Miscellany

Infrared Group Organized

Formation of the Coblentz Society, named in honor of retired NBS physicist W. W. Coblentz, has been announced by a committee on infrared spectroscopy which was organized at last year's Ohio State Conference on Molecular Structure and Spectroscopy. The purpose of the new society is "to foster the understanding and application of infrared spectra. As it becomes desirable and feasible the scope may be broadened to include other types of spectra." The organization is concerning itself initially with such matters as the problem of adequate coverage of infrared subjects at scientific meetings, suitable means of publishing infrared analytical methods applied to specific mixtures, the promotion of programs for collecting and disseminating infrared spectra of chemical compounds, establishment of a cooperative study of the problem of variations in absorption coefficients as obtained on different infrared spectrometers, and participation in the recommending of standards relating to infrared. The enrollment fee is $1.00. For further information write to Dr. V. Z. Williams, Perkin-Elmer Instrument Company, Stamford, Connecticut.

Research Facilities

The George B. Pegram Laboratory, a $350 000 physics research facility now under construction at Columbia University in New York City, is scheduled to be completed in August. A substantial part of the building's cost is being provided by the Atomic Energy Commission, which will also furnish a new 6 Mev Van de Graaff generator on indefinite loan for use in the laboratory. The building will stand next to the eastern end of the present Pupin Physics Laboratories building on the Columbia campus and the two structures will be connected below ground by a continuous basement. The new accelerator will serve to augment studies of problems in low-energy nuclear physics which have been carried on at Columbia for a number of years with the help of the "venerable" 20 Mev cyclotron in the basement of Pupin Laboratory. Present plans for the Van de Graaff generator call for a continuation of the systematic measurement of cross sections and nuclear energy levels. The laboratory is named in honor of Dean George B. Pegram, emeritus vice president and special advisor to the president of Columbia University, who has been associated with the University for the past half-century. He became dean of the Columbia School of Mines, Engineering, and Chemistry in 1918, a post he held until 1930, and was dean of the Graduate Faculties from 1937 to 1949. For many years Dean Pegram has served as treasurer of the American Physical Society and of the American Institute of Physics.

A new section for heat and power research has been established at the Franklin Institute Laboratories in Philadelphia. The section is headed by Francis L. Jackson and will largely be concerned with problems inherent in the design of nuclear power plants. The nuclear physics staff of the Franklin Institute's Bartol Research Foundation will be available for consultation and assistance.

An industrial research reactor to be owned and operated by private industry has been proposed by the American Machine & Foundry Company. It has been estimated that the reactor and its supporting laboratory facilities (planned for construction on a 250-acre site in the New York area) will cost something over one million dollars and can be built and available for use within eighteen months. The program, however, will first require licensing by the Atomic Energy Commission. Present plans visualize a high-flux, solid-fuel reactor employing a core similar to that in the AEC's Materials Testing Reactor. The company, one of the first to join the AEC industrial participation program on an individual basis, has announced that several firms representing a number of different industries have been invited to take part in the proposed program on a cooperative basis.

General Electric has announced that it will enter into a contract with Washington State College to study the installation of a nuclear reactor of the swimming pool variety at Pullman, Washington. A G-E spokesman said the contract will be the first phase of an over-all program designed to have a reactor in operation in two years. Harold M. Dodgen, director of the College's nuclear reactor project, is in charge of the program.

India has contracted to buy ten tons of heavy water from the United States to use as a moderator for a research reactor to be located in the vicinity of Bombay. U. S. Atomic Energy Commission Chairman Lewis L. Strauss announced on February 12th that the AEC had agreed to the request of the Government of India for the sale, adding his hope that the action would be "only a first important step" in a broader collaboration with friendly nations to promote the peaceful uses of atomic energy.

AEC Research Contracts

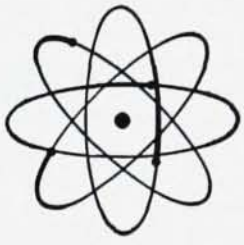
Forty-nine contracts in support of unclassified physical research have been awarded by the Atomic Energy Commission recently, of which all but six represented renewals of contracts already in force. The new contracts, totalling almost $80 000, are: University of Illinois, occurrence of technetium in nature (E. A. Alperovitch) and diffusionless phase changes in non-

Physicists
Mathematicians

are invited to investigate
challenging new work in

Experimental Reactor Physics
Theoretical Reactor Physics
Applied Mathematics

at the Westinghouse
Atomic Power Division



Mathematicians for research in applied mathematics, numerical analysis and digital computing techniques relating to theoretical problems in the physics and engineering of nuclear power reactors.

Experimental Physicists to conduct research studies with nuclear reactors and to determine the effects of reactor environment on physical phenomenon.

Theoretical Physicists for general development and application of reactor theory and reactor dynamics.

