

Book review

Surface Organometallic Chemistry: Molecular Approaches to Surface Catalysis, edited by Jean-Marie Basset et al. (NATO ASI Series, Series C: Mathematical and Physical Sciences, Vol. 231), Kluwer Academic Publishers Group, Deventer, 1988, xviii + 330 pages, \$94, £54, ISBN 90-277-2724-4.

This volume is the outcome a NATO workshop held in Le Rouret, France in May 1986, with its main theme being surface catalysis by organometallic species. Other topics considered were reactions of organometallics with zeolites, metal and metal oxide surfaces, molecular models of surfaces, molecular approaches to mechanisms of surface reactions, and synthesis and modification of zeolites.

The papers in the volume do reflect the true multidisciplinary character of this field, still at present in its infancy. Some of the authors, for example Lyons on supported and soluble oxidation catalysts and Herrmann on organometallic oxides, clearly speak the same language as the classical organometallic chemist. On the other hand Gallezot on low nuclearity metal clusters, and Knözinger on surfaces of oxides, are clearly speaking to surface scientists. The four papers on zeolites again represent a distinct group. What was not entirely clear to me was that these groups were really speaking to each other, or perhaps more importantly, to each others customary audiences. The article by John Evans on the reaction of organometallics with surfaces of metal oxides was a notable exception. I would hope to see that the future in this area will show developing collaboration, with equitable input from each side of the presently perceived divide.

This volume begins with a 35 page report from the workshop. This is a succinct review of the state of the art in important areas, and contains recommendations for the direction of future research. I can strongly recommend it to anyone preparing a grant application in this field; it will provide them with much useful material. It will also be of great value to either organometallic chemists or surface scientists wishing to enter each other's fields.

This book has been well produced, with clear diagrams and few typographical errors. The index is helpful and well laid out. Both organometallic chemists and surface scientists will find much of interest here, and the book should contribute to the expanding interest in this important field.