

BOOK REVIEWS

LEAD ISOTOPES IN GEOLOGY, by R. D. RUSSELL and R. M. FARQUHAR, 243 pages, Interscience Publishers, Inc. 250 Fifth Avenue, New York. Price \$9.00.

As stated in the preface, the authors mention that this short monograph is concerned with isotopes of common lead, and interpretation of lead isotope abundances and their applications which would be of interest to the geologist. Accordingly, the book is divided into eight short chapters with subheadings, and 12 appendices of lead isotope abundance values given in 119 pages. The chapter titles include: Introduction, measurement of lead isotope ratios, the age of the Earth, dating of galenas by means of their isotopic constitutions, anomalous leads, case histories (three are given), extension of the Holmes-Houtermans model, and lead-uranium-thorium methods of age determinations.

The small book is well organized and each topic is clearly presented. When ideas of the authors are stated, they admit that other scientists may dispute them, especially as to the source of lead.

In conclusion, the book is well worth reading for those interested in interpretation of lead isotope methods and their applications to geology.

EUGENE B. GROSS
Department of Mineralogy
The University of Michigan
Ann Arbor, Michigan

TRAP ROCK MINERALS OF NEW JERSEY, by BRIAN H. MASON. 51 pages, 16 figures, and one foldout map. New Jersey Geological Survey Bulletin 64, 1960. \$1.50.

The bulletin consists of a brief résumé of the geology, paragenesis, and localities of minerals occurring in the Triassic Trap Rock of New Jersey. The minerals were examined in a collection from the American Museum of Natural History, New York. A statement on the zeolite group is also included by the author. This is followed by a brief description of 60 minerals with optical properties given for non-opaque ones. A list of discredited minerals and unconfirmed occurrences concludes this bulletin.

The publication is well illustrated with black and white geologic map showing mineral localities and many photographs of mineral specimens. Bulletin 64 is well suited for mineralogists interested in collecting from the Trap Rock deposits of New Jersey.

EUGENE B. GROSS
Department of Mineralogy
The University of Michigan
Ann Arbor, Michigan

ADVANCES IN X-RAY ANALYSIS, Vol. 4. Edited by WILLIAM M. MUELLER. Plenum Press Inc., 227 West 17th St., New York 11, N. Y. 576 pp., illustrated. \$15.00.

This volume contains the complete texts of 38 reports presented at the Ninth Annual Conference on Applications of X-ray Analysis, held August 10-12, 1960, in Denver, Colorado, and sponsored by the University of Denver.