

The Third International Workshop on Nano Materials for Energy Conversion (NMEC-3)

Report

From 03-06 May 2017, the ISE Sponsored Meeting, *Third International Workshop on Nano Materials for Energy Conversion* (NMEC-3), was taken place at the University of Science, Vietnam National University – Ho Chi Minh City (VNU-HCM), Vietnam. The workshop was organized by University of Science/Applied Physical Chemistry Lab. (APCLab) and VNU-HCM.

Currently, Vietnam is one of the countries that strongly endure the effects of global warming. Therefore, the renewable and sustainable energy is a matter of great interests of Vietnamese government. The purpose of this event was to introduce high-impact research in the field of nano-materials for energy conversion and preservation as well as to explore new discoveries in fuel cells, solar cells, lithium batteries, nano-catalysts and electrode materials. This workshop is also a place to network, exchange information, as well as strengthen the ties between attending scientists all over the world in the field of nano-materials.

Follow NMEC-1 in 2012 and NMEC-2 in 2014, NMEC-3 workshop was a real success.

Contributions by the workshop topics:

- Electrochemistry and energy conversion- *4 contributions*
- Fuel Cell - *8 contributions*
- Rechargeable batteries - *21 contributions*
- Modeling, computation - *9 contributions*
- Nano materials, nano catalysts for energy conversion - *10 contributions*
- MOFs, ZIFs for gas separation and storage - *06 contributions*
- Photovoltaics, photocatalysis and solar water splitting - *11 contributions*
- Thermo-electronic materials - *6 contributions*

As an extension to this workshop, on May 3rd and May 6th, 2017, four special-topic lectures, *Fuel cell technology for highly efficient biomass utilization*, *Thermoelectric Power Generation — from fundamentals to applications with a demo of how to generate electricity*, *Innovated materials for construction of an artificial leaf* and *Voltammetry: Techniques, equipment and applications*, were given at the University of Science. These lectures were taught by Y. Shiratory, M. Ohtaki, Tran Dinh Phong, and Le Quoc Hung, respectively.

71 presentations were presented during two-day workshop (04-05 May, 2017) including 40 orals and 31 posters. The authors came from 17 countries (Australia, PR China, Denmark, France, Germany, Japan, Korea, Philippines, Poland, Russia, Singapore, South Africa, Spain, Taiwan, United Kingdom, United States, and the host country, Vietnam). 20 invited speeches were made

by famous international scientists, including Jean-Marie Tarascon, Jean-Claude Lepretre, Rita Baddour-Hadjean, J-P. Pereira-Ramos (France), Yusuke Shiratori, Michitaka Ohtaki, Shigeto Okada (Japan), Yang-Kook Sun, Yong Soo Kim, Jong-Sung Yu, Sunghae Cho (Korea), Richard Rocheleau, Nguyen Quang Minh (USA), Wei-Fu Chen, Jer-Lai Kuo (Taiwan), Le Quoc Hung (Vietnam), etc. There were approximately 160 attendees in the workshop and short courses.

NMEC-3 could not have been held successfully without the contribution and support of many organizations and people. We highly acknowledge the support of International Electrochemical Society (ISE), Vietnam Ministry of Science and Technology (MOST), Vietnam National University – Ho Chi Minh City (VNU-HCM) and other organizations and companies. We would like to thank the authors, invited speakers, tutorial presenters and all the participants for their contribution to the scientific program of the workshop. We would like to express our gratitude to all the personnel of the organization and program committees, who have contributed much time and efforts to bring a big success to the Third International Workshop on Nano-materials for Energy Conversion.

Date: *04 June, 2017*

Chairmen: **Jean Marie TARASCON and Jean Pierre PEREIRA-RAMOS**

Co-chairs: **VU Hai Quan and LAM Quang Vinh**