Send complete resumes to:

Dr. S. Krasik
Physics Department
Westinghouse Electric Corporation
Atomic Power Division
P.O. Box 1468, Pittsburgh 30, Pa.

ferrous metals (T. A. Read); University of Michigan, fundamental research on isotopic reactions (Richard B. Bernstein); Florida State University, analysis of nuclear forces (A. E. S. Green and M. A. Melvin); Kansas State College, labeled chemical species produced by neutron irradiation of phosphorous trichloride and related compounds (R. E. Hein); and University of California, nuclear moments (Carson D. Jeffries).

National Science Foundation

A second group of awards for the fiscal year 1955, totalling about $1.6 million, has been announced by the National Science Foundation. Twelve of the 120 grants for the support of basic research and related matters were listed under the category of physics. These include Amherst College (T. Soller), metals and paramagnetic salts below one-tenth degree absolute; University of California at Berkeley (D. S. Saxon), theoretical nuclear and atomic physics; Indiana University (R. W. Thompson), construction of a double cloud chamber for research on fundamental particles; Midwestern Universities Research Association (D. W. Kerst), high-energy accelerator problems; University of Pennsylvania (K. R. Atkins), superfluidity of liquid helium, and (W. E. Stephens), photonuclear and transmutation processes; Principia College (S. L. Leonard), direct pair production by electrons of 200–500 Mev energy; University of Rochester (M. P. Givens), a study of solids with soft x-rays; Stanford University (W. K. H. Panofsky), design study for high-energy magnetic spectrometers; Vanderbilt University (I. Bloch), normal modes of vibration of nuclei; University of Washington (J. H. Manley), nuclear emulsion studies of pion-proton scattering; and Yale University (V. W. Hughes), atomic beam magnetic resonance investigations. The Foundation is also supplying funds to the Carnegie Institute of Washington for the preliminary studies of a committee on radio astronomy, to the University of Rochester for the fifth annual conference on high-energy nuclear physics, and to the American Institute of Physics for maintaining the National Register of Scientific and Technical Personnel in the field of physics.

NSF has agreed to accept responsibility through the fiscal year 1956 for the administration of the federal rubber research program. Alan T. Waterman, the Foundation's director, has indicated that the aid of expert scientific and technical advice will be enlisted in reviewing and evaluating the existing research program, which consists of (1) basic research conducted by contract with nine educational institutions and three research organizations and (2) a government laboratory operated under contract with the University of Akron. The program has been administered by the Office of Synthetic Rubber of the Federal Facilities Corporation.

The National Science Foundation this summer will provide thirty stipends of $250 each and a limited number of fee exemption certificates amounting to $66 each to high school teachers of chemistry, physics, and general science. The stipends and certificates are for enrollment in the Institute for High School Science Teachers to be held at the Pennsylvania State University July 5th to August 13th. Detailed information about the program and application forms are available from the Director of Summer Sessions at the Pennsylvania State University, State College, Pennsylvania.

A summer institute designed "to improve the teaching of physics on all levels and devise ways of attracting gifted students into the study of physics" is to be held at the University of New Mexico June 16 to July 13 under NSF sponsorship. The program will include lectures on modern physics by H. A. Bethe, a course for high school teachers by W. L. Parker, and graduate seminars by C. F. Squire, W. D. Walker, and G. E. Pake. Membership is open to physics teachers and high school teachers with at least one year of college physics, and a few $200 stipends will be available, for which applications must be received by April 1. Membership applications are due by May 1. For further information write John R. Green, Director, Summer Institute for Teachers of Physics, University of New Mexico, Albuquerque, New Mexico.

Education

March 14th is the deadline for application to enroll in the 1955–56 session of the Oak Ridge School of Reactor Technology, a fifty-week course of study scheduled to begin on September 12th. Industrial firms have been invited to sponsor personnel in their employ for enrollment in the school under an arrangement whereby sponsored students remain on the payroll of their home organizations. To defray the pro-rata operating costs of the school, including all supplies and the use of special facilities, a fee of $2500 is charged for each student. For those who are on an AEC cost-type contract or government payroll there is no charge. The school is part of Oak Ridge National Laboratory, which is operated by Union Carbide and Carbon Corporation for the Atomic Energy Commission. It was established as a means for providing advanced training in reactor theory and technology for engineers and scientists who will engage directly in reactor research design and development. The school utilizes the ORNL staff and facilities for the instruction of students, and since much of the material presented in the curriculum is classified, enrollment is contingent upon satisfactory completion of a personnel security investigation. Further information and application forms may be obtained from the Director, Oak Ridge School of Reactor Technology, Oak Ridge National Laboratory, P. O. Box P, Oak Ridge, Tennessee.

The second annual Graduate Summer Session in Statistics, sponsored jointly by the University of Florida, North Carolina State College, Virginia Polytechnic Institute, and the Southern Regional Education Board, will be held from June 20 to July 29 at the University of Florida at Gainesville ("in the rolling hills of North Central Florida, midway between the cooling