BOOK REVIEW

Methane Conversion. Edited by D. M. BIBBY, C. D. CHANG, R. F. HOWE, AND S. YURCHAK. Elsevier, Amsterdam, 1988. xvi + 742 pp. Dfl. 375.00/$197.25.

Publication of the proceedings of a conference is now a regular occurrence. Sometimes this is seen by authors as an opportunity either to dispose of some otherwise unpublishable results or to reproduce in a slightly amended form recently published material. For the most part the present book does not fall into this category.

"Methane Conversion" is the proceedings of a Symposium on the Production of Fuels and Chemicals from Natural Gas held in New Zealand in 1987. One surprising, but very welcome, feature of this book is the large number of papers from industrial laboratories. The 75 papers presented (comprising review articles, original papers, and summaries of poster presentations) cover the following general topics: methane conversion via methanol; alternative routes to methane conversion; zeolites and other catalysts; commercialisation of the gas-to-gasoline process. The review papers by Maiden (on the economics of the New Zealand gas-to-gasoline project), Meisel (on Mobil's discovery and development of the ZSM5 zeolites), Wainwright (methanol synthesis), Bhasin (oxidative coupling), Lunsford (methane to methanol), and Barrer (micropores in crystals) are particularly interesting. The quality and originality of the other papers are quite varied. For example, among the papers on methane coupling, readers in touch with the current literature will find some rather familiar facts and figures. Overall, however, the book contains enough new and interesting material to justify its publication. From the large number of good papers it would be invidious to select just a small fraction for special mention. Suffice it to say that I would expect most readers to find something of real interest in this book. It is a recommended purchase.

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