

## Preface

# Advances in catalysis and catalytic materials for energy and environmental protection<sup>☆</sup>

The 10th Korea–Japan Symposium on Catalysis was held at Shimane Prefectural Assembly Hall, Matsue, Japan on May 10–12, 2005, the 40th anniversary of the Japan–Korea Diplomatic Relations. The symposium is held every 2 years alternating the places between Korea and Japan, with aim of sharing the latest research results and ideas and boosting the cooperative relations among catalytic scientists and engineers of two countries. Korea–Japan Symposium on Catalysis has been continued for about 20 years as 1987 in Seoul, 1989 in Tokyo, 1991 in Seoul, 1993 in Tokyo, 1995 in Taejon, 1997 in Fukuoka, 1999 in Kwangju, 2001 in Osaka and 2003 in Pohang. These symposia have extensively promoted cooperative relations among catalytic scientists and engineers of our two countries.

The present 10th Japan–Korea Symposium on Catalysis was organized under the auspices of the Catalysis Society of Japan. The numbers of the presentations and participants have been gradually growing, while many other bilateral meetings have already disappeared. In the present symposium, we had about 190 presentations and 220 participants from both countries. These surprisingly large numbers are certainly a consequence of increasing personal friendships between Korea and Japan as well as a remarkable increase in the importance of catalysis in two countries and worldwide to aim at the establishment of sustainable society. The 1-day Young Scientists Session with 10 oral and some poster presentations is believed to be particularly important for the future development of catalytic science and technology in two countries. We also had 2-day main session where two plenary lectures, five invited lectures from industries, 24 regular talks, and 148 poster presentations were given. The topics of the presentations covered virtually all of current research activities on not only catalysis and photocatalysis, but also related areas such as novel materials,

combinatorial chemistry, computational chemistry, supercritical phenomenon, surface science and electrochemistry. The type of research was widely distributed from fundamental to industrial fields, and the quality of presentations was certainly high. This symposium is believed to be a good opportunity not only to obtain scientific information on the catalytic research but also to strengthen the friendship among participants from Korea and Japan. The organizing committee greatly appreciates enthusiastic participation and supports received from all of the participants. We wish to thank Shimane Prefecture and Matsue City for their generous supports as well.

The organization committee wanted to publish a special symposium issue in this journal to commemorate this fruitful academic meeting. As mentioned above, the topics of the presentations in this symposium covered the catalysis and related areas, but we felt a strong trend toward solutions of global energy and environmental problems through these studies. Therefore, we set the title for this special issue as Advances in Catalysis and Catalytic Materials for Energy and Environmental Protection. Among the excellent presentations, only selected papers that match this special issue title are included in this issue.

In preparation of this symposium issue, we often consulted Prof. Makoto Misono and Prof. Kazunari Domen, the Associate Editor of this journal and deeply appreciate their efforts, valuable advices, and enthusiastic cooperation. Special thanks go to Elsevier for enabling us to publish this symposium issue. Finally, we would like to thank all of the authors for contributing original papers to this issue. We hope that this valuable tradition of academic get-together will continue and that catalytic scientists and engineers of two neighbor countries are not only heading for more environmentally friendly goals in their research but also getting more friendly among themselves.

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