News and views

Atoms for Peace

PRESIDENT Eisenhower, in a commencement-day address at Pennsylvania State University on June 11th, added two new proposals for United States cooperation in international atomic energy affairs under the atoms for peace plan first set forth on December 8, 1953. The new programs, which will be submitted to Congress "in the conviction that they reflect the spirit and intent of law and of the American people", were described in the following terms:

"First, we propose to offer research reactors to the people of free nations who can use them effectively for the acquisition of the skills and understanding essential to peaceful atomic progress. The United States, in the spirit of partnership that moves us, will contribute half the cost. We will also furnish the acquiring nation the nuclear material needed to fuel the reactor.

"Second, within prudent security considerations, we propose to make available, to the peoples of such friendly nations as are prepared to invest their own funds in power reactors, access to and training in the technological processes of construction and operation for peaceful purposes.

"If the technical and material resources of a single nation should not appear adequate to make effective use of a research reactor, we would support a voluntary grouping of the resources of several nations within a single region to acquire and operate it together.

"Our purpose is to spark the creative and inventive skills latent in the free world, to pool them and to put them to work for the betterment of the conditions under which men must live.

"The research reactors acquired under this program will be fertile seeds for progress sown in the receptive soil of the free nations. The cost to people of the United States will be small indeed when measured against the certain returns, tangible and intangible.

"The second proposal will be of immediate interest mainly to the power-short areas of the world where atomic power may be economically feasible even today. Some of the countries, however, lack the knowledge and experience needed to construct and operate a commercial power reactor. This we can share for constructive purposes with friendly countries without real risk to our national security. Such sharing is expressly contemplated by the new Atomic Energy Act.

"Together, these two provisions are designed, within the limits of prudence, to clear away some of the obstacles that have impeded progress in nuclear science to permit its peaceful application by all who propose to make it serve mankind.

"Here is an invitation—to scientists and engineers, to industries and governments—to pool their energies and creative talents that this great achievement of the human mind may bear the fruit of its infinite promise."

In submitting the new proposals, the President noted that although the United Nations had adopted a resolution last year recommending the formation of an international atomic agency to receive contributions of fissionable materials from the stockpiles of participating nations, "the Soviet Union has indicated no willingness to share any part of its nuclear stockpile with such an agency". The U. S. offer to contribute to an international pool of fissionable materials still stands, he said, but "we cannot wait on Soviet decisions".

The Atomic Energy Commission has stated in this regard that twenty agreements with foreign countries were expected to be signed by June 15th to provide each country with six kilograms of uranium concentrate for experimental purposes and to permit the nations involved to acquire an atomic reactor in the United States.

Plans for next month's International Conference on the Peaceful Uses of Atomic Energy at Geneva, Switzerland, are meanwhile proceeding according to schedule. The AEC has announced that more than one thousand American scientists and engineers have submitted abstracts of papers they wish to present at the conference, and that a "first group" of 189 abstracts were tentatively accepted and forwarded to the United Nations two months ago. The technical director for U. S. participation in the conference, George L. Weil, explained however that "within the time allotted to the U. S. at the conference only a relatively small number of all the papers eventually accepted can be presented in person by the authors. Other papers will be published in the Conference Proceedings."

By the middle of June, according to the United Nations Conference Office in New York, 1070 abstracts were under review, of which it was anticipated that about one-third would be selected for presentation at Geneva. The program for the conference, which will begin August 8th and extend through August 20th, will emphasize nuclear reactor technology. The first three and one-half days of the meeting will be given over to discussions of the economics of nuclear power, legal considerations, health and safety, and other general matters. Eight days will then be devoted to three groups of parallel technical sessions dealing with (1) reactor engineering and physics, (2) reactor chemistry, and (3) radiation biology and medicine, and the applications of radioisotope techniques in industry, science, and medicine.

The program is being organized under the leadership of Walter G. Whitman, head of the department of chemical engineering at the Massachusetts Institute of Technology, who was named Secretary General of the

conference earlier this year by the Secretary General of the United Nations, Dag Hammarskjold. The conference itself will be presided over by the chairman of India's Atomic Energy Commission, Homi J. Bhabha.

