Miscellany

Science and Foreign Relations

Seven scientists, three of whom are physicists, were appointed by the State Department in December to serve for the next two years as scientific advisers to United States embassy staffs in London, Paris, Rome, Bonn, Stockholm, and Tokyo under the Department's newly resurrected overseas science officer program.

The physicists named as science officers are: (for London) Thomas H. Osgood, dean of the School for Advanced Graduate Studies at Michigan State University and editor of the American Journal of Physics; (for Rome) Walter Ramberg, chief of the Mechanics Division of the National Bureau of Standards; and (for Stockholm) Julian E. Mack, professor of physics at the University of Wisconsin.

Others appointed as science officers are: (for Bonn) Ludwig F. Audrieth, professor of chemistry at the University of Illinois; (for Tokyo) Willis R. Boss, professor of zoology at Syracuse University; (for Paris) Edgar L. Piret, professor of chemical engineering at the University of Minnesota. In addition, Edward H. Cox, retired head of the Department of Chemistry at Swarthmore College, has been appointed as deputy science officer for Paris.

The science program of the Department of State was formally reestablished by the Administration one year ago when Wallace R. Brode, associate director of the National Bureau of Standards, took over the long vacant post of science adviser to the Secretary of State. Still to be appointed, according to Dr. Brode, are science officers for embassies in the USSR, India, and South America, as well as deputy science officers for all the posts except Paris, to which Dr. Cox has been assigned. The science officers selected for overseas duty, according to the Department, will serve primarily as ambassadorial advisers "in the evaluation of the interaction of science with foreign policy, the assessment of current scientific progress abroad, and the enhancement of the liaison between United States and foreign scientists and engineers".

Awards

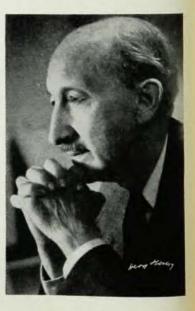
The second Atoms for Peace Award, consisting of a gold medal and an honorarium of \$75 000, was presented last month to Nobel Laureate George C. de Hevesy of Sweden in recognition of his pioneering work in the use of radioactive isotopes for studying organic systems. The first such award was presented to Niels Bohr in October 1957. The prize was created by the

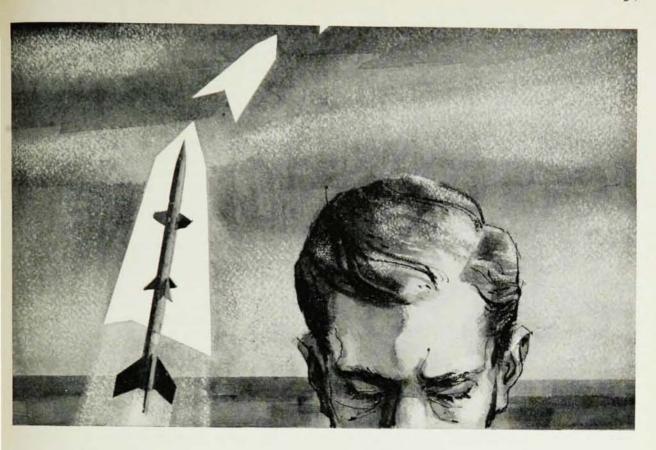
Ford Motor Company as a memorial to Henry Ford and his son, Edsel Ford, and is administered by a Board of Trustees, which with the assistance of an advisory committee on nominations selects the annual winner "without regard for nationality, politics, or any other consideration except the merit of the contribution."

In tribute to Prof. de Hevesy, Board Chairman Detlev W. Bronk said: "His willingness to accept a failure in a chemical experiment as a starting point for new explorations led to the first use of radioactive isotopes as tracers in chemical studies. His application of this discovery to biological systems has revolutionized our concept of the biochemical processes in living organisms. He was the first to apply both natural and artificial isotopes to the study of plants and animals; he introduced the use of stable isotopes and he was the first to explore the possibility of creating radioactive substances within the system being studied by means of neutron bombardment. These discoveries, now adopted in laboratories and hospitals all over the world, are certainly among the most important advances in the peaceful use of atomic energy in our time."

