Book Review

Annual Review of Energy, Volume 4

Edited by J M. Hollander, Annual Reviews Inc., Palo Alto, California, USA, 1979, \$17 in U.S A., \$17.50 elsewhere.

Starting from an analysis of the present state of utilizable energy resources and energy sources as well as their conversion, utilization and special application in various fields of technology and daily life, questions concerned with meeting future energy demands, especially in the USA, are discussed. The increased utilization of energy resources, used up to now only to a small extent, such as geothermal energy, wind energy, tidal, and solar energy, as well as the growing importance of nuclear energy on the basis of fast breeders, are also discussed

The book is an assembly of articles by several authors dealing with the individual aspects mentioned above Aspects of environmental protection, waste disposal, and the safety risks associated with the development and utilization of new methods of energy generation are included. Much attention is given to questions of energy resources, among others, the future possibilities of North Sea oil as well as US coal deposits and uranium resources are dealt with extensively. Concerning the utilization of energy, applications in the transport industry and telecommunications are illustrated. With regard to solar energy sources, not only is the direct conversion into thermal or electron energy through photovoltaic systems illustrated, but also a more effective photochemical utilization of solar energy (photosynthesis) by means of biological bacterial methods as a simultaneous means of energy storage is discussed. Finally both energy concepts are presented as models and an outlook on the energy situation in the USA is given.

The book offers useful references to the individual dealing with future possibilities, the state of development, generation and utilization of energy, it is more suitable for planners and economists than for technicians in this field.

> K Wiesener Technical University, Dresden, G.D.R.