

Journal of Molecular Catalysis A: Chemical 173 (2001) 1



www.elsevier.com/locate/molcata

Foreword

Metal catalysis with supported palladium metal has been a "sacred cow" in synthetic organic chemistry for most of the past century. Generations of academic and industrial chemists grew surrounded by a sort of intimate faith in the "magical power" of metal palladium as a catalyst for the ubiquitous necessity to reduce a variety of functional groups with hydrogen, generally under relatively mild conditions. Recent perceptions in the catalysis academic and industrial literature let one to predict a marked increase of the employment of heterogeneous metal catalysis in the area of industrial fine chemistry to make it more "green" and more "atom efficient". In this connection, no doubt that the Pd-based catalyst will take the lion's share.

This special issue was conceived keeping all these considerations in mind. The obtained contributions are divided into three groups. The first part is devoted to general topics, in which properties of palladium as a metal, preparation of various types of palladium catalysts and examples of their application are discussed. The next part deals with processes and syntheses carried out over palladium metal based catalysts. Mainly hydrogenation processes are stressed in this part. The last, but of course not the least involves environmental applications. In the context with "alive" or potential industrial applications, bimetallic as well as bifunctional palladium-acid catalysis is also presented. Of course, we are well aware that this special issue does not cover all areas of applications of palladium metal catalysts, e.g. industrial oxidation processes to such an extent as it was planned at the start of the endeavour. Apart from this limit, the ambitious task is achieved and the uncommonly log time required to guest-editing the issue is due to the necessity to gather a variety of different and complementary critical know-how.

We warmly hope to have been successful.

Benedetto Corain Università di Padova Dipartimento di Chimica Inorganica Metallorganica e Analitica and Centro per lo Studio della Stabilità e Reattività dei Composti di Coordinazione, C.N.R. via Marzolo 1, 35131 Padova, Italy Tel.: +39-49-8275211 fax +39-49-8275223 E-mail address: corain@chin.unipd.it (B. Corain)

Milan Kralik Department of Organic Technology Slovak University of Technology Radlinskeho 9, 812 37 Bratislava 1 Slovak Republic Tel.: +421-7-52495242; fax: +421-7-52493198 E-mail address: kralik@chtf.stuba.sk (M. Kralik)

1381-1169/01/\$ – see front matter © 2001 Elsevier Science B.V. All rights reserved. PII: S1381-1169(01)00142-X