Elaborate preparations have been made for exhibits relating to reactor technology, nuclear instrumentation, and isotope applications. The United States is constructing a small research reactor (at an estimated cost of $350 000) for demonstration during the conference to "enable visiting scientists and technicians to observe a reactor which provides excellent facilities for a variety of cross-section measurements and experiments with neutrons and gamma rays, including shielding studies and production of radioisotopes". After the conference the research reactor will be sold to Switzerland.

Ceremonies at CERN

REPRESENTATIVES of Switzerland and its Canton of Geneva, where the laboratory of the European Organization for Nuclear Research (CERN) is being constructed, took part in two ceremonial functions last month that signified progress in the cooperative endeavor of twelve European nations to complete the laboratory. During the afternoon of June 10th the Foundation Stone was set in place at the CERN site at Meyrin in the presence of Max Petitpierre, President of the Swiss Confederation, François Perréard, President of the "Conseil d'Etat" of the Republic and Canton of Geneva, Sir Ben Lockspeiser (England), President of the Council of CERN, and a large assemblage of distinguished guests. The following morning, P. R. Micheli, Minister Plenipotentiary and head of the Division for International Organizations of the "Département politique fédéral", and CERN's Director General, Felix Bloch, signed a "Headquarters Agreement" defining the status of CERN in Switzerland.

International Geophysical Year

AN Office for the International Geophysical Year has been established by the National Science Foundation, which is the government agency responsible for the administration of special federal appropriations being made in support of United States participation in the International Geophysical Year and for coordinating government interests in the undertaking. The new office is headed by J. Wallace Joyce, who comes to the Foundation from the Department of Defense, where he has been serving as a member of the staff of the Assistant Secretary of Defense for Applications Engineering. As administrator of the Foundation's activities in IGY, Dr. Joyce will work closely with the Earth Sciences and Astronomy Sections of the Foundation, utilizing both the facilities and the information available through these continuing programs.

Under the auspices of the International Council of Scientific Unions, thirty-eight nations have already agreed to join, during the year 1957–58, in a vast effort to collect synoptic data in such fields as geodesy, meteorology, the upper atmosphere and ionosphere, oceanography, earth magnetism, and latitude determinations.

The National Academy of Sciences, which adheres to the International Council of Scientific Unions on behalf of scientists of the United States, has been responsible for developing the scientific program to be carried out by this country during the International Geophysical Year. To plan and carry out the program, the Academy established the U. S. National Committee for the International Geophysical Year, composed of leading American scientists. This committee is assisted by the twelve technical panels dealing with the various phases of the program.

Letter to the Editor

THE importance of Dr. Heinz Haber's aptly titled article "Safety Hazard of Tinted Automobile Windshields" in the June *Journal of the Optical Society of America* should not go unheeded by members of the Institute. The information and conclusions presented by Dr. Haber affect every person who drives or rides in an automobile. The sense of sight is of prime importance for safe driving. The magnitude of visibility losses resulting from tinted windshields may be argued in technical journals for years, but the fact remains that there is a loss which is readily apparent to any driver whose car is equipped with tinted windshields. Moreover, according to Dr. Haber "safe" visibility is incompatible with the attainment of the advantages claimed for tinted windshields, namely glare protection and reduction of radiant heat transmission.

Fortunately, tinted windshields introduce a driving hazard which could be readily eliminated. The problem is how to do it. I doubt that modification of windshield specifications in the American Standard Safety Code or articles in technical journals will directly eliminate the menace. Automobile manufacturers are likely to sell tinted windshields as long as there is a market for them. Thus, it seems to me that the most direct and possibly the simplest method of eliminating tinted windshields is to legislate them out of existence on the state level. This should not be too difficult when it is stressed that tinted windshields are an item on which everyone stands to lose and few, if any, stand to gain. Passage of laws banning tinted windshields on new cars in just a few states would undoubtedly encourage other state legislatures to do likewise and would ultimately discourage automobile manufacturers from equipping new cars with them. It is in convincing state legislatures by individual action, if not by collective action, in the form of letters that the members of the Institute can do every automobile driver a service.

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