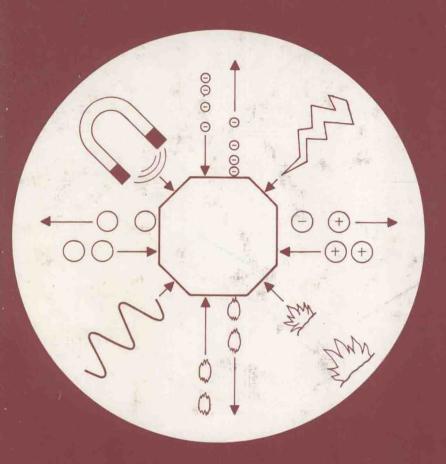
# studies in surface science and catalysis



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# PREPARATION OF CATALYSTS IV

Scientific Bases for the Preparation of Heterogeneous Catalysts

B. Delmon, P. Grange, P.A. Jacobs and G. Poncelet (editors)

### Studies in Surface Science and Catalysis

Advisory Editors: B. Delmon and J.T. Yates

Vol. 31

# PREPARATION OF CATALYSTS IV

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**Editors** 

#### B. Delmon and P. Grange

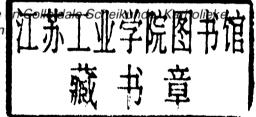
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PREPARATION OF CATALYSTS IV
Scientific Bases for the Preparation of Heterogeneous Catalysts

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We are pleased to present here the Proceedings of the IVth International Symposium on the "Scientific Bases for the Preparation of Heterogeneous Catalysts". The series started rather modestly in 1975, but since then it has attracted increasing scientific attention. The call for papers for this fourth symposium resulted in the submission of no less than 210 extended abstracts, an appreciable proportion of which stemmed from industrial research laboratories. This large number posed a great problem for the Scientific Committee, made up of 19 scientists with international reputations in the field and representing industry as well as academia. It seemed a hopeless task to make a selection from this wealth of proposals. It also became clear that quality could not be the sole yardstick in judging the suitability of the papers, for reasons we hope will become clear in what follows.

A much appreciated feature of this series of symposia has been that the Scientific Committee really is responsible for the scientific content of the Proceedings; during a one-day meeting of the Committee, some 60 abstracts (the maximum possible number) were selected, unfortunately a mere 29% of the contributions submitted. Thanks to this selection, most of the accepted abstracts fell within the scope of the symposium as initially defined. The few exceptions were justified by their originality or outstanding quality. It had been stressed when announcing the scope that new results should have a clear bearing on catalysts either already in industrial use or under development, that contributions dealing with new preparation methods would be particularly welcome, and that new routes of catalyst manufacture should be explored. It had also been hoped that new ways of manufacturing catalysts could be presented and discussed. Not all of these expectations were fulfilled, but relevance to problems of practical applications and originality were certainly the hallmarks of the meeting.

The Scientific Committee and the local Committee attemped to organise, as they had done for the previous symposia, self-contained sessions on the basis of the selected papers. Accordingly, sessions devoted to catalysts for selective oxidation, hydrodesulphurisation, Fischer-Tropsch catalysis, methanol synthesis, and metal supported catalysts, including new trends in catalyst preparation, were arranged. The programme comprised two parallel sessions, the major concern being the organisation of a well-balanced programme around the chosen topics. In the light of this, the many authors whose abstracts were not selected should not infer from their refusal that the quality of their work was being questioned.

Against this background, 4 experts were invited to deliver plenary lectures or extended communications, and plenty of time was left for discussions. The conference chairmen and editors considered, therefore, that these discussions were worth being included in these proceedings.

Approximately 350 participants attended the IVth Symposium. Over 40% were affiliated with industry, confirming again the need for this kind of event, as felt by all scientists working in the field. This will be a stimulus to the local organisers of future conferences when they start with the preparations for the Vth symposium.

When initiating this series of symposia, the organisers hoped to begin bridging the gap between those scientists who are directly involved in the day-to-day manufacture or uses of catalysts and those whose contribution to this area is more on the theoretical side. Modest but substantial progress has been made in this direction during the course of these symposia. We shall strive to speed up this progress, with the help of the next scientific committee and the members of past ones, who have already helped us so much.

- B. DELMON
- P. GRANGE
- P.A. JACOBS
- G. PONCELET

#### **ACKNOWLEDGEMENTS**

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We also thank the University Authorities and, in particular, Professor E. Buyse, for the welcome address to the participants.

Our deep gratitude goes to the members of the Scientific Committee who accomplished very efficiently their difficult task of selecting the communications, and accepted to act as session chairmen during the symposium.

The minisymposium on Catalyst Normalization was handled by Professor E. Derouane. We are most indebted to him and also to Professor G.C. Bond, Professor T. Hattori and Professor J.W.E. Geus for leading brilliantly this session.

The organizers are very pleased to acknowledge the contributions of Professor J.A. Schwarz, Professor J.B. Moffat and Dr. Shibata who delivered most stimulating plenary lectures. The Organizing Committee also acknowledges the authors of the 200 papers submitted, both those who presented a paper and those whose paper could not be retained, mostly due to time limitation.

Our congratulations for the perfect achievement and our gratitude are addressed, as usual, to the hostesses of the REUL (Relations Extérieures de l'Université Catholique de Louvain), headed by Mrs F. Bex, and to Mr J. Therer (Service du Logement), for their enthusiasm and efficiency. It is a special pleasure to thank them for this symposium after similar thanks for the preceding ones.

The Organizing Committee wishes to acknowledge all the persons from the "Groupe de Physico-chimie Minérale et de Catalyse", and from the "Laboratorium voor Oppervlakte Chemie", K.U. Leuven, who worked for the success of the symposium, in particular, A. Arteaga, D. Balloy, P. Berteau, E. Churin, Chr. Dhayer, T. Machej, M.A. Martin-Luengo, R. Prada Silvy, P. Ruiz, M. Ruwet, L. Weng, B. Yasse, B. Zhou; A. Boden, J. Geerts, L. Jacobs, S. Pelgrims, J. Perez, P.Tastenhove, M. Tielen.

Finally, special thanks are due to the team of secretaries, F. Somers, J. Liagre and especially P. Theys, who, right from the beginning up to the end, took care of the most thankless part of the organization of the symposium.

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