

the material for Volume 1 under the same title.

The editing of symposia of this nature serves a very useful function in drawing together in a single place the state-of-the-art thinking in specific narrow areas, and although the cost of the book is high, it is certainly much cheaper than attending the conference in person.

However, as published proceedings of conferences become more and more common, we should look for a greater sophistication on the part of editors in reducing the volume of extraneous material and the elimination of redundancy. Accepting everything the author himself includes in his paper does not serve the reader well, and editors should accept the responsibility of really editing rather than merely compiling. This present volume gives us a number of cases in point. For example, every paper starts with a footnote "Presented at the Second Workshop on 'Laser Interaction and Related Plasma Phenomena' at Rensselaer Polytechnic Institute, Hartford Graduate Center, August 30-September 3, 1971." Yet the whole book is announced as being this and a good many inches of space could be saved if this was not repeated automatically for every paper in the book. Five of the papers are given in abstract only; these abstracts are so brief as to be useless and they should have been eliminated. The reader is not interested in archival records of the workshop but in the substance presented.

The editors have produced both an author index and a subject index, and this adds considerably to the use of the text. However, a greater cohesiveness would have been achieved if the editors had compiled an index not only of cited names in the text, but also an index to the references following each paper. Considerably more value would have been gained if this had been undertaken.

Finally, in an edited volume of this sort, such statements as "The authors gratefully acknowledge the encouragement and stimulating remarks of..." add nothing to the usefulness of the material and in some cases take up as much as a quarter of a page—the elimination of which could have reduced the length and hence the expense of the published volume.

The edited proceedings of conferences and workshops are fast becoming a standard method of publication. These books are very useful and serve an important function, but in general the editing of them has not yet developed the criteria and standards that need to be enforced as rigidly as in journal editing or authored books. It is hoped that such criteria will soon evolve, so that these volumes may present their material in a tighter for-

mat to save both the time of the reader and space on the library shelves.

SANBORN C. BROWN
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new books

Electricity and Magnetism

Electricité Magnétisme Cours. P. Baruch, M. Hubin, J. F. Petroff. 319 pp. Hermann, Paris, 1973. 46 F.

Materials Science

Cooperative Phenomena Near Phase Transitions: A Bibliography with Selected Readings. H. Eugene Stanley, ed. 308 pp. MIT Press, Cambridge, Mass, 1973. \$14.95.

Defects in Crystalline Solids. B. Hender-son. 203 pp. Crane, Russak, New York, 1973. \$19.50 cloth, \$9.75 paper.

L'Effet Mössbauer et ses Applications. Christian Janet. 234 pp. Masson, Paris, 1972. 110 F.

Magnetic Properties of Rare Earth Metals. R. J. Elliott, ed. 425 pp. Plenum, New York, 1972. \$28.00.

Optical Properties of Solids. F. Abelès, ed. 1026 pp. Elsevier, New York, 1972. \$69.00.

Point Defects in Solids, Vol. 1, General and Ionic Crystals. J. H. Crawford, L. M. Slifkin, eds. 556 pp. Plenum, New York, 1972. \$37.50.

Radiation Damage and Defects in Semiconductors. (Conf. Proc. Institute of Physics 19-21 July 1972). 458 pp. American Institute of Physics, New York, 1973.

Sintering and Related Phenomena. (Conf. Proc. Third International Conference on Sintering and Related Phenomena, Notre Dame, Indiana, 5-7 June, 1972). G. C. Kuczynski, ed. 451 pp. Plenum, New York, 1973. \$25.00.

Low Temperature

Critical Currents in Superconductors. A. M. Campbell, J. E. Evetts. 243 pp. Barnes & Noble, New York, 1973. \$17.75.

Cryoelectronics. W. P. Jolly. 88 pp. Halsted, New York, 1972.

Astronomy, Space Physics

Atoms and Molecules in Astrophysics. (Conf. Proc. 12th Scottish Universities Summer School in Physics. University of Stirling, August 1971). T. R. Carson, M. J. Roberts, eds. 367 pp. Academic, New York, 1973. £7.50.

