

## Preface

### *Scope of the issue*

This issue collects the lectures of the 3rd Seminar of Catalysis (Rimini, Italy, 19–24 June 1994) organized by the Interdivisional Group of Catalysis and the Division of Industrial Chemistry of the Italian Chemical Society.

The 3rd Seminar, entitled ‘The catalytic process from the laboratory to the industrial plant’, was attended by over 150 researchers and follows the first Seminar of 1990 devoted to the main reactions of heterogeneous catalysis and the second one of 1992 that focused to a greater extent on homogeneous and organometallic catalysis.

The choice of the Seminar’s subject has been suggested by the fact that there are but few opportunities of meeting the realities of scaleup during university standard courses, or even in many industrial companies. The Seminar and this issue have therefore been designed to present to researchers the aspects associated with the development of a technology involving a catalytic reaction. On these premises, the authors have been invited to describe, in a logical sequence, the main activities that it is necessary to perform ‘after’ a material, catalytically active for a given reaction, has been identified.

In any large field, such as R&D, it is very difficult to find the right balance between ‘width and depth’. In this regard, no book can answer every question, particularly in the case of this one-week Seminar, for which we have assembled different topics to satisfy several university annual courses.

The Scientific Committee has chosen to privilege the ‘helicopter view’ on the ensemble of problems to be faced, accepting to overlook in

this way a great number of details. I hope that this decision, on the other hand, will provide a more complete framework for people contributing to the organizations efforts towards technological progress and for a better co-operation and mutual understanding between the various expertise involved, as well as between industries and universities. This effort of collaboration is coming true, at least in this issue that blends academic and industrial backgrounds. Therefore this issue has been written by many authors and, since a general and absolute law for scaling up catalytic processes does not exist, the different viewpoints of authors, reflecting their different experiences, offer the reader an additional understanding of the multiplicity of the approaches to catalytic processes development.

### *Acknowledgements*

Thanks are due to Professor Lucio Forni, Professor Pio Forzatti, Dr. Maria Lupieri, Dr. Guido Petrini, and Professor Elio Santacesaria, that shared with me the responsibility of defining the ‘battery limits’ and selecting the themes of the Seminar.

Together with the entire organizing committee, I am particularly grateful to all the authors that have accepted to report their experience in the Seminar and, according to a suggestion of Professor Corain, in a comprehensive issue. We consider it a great honour to be able to publish these papers in this special issue of Catalysis Today.

Thanks are also due to the Seminar organizing

team of the Department of Industrial Chemistry and Materials of the University of Bologna, to Dr. Ivano Miracca for helping me in keeping the contacts with the authors and to Ms. Gabriella Chiesa for arrangement of the manuscripts.

Lastly, my own wish to any researcher to have the chance of participating in the development

of a catalytic process from the appearance of the initial idea up to the successful start-up of the commercial prototype that will represent, for sure, one of the most exciting experiences in his professional career.

Domenico Sanfilippo