





## **Preface**

In this issue, a number of specialized studies and review articles in the field of IB metals have been compiled for the first time. The articles, which are presented by leading research groups, cover papers submitted to "the Workshop on Environmental Catalysis: the Role of IB Metals" held on the 2nd and 3rd of November 1995, at the Osaka National Research Institute, Ikeda City, Japan.

The reason for the workshop arises from the unique catalytic role played by the coinage metals, copper, silver and gold. Though located towards the end of the transition metal series, the reason for the large differences in catalytic behaviour between each of the respective IB metals remains largely a mystery. It was therefore felt that now was the time to bring together research scientists from all over the world to correlate known scientific results with more recent data in order to develop a basis for further collaborative research. It was with these aims that invitations for papers were sent worldwide to those active in the study of IB metals. The conference successfully attracted 69 participants, including 15 from overseas, and during the two days 14 invited talks were presented, with topics ranging from the use of homogeneous and heterogeneous catalysis in such diverse subjects as organic asymmetric synthesis, mechanistic studies and the application of IB metals to environmental problems such as the removal of nitrogen oxide.

Of the papers submitted to the workshop, 19 were finally chosen for publication. Each paper was subjected to the usual high refereeing stan-

dard of Catalysis Today and our deepest thanks are expressed to all authors and the referees for assisting the editorial staff in respecting publishing deadlines. In making the conference a success, we would like also to extend our thanks to the assistance of members of the organizing committee, Dr. T. Kobayashi, Dr. Y. Matsumura and Mr. S. Tsubota, for their tremendous contributions. Acknowledgements are also extended to the Director-General, Dr. T. Kodama, and the Senior Research Planning Officer, Dr. O. Nakamura, of the Osaka National Research Institute, AIST, for their support and encouragement. We would also like to thank J. Ross, Professor R. Burch and Professor M. Misono for their valuable advice and assistance in publishing this special edition of Catalysis Today. It is perhaps a happy coincidence that in this year, the year of the 1996 Olympics, medals made from Au, Ag, and Cu will have been given to the top athletes of the world and the publication of this special edition dedicated to these three unique metals will have been initiated. We therefore hope that catalysis of "Olympic medals" will continue to stimulate new research fields in the future.

This workshop was organized and sponsored by the Osaka National Research Institute, a part of Agency of Industrial Science and Technology, Ministry of International Trade and Industry.

> Masatake Haruta Yoshie Souma June, 1996