cedures include (i) the use of beta and gamma radiation of earth and rock material both in the field and in specimens in the laboratory, primarily to determine density and water content of soils; (ii) the radiation of sand grains to serve as guides to sand movement; (iii) the addition of artificial radioactive glass grains to sands for use in tracing movement of the sand; and (iv) the coating of sand grains with phosphors that can be detected by ultraviolet light. One interesting procedure is the addition of salts of sodium 24 and 22 to water to trace its movement both on the surface and in the ground. Radioactive procedures are also used to determine changes in soil and water content of drilling muds in the course of drilling operations. Rapid means of measuring water content of soils by both mechanical and chemical methods are described. A vibrodrilling technique for rapidly procuring cores of soil to a depth of 20 to 30 feet is discussed at some length. The book closes with a description of safety measures to be used with radioactive procedures and with a series of tables describing the properties and cost in Russia of various radioactive isotopes. The volume contains relatively little material on rock mechanics or on geophysical tools, such as resistivity or seismic velocities. It has a bibliography of 43 titles, mostly Russian. The authors are highly objective in their approach to problems, listing both merits and disadvantages of the procedures described. Fitzsimmons' translation is idiomatic and is technically adequate. In my opinion the book contains much novel material, presented in an authentic manner.

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Glossary of Meteorology. Ralph E. Huschke, Ed. American Meteorological Society, Boston, Mass., 1959. viii + 638 pp. $10.

The glossary's purpose, stated in its preface, is "to define every important meteorological term likely to be found in the literature today."

It is an alphabetically arranged volume listing 7247 entries. Abbreviations and contractions which have been adopted as terms in themselves are included, but most common abbreviations are not.

The following are typical entries:

"ab-polar current—(Obsolete.) An air current moving away from either of the earth's poles."

"konimeter—(Also spelled conimeter) An instrument for determining the dust content of a sample of air. One form of the instrument consists of a tapered metal tube through which a sample of air is drawn and allowed to impinge upon a glass slide covered with a viscous substance. The particles caught are counted and measured with the aid of a microscope.

"*See* **dust counter**."

"Z-R relationship—*See* **radar reflectivity**."

New Books

Annual Review of Nuclear Science. vol. 9. Emilio Segrè and Leonard I. Schiff. Annual Reviews, Palo Alto, Calif., 1959. 633 pp. $7.

British Parasitic Fungi. W. C. Moore. Cambridge Univ. Press, New York, 1959. 446 pp. $8.50. This book provides a guide to the parasitic fungi reported on cultivated plants in Great Britain, the diseases they cause, and the British literature on the subject. The first part of the book is an alphabetical list of the scientific and common names of cultivated host plants, with the fungus parasites recorded on each host listed alphabetically under the scientific name of the host. The second part lists the parasites alphabetically and gives references to the place where each was first described.

Chemical and Molecular Basis of Nerve Activity. David Nachmansohn. Academic Press, New York, 1959. 246 pp. $7.50.

Encyclopedic Dictionary of Electronics and Nuclear Engineering. Robert I. Sarbacher. Prentice-Hall, Englewood Cliffs, N.J., 1959. 427 pp. The approximately 14,000 entries, alphabetically arranged, cover modern terms and definitions, equipments, elements, components, and systems in electronics and nuclear engineering. In the foreword to the volume, A. V. Astin says "*This* dictionary is especially valuable, for the fields of electronics and nuclear engineering have undergone so rapid an expansion in the past decade that a new jargon has sprung into being. Several of the professional societies have achieved considerable progress in standardizing many of the specialized terms in their areas. Dr. Sarbacher has made optimum use of these."

An Introduction to the Mechanics of Solids. Stephen H. Crandall and Norman C. Dahl, Eds. McGraw-Hill, New York, 1959. 454 pp. $8.50.

The Kinetics of Cellular Proliferation. Frederick Stohlman, Jr., Ed. Grune and Stratton, New York, 1959. 470 pp. $5.75.

Das Leben des Szelider Sees. Limnologische studien an einem natriumkarbonatchloridhaltigen see des ungarischen Alfold. Erno Donaszy. Akademiai Kiado, Budapest, Hungary, 1959. 425 pp.

Levels of Knowing and Existence. Studies in general semantics. Harry L. Weinberg. Harper, New York, 1959. 288 pp. $3.25.

The Lloyd William Taylor Manual of Advanced Undergraduate Experiments in Physics. Thomas Benjamin Brown, Ed. Addison-Wesley, Reading, Mass., 1959. 575 pp. $9.50.

Lymphocytes and Mast Cells. Margaret A. Kelsall and Edward D. Crabb. Williams and Wilkins, Baltimore, Md., 1959. 415 pp. $8.

Mechanisms of Hypersensitivity. Joseph H. Shaffer, Gerald A. LoGrippo, Merrill W. Chase, Eds. Little, Brown, Boston, Mass., 1959. 774 pp. $18.50. Papers from the symposium sponsored by the Henry Ford Hospital, 27–29 March 1958.

Metabolic Aspects of Renal Function. William D. Lotspeich. Thomas, Springfield, Ill., 1959. 228 pp. $7.50.

Minerals of New Mexico. Stuart A. Northrop. Univ. of New Mexico Press, Albuquerque, rev. ed., 1959. 681 pp. $10.

Open-Channel Hydraulics. Ven Te Chow. McGraw-Hill, New York, 1959. 698 pp. $17.

Physics of the Earth's Interior. Beno Gutenberg. Academic Press, New York, 1959. 252 pp. $8.50.

Physics and Geology. J. A. Jacobs, R. D. Russell, J. Tuzo Wilson. McGraw-Hill, New York, 1959. 436 pp. $9.75.

The Physiological Basis of Diuretic Therapy. Robert F. Pitts. Thomas, Springfield, Ill., 1959. 346 pp. $9.75.

Productive Thinking, Max Wertheimer. Enlarged edition edited by Michael Wertheimer. Harper, New York, 1959. 318 pp. $5.50.

Progress in Hematology. vol. 2. Leandro M. Tocantins, Ed. Grune and Stratton, New York, 1959. 296 pp. $9.75.

Report of the First Institute on Clinical Teaching. Helen Hofer Gee and Julius B. Richmond. Assoc. of American Medical Colleges, Evanston, Ill., 1959. 266 pp. Cloth, $3; paper, $2.

The School as Agent for Cultural Renewal. Fifth lecture in the "Burton Lecture" series. Lawrence K. Frank. Harvard Univ. Press, Cambridge, Mass., 1959. 55 pp.

Sons of the Shaking Earth. Eric R. Wolf. Univ. of Chicago Press, Chicago, Ill., 1959. 311 pp. $5.

Testing Statistical Hypotheses. E. L. Lehmann. Wiley, New York; Chapman and Hall, London, 1959. 382 pp. $11.

Turbulence. An introduction to its mechanism and theory. J. O. Hinze. McGraw-Hill, New York, 1959. 595 pp. $15.

Understanding Chemistry. Lawrence P. Lessing. Interscience, New York, 1959. 192 pp. $3.50.

The Wealth of India. Raw materials. vol. *5, H-K.* Council of Scientific and Industrial Research, New Delhi, 1959. 369 pp. R. 30.

Writing in Industry. vol. 1. Siegfried Mandel, Ed. Plenum Press, New York; Chapman and Hall, London, 1959. 121 pp. $2.75. Selected papers from the proceedings of the conference on writing and publishing in industry, sponsored by Polytechnic Institute of Brooklyn, 1959.