Le Ciel et Deux Ecrits. Jean-Claude Pecker. 157 pp. Hermann, Paris, 1972. 12 F.

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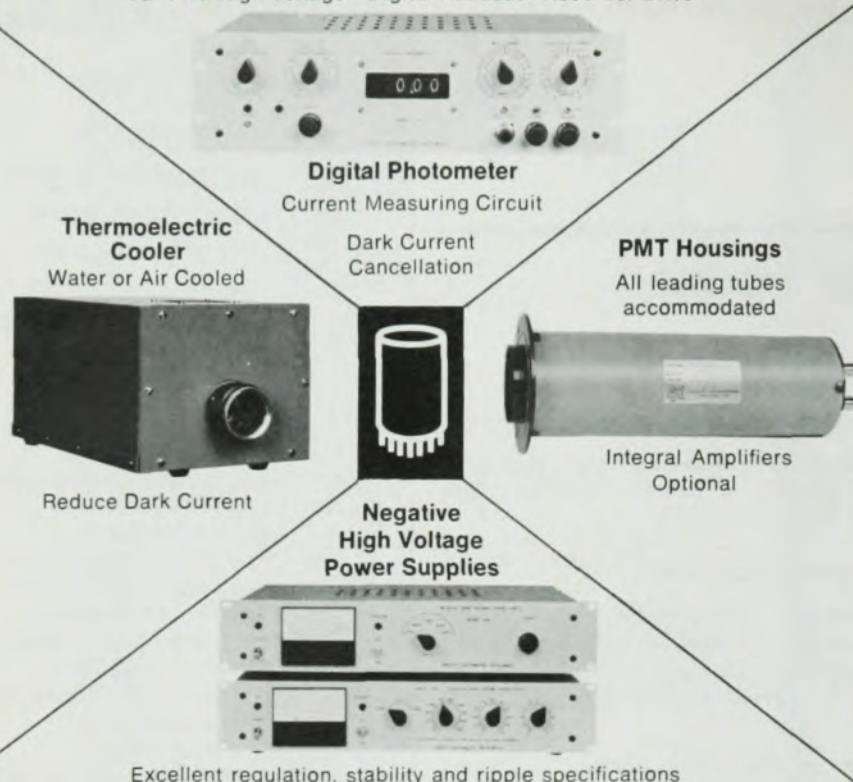


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Geophysics

Fundamentals of Air Pollution. Samuel J. Williamson. 472 pp. Addison-Wesley, Reading, Mass, 1973. \$14.95.

Marine Physics. R. E. Craig. 83 pp. Academic, New York, 1973. £1.90.

Pollution: Engineering and Scientific Solutions. (Conf. Proc. First International Meeting of the Society of Engineering Science. Tel Aviv. 12-17 June 1972). E. S. Barrekette, ed. 784 pp. Plenum, New York, 1973. \$35.00.

Biophysics

Proceedings of the International Symposium on Atomic, Molecular and Solid State Theory and Quantum Biology, Number 6. (Conf. Proc. Sanibel Is., Fla. 17-22 Jan. 1972.) Per-Olov Löwdin, ed. 465 pp. Wiley, New York, 1973. \$24.95.

Theory and Mathematical Physics

A Course in Simple Homotopy Theory. Marshall M. Cohen. 114 pp. Springer-Verlag, New York, 1973.

Axiomatic Set Theory. Gaisi Takeuti, Wilson M. Zaring. 238 pp. Springer-Verlag, New York, 1973.

Fourier Transforms and their Physical Applications. D. C. Champeney. 256 pp. Academic, New York, 1973. £5.20.

Géométrie Spinorielle. Max Morand. 236 pp. Masson, Paris. 1973. 98F.

Padé Approximants and their Applications. (Conf. Proc. Canterbury International Conference, U. of Kent, 17-21 July 1972.) P. R. Graves-Morris, ed. 354 pp. Academic, New York, 1973. £5.50.

