



Foreword

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Sustainable development of our planet relies on the efforts from various areas ranging from fundamental studies to industrial manufacturing. Researchers in diverse fields are making significant progress within their subject. However, a cross-discipline collaboration is expected to figure out a holistic strategy for future advances. Under such a context, the 17th Congress of Asian Pacific Confederation of Chemical Engineering was held in Hong Kong during 23–27 August, 2017. Around 500 experts gathered together to exchange ideas and present the most recent results among the chemical engineering community, and in particular, to discuss the role of Asia Pacific region towards a sustainable world. More than 650 abstracts were received, and they were divided into eight sessions, including advanced functional materials, advanced separation and filtration, catalysis for environmental application, dewatering and dyeing technology, ionic liquids and green energy, microreaction technology and green processing, process safety and risk management, and energy conversion and storage.

This special Issue focuses on the topic of “Energy Conversion and Storage”. Energy has been recognized as one of the most challenging issues in the next 50 years. The harvesting and utilization of clean energy are essential for sustainable development. We hope that the fruitful discussions

among the researchers from various fields would enable opportunities to implement advanced technology for sustainable and clean energy. The session contains 2 plenary lectures, 3 keynote lectures, 17 invited talks, and 33 oral and 34 poster presentations, which covers a wide range of topics including electrocatalysts, fuel cells, thermal energy storage, alkali-metal ion (Li, Na, K) ion batteries, redox flow batteries, etc. The representative works are selected and presented here after a rigorous peer-review process.

We would like to thank the Chairman, Prof. Guohua Chen (HK PolyU), and the organizing committee of the session, Prof. Zi-Feng Ma (Shanghai Jiao Tong University), Prof. Quan Li (CUHK), for their efforts in organizing this event. A great conference is always remembered by the great messages from its speakers. We would like to express our deep gratitude to all the participants for their great contributions to the wonderful and invaluable discussions. We also want to take this opportunity to acknowledge the guidance and assistance from Prof. Gerardine G. Botte and her editorial team in the Journal of Applied Electrochemistry. The successful publication of this Special Issue has not been possible without their strong support.

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