

Miscellany

Science and Foreign Relations

The long dormant science program of the Department of State was reactivated last month when Wallace R. Brode, associate director of the National Bureau of Standards, was sworn in as science adviser to the Secretary of State, a post left unfilled since 1953. Dr. Brode, who for a number of years has been the editor of the *Journal of the Optical Society of America* and who is currently president of the American Association for the Advancement of Science, commenced his new duties on January 13 and promptly announced that science attachés will again be assigned to specified United States diplomatic missions abroad. Dr. Brode has been granted a year's leave of absence from the Bureau, but will "continue to maintain close contact in a quasi-official capacity" at NBS and can still be reached through his Bureau office.

The office of science adviser was formally established in the State Department on February 6, 1951, in line with recommendations contained in the document "Science and Foreign Relations", which had been submitted nine months earlier as the report of a special task group led by L. V. Berkner. The study upon which the Berkner report was based had its origins in the findings of a survey completed in 1949 by a State Department task force that had been set up to implement recommendations of the Hoover Commission. J. B. Koepfli, a chemist from the California Institute of Technology, served as the first science adviser to the Department, and for a time in 1952 there were as many as eleven science attachés assigned to US embassies in foreign countries. Dr. Koepfli resigned in 1953 without being replaced, and by the end of that year the staff of the State Department's science office in Washington had been reduced from four members to two, and the number of science attachés stationed abroad had dropped to four. During the past two years there have been no science attachés at all. The science office was kept open following Dr. Koepfli's resignation by the assistant to the science adviser, Mr. Walter M. Rudolph, but until recently no interest was displayed by the State Department in continuing the functions for which the office was established.

A short while before Dr. Brode's appointment, State Department spokesmen were reported to have indicated that science attachés would soon be sent to Paris, Bonn, Stockholm, Tokyo, and New Delhi, with the possibility of subsequent appointments to posts in Beirut, Rio de Janeiro, and Buenos Aires.

As originally recommended in the Berkner report, the science activities of the State Department, to be coordinated through a science office at a policy-making level, would be designed to formulate and carry out an American foreign scientific policy that would encourage the free international exchange of scientific information, materials, and personnel by any appropriate means. In practice, it was proposed, this would involve encouraging existing communication channels and implementing them where necessary by actually collecting and transmitting information, supporting international conferences and cooperating with international organizations in science, arranging for collaborative research programs by US and foreign scientists, facilitating two-way exchanges of personnel and materials, and cooperating generally with individuals and with organizations in providing access to the most direct avenues of interchange. The report urged that science staffs be assigned to US diplomatic missions to serve primarily as representatives of American scientists abroad and as connective links between scientific groups in America and other parts of the world rather than simply as "listening posts" seeking to direct a one-way flow of information to the United States.

Programs and Facilities

Rensselaer Polytechnic Institute is planning to construct a \$6 million Science Center on its campus in Troy, N. Y., as the first step in a major expansion of the Institute's program for training scientists and engineers. The new Center will be an integrated group of four structures which will contain library, classroom, and laboratory facilities for both undergraduate and advanced study and research. The buildings will also contain a planetarium, an optical observatory, an experimental studio for the development of new methods and techniques in teaching, and a large demonstration and teaching auditorium that will accommodate 650 students and will provide movable stages permitting the preparation of one complete demonstration unit while another is in use before the audience. Construction of the first units is expected to begin later this year. The Institute's present equipment for research in physics has recently been augmented by the gift of a 30-Mev betatron from the General Electric Research Laboratory in Schenectady.

Rensselaer also intends to commence a sweeping re-evaluation of its introductory physics teaching program this month, with the aim of eventual modernization of the content and approach of the basic physics course. Classical and contemporary physics, under the projected plan, would be taught in an integrated manner so as to stress the unifying concepts underlying all areas of physics. Emphasis would be on depth of understanding rather than encyclopedic coverage. The study to determine the extent of the proposed revisions is expected to take three years to complete. A gift of \$20 000 from the General Electric Educational and Charitable Fund will help finance the study during the first year.

The University of Michigan board of regents has approved a proposal to establish a new Institute of Science and Technology at Ann Arbor that will serve as the University's center for science instruction. The proposed Institute, to be set up in the University's School of Graduate Study, will establish and administer a system of scholarship grants for undergraduate and graduate students intending to teach or carry on research. Studies will also be conducted to determine methods of increasing the effectiveness of education in the sciences.

