

SCIENCE EDUCATION

Soviet-American Exchange Program

Opportunities to spend from one semester to fifteen months in the Soviet Union as participants in the Soviet-American academic-exchange program for the academic year 1962-63 have been announced by the Inter-University Committee on Travel Grants. The program, which has been in operation since 1958, will cover study and research in physics, chemistry, mathematics, and other technical fields as well as in the social sciences and humanities. An approximately equal number of Soviet students will spend all or part of the year in the US.

Participation is limited to American citizens under forty years of age who are graduate students, postdoctoral researchers, or faculty members at the time of application. In addition, a knowledge of Russian adequate to the needs of research and study and a substantial understanding of both Russian and American history and culture are required. The Soviet Union has not agreed to permit participants to take their entire families with them but those persons remaining a minimum of one academic year may be accompanied by their wives who, if the participant's needs require, will also be maintained by the funds available through the committee.

Applications must be submitted no later than December 15, 1961. The necessary forms are obtainable from S. Viederman, Deputy Chairman, Inter-University Committee on Travel Grants, 719 Ballantine Hall, Indiana University, Bloomington, Ind.

NDEA's First Two Years

During the first two fiscal years in which the National Defense Education Act has been in effect the nation's public elementary and secondary schools have received more than \$108 million (half being federal funds) to improve the teaching of science and mathematics. According to an announcement by the US Office of Education, the various states have approved 56 545 projects involving science and mathematics under the provisions of Title III of the Act. These projects have ranged in cost from less than \$100 to more than \$50 000 and have included minor remodeling of 6211 classrooms and laboratories as well as the purchase of laboratory equipment and instructional aids.

As a result of this combined federal, state, and local effort to improve instruction, the following trends have been reported by the Office of Education: newer and advanced concepts of mathematics are being introduced at earlier grade levels; some high schools are adding third- and fourth-year courses in mathematics; there is

greater emphasis on laboratory work in which students have opportunities for individual experiments; more science instruction is being provided in elementary schools; many states report increasing enrollments in science and mathematics, in some cases as much as 40 to 50 percent; and advanced physics and chemistry courses are being added in many high schools.

In addition to funds for equipment and materials, the Office of Education also paid out to the states during the same fiscal period \$3.4 million for the employment of state science and mathematics supervisors to develop curriculum guides, demonstrate new materials and equipment, and help local instructors improve their programs.

Equipment

The Atomic Energy Commission has made 175 grants with a total value of nearly \$2 million to 165 educational institutions as part of its five-year-old program to aid the purchase of laboratory equipment for courses related to nuclear energy. Awards in the physical sciences and engineering amounting to \$1.4 million were granted to 111 institutions. The new grants under the five-year-old program bring the grand total of such assistance to more than \$20 million. In addition, the AEC has loaned nuclear materials worth about \$11 million to many of the same institutions.

Purdue University has announced plans to install a low-power nuclear reactor, designed and built by Lockheed's Nuclear Products branch, for use in the school's recently organized Nuclear Engineering Department. The pool-type reactor, which is intended primarily for the training of students, will operate in the 500- to 1000-watt range, and will be constructed so that it may be converted to higher power levels in the future and may be moved when new nuclear facilities are developed.

Grants and Fellowships

Applications are now being accepted for two National Science Foundation graduate-level fellowship programs: Cooperative Graduate Fellowships for the academic year 1962-63 and Summer Fellowships for Graduate Teaching Assistants for the summer of 1962. Now in their fourth year, the two programs are administered cooperatively by the NSF and institutions which grant doctoral degrees in mathematics and the sciences. A total of 165 schools are participating in the academic-