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Editorial (Special Column on Novel Catalysts for Energy and Environmental Issues)

Preface to Special Column on Novel Catalysts for Energy and Environmental Issues

This special column hosts four contributions in celebration of great success of the International Symposium on Novel Catalysts for Energy and Environmental Issues, which was held in Sapporo on June 30 and July 1, 2016. This was one of satellite symposia of the 16th International Congress on Catalysis in Beijing, China on July 3–8, 2016, and it was also organized as the 2nd International Symposium of Institute for Catalysis (ICAT), Hokkaido University, Japan. The aim of this symposium was to bring together researchers in the field of heterogeneous catalysis, and to provide all participants with opportunities to have more understanding and integration of fundamental concepts and latest developments of this field.

Catalysis is the key to creating new energy and to protecting environments, and for that purpose we need to reinforce catalytic science and technology and to extend our findings to innovation. At this symposium, papers on the following topics were presented: C₁ chemistry, energy carrier, biomass conversion, methane oxidation, selective oxidation, CO₂ valorization, mesoporous materials, metal-support interaction, data warehouse, etc. The scientific program included three plenary lecturers, nine invited lectures, 20 oral presentations and 39 poster presentations. These presentations were very beneficial in revealing the present situation and future prospects in academia and industry related to catalysis.

We were pleased to welcome 147 participants in total including 17 delegates from UK, USA, Russia, China, Australia, Belgium, Indonesia, Taiwan, Thailand and The Netherlands. We

hope that the presentations and discussion in the symposium will contribute to further development of catalytic science and technology. It was also recognized that education for young scientists and students to understand the fundamentals of catalysis is important for the concerted development of this field.

I am grateful to Professor Can Li and Professor Tao Zhang, Editors-in-Chief of *Chinese Journal of Catalysis*, for their invitation to be the Guest Editor of this special column. I am also grateful to my colleagues who contributed to this special column. I would like to thank them for their responsibility and their high quality manuscripts.

Finally, the Guest Editor gratefully acknowledges the staff of the editorial office of this journal for their dedication to this special column and their careful and smart work.

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