Quantum Electrodynamics. G. Kallen. 233 pp. Springer-Verlag, New York, 1972. \$10.80.

Quantum Physics and Ordinary Language. T. Bergstein. Humanities Press, New York, 1972. \$7.50.

Tables of Bessel Transforms. F. Oberhettinger. 289 pp. Springer-Verlag, New York, 1972. \$8.80.

The Many-Body Problem in Quantum Mechanics. N. H. March, W. H. Young and S. Sampanthar. 459 pp. Cambridge U. P., New York, 1973. \$7.50.

Instrumentation and Techniques

Advances in Electronics and Electron Physics, Vol. 32. L. Marton, ed. 399 pp. Academic, New York, 1973.

Methods of Physical Examination in Archaeology. M. S. Tite. 385 pp. Seminar Press, New York, 1973. £6.80.

Orthogonal Polynomials for Engineers and Physicists. Petr Beckmann. 280 pp. Golem Press, Boulder, Colo. 1973. \$15.00.

Physical Electronics. J. Seymour. 438 pp. Halsted, New York, 1973. \$10.50.

Quantitative Decision-aiding Techniques

for Management. Marvin J. Cetron, Harold Davidson and A. H. Rubenstein, eds. 205 pp. Gordon and Breach, New York, 1972.

Heat, Thermodynamics, Statistical Mechanics

Specific Energies of Galvanic Reactions and Related Thermodynamic Data. J. G. Gibson, J. L. Sudworth. 820 pp. Halsted, New York, 1973. \$30.00.

Student Texts

Essentials of Modern Physics. V. Acosta, C. L. Cowah, B. J. Graham. 594 pp. Harper & Row, New York, 1973. \$12.95.

Introduction to Concepts and Theories in Physical Science, 2nd ed. Gerald Holton, Steven G. Brush. 589 pp. Addison-Wesley, Reading, Mass.

Invitation to Physics. Ken Greider. 315 pp. Harcourt, Brace, Jovanovich, New York. \$9.95.

Physics: An Introduction for Students of Science and Engineering. M. Paul Hagelberg. 753 pp. Prentice-Hall, Englewood Cliffs, N. J. 1973. \$14.95.

Science and Human Destiny. Norman F. Dessel, Richard B. Nehrich Jr and Glenn I. Voran. 318 pp. McGraw-Hill, New York, 1973. \$6.95.

History and Philosophy

Cosmos. Richard J. Pendergast. 207 pp. Fordham U. P., New York, 1973. \$9.00.

Creativity and Intuition: A Physicist Looks at East and West. Hideki Yukawa. Kodansha, New York, 1973. \$8.95.

Einstein. Jeremy Bernstein. 242 pp. Viking, New York, 1973. \$6.95.

Ernst Mach: His Life, Work and Influence. John T. Blackmore, 414 pp. U. of California Press, Berkeley, 1972. \$16.95.

The Field Concept in Contemporary Science. Mendel Sachs. 120 pp. Thomas, Springfield, Ill., 1973. \$9.75.

Society and Government

Human Ecology: Problems and Solutions. P. R. Ehrlich, Anne H. Ehrlich, John P. Holdren. 304 pp. W. H. Freeman, San Francisco, 1973. \$4.75.

Nuclear Energy: Its Physics and Its Social Challenge. David R. Inglis. 395 pp. Addison-Wesley, Reading, Mass. 1973.

Popularizations

Louder and Louder: The Dangers of Noise Pollution. Thomas Perera, Gretchen Perera. 42 pp. Franklin Watts, New York, 1973. \$4.95.

Origins of the Universe. Albert Hinkelbein. 128 pp. Franklin Watts, New York, 1973. \$5.95.

Miscellaneous

Trends in Physics. (Conf. Proc. 2nd General Conference of the European Physical Society 3-6 Oct. Wiesbaden, Germany). 356 pp. EPS, Geneva, 1973. □

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