

## Preface

The 8th International Symposium on Relations between Homogeneous and Heterogeneous Catalysis (8th SHHC) was held in Balatonfüred, Hungary, 10-14 September 1995. The Symposium was organized under the auspices of the Hungarian Chemical Society and the Chemistry Section of the Hungarian Academy of Sciences.

Three years after the 10th International Congress on Catalysis, held in Budapest in 1992, the 8th SHHC was organized by the Hungarian catalysis community. Symposia were held at 3 year intervals in Brussels (1974), Lyon (1977), Groningen (1980), Asilomar (1983), Novosibirsk (1986), Pisa (1989) and Tokyo (1992). During the last few years in catalysis a growing emphasis has been placed on the application of 'heterogenized homogeneous catalysts'. Many techniques from materials science have been utilized in the immobilization of homogeneous catalysts. The program of the Symposium was focused mainly on the special area between homogeneous and heterogeneous catalysis, including enzyme catalysis and industrial applications of homogeneous catalysis. Within the scope the following topics were considered: (1) Molecular design of catalysts: anchored molecular clusters (metals, oxides), supported organometallics and heteropolyacids as building blocks for tailored catalysts; (2) catalytic effects of chemically modified microporous crystals: synthesis of new type zeolites, pillared clays, inorganic and organic materials; (3) catalysis by transition metal clusters, and colloids; (4) molecular aspects of homogeneous and heterogeneous catalysis in C-H activation, CO<sub>2</sub> and N<sub>2</sub> fixation, and C<sub>1</sub> chemistry including Fischer-Tropsch reactions; (5) selective syntheses, including asymmetric synthesis of fine chemicals, and selective oxidation; (6) polymerization by heterogenized metal complexes; (7) computer modelling and novel instrumental developments for molecular understanding of homogeneous and heterogeneous catalysis; (8) application of enzymes in organic syntheses.

The Organizing Committee received 173 abstracts and out of these 37 oral lectures and 110 poster presentations were selected. Four plenary lectures, by R. Ugo (Italy) (Topic No. 1), M. Ichikawa (Japan) (Topic No 3), G. A. Somorjai (USA) (Topic No. 4) and R. A. van Santen (Netherlands) (Topic No. 7), introduced the various topics. The invited lectures were presented by Y. Iwasawa (Japan), J. Johnson (USA), Likholobov (Russia), R. A. Sheldon (The Netherlands), H.-U. Blaser (Switzerland), G. Schmid (Germany), M. Hidai (Japan), F. Ciardelli (Italy), and D. Coucouvanis (USA). A round table discussion was organized on 'New Perspectives in Homogeneous and Heterogeneous Catalysis' moderated by Professor Jean Marie Basset with a lively discussion.

The world catalysis community has suffered some great losses during the last two years. Adalbert Farkas (USA), Jochen H. Block (Germany), Giuseppe Braca (Italy), Martin Capka (Czech Republic) and Z.G. Szabo (Hungary), all outstanding scientists, have passed away. The participants gave tributes to honor the memory of them during the opening session.