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OTI's versatile new Model 600 optical calorimeter measures optical energy and power. You can use it with either pulsed or cw inputs over a wide dynamic and spectral range.

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## POWER METER



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### New Journals

The Infinity Press of New York City has begun publication of a new journal, *Russian Physics Quarterly*, whose first issue appeared in December. The quarterly is not a cover-to-cover translation of a Russian publication, but rather a selective source, "seeking out those reports and discussions which have the most immediate and general usefulness in American research laboratories." Full translations of selected articles are published.

The contents of the first number include fifteen papers, making up 166 pages of English text and representing 220 pages of the original Russian. Volume 1, number 1, is available at an introductory price of \$10, and a special rate of \$85 has been announced for the entire first volume. (Regular rates are \$35 per single issue and \$100 per volume.)

Further information is available from the International Physical Index, Inc., 1909 Park Ave., New York 35, N.Y.

Beginning in January, a national journal of radio science will be published by the National Bureau of Standards in cooperation with the US National Committee of the International Scientific Radio Union.

According to a recent NBS announcement, *Section D* of its *Journal of Research*, previously known as *Radio Propagation*, will be expanded in scope under the title, *Radio Science*, and will be issued monthly instead of six times a year as before. Plans for the publication of the new journal were made following a recent recommendation of the National Academy of Sciences pointing out the need for a journal that would serve as an outlet for reporting research in the field.

*Radio Science* will present research papers as well as occasional survey articles in radio propagation, communications, and radio science generally. It will serve as the principal publication channel for the research of the NBS Central Radio Propagation Laboratory and the scientific activities of the US National Committee of URSI.

The journal will also carry selected papers from the NBS Radio Standards Laboratory and invited papers from authorities in the field.

C. Gordon Little, chief of the NBS Central Radio Propagation Laboratory, has been appointed editor of the journal, and L. A. Manning of Stanford University will serve as editor for URSI.

The subscription price, according to the Bureau, will be \$9 a year.

Another new quarterly, the *Journal of Sound and Vibration*, will be published by Academic Press. Edited by P. E. Doak of the Faculty of Engineering of the University of Southampton, the journal will publish reports of new work, invited review articles on problems of current interest, brief notes and comments (letters to the editor), book reviews, and announcements of scientific meetings and other coming events.

The first issue is expected to appear this month. Subscription rates for volume 1 (4 issues) are \$18 for institutions and \$12 for individuals, plus \$1 for postage in each case. Prospective subscribers should write to Academic Press, 111 Fifth Ave., New York, N.Y., 10003.

### Conference Proceedings

The University of California Press has announced publication of the proceedings of the Third Conference on Reactions Between Complex Nuclei, held at Asilomar, Calif., in April 1963.

Editors for the 67 papers and discussions making up the 480-page volume are Albert Ghiorso, R. M. Diamond, and H. E. Conzett. Topics covered include elastic and inelastic scattering; stripping, pickup, nucleon transfer, and compound nucleus reactions; effects of high angular momentum; Coulomb excitation; and nuclear spectroscopy.

Copies are available from the University of California Press, Berkeley, Calif., for \$17 each.

Papers presented at a conference on wave interaction and dynamic nonlinear phenomena in plasmas, which took place in February 1963 at the Pennsylvania State University, are now



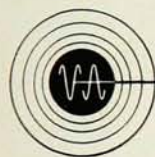
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## New Publications

### The World of Elementary Particles

Kenneth W. Ford, Brandeis University

Both the rich variety of activity in this infinitesimal world far beneath the level of man's perception and the order imposed by beautifully simple laws of conservation form the themes of this book. In addition to explaining the facts of the particle world, the author considers the radical new concepts and new ways of thinking about nature to which man has been led. 1963. Illustrated. 245 pages. Paper, \$2.95  
Hardbound, \$4.50

### The Calculus of Variations

N. I. Akhiezer, Kharkov University (translated from the Russian by Aline H. Frink, Pennsylvania State University)

This concise and lucid treatment balances theory with application. Including problems in the physical sciences, it discusses necessary conditions for an extremum, various sufficient conditions, direct methods for establishing the existence of solutions of extremum problems, and approximating these solutions practically. 1962. 256 pages. Hardbound, \$8.50

### Oersted and the Discovery of Electromagnetism

Bern Dibner, Burndy Library

Beginning with Volta's announcement of his constant-current source of electricity in 1800, the author continues by discussing Oersted's discovery that the needle of a magnetic compass deviated when the circuit of a voltaic pile was completed, and he discusses the many contributions of other prominent scientists. 1963. Illustrated. 96 pages. Paper, \$1.95  
Hardbound, \$3.50

## Forthcoming Publications

### The Natural Philosopher 3

Daniel E. Gershenson and Daniel A. Greenberg, Editors

This continuing series brings together papers in the history of physics and in the role physics has played in human affairs. The articles included in this volume are: Einstein and the Wave-Particle Theory, The Gravitational Theory of LeSage, A Bibliographic Reference Table for Faraday's Papers on Electricity, The Physics of the Eleatic School. March. 144 pages. Paper, \$1.95  
Hardbound, \$2.95

### Electromagnetic Fields and Interactions

Richard Becker and Fritz Sauter, U. of Cologne

I. *Electromagnetic Fields and Interactions* (\$9.50) will cover the introduction to Vectors and Tensor Calculus, the Electrostatic Field, the Electric Current and the Magnetic Field, General Fundamental Equations of the Electromagnetic Field, Relativity Theory. Ready Spring 1964

II. *Quantum Theory of Atoms and Radiation* (\$9.50) will cover the Classical Foundations of Electron Theory, Foundations of Quantum Mechanics, Single-Electron Problems, Many Electron Problems, Theory of Radiation, Relativistic Theory of the Electron. Ready Summer 1964

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## DECISIVE THOUGHT

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available. Sponsors of the meeting included the University's Ionosphere Research Laboratory and the National Aeronautics and Space Administration.

Orders (\$5 per volume) can be placed with Engineering Publications, 227 Hammond Building, The Pennsylvania State University, University Park, Pa.

The twenty-four papers presented at the 1962 Working Conference on the Mössbauer Effect, held at the Joint Institute for Nuclear Research in Dubna, USSR, have been translated into English and made available in multilith form. The charge for each set of 24 papers is \$36, and they can be ordered from Consultants Bureau, 227 West 17 Street, New York 11, N. Y.

A limited number of plastic-bound copies of the collected papers for the Dielectrics in Space Symposium, held at the Westinghouse Research Laboratories in June 1963, are currently available. The papers cover vacuum and low-pressure breakdown, radiation effects, high-temperature materials, etc. Copies of the booklet can be ordered for \$5 each from T. W. Dakin, Westinghouse Research Laboratories, Pittsburgh 35, Pa.

The proceedings of the Second Conference on Kinetics, Equilibria and Performance of High Temperature Systems, edited by Gilbert S. Bahn of the Marquardt Corporation, are now available. The meeting was held in April 1962 at the University of California at Los Angeles and was sponsored by the Western States Section of the Combustion Institute. Copies, priced at \$19.50 each, can be ordered from Gordon and Breach, 150 Fifth Ave., New York 11, N.Y.

### *Maser Abstracts*

Pacific Impex Co. of Vancouver has introduced a new abstracting service, *Laser and Maser International*, which will cover the literature reporting new developments and applications in the field. A complimentary copy of the looseleaf monthly publication can be obtained from Pacific Impex Co., Dept. LMI-2, Vancouver, B. C., Canada.