## **PREFACE**

This issue of Catalysis Today is a selection of the papers presented at the International Symposium on Catalysis and Zeolites held at the National Tsinghua University, Hsinchu, Taiwan, August 29-30, 1994. The symposium was organized by the Catalysis and Zeolite Clubs of the Chemical Research Center, National Science Council of Taiwan. Three currently important topics in catalysis formed the main scope of the symposium: Catalysis in Environmental Applications, Perspectives in Zeolite Science, and Computing Simulation in Solid-State Chemistry and Catalysis. Overviews of these important fields were given in seven invited lectures, which were complemented by a number of oral and poster contributions and a very interesting panel discussion. The first topic was chosen as the theme for this special issue, not only because the papers dealing with the other two topics overlapped the contents of previous or other issues in preparation of Catalysis Today, but also because "Catalysis in Environmental Applications" is of growing importance nowadays. As in most of the developed countries. Taiwan is suffering from the effects of pollution accompanying industrialization. Environmental protection is becoming a big issue in our society. Although chemical industry is often condemned for the problems, chemical processes can play an essential role in achieving satisfactory solutions. Environmental regulations are forcing the petroleum refiners to produce transportation fuel with low sulfur and aromatics, and the chemical industry to develop technology with minimum waste disposal. A review paper by P.-S.E. Dai addresses the current development of zeolite catalysis in related research. Three original papers are devoted to the applications of metal-zeolite catalysts in the selective catalytic reduction of NO<sub>v</sub>. Also presented in this special issue are original papers discussing the important roles played in vehicle exhaust catalysts, the promoter effect in various oxidation catalysts and semiconductor materials in catalytic combustion and as photodecomposition catalysts.

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they gave to present their research at the symposium and in preparing their manuscripts. We would also like to thank the organizing committee, especially Professor Kuei-Jung Chao, for his work in organizing the symposium. Our thanks are also extended to the organizing committee of TOCAT 2 for advertising the symposium as a post-conference meeting, and to Professor Akira Miyamoto for providing us with the opportunity to edit this special issue.

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