

# 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-

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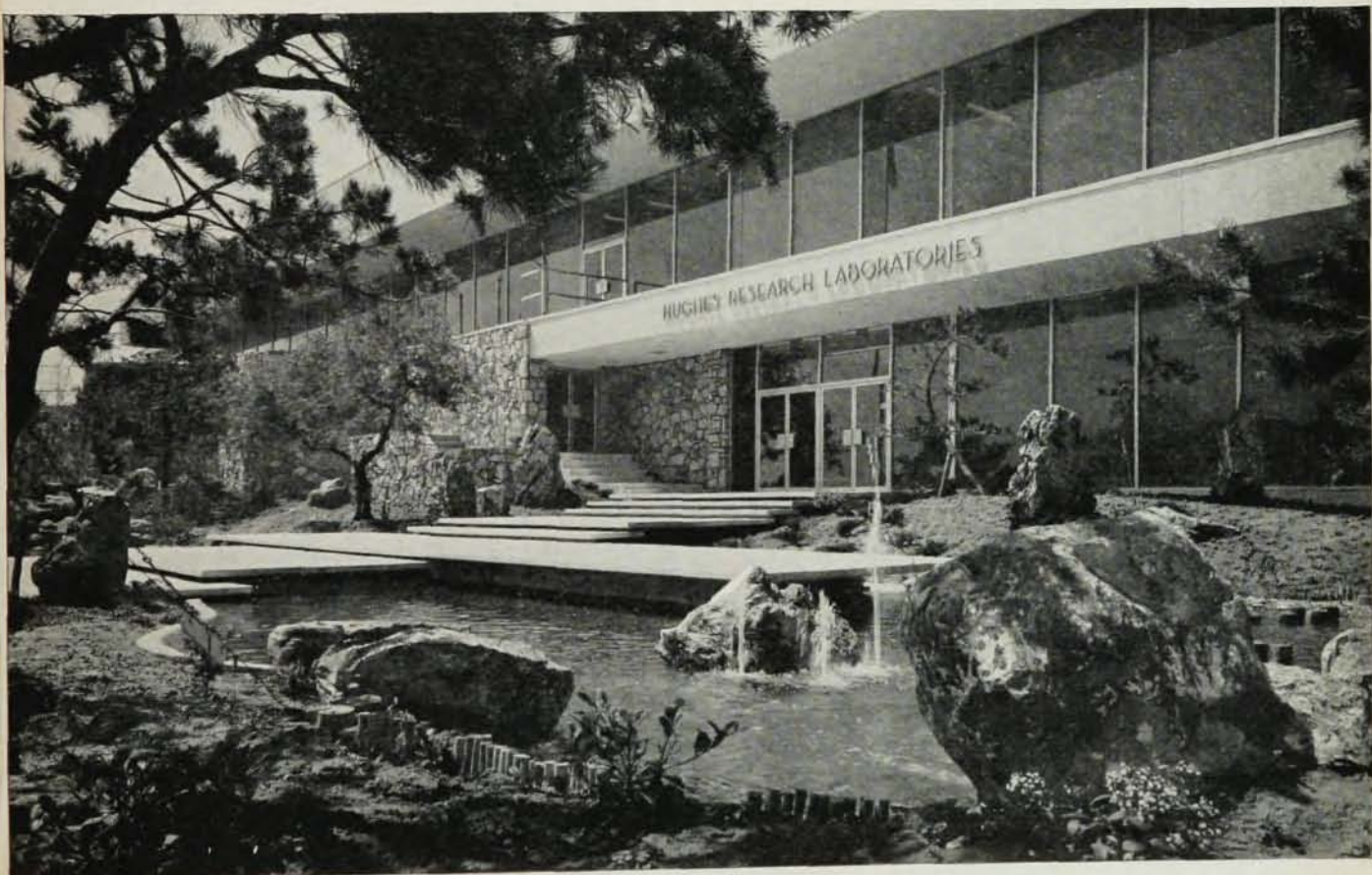
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year fellowships program, and all but six of these will take part in the summer fellowship program.

In both cases, individual applicants must contact the institution of their choice. Local faculty committees will evaluate the candidates' qualifications and forward the applications to the Foundation. Further evaluations will then be made by panels of scientists appointed by the National Academy of Sciences—National Research Council, and the Foundation itself will select the Fellows. Cooperative Graduate Fellows will receive stipends of \$2400 for a full year or \$1800 for the academic year. The individual institutions may augment this by as much as \$1000 for 12 months or \$750 for 9 months. Summer Fellows will receive between \$50 and \$75 a week, as determined by their institutions. Applications for Cooperative Graduate Fellowships must be received by the participating institutions by November 1, 1961; for Summer Fellowships by December 8. Application materials may be obtained from the graduate dean of any participating institution or from the Fellowships Section, Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D. C. A list of the participating institutions can be obtained by writing to the Foundation.

The Oak Ridge Institute of Nuclear Studies has announced that Atomic Energy Commission Special Fellowships in Health Physics, which ORINS administers for the AEC, have been awarded to 61 persons who will begin their graduate studies in September of this year. The appointees will spend nine months at regular graduate study at one of eight universities participating in the program, followed by three months of field training at a cooperating installation of the AEC. Participating universities are Vanderbilt, Harvard, and the Universities of Washington, Rochester, California, Michigan, Kansas, and Puerto Rico.

Physicists wishing to apply for overseas lecturing and advanced research awards under the Fulbright Act must submit their applications by October 1 to be considered for the 1962-63 academic year. The services of Fulbright scholars in physics and related disciplines are understood to have been requested by Austria, Belgium, China, Denmark, Finland, France, Germany, Israel, Italy, Japan, the Netherlands, Norway, Spain, Turkey, the United Arab Republic, the United Kingdom, and UK Overseas Territories. A number of lectureships are also available under the Smith-Mundt Act in countries not included in the Fulbright Program, but since requests for lecturers are received throughout the year, no open competition is held.

Application forms and additional information on awards which are currently available under both the Fulbright and Smith-Mundt Programs can be obtained by writing to the Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Avenue, Washington 25, D. C.