

Preface

In light of the global financial crisis, innovation becomes more critical, especially for industry. The crisis thus heightens the relevance and importance of the 5th International Symposium on Novel Materials and Their Synthesis (NMS-V) and the 19th International Symposium on Fine Chemistry and Functional Polymers (FCFP-XIX) (<www.nms-iupac.org>). Since the initial conference in 2005 [1], this is the 5th serial symposium of NMS together with FCFP, which was organized by Fudan University and the University of Wollongong in Shanghai, 18–22 October 2009. The National Natural Science Foundation of China, the Science and Technology Commission of Shanghai Municipality, Shanghai Key Laboratory of Molecular Catalysis and Innovative Materials, Shanghai Society of Chemistry and Chemical Industry, and the National Basic Research Program of China (2007CB209700) provided valuable financial support. The symposium was carried out under the auspices of IUPAC.

The main objectives of the symposium were to present state-of-the-art preparation of novel materials, and to discuss their performance and application potentials. The wide scope of the symposium provided a multidisciplinary high-level academic exchange chance on new ideas and latest findings for the scientific community. At the same time, the forum gave young scientists the opportunity to know some international authorities in their specialized areas and to develop professionally as quickly as possible. The symposium also opened other doors for the participants to learn more about Fudan University, Shanghai, and China.

The symposium was attended by 420 participants from 33 countries and areas. The scientific program comprised 7 plenary lectures, 235 invited lectures, 107 posters, and 1 NMS Nobel Public Lecture. Detailed, active, and lively discussions were covered by the following six themes:

- innovative catalytic and other synthetic methods, including chiral and asymmetrical synthesis
- innovative polymer materials, including supramolecular (supramolecular, dynamers), conducting, semiconducting, and biobased polymers, their properties, and characteristics
- innovative energy systems, including fuel cells, solar cells, lithium batteries, and supercapacitors, and their key materials (PS-III: International)
- innovative nanomaterials and their characterization and application
- new ceramic materials, such as superconductors, electronic, diaelectronic, ferroelectric, piezoelectric, optoelectric, and magnetic materials
- other novel materials, including drugs, perfumes, agricultural chemicals, electrical materials, photosensitive materials, displaying materials, and fine ceramics and their preparation

A selection of 17 papers based on specially invited presentations to NMS-5/FCFP-19 is published in this issue to demonstrate the quality and scope of the themes of this symposium.

During the symposium, the role and contributions of this high-level academic platform to novel materials and their synthesis are well realized by the participants, sponsors, and exhibitors. In addition, the organization committee established the “Distinguished Award 2009 for Novel Materials and their Synthesis”, and Prof. Makoto Shimizu from Japan and Dr. Klaus Kurz from Germany received the award for their excellent work. Three winners for the IUPAC Poster Prize were also awarded.

The advisory board and the organization committee have approved holding this symposium every October. The committees also discussed the IUPAC Prof. Jiang Novel Materials Youth Prize, which will be formally awarded at the 2011 symposium with the support of IUPAC and Prof. Yingyan Jiang, the honorary chairman of this serial symposium.

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Conference Editors

1. Y. P. Wu. *Pure Appl. Chem.* **78**, iii (2006).