

News of Science

International Atomic Energy Agency

Postponement of the first general conference of the International Atomic Energy Agency until 1 Oct. has been announced by the preparatory commission. The meeting had been scheduled to start 19 Aug. The conference is to organize the new agency and make decisions on its program during its first year. The new date will insure sufficient time for participating governments to consider program proposals.

It is possible that the postponement was influenced by the failure of the United States and other atomic powers to ratify promptly the statute of the agency. The following states have so far deposited instruments of ratification with the Government of the United States, acting as depositary government: 29 Mar., Guatemala; 5 Apr., Switzerland; 8 Apr., Byelorussian S.S.R. and U.S.S.R.; 12 Apr., Romania; 2 May, Pakistan; 10 May, Austria. In order to come into effect, the statute must be ratified by 18 states, including three of the following five: Canada, France, the U.S.S.R., the United Kingdom, and the United States.

College Presidency Study

Harold W. Dodds, who retires this month as president of Princeton University, will direct a study of the office of the college and university presidency, with support from the Carnegie Foundation for the Advancement of Teaching. The foundation has announced that it has made a grant for this purpose to the Institute for College and University Administrators, Boston, Mass.

Dodds will begin work on the study, which will probably take 2 years to complete, on 1 Jan. of next year in New York City. He and a small staff expect to look into the historical development of the office in the United States and the nature of the college president's job today. Dodds will visit a number of campuses and will talk not only with presidents but with deans, faculty members, and members of boards of trustees.

In midsummer, after launching the preliminary phases of the study, Dodds

will depart for Australia to accept a long-standing invitation of the Australian Vice-Chancellor's Committee. The committee annually invites a distinguished educator from overseas to lecture to Australian universities and to discuss general education problems with Australian educators. Dodds' visit will mark the first time that the Vice-Chancellor's Committee has invited its annual guest lecturer from outside of the Commonwealth. Dodds will arrive in Sydney in late August and will return to the United States sometime in December.

First-Generation Effect of Radiation

An experiment that was designed by W. L. Russell of the Oak Ridge National Laboratory to compare the genetic effects of neutrons from an atomic bomb with those from a cyclotron has led to some observations on the effect of neutron radiation on length of life [*Proc. Natl. Acad. Sci. (U.S.)* 43, 324 (April 1957)]. Russell exposed male mice, shielded by 7-inch-thick lead hemispheres, to atomic bomb radiation. The lead shielding reduced the gamma-component of the bomb's radiation to such an extent that it would not seriously interfere with estimates of neutron effect. The exposed mice were crossed with untreated females and the offspring kept throughout their life-span. In a summary of his results Russell states:

"Length of life in the offspring of male mice exposed to moderate doses of neutron radiation from a nuclear detonation is shortened by 0.61 day for each rep received by the father over the dose range tested. . . . Extrapolating to a proportional shortening of life in man gives 20 days per rep received by the father as the point estimate and 5 and 35 days as the 95 percent confidence limits. . . . It seems likely that, even when allowance is made for the conditions of human radiation exposure, shortening of life in the immediate descendants will turn out to be of a magnitude that will warrant serious consideration as a genetic hazard in man." Russell attributed the shortening of life largely to the dominant deleterious effects of recessive lethal genes.

NSF In-Service Institutes

Grants totaling \$138,000 have been awarded by the National Science Foundation to 18 colleges and universities in the United States and its territories to support in-service institutes designed to improve the training of high-school teachers of science and mathematics. In-service institutes will begin in the fall of 1957 and will run through the academic year 1957-58. Each will offer special courses in the subject matter of science or mathematics especially designed for the needs of high-school teachers.

Institutes will be held in the evenings and on weekends in order that teachers may attend them outside regular teaching hours. Travel expenses, tuition, and fees for each participant will be covered by the grant from the National Science Foundation. Participants in each institute will be selected from high-school teachers within a radius of some 50 miles of the host institution.

This program is an experimental extension of the current programs of summer and academic-year institutes for high-school teachers sponsored by the National Science Foundation [*Science* 125, 108 (18 Jan. 1957); 981 (17 May 1947)]. The high degree of teacher interest in such work is indicated by the fact that there were more than 25,000 applications for some 5000 openings in the 1957 summer and academic-year institute programs.

Bensley Memorial Fund

A memorial fund in honor of R. R. Bensley, formerly of the University of Chicago, is being established. The American Association of Anatomists will administer the fund, and the proceeds will be available equally to Canadians and citizens of the United States. Bensley made a number of classical contributions to cytology and to cytological chemistry. Contributions for this fund may be sent to Normand L. Hoerr, Western Reserve School of Medicine, Cleveland 6, Ohio.

Biochemistry at Brandeis

Brandeis University in Waltham, Mass., has established a graduate department of biochemistry as a result of a gift made to the university by the Dorothy H. and Lewis S. Rosenstiel Foundation. The initial staff appointments are as follows: Nathan O. Kaplan of the McCollum-Pratt Institute, Johns Hopkins University, professor and chairman of the department; and Martin D. Kamen of the department of radiobiology, Washington University Medical School, professor of biochemistry. Wil-

liam F. Loomis of the Loomis Laboratory will also have an appointment as professor of biochemistry. Assistant professors are Mary Ellen Jones of the Biochemical Research Laboratories at Massachusetts General Hospital, Lawrence Levine of the New York State Department of Laboratories, Lawrence Grossman of the National Institutes of Health, and William P. Jencks of the department of chemistry at Harvard University.

