

Book Review

Introduction to Energy Technology. By M. L. Shepard, F. H. Cocks, J. B. Caddock, and C. M. Harman. Ann Arbor Science Publishers, Ann Arbor, Michigan (1976). 300 pp. \$12.50.

The subject matter covered in this book is thoroughly and succinctly summarized on the inside of the jacket as follows: "While providing a survey of the whole field of energy conversion and control, this book will stimulate the individual to think creatively about energy technology. With an eye toward developing an 'energy future,' the authors discuss the energy crisis, energy sources, and uses thermodynamics, engineering approaches to energy conversion, nuclear and fossil fuel plants, plus transportable energy storage systems. The problems and potential of new energy technologies are also explored, including solar, geothermal, wind, and tidal energies."

The title of the book, *Introduction to Energy Technology*, fairly indicates the depth of the subject matter. It is an introduction and is most suited for presenting the energy picture to a nontechnical person in a comprehensive and understandable manner. It is valuable for a liberal arts student who wishes to become informed in the many complex ramifications of the energy crisis. The technical discussion is in sufficient depth to present the basic principles and problems clearly without inundating the nontechnical reader with scientific overkill. A possible exception is Chap. 3, which might better have been included as an appendix. The discussion on thermodynamics and mechanics is not necessary for assimilating the information in the rest of the book.

For a book presenting an overview of the energy status in rather general terms, the problems included in each chapter appear to be superfluous. It might have been better to omit them or to provide answers against which the reader could check his work.

There is a minimum of subjective opinion on the part of the authors. Each chapter has a rather adequate list of references that would be helpful for one wishing to pursue the subjects further.

It is unfortunate that many of the graphs, charts, and pictures are very difficult to read. They are either too small or too cluttered to be easily deciphered.

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About the Reviewer: Ed Bettis, an Oak Ridger since 1943, joined Oak Ridge National Laboratory (ORNL) in 1951 following an association with the Y-12 uranium-isotope separation plant. At ORNL, he innovated on numerous fission reactor projects, including the aircraft-propulsion concept. Following retirement, he continues to serve ORNL as a consultant to the thermonuclear program. Mr. Bettis received his academic training at Davidson and Cornell.