Prof. de Hevesy, who was awarded the Nobel Prize in chemistry for 1943, was born in Budapest, took his doctorate at Freiburg in 1908, and after studying in Switzerland and Germany went to England in 1911 to work with Ernest Rutherford. Here he failed to separate Radium D from lead, and as a result developed the use of that radioactive isotope as a tracer for lead. From 1913 to 1920, while at the University of Budapest, he continued to use the tracer technique in studies of lead in organic and inorganic compounds. In later years, working at the Institute for Theoretical Physics in Copenhagen, he extended his tracer techniques to include the use of heavy water and of artificially radioactive elements. Since World War II he has worked in Copenhagen and at the Research Institute for Organic Chemistry in Stockholm, his present home.







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Chien-Shiung Wu of Columbia University, who received the Research Corporation Award for 1958 for her contributions to the success of the first experimental demonstration of the violation of parity conservation.

The 1958 Research Corporation Award, consisting of a \$2500 honorarium, a plaque, and a citation, has been presented to Chien-Shiung Wu, professor of physics at Columbia University, for the part she played in finding a loophole in the law of parity conservation. Dr. Wu, who is the first woman ever to receive the award, was cited for "her crucial contributions to the major advances during the last ten years in understanding beta-decay and the weak interactions, especially for the first clear experimental demonstration, through beta-decay of oriented nuclei, of the violation of parity conservation, long considered a fundamental law of nature".

The experiment, carried out in 1956 in collaboration with E. Ambler, R. Hayward, D. D. Hoppes, and R. P. Hudson of the National Bureau of Standards at the NBS Low-Temperature Laboratory in Washington, confirmed the earlier predictions of theorists T. D. Lee and C. N. Yang. The 1957 Nobel Prize in physics was presented jointly to Drs. Lee and Yang for their work.

Research Corporation is a foundation established in 1912 by the late Frederick Gardner Cottrell to support scientific research in colleges, universities, and scientific institutions.

A memorial lectureship bearing the name of the late Ernest O. Lawrence has been established by the National Academy of Sciences. The first Lawrence Memorial Lecture ("Atomic Beam Research on Radioactive Atoms") was given by William Nierenberg, professor of physics at the University of California, during the Academy's meeting last November on the University's Berkeley campus. The meeting took place twenty-eight years after another fall meeting of the Academy in Berkeley, on which occasion Lawrence

presented his first formal paper on the cyclotron. Professor Lawrence, who received the Nobel Prize in physics in 1939 and the Atomic Energy Commission's Enrico Fermi Award in 1957, died last summer after having served as a member of the Western delegation at the meeting of Western and Soviet bloc scientists which was held in Geneva to discuss the technical aspects of nuclear test detection methods.

The Gravity Research Foundation is again offering five awards for the best short essays (up to 1500 words) "on the possibilities of discovering (a) some partial insulator, reflector, or absorber of gravity, or (b) some alloy, or other substance, the atoms of which can be agitated or rearranged by gravity to throw off heat, or (c) some other reasonable method of harnessing, controlling, or neutralizing gravity". The essays must be submitted, in triplicate, before April 15. They must be accompanied by a title, 100-word summary, and short biographical sketch and should be sent to the Gravity Research Foundation, New Boston, N. H.

E. I. duPont de Nemours and Company has awarded grants totaling nearly \$1.2 million to 139 colleges and universities for the support of fundamental research and for strengthening the teaching of science and related liberal arts during the 1959–60 academic year, under the company's annual program of aid to education. In the only major change in this year's program, Du Pont has nearly doubled its grants for unrestricted research in the physical sciences.

Facilities

Design studies for a proposed high-energy, highintensity electron accelerator at the National Bureau of Standards are currently being conducted by the Bureau's High-Energy Radiation Laboratory. The ultimate aim is to build a machine capable of operating in an energy range in excess of 50 Mev and having an electron beam power of about 40 kilowatts. Within the next few months, it is expected, the study will result in a detailed specification for the accelerator. If the necessary funds are provided, contracts for the machine and for constructing a laboratory building to house it will be awarded sometime next summer. The proposed building would also house the present 50-Mev betatron and 180-Mev synchrotron and be located on the Bureau's new site, a 550-acre tract of land near Gaithersburg, Md. In addition to the emphasis placed upon accelerator design and shielding problems, the preliminary study involves an investigation of the feasibility of storage rings or similar devices and an examination of applications of such an accelerator to problems involving measurement standards for high-intensity electron beams, research in nuclear and particle physics, free radical research, and radiation damage.

Stanford University has established an Institute of Theoretical Physics which will function as a part of the Stanford Physics Department and where theoretical studies will be conducted that will complement