



## BOOK REVIEWS

**The Future of Energy Gases.** Edited by David G. Howell, USGS Professional Paper No. 1570, U.S. Geological Survey, Denver, Colorado, U.S.A., 1993: 898 pages. Hardcover price: U.S.\$59.00.

First, a question of terminology. The term "energy gases" is used in this work, rather pedantically, to distinguish naturally occurring gases, primarily methane, that have energy applications as fuels from other natural gases (e.g. nitrogen, oxygen, carbon dioxide in the air) that have no such utility potential. For all practical purposes, therefore, the term "energy gases" can be taken as synonymous with the common "natural gas."

Dwindling supplies from the world's finite oil resources and fears of their depletion and eventual extinction in the not-so-distant future, coupled with the concern to secure sustained economic development, which is heavily dependent on continued energy supply on an increasing scale, has prompted energy specialists all over the globe to search for alternative energy sources to fill the oil gap. Natural gas is considered a good solution, particularly in countries like the U.S.A., which is endowed with abundant resources of natural gas, but this would imply a phenomenal increase in the demand for natural gas. This in turn will throw up a variety of issues bearing on the adequacy and long-term sustainability of gas supplies (on an increasing scale) and the related economics and commercial issues, infrastructure requirements and environmental consequences. For a detailed discussion of these important issues, a workshop was organized under the auspices of the U.S. Geological Survey in October 1992, with the participation of over 75 specialists and

researchers drawn from government departments, universities and the gas industry. The discussions spanned a wide spectrum of topics, ranging from the origin and formation of energy gases to how methane may provide a bridge to a future hydrogen-based energy system.

The proceedings of the workshop are compiled in this volume in 57 articles, logically grouped in eight parts, covering the entire range of geological, technological, economic, environmental and societal perspectives on the possible expanded use of natural gas in the U.S.A.

Although the contributions included in the volume are addressed primarily to the prospects of natural gas in the U.S.A. (which is endowed with a big potential for expanded natural gas production and application), many of them (e.g. those relating to the geologic origin and the technology of their extraction, storage, distribution and usage) are of general appeal and are useful to all countries, including those that have no natural gas resources of their own.

Stated briefly, the book is a comprehensive treatise and reference text on natural gas. The USGS has done immense good by bringing it out at the present juncture, when almost the entire world looks to natural gas as a saviour substitute for the elusive petroleum.

The book is profusely illustrated with colour pictures and is very modestly priced at U.S.\$59.

M. V. C. SASTRI  
Green Court  
18 Visweswarapuram Street  
Mylapore, Madras-600 004  
India