

The author's survey of interpretation is far from briefly comprehensive, and it is not particularly selective. The quotation of geometrical body formulas is in order in a compact treatise such as this, the physical concepts having been laid, but in his treatment of magnetism Parasnis does not quote the induction formulas for a sloping face, from which practically all others can be simply deduced. Analytical projections upward and downward and derivative derivations are suggested but not quoted. Although the Smith rules, which are used in magnetics and gravity essentially for depth control, are newly presented, they have been used, in somewhat different form, by industry for several years. No formulation is given of the induced polarization method for simple body cases even though such formulations were available when this book was being prepared.

Although the extensive North American literature on various electromagnetic dipole-dipole systems is restricted to about one page on airborne electromagnetic systems, the Swedish systems are well presented and indicate clearly the physical factors and parameters involved. The treatment of seismic methods merely touches the simple refractive and reflective boundary. The simple but comprehensive time delay approach is not presented. Bore-hole work, geothermal work, and geochemistry are mentioned in a paragraph. Nowhere does geologic noise, which is present in all these methods as the response from unsought formations or bodies and variable surface conditions, receive more than occasional mention; when such factors are mentioned, it is not with respect to the methods and systems where they are known to bulk largest.

In summary, however, I recommend this presentation as one of the best available concise statements of the physical property factors and physical parameters involved with respect to magnetic, gravity, and electromagnetic methods. Its presentation of interpretation is too limited, and many known items of usefulness have been omitted. Its treatment of induced polarization, seismicity, Afmag, and geochemistry are only introductory. Essentially, the book will be of value to university students and engineers in the field of mining geophysics.

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Advances in Organic Chemistry. Methods and results. vol. 3. Ralph A. Raphael, Edward C. Taylor, and Hans Wynberg, Eds. Interscience (Wiley), New York, 1963. 341 pp. Illus. \$13.75.

Chemical Calculations. An introduction to the use of mathematics in chemistry. Sidney W. Benson. Wiley, New York, ed. 2, 1963. 266 pp. Illus. Paper, \$2.95.

Chemistry of Coal Utilization. Supplementary volume. H. H. Lowry, Ed. Wiley, New York, 1963. 1150 pp. Illus. \$37.50.

The Complete Book of Slide Rule Use. Ira Ritow. Doubleday, Garden City, N.Y., 1963. 216 pp. Illus. Paper, \$1.95.

Corrosion and Corrosion Control. An introduction to corrosion science and engineering. Herbert H. Uhlig. Wiley, New York, 1963. 381 pp. Illus. \$10.

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Differential-Difference Equations. Richard Bellman and Kenneth L. Cooke. Academic Press, New York, 1963. 478 pp. Illus. \$13.75.

Differential Equations: Geometric Theory. Solomon Lefschetz. Interscience (Wiley), New York, ed. 2, 1962. 400 pp. Illus. \$10.

Electronic Structure and Alloy Chemistry of the Transition Elements. A symposium sponsored by the American Institute of Mining, Metallurgical, and Petroleum Engineers (New York), 1962. Paul A. Beck, Ed. Interscience (Wiley), New York, 1963. 261 pp. Illus. \$12.

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An Introduction to Electronics. Dennis F. Shaw. Wiley, New York, 1962. 346 pp. Illus. \$6.25.

An Introduction to Mathematical Probability. Julian Lowell Coolidge. Dover, New York (reprint), 1962. 226 pp. Illus. Paper, \$1.35.

A Laboratory Guide in Chemistry. Joseph H. Roe. Mosby, St. Louis, ed. 4, 1963. 262 pp. Illus. Paper, \$3.75.

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