

Foreword

The “First International Workshop on Catalytic Membranes” was held in Villeurbanne, France, between September 26–28, 1994. The meeting was organized by the Institut de Recherches sur la Catalyse/CNRS (Villeurbanne, France), the Laboratoire d’Automatique et de Génie des Procédés/UCB-CPE-Lyon-CNRS (Villeurbanne, France), and the Laboratoire des Matériaux et Procédés Membranaires/UM II-CNRS (Montpellier, France).

The rapid development of membrane-based processes has already resulted in a number of congresses devoted to membrane science and technology. However, in addition to these general large meetings there is still a place for highly-focused meetings devoted to a specific application of membranes or to a new field of interest involving membranes.

This major research interest in catalytic membrane reactors is aimed at combining chemical reaction and separation in one unit. Early studies were focused on equilibrium restricted reactions, where the selective permeation through the membrane of a product leads to improved yields when compared to conventional reactors. More recently, catalytic membranes have been used to improve catalytic performances via process control at the membrane (e.g. selective oxidation, oxidative dehydrogenation, NO_x reduction ...).

Because of these various developments, it appeared appropriate to review the progress of catalytic membrane reactors and to try to assess the future of this field. With this aim in mind this workshop stimulated a highly successful dialogue between 111 scientists from twenty countries and representing the different disciplines involved in the topic of catalytic membrane reactors (membrane science, catalysis, reactor engineering). Sixty-three plenary lectures, keynote lectures, oral communications and posters were presented during the workshop.

The proceedings of this workshop published in this special issue of *Catalysis Today* reflect the present state-of-the-art on catalysis in membrane reactors. Thirty-eight papers were accepted for publication after having been fully refereed as is usual in *Catalysis Today*. The authors and referees are thanked for having respected the deadlines of the editing procedure.

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European Society of Membrane Science and Technology
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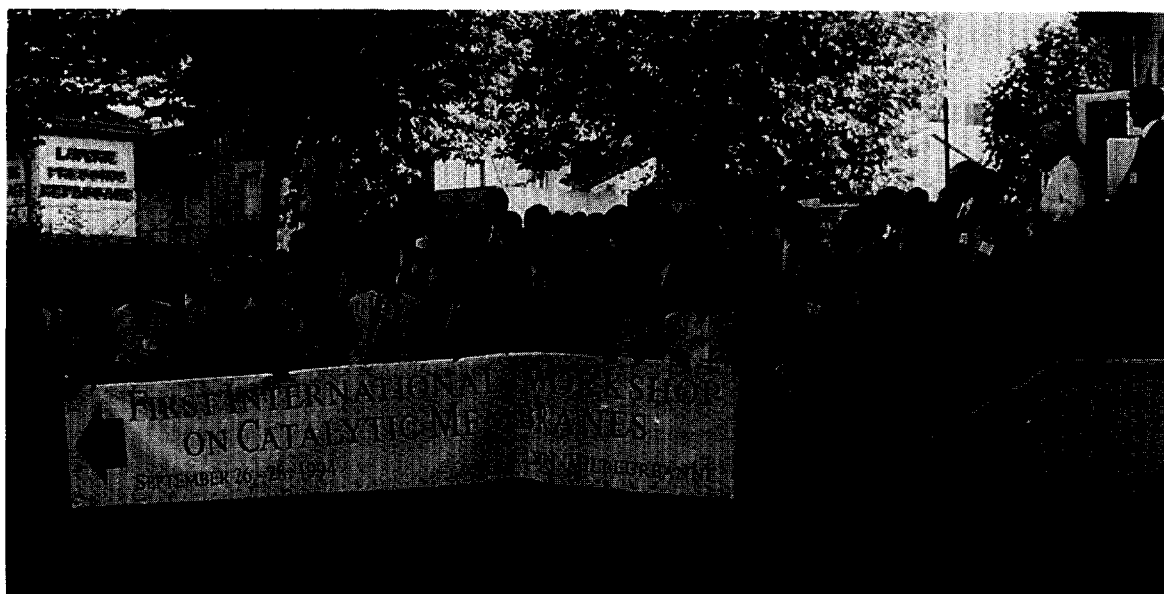


Fig. 1. The conference participants.

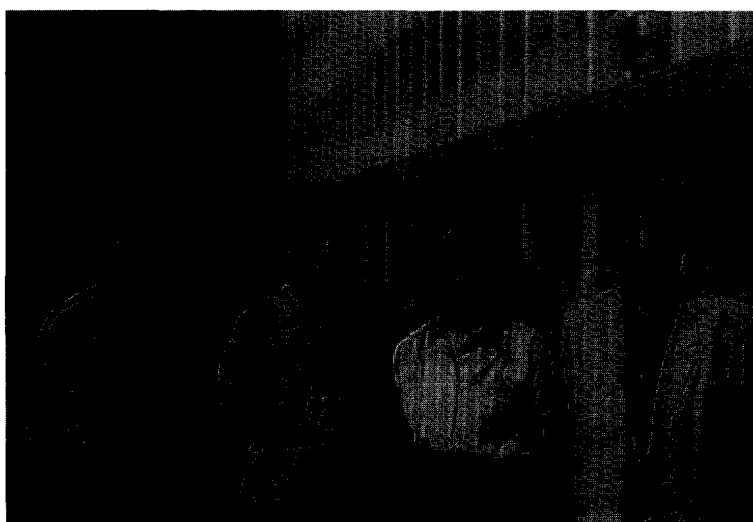


Fig. 2. The editors. From left to right H. Mozzanega, C. Mirodatos, A. Giroir-Fendler and J.A. Dalmon.