The department will offer a program of studies leading to the Ph.D. degree. An advanced training program for investigators with a Ph.D. or an M.D. degree is also planned. Research activities of the department will be carried out in a number of different areas, including intermediary metabolism in normal and tumor tissue, enzymology, immunochemistry, biochemical and immunogenetics, biochemical basis of chemotherapy, protein chemistry, plant and virus metabolism, radiobiology, problems in growth and differentiation, photobiology, microbial metabolism, and organic biochemistry. The department will begin its program on 1 July.

Hughes Department for Radiation Study

A new department of nuclear electronics has been announced by the Hughes Aircraft Company, Los Angeles, Calif. The department, headed by John W. Clark, will work with systems designers and manufacturers of components to measure radiation effects on materials and circuitry and to improve their performance under nuclear radiation conditions. The new group will specialize in radiation physics; dosimetry, particularly for high nuclear radiation rates; development of reliable techniques for radiation experiments, and design of radiation testing facilities.

AEC Radiation Protection Rule

The U.S. Atomic Energy Commission has amended its regulation on standards for protection of workers and the public against radiation to provide that those who are licensed shall promptly notify the commission of potentially serious accidents involving licensed material. They must now immediately notify the nearest AEC operations office of any incident involving licensed material which may have resulted in appreciable release of radioactive material or excessive exposure of individuals to radiation. This will enable the commission to assure that appropriate steps are taken to minimize the consequences of the incident, to determine its cause, and to initiate corrective action. Holders of licenses are required,

also, to make a detailed report in writing, within 30 days, of all such incidents, regardless of their nature or extent, resulting in radiation exposures or concentrations of radioactive materials above permissible limits.

Spectrochimica Acta

Pergamon Press, Ltd., has announced that a reorganization of the scope of *Spectrochimica Acta* has been undertaken so as to take into account the changing emphasis in spectroscopy in recent years. The journal, which used to be mainly directed to problems of atomic emission spectroscopy and spectrographic analysis, will now reflect the impact upon chemistry, whether organic or physical, of molecular spectroscopy; problems of atomic emission spectroscopy will continue to be fully treated.

In the future, the journal will be published in four-issue volumes, containing the same number of pages as hitherto published in the six-issue volumes, and it is hoped that the journal will appear monthly. This increased rate of publication will make possible rapid publication of papers and also of short research notes, up-to-date reports on spectroscopic meetings, and general information of interest to spectroscopists. It is hoped that full-length papers can be published within 90 days of their acceptance and short communications within a maximum of 60 days.

Teacher Shortage in West Germany

The German Research Association, Bonn, has reported in its most recent survey that the shortage of science teachers in West German technical schools is "catastrophic." The report seems to indicate that some of the factors producing critical shortages in the United States are also operative in West Germany. These factors include an inadequate number of technical schools for the growing population, small teaching staffs, and poorly equipped technical schools.

The report says that there is a 60 percent shortage of engineers and assistants in the technical schools. The shortage of technical and workshop personnel in the school system has risen to 96 percent.

Further, the physical condition of the school buildings in many cases is very poor. Almost 50 percent of the schools specializing in chemistry were constructed before 1918. Between 20 and 30 percent of these institutions are described as "dilapidated." More than two-thirds of the schools are too small.

The income of science teachers compared with that of their graduates poses the same problem as in the United

States. The shortage of technical personnel in engineering and chemical industries has also assumed a pattern similar to that in the United States. The Sunday editions of leading newspapers contain as many as eight and ten pages of classified advertisements for electronic, mechanical, construction, chemical, and steel engineers. Foreign concerns, including American organizations, have also been advertising for trained personnel to be employed in their German or overseas plants.

Public Relations and the Laboratory

Leland Haworth, director of Brookhaven National Laboratory, recently warned a group of Latin-American scientists that the public relations aspect of any atomic program is of primary importance. To demonstrate his point, he described the succession of events that followed the accident that took place at Brookhaven last month, when several laboratory staff members were injured, none fatally, in a chemical explosion.

Within minutes after the news of the explosion had been made public by bulletins and radio broadcasts, the laboratory switchboard was swamped. A Detroit editor had asked how much of Long Island had been destroyed; the *Times of London* wanted all details; one report said that there had been 1000 fatalities; the Oak Ridge National Laboratory wanted to know how it could help; and Haworth's daughter in California phoned that evening to see how he had come through the disaster.

Haworth deplored any unscheduled explosion, even in a test laboratory, but he emphasized that every nuclear research center should have well-organized public relations and press information sections fully prepared to deal with such emergencies. He went on to comment as follows about news and radio people: "They do things differently from scientists, who hold accuracy first and speed second. In some quarters, matters of public information are reversed. The Wednesday [explosion] event is a case in point. When word was passed out, there was a news chain reaction that went to many parts of the world."

N.Y.U.-Bell Laboratories Program

A graduate study center will be established by New York University at the Bell Telephone Laboratories this fall. At the center certain Bell Laboratories employees will be able to earn advanced engineering degrees by attending classes during regular business hours while receiving full-time pay.

A committee of Bell scientists worked