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Mr. John R. Weld, Employment Manager
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PHYSICISTS

The APPLIED PHYSICS LABORATORY OF THE JOHNS HOPKINS UNIVERSITY offers an exceptional opportunity for professional advancement in a well-established laboratory with a reputation for the encouragement of individual responsibility and self-direction. Our program of

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PROFESSIONAL STAFF APPOINTMENTS

APPLIED PHYSICS LABORATORY THE JOHNS HOPKINS UNIVERSITY

8621 Georgia Avenue
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Meetings

Network Synthesis

An international symposium on modern network synthesis, which forms a part of the program commemorating the 100th anniversary of the Polytechnic Institute of Brooklyn, will be held April 13-15 at the Engineering Societies Building, 33 West 39th Street, New York City. Advances in the synthesis of passive networks in frequency and time domains and new developments in active and nonreciprocal circuits will be covered in the symposium, which is organized by the PIB Microwave Research Institute with the cooperation of the Professional Group on Circuit Theory of the IRE and the cosponsorship of the Office of Naval Research, the Air Force Office of Scientific Research, and the Signal Corps. Correspondence should be addressed to Polytechnic Institute of Brooklyn, Microwave Research Institute, 55 Johnson Street, Brooklyn 1, New York.

Radio Engineering

Sessions on semiconductors, measuring techniques and equipment, missile design, telemetering problems, and other topics will be included in the Institute of Radio Engineers 7th region technical conference and trade show to be held April 27-29 at the Hotel Westward Ho in Phoenix, Arizona. The Phoenix Section of IRE will be the host. The conference chairman is A. M. Creighton, Motorola Inc., 3102 North 56th Street, Phoenix, Arizona.

Theoretical Physics Colloquium

The Division of Physics of the National Research Council of Canada, Ottawa, will hold a Colloquium on Theoretical Physics in honor of Professor P. A. M. Dirac from June 9th to 21st. The program will consist of lectures by invited speakers reviewing chosen research problems and of contributed papers on current research topics. The following is a list of the invited speakers with the number of lectures indicated in parentheses: H. A. Bethe, scattering and photoproduction of π mesons (2); G. Breit, nucleon-nucleon scattering (2); S. Chandrasekhar, problems of stability in hydrodynamics and hydromagnetics (2); and turbulence in hydrodynamics and hydromagnetics (2); P. A. M. Dirac, quantum electrodynamics (4); J. R. Oppenheimer, the description of primordial matter (2); A. Pais, fundamental particle problems (3); G. M. Volkoff, Overhauser effect and its suggested application to

nuclear alignment (1), and the Bohr-Mottelson theory of the nucleus (1); W. H. Watson, topic to be announced (1); V. F. Weisskopf, topic to be announced (2); G. Wentzel, π -meson-proton scattering, experiment and theory (2). All those interested are welcome to participate in the Colloquium. Those wishing to contribute a paper should send a brief abstract; its inclusion, however, will depend on limitations of time. Inquiries should be addressed to Dr. T. Y. Wu, Division of Physics, National Research Council, Ottawa 2, Canada.

Carbon Conference

A conference on carbon will be held at the University of Buffalo on June 9th and 10th of this year. Speakers from academic and industrial institutions will discuss the present status of knowledge of the field and the results of research currently performed at their laboratories. The topics will include physical and chemical properties of cokes, carbons, graphites, and carbon blacks, and some of the engineering problems involved in their production. For further information write to Carbon Conference, Department of Physics, University of Buffalo, Buffalo, New York.

College Physicists' Colloquium

The annual Colloquium of College Physicists will take place June 15-18 at the State University of Iowa. In addition to invited papers and reports, the program will include lectures by Bruno Rossi of MIT on recent advances in cosmic-ray research, an exhibit of new devices by members of the Colloquium, and a demonstration in supersonics. Those wishing further details should contact Dr. G. W. Stewart, Department of Physics, State University of Iowa, Iowa City.

Low Temperature Physics

A Conference on Low Temperature Physics is to be held under the joint auspices of the International Union of Pure and Applied Physics and Commission I of the Institut International du Froid as part of the International Congress of Refrigeration which commences at the Sorbonne, Paris, on August 31st. The first sessions will be mainly devoted to the applied aspects of low temperature physics; those concerned mainly with pure physics will begin on September 2nd. All the proceedings will be over by the evening of September 8th. It is hoped that at least half the time of the conference will be spent in discussions. Therefore contributions should be as brief as possible and should be descriptions of work in progress rather than surveys of particular fields. Those wishing to attend and/or read a paper should write to Professor L. Weil, Institut Fourier, Place du Doyen Gosse, Grenoble, Isère, France, as soon as possible. Titles and abstracts of papers should be sent to Professor Weil by May 15th.

OUTSTANDING McGRAW-HILL BOOKS

MODERN PHYSICS

By **JOHN C. SLATER**, Massachusetts Institute of Technology. Ready in May

Here is an outstanding new work which offers an elementary survey of modern physics, including its development from about 1900 to the present. The aim is to follow the development of the ideas of modern physics, in particular the quantum theory, and its application to the structure of atoms, molecules, solids, and the atomic nucleus. The keynote of the treatment is the logical historical development of 20th Century physics, showing how each of the great new theories followed each other almost inevitably.

PRINCIPLES OF BIOLOGICAL AND MEDICAL PHYSICS

By **RALPH F. STACY**, Ohio State University; **DAVID T. WILLIAMS**, Battelle Memorial Institute; and **RALPH E. WORDEN**, Ohio State University. Ready in May

This new work provides a unification of the far-reaching and widely scattered ideas comprising the broad field of biophysics. The relation between physics and physiological sciences is clearly defined, and thus introduces the student to the characteristics peculiar to both fields. Principles, approaches, and limitations of the application of physics to biology are emphasized throughout. Basic facts of instrumentation are given at the beginning of each chapter, and the clinical medical applications of the material, including such recent advances as high frequency radiation, application of ultrasonics, use of mechanical principles, are presented at the ends of the chapters.

DIELECTRIC BEHAVIOR AND STRUCTURE

By **CHARLES P. SMYTH**, Princeton University. International Chemical Series. Ready in April

A specialized book explaining the relations between the molecular structure of matter and the dielectric behavior of matter. It considers the interpretation of dielectric constant and loss data in terms of structure, and actual methods of measurement. The book also provides the most extensive available account of the use of dipole moment in the determination of molecular structure and in the study of the nature of the chemical bond and resonance. This work is important in the chemistry, physics, and engineering of insulators of all types, and also significant in the study of organic molecules.

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