



Preface

This special issue of Catalysis Today contains papers presented at the first joint international conference of The Sixth Tokyo Conference on Advanced Catalytic Science and Technology (TOCAT6) and The Fifth Asia Pacific Congress on Catalysis (APCAT5) from July 18 to 23, 2010 in Sapporo (cochaired by Prof. Wataru Ueda and Prof. Masakazu Iwamoto with Prof. Atsushi Fukuoka as secretary), Japan. These two are big international conferences about catalysis hosted by Asian countries since 1990 (TOCAT) and 1997 (APCAT). In this year both conferences are hosted by Japan and the joint international conference is realized after mutual discussion.

The catalysis is now important and key science and technology to establish sustainable society in 21st century. This joint conference was intended to contribute to exchanging new ideas and technologies in catalysis. And to promote developments of new outstanding catalysts under the scope that catalysis is a highly demanded technology for sustainable society and drives innovation in many other fields. The conference covered the following topics. (1) New concepts for catalysis; (2) advanced materials for catalysis; (3) fundamentals and characterization; (4) catalysis for green/sustainable chemistry; (5) catalysis in energy conversion; (6) biocatalysis; (7) photocatalysis; (8) solid acids and bases; (9) selective oxidation; (10) homogenous/organometallic catalysis; (11) reactor engineering; (12) introduction of recently developed and/or commercialized industrial catalysts and processes; (13) environmental protection; (14) petroleum refining and petrochemicals; (15) fine and chiral synthesis; (16) polymerization. Total participants were 819 (Japan 412, Asia, Oceania 310, USA and South America 17, Europe 78 and Africa 2) and total presentations are 713 (Plenary 8, Invited 23, Oral 190, Poster 492).

We have published two types of proceedings based on this conference. One is for review papers contributed from plenary and invited speakers that are published in Catalysis Survey From Asia.

The other is this issue. We included the papers that published in the oral or poster sessions in TOCAT6/APCAT5. We followed the traditions of TOCAT and APCAT that stimulates closer ties between academia and industry and encourages young researchers in the field of catalysis in this conference and we reflect these spirits to this issue. The readers may find so many papers submitted from industrial and young scientists.

The other feature of this special issue is that we conducted peer review processes of two reviewers that guaranteed the high level of the papers. It was contradicted with the demand for the quick publication. Thus we had to reject some papers that could be accepted in the normal journal after several-times correspondence between authors and reviewers. We sincerely apologize for giving inconvenience and displeasure to some authors whose papers were not included in this issue.

Next APCAT6 will be held in Taiwan in 2013 and the TOCAT7 will be in Japan in 2014 separately. We hope that next joint conference again held somewhere in Japan in the near future.

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