunity to express our deep appreciation to the Organizing Committee including Profs. Guohua Chen, Christos Comninellis, Gerardine Botte, Minhua Shao (HKUST), Kwong Yu Chan (HKU), Francesco Ciucci (HKUST), Haitao Huang (HK PolyU), Jang Kyo Kim (HKUST), Quan Li (CUHK), Fude Liu (HKU), Yi-Chun Lu (CUHK), Shihe Yang (HKUST), Denis Yu (HK CityU), and Limin Zhou (HK PolyU). We also want to thank Prof. Gerardine Botte and her editorial team for helping organize this Special Issue.

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