

layed access to archives and libraries hampered work. Travel restrictions were maintained, and difficulties were encountered in establishing free and open social relations with Russian students.

The second year of the program, which is now beginning, calls for the exchange of 32 Soviet graduate students for 27 Americans. The Americans represent 14 universities around the country. Many of the Russian students, following the pattern set last year, will work in science and technology. This year, for the first time, some of the American students will also work in these fields.

Argonne International School To Become International Institute

The International School of Nuclear Science and Engineering at the U.S. Atomic Energy Commission's Argonne National Laboratory, Lemont, Ill., will expand its activities and broaden its program to help meet new scientific needs of nations throughout the world. The change will become effective in February 1960, after completion of the school's ninth session in December. The school will then be known as the International Institute of Nuclear Science and Engineering.

The institute will give greater emphasis to advanced training and will offer less background instruction, inasmuch as this type of training now is becoming available in colleges and universities. Personnel enrolled in the institute will represent the United States and many foreign countries. Instruction in the institute, like that of the school, will be on an unclassified basis.

Appointment to the Institute

Rollin G. Taecker, director of the international school, who will be director of the institute, emphasized that the new curriculum will be entirely on a postgraduate level, requiring for entry the equivalent of a master's degree from a United States university. As is the case with the present international school, all those taking part in the new program must be sponsored by industry, government, or the atomic energy agency in their home country. Scientists and engineers appointed to the institute will follow two types of program objectives. The first, the "participant" appointment, will require the equivalent of a United States university's master's de-

gree and a background in fundamental nuclear studies. Participants may be selected for one or two 16-week terms. Instruction will emphasize the applied aspects of nuclear science. Tuition for participant appointees will be \$1000 per term.

The second, or "affiliate," appointment level will require the equivalent of a United States institution's doctor of philosophy degree. Affiliates will be accepted for no less than two terms. Preferably, their stay at Argonne will be a full calendar year. Their abilities must be such as to enable them to contribute significantly to the over-all Argonne scientific research program.

At the beginning, appointments to the institute will be made in five program areas. These are: reactor science and technology, engineering research and development, physical science research, life science research, and the engineering, administration, and operation of nuclear facilities. When the new International Institute first opens in February, programs in all but the fifth area of instruction will be offered. The engineering, administration, and operation course sequence will start with the institute's second term, which begins in June.

During the last seven of the nine sessions of the school at Argonne, the U.S. Atomic Energy Commission has drawn on the facilities of North Carolina State College and Pennsylvania State University to provide initial training for students enrolled in its international program. Since several other universities throughout the world now have comparable nuclear training courses and equipment, this phase will cease with the beginning of the institute.

Through its first eight sessions, the International School of Nuclear Science and Engineering at Argonne has trained 478 scientists and engineers, 102 from the United States and 376 from 43 foreign countries. Forty-four scientists and engineers are attending the current session of the school.

Conquest Programs Resumed

Conquest, a CBS television series that is prepared in cooperation with the AAAS, will resume broadcasting of weekly half-hour Sunday programs, 5 to 5:30 P.M. EST, beginning 1 November. News correspondent Charles Collingwood is host-narrator of the telecasts, which will explore new develop-

ments in various fields of science. The subjects to be covered in the 20 shows scheduled include tuberculosis, embryology, oceanography, fallout, streptococcus, evolution, and solar research.

The opening program deals with the nature of mother love as determined by experiments on baby rhesus monkeys. The work will be demonstrated by Harry Harlow, University of Wisconsin psychologist, who is conducting the research. *Conquest* is sponsored by the Monsanto Chemical Company.

International Committee To Study Technical Literature Problems

A committee representing 10 countries was named at the closing session of the International Conference for Standards on a Common Language for Machine Searching and Translation to continue the work of the conference. Co-sponsors of the meeting, which met in Cleveland, Ohio, 6-12 September, were Western Reserve University and the Rand Development Corporation. The new group will conduct studies under the four main headings of research, nomenclature, exchange of materials, and information and exchange of personnel.

Brian Vickery of Imperial Chemical Industries of Great Britain was elected president of the committee. Allen Kent, associate director of Western Reserve's Center for Documentation and Communication Research, was elected general secretary. Vice-Presidents are J. Dekker of the Netherlands, S. R. Ranganathan of India, Rudolph Bolting of Brazil, and a representative, yet to be named, of the U.S.S.R. Sponsorship will be sought by the committee from existing agencies, such as the International Standards Organization and the United Nations.

The conference in Cleveland was an experimental effort to combat the problems associated with the growing mass of technical literature. More than 200 persons from 10 countries—Brazil, France, India, Italy, Japan, the Netherlands, the United Kingdom, the United States, the U.S.S.R., and West Germany—heard 55 formal papers reviewing work in progress in machine literature searching, machine translation, and language studies for machine searching, correlation, and translation.