Construction of a \$124 000 Biophysics Laboratory is underway at Stanford University, Stanford, Calif. Henry S. Kaplan, head of Stanford Medical School's Radiology Department, will direct the new laboratory, which will be attached administratively to the W. W. Hansen Laboratories of Physics. The new facility will be staffed initially by approximately 15 scientists, some holding regular appointments in other faculty departments. The research program is expected to be concerned with such matters as x-ray microscopy, radiation physics, experimental high-energy electron therapy of cancer, paramagnetic resonance studies of free radicals, cellular radiobiology, and radiation chemistry. The new building, which is expected to be complete by early summer, will be connected by a covered walkway to the Microwave Laboratory which houses Stanford's 80-Mev linear accelerator. The latter facilities already include an underground radiation vault where experimental cancer therapy with high-energy electrons will be pursued.

Mountains Named for Scientists

Among the most prominent of the great peaks of the central Chugach Mountains in southern Alaska is Mt. Einstein, a lofty eminence (11 552 ft.) rising above the neighboring Harvard, Yale, Columbia, and Science Glaciers. It was named in honor of the late Albert Einstein by the members of a scientific expedition sent to the region in 1955 by the Arctic Institute of North America. The party was led by Lawrence Nielsen of Springfield, Mass., a chemical physicist with the Monsanto Chemical Co. Other members of the group were

chemist Robert West of the University of Wisconsin, Mrs. Peggy West, chemists Norman Aubrey and William Coaker of Monsanto, geologist James Maxwell of the Missouri School of Mines, Oregon State College chemist Arthur Maki, and Robert Bale, a student.

Dr. Nielsen reports that the members of the expedition thought it appropriate that America's greatest scientists be honored by having the mountains of the previously unexplored central Chugach region named after them, and so, in addition to Mt. Einstein, the list of peaks in the vicinity now includes Mt. Fermi, Mt. Willard Gibbs, Mt. Gilbert Lewis, Mt. Langmuir, and Mt. Michelson. Of these peaks, only Mt. Einstein has been climbed. The first ascent was made on June 17, 1957, by a party led by Dr. Nielsen and including Arthur Maki and photographer Dave Bohn, attorney Martin Mushkin, and Don Mokski, a mechanical engineer. Known as a region of dense fog, heavy snow, high wind, and generally miserable weather, the peaks of the Chugach Mts. dominate the horizon north of Prince William Sound between Anchorage and Valdez. The party that climbed Mt. Einstein also made the first ascent of Mt. Valhalla, Mt. Elusive, and Mt. Wither-spoon, which at 12 023 ft. is probably the highest of the peaks.

Science Education

The 1958 session of the Summer School for Theoretical Physics of the University of Grenoble will be held July 7 to August 29 in Les Houches (Haute Savoie), France. This year's program will be devoted to the many-body problem in nuclear physics, solid state, and superfluids. Lecturers will include Professors D. Bohm, N. N. Bogolubov, K. A. Brueckner, K. Huang, N. Hugenholtz, B. R. Mottelson, D. Pines, and R. Schrieffer. Classes will be given in French and English. The number of participants is limited to thirty. Further information and admission forms may be obtained by writing to Mr. Philippe Nozieres, 76 bis, rue de Rennes, Paris 6 ème, France.

Courses in nuclear energy for high-school teachers will again be offered by Argonne National Laboratory, Lemont, Ill. Four 2½-week sessions are tentatively set to run from June 9 through August 27. The courses, which are sponsored by the Argonne chapter of the Scientific Research Society of America, will include lectures by Argonne scientists, laboratory work in physics, chemistry, biology, and metallurgy, and visits to reactors and other facilities. Inquiries about the courses should be directed to Dr. Earl W. Phelan, Laboratory Director's Office, Argonne National Laboratory, P. O. Box 299, Lemont, Ill.

Teacher-training programs will be sponsored by the National Science Foundations at 108 summer institutes in 104 educational institutions located throughout the United States and its Territories during the summer of 1958. An estimated 5000 high-school teachers and 250 college teachers are expected to participate in this



Mt. Einstein, named in '55, climbed in '57