SCIENCE EDUCATION

Loyalty Affidavit

On October 16, President Kennedy signed a bill providing for the repeal of the requirement that non-Communist affidavits be filed by college students and scientists seeking federal aid in furthering their education. The provision of the new bill repealing the affidavit requirement applies not only to loans and grants under the National Defense Education Act of 1958 but also to graduate fellowship awards and research stipends administered by the National Science Foundation, which, since its inception in 1950, has required such affidavits.

As a substitute for the affidavit, the new bill provides for a $10 000 fine or a sentence of as much as five years in prison, or both, for members of "any Communist organization" required to register with the Subversive Activities Control Board who apply for or use federal scholarship or fellowship funds. The bill also gives the Office of Education and the NSF authority to revoke any fellowship or stipend awarded to a graduate student or researcher for reasons that are deemed to be "in the best interest of the United States". In addition, applicants for undergraduate loans are still required to take an affirmative oath of allegiance to the United States, and graduate applicants have to file statements of any convictions of serious crimes and of criminal charges pending against them.

Repeal of the affidavit requirement had long been urged by various educational organizations and by individual educators on the grounds that it was a violation of academic freedom, that it served no useful purpose in the task of safeguarding the nation's security, and that it was unjust to single out students as being potentially untrustworthy, particularly in view of the fact that labor leaders, business men, and farmers were not required to file such an affidavit in dealing with agencies of the government. In approving the measure, the President noted that the affidavit requirement had led 32 colleges and universities to stay out of the federal student-loan program because it was felt that the requirement "discriminated against college students and was offensive to them". According to reports appearing in the press, several of these institutions have expressed dissatisfaction with provisions included in the new measure and have indicated that they will continue to ask for the unqualified repeal of loyalty provisions aimed specifically at students.

Grants and Fellowships

Sigma Delta Epsilon, the national women's scientific organization, is offering a $500 grant-in-aid to a woman who holds a degree from an accredited institution and has demonstrated outstanding research ability in one of the mathematical, physical, or biological sciences. The grant is for one calendar year, and may be applied to a research project, or to course work relevant to a research program. Applications are due before February 1, and the required forms may be obtained from Dr. Virginia Bartow, 7 Chemistry Annex, University of Illinois, Urbana, Ill.

The National Science Foundation has announced that applications are being accepted in the graduate fellowship program as well as in programs designed for secondary-school and college science teachers.

Graduate fellowships (the application deadline is January 4) will be awarded for graduate work in the mathematical, physical, biological, and social sciences, including interdisciplinary fields. Applicants must be American citizens or nationals as of March 1, 1963, and acceptable as graduate students in an accredited institution. The awards carry stipends ranging from $1800 to $2200, plus allowances for travel and dependents. The Fellowship Office of the National Academy of Sciences—National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D. C., will supply the necessary application forms.

Under a newly established Foundation program, secondary-school science and mathematics teachers will be offered summer-study opportunities designed to improve their teaching skills. Beginning in 1963, and extending for as many as three summers, the programs will provide for advanced study in the physical, mathematical, and life sciences. Applicants are required to be American citizens or nationals and to have three years of teaching experience. Tuition, fees, allowances for travel and dependents, and an $85 stipend for each week of tenure will be provided by the NSF. Application forms (deadline, January 4) for summer fellowships for secondary-school teachers of science can be obtained by directing requests to National Science Foundation Secondary-School Fellowships, American Association for the Advancement of Science, 1515 Massachusetts Avenue, N.W., Washington 5, D. C.

Opportunities for college and high-school teachers of science to participate in regular research projects under the guidance of experienced research scientists are being offered under two special Foundation projects. The summer programs (eight to twelve weeks) will provide stipends of $75 to $100 per week and allowances for travel and dependents. Of the approximately 90 institutions participating, some will present a broad range of problems, and others will offer projects restricted to a single discipline. About half of the institutions will ar-

range for the participants to continue their summer research problems at their home institutions during the following academic year. Two brochures, one for college teachers and the other for high-school teachers, contain the relevant information. They are available from the Special Projects in Science Education Section, National Science Foundation, Washington 25, D. C. Application blanks must be obtained from the individual institutions, and in most cases must be returned to them by February 15.

Summer Programs

The 1963 session of the University of Grenoble's Summer School of Theoretical Physics, which will again be held at Les Houches, will deal with the topics of relativity, groups, and topology. The session will run from July 1 through August 23.

The following courses will be offered: introduction to general relativity (J. L. Synge), group theory (F. Gürsey), topology and differential geometry (C. W. Misner), geometrodynamics (J. A. Wheeler), experimental relativity (R. H. Dicke), detection of gravitational radiation (J. Weber), theory of gravitational radiation (R. K. Sachs), propagators in general relativity (A. Lichnérowicz), and quantization of geometry (B. S. DeWitt). Both French and English will be used in class.

The school is primarily intended for physicists who wish to become thoroughly acquainted with recent developments, and a solid background in the fundamentals of theoretical physics at the graduate level is a prerequisite. Admission will be limited to thirty participants. In the past, a number of National Science Foundation travel grants have been available for US citizens admitted to schools, such as Les Houches, which receive partial support from NATO, and it is hoped that similar grants may be available in 1963. Further information and application blanks can be obtained from Professor Cecile DeWitt, Department of Physics, University of North Carolina, Chapel Hill, N. C. Completed blanks must be returned to Grenoble by March 1.

The University of Uppsala's Institute of Physics will hold its annual physics seminar for scientists from developing countries from August 31, 1963, to about July 1, 1964, under the sponsorship of the Swedish Agency for International Assistance, the International Atomic Energy Agency, and the United Nations Educational, Scientific, and Cultural Organization. To be held at the Institute, the International Seminar for Research and Education in Physics will provide registrants with opportunities to perform research under the guidance of experienced scientists. It is open to non-European students and scientists, mainly from developing countries, who are teaching or doing research at a university or national laboratory. Requests for the required application forms, due by April 15, should be sent to the International Seminar, Institute of Physics, University of Uppsala, Uppsala, Sweden.