The featured speaker of the week was Senator Hubert H. Humphrey (D-Minn.) who, in discussing "Knowledge

is Power," stressed the need for improved mechanical information services on a coordinated basis and for more cooperation within the United States as well as among the various nations of the world. The Senator deplored the slow start made by U.S. government agencies in recognizing the problem of the burgeoning technical literature and in taking effective steps to support new ideas for controlling it.

The proceedings of the conference are to be published in March 1960 by Interscience Publishers, Inc., 250 Fifth Ave., New York 1, N.Y.

Pharmacologists Form International Body

At the 21st International Union of Physiological Sciences held in Buenos Aires in August 1959, a Section on Pharmacology of the IUPS was created and empowered to arrange for symposia, conferences, and congresses and to carry out fellowship programs as well as other activities that will contribute to the advancement of pharmacology. An organizing meeting of the new section was held on 11 August. It was decided to build the new section around the already existing International Council of Pharmacologists, which contains one representative of each nation or region that adheres to the IUPS. The following executive committee was elected: president, Carl F. Schmidt (U.S.A.); vice president, S. Anitchkov (U.S.S.R.); secretary, D. Bovet (Italy); and treasurer, D. M. Aviado (U.S.A.).

Grants, Fellowships and Awards

Radiology. On behalf of the James Picker Foundation, the National Academy of Sciences-National Research Council has announced a new fellowship program, the James Picker Foundation Advanced Fellowships in Academic Radiology. These awards are offered in addition to the previously established research fellowships and scholar and research grants, which will be continued during 1960-61.

The new program is designed to prepare a candidate to meet in full the demands of an academic position in radiology. In general, it is expected that a candidate will be not more than 33 years of age and will have completed his clinical training. He should be pre-

pared to devote a minimum of 2 years to course work in the basic sciences, to the application of the techniques and methods of these basic disciplines to radiological research, and to other activities designed to enhance his preparation for an academic career. Applications will be accepted on nomination by a candidate's clinical adviser, who should be a member of the staff of a department of radiology in a medical school.

The previously established program of the Picker Foundation, for which applications again are being invited, comprises three types of awards: post-doctoral fellowships in radiological research; grants for scholars, a transitional form of support to bridge the gap between the completion of research fellowship training and the period when the young scientist has thoroughly demonstrated his competence as an independent investigator; and grants-in-aid of research, designed to encourage investigations offering promise of improvement in radiological methods of diagnosis or treatment of disease.

Applications in all four categories will be reviewed by the Committee on Radiology of the Academy-Research Council's Division of Medical Sciences. Final determination of awards is made by the foundation upon recommendation of the division. Support is not restricted to citizens of the United States or to laboratories within this country.

Applications for 1960-61 should be submitted by 15 December. Further details and application blanks may be obtained from the Division of Medical Sciences, Room 411, National Academy of Sciences-National Research Council, 2101 Constitution Avenue, NW, Washington 25, D.C.

The National Research Council of Canada serves as scientific adviser to the James Picker Foundation with respect to its Canadian program. Accordingly, if the proposed studies are to be carried out in Canada, requests for information and application forms should be directed to the Awards Office, National Research Council of Canada, Ottawa 2, Canada.

Summer conferences. The National Science Foundation has announced that it will continue to support in 1960 an experimental program of some 20 Summer Conferences designed primarily for college teachers of engineering, science, and mathematics. The Summer Conferences are of shorter duration than,

but generally similar to, the Summer Institutes that the foundation has supported in recent years.

Colleges and universities interested in sponsoring such conferences are invited to request further information from the Program Director for Summer Institutes, National Science Foundation, Washington 25, D.C. The deadline for submitting proposals is 15 December.

Teacher training. The National Science Foundation has announced that approximately 550 summer fellowships for graduate teaching assistants will be offered for the summer of 1960. Designed to enable graduate teaching assistants to devote their full summer to study and research, the fellowships will be offered in the sciences, mathematics, and engineering.

In this, the second year of operation of the program, teaching assistants at 150 institutions that are authorized to confer the doctoral degree in at least one of the sciences will be eligible to apply for summer fellowships. First-year participation in the program had been limited to 115 institutions which had awarded a specified minimum number of science doctorates.

Teaching assistants at the participating institutions should apply through their own institutions and will be screened and evaluated initially by their faculties. Summer tenures from 8 to 12 weeks may be selected by the fellow. The stipend will range from a minimum \$50 per week up to a maximum of \$75 per week.

Awards will be provided for study in the mathematical, physical, medical, biological, and engineering sciences, as well as in anthropology, psychology (excluding clinical areas), and certain selected social sciences. The social sciences included are geography, mathematical economics, econometrics, demography, information and communication theory, experimental and quantitative sociology, and the history and philosophy of science, where they conform to accepted standards of scientific inquiry by fulfilling the requirements of the basic scientific method as to objectivity, verifiability, and generality.

Application materials may be obtained from the graduate dean of a participating institution, or from the Fellowships Section, Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C. Applications must be submitted to the graduate deans by 11 December.