

POSITIONS OPEN

Engineering college in northern New York will enlarge its physics faculty, which currently has eight members. Positions available at assistant professor and instructor levels. Applicant should have a Ph.D. in physics and a willingness to teach undergraduate courses. Recently established physics curriculum. Research in solid state theory, X-ray diffraction, and optical spectroscopy in progress. Good opportunity for advancement. Send resume of qualifications to: Box 155B, 57 East 55 St., New York 22, N. Y.

POSITION OPEN

Physics and Mathematics Editor for encyclopedia. Man or woman with strong training in physics and mathematics, also astronomy, geology and mineralogy, if possible. Editorial experience desired. Chicago area resident preferred. Please state full background and salary requirements. Franklin J. Meine, Editor-in-Chief, American Peoples Encyclopedia, 179 North Michigan Avenue, Chicago, Illinois.

POSITIONS OPEN

PHYSICISTS—M.S. or Ph.D. Senior physicists with excellent grounding in fundamentals of both analytical and laboratory research and development are needed for new activities in nuclear physics, optics and acoustics. Men with versatility and leadership ability will be offered the opportunity to develop research programs along lines of their own experience and interest within the wide scope of activities possible in an independent organization. Write S. J. Keane, Physics Department, Southwest Research Institute, 8500 Culebra Road, San Antonio, Texas.

POSITIONS OPEN

PHYSICIST AND ENGINEERING PHYSICIST

Required for research and development work in the fields of general physics and instrumentation. Good knowledge of electronic circuitry and applied mathematics required.

Airmail summary of qualifications to:

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who discussed the present five-year government program of reactor research. He stated that while in the near future atomic energy will not be the exclusive source of energy, nor will it necessarily make energy cheap, the indications are, however, that atomic power will prevent present costs of energy from rising. The experimental boiling water reactor is one example of a reactor which shows good promise for reducing costs, he said.

Alvin Weinberg of Oak Ridge National Laboratory, in discussing the homogeneous reactor experiment, mentioned the possibility that one result of the experiment might be to put electronic engineers out of the reactor business. Reason—the essential simplicity of the homogeneous type reactor. Some features of the Oak Ridge reactor: the core is contained in an 18-inch stainless steel sphere; 1 gram of U-235 is consumed per day at high-power operation (1000 KW); total activity of the reactor at the 1000 KW level is 30 million curies; 10 million curies of activity in the form of fission gases must be removed per day. The big advantage of this type of reactor is that it is temperature compensating. It is thus a slave to power demands. As power is removed from the reactor system, its fuel temperature drops, resulting in increased reactivity, which in turn increases the power level. Such a reactor is very unlikely to blow itself up, in the event of some sort of accident.

Lyle B. Borst from New York University described an economic "little power" reactor. Since it is specifically designed for use in railroad locomotion, it has vital restrictions as to size in that the reactor cannot be more than 10 feet wide, 16 feet high, or 60 feet long. Since approximately four feet of shielding is needed on each side, the actual reactor width could be only two feet.

Robert Vestergaard described Sweden's first reactor. A heavy water moderated, high-power (100 KW), low-temperature reactor, it is housed in an underground building only two kilometers from the center of the city. Plans to build Sweden's second reactor are now underway.

G. C. Laurence from Atomic Energy of Canada, Ltd., stated that the Canadian government has authorized a large-scale program of atomic development. The present Canadian interest is in large central station reactors—not packaged power plants. Dr. Laurence described the NRX and NRU reactors. The new NRU reactor will be of much higher power than NRX and will be moderated and cooled by heavy water. Dr. Laurence emphasized the value of international symposia of this sort because of the many reactor problems which face everyone in this field.

S. J. Goslovich
Glen Ellyn, Illinois

Spectroscopy Seminar

The University of Florida's 3rd annual spectroscopy symposium, dealing with various applications of emis-

sion spectroscopy and open to anyone interested in spectroscopy, will be held February 2-4. All inquiries should be addressed to Professor William T. Tiffin, College of Engineering, University of Florida, Gainesville, Florida.

Industrial Spectroscopy

Industrial Applications of Spectroscopy will be the theme of the 6th Annual Conference of the American Association of Spectrographers, which will take place in Chicago on May 6th. Contributed papers in the fields of emission, x-ray fluorescence, or absorption spectroscopy as applied to industry are invited. Abstracts must be submitted by March 1, 1955. Inquiries should be addressed to F. E. Stedman or E. E. Stilson, Co-Chairmen, Engineering Research Laboratory, Products Division, Bendix Aviation Corporation, 401 North Bendix Drive, South Bend 20, Indiana.

Electromagnetic Wave Theory

An International Symposium on Electromagnetic Wave Theory sponsored by Commission VI of URSI (International Scientific Radio Union) and the University of Michigan will be held June 20-25 at the University of Michigan in Ann Arbor, Michigan. The work of the symposium will be separated into the following specific major topics: (1) propagation in doubly refracting media in wave guides (e.g. ferrites); (2) boundary value problems of diffraction and scattering theory; (3) work in antenna theory of fundamental importance; (4) forward scattering; and (5) multiple scattering of light by colloidal particles. Of particular interest are millimeter wave developments in the above topics. Those who wish to present papers should submit abstracts (not more than 200 words) by March 31, 1955, to K. M. Siegel, Chairman, Symposium on Electromagnetic Wave Theory, Willow Run Research Center, University of Michigan, Ypsilanti, Michigan. Further information on the symposium can be obtained by writing to J. W. Crispin, Jr., at the same address. Housing accommodations are necessarily limited in a college community; as a result registration and room reservations will be allotted in order of receipt.

NSF Travel Grants

A limited number of grants to physicists in support of travel to international meetings will be made during 1955 by the National Science Foundation. Application blanks are available from the Foundation, Washington 25, D. C., and should be received by January 24th. Meetings for which travel requests will be considered are: (1) Elementary Particle Conference, Pisa, Italy, April; (2) Gas Discharge Physics, Delft, Holland; (3) International Congress on Cosmic Radiation, Mexico City, Mexico, September 10-15; and (4) Symposium on the Solid State and Plasticity, International Union of Theoretical and Applied Mechanics, Madrid, Spain, September 26-28.

POSITIONS OPEN

Teaching Opportunity Electronics and Physics

Three positions in electronics engineering as well as advanced physics are open at a rapidly expanding Eastern technological university. Excellent opportunities for the right men. Write, giving experience and qualifications, to Box 155A, Physics Today, 57 East 55 St., N. Y. 22, N. Y.

POSITION OPEN

Teaching-Research Physicist—

Position open to young Ph.D. graduate or experienced physicist. Teaching undergraduates and graduates, and directing graduate research programs. Research at least half-time. Knowledge of microwave and transistors desirable. 12 month academic appointment. Salary commensurate with experience and specialty.

Research Foundation
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POSITION WANTED

Physicist, Ph.D. general physics, specialized in applied optics, optical and photometric instrumentation, atmospheric optics, applied information theory, operations research on optical equipment, aerial photography, author of many scientific publications (1 book), 18 years experience in active research, development and research administration, now in Government service. Permanent responsible position with progressive industrial or scientific organization is desired. Available about April 1955. Replies should include description of responsibilities. Box 155, Physics Today, 57 East 55 St., New York 22, N. Y.