

members. The 20-member committee, organized under the aegis of the National Academy of Sciences, represents the US at IAU General Assembly meetings.

AIP OFFERS ENGLISH EDITION OF SOVIET SUPERCONDUCTIVITY

The American Institute of Physics, in cooperation with the Kurchatov Institute of Atomic Energy in Moscow, recently began publishing an English-language edition of the Soviet journal *Superconductivity: Physics, Chemistry, Technique*. The monthly journal is edited by V. I. Ozhogin, a professor

at the Kurchatov Institute, and is the newest scientific journal devoted to superconductivity research being published in the USSR.

Translation of articles appearing in *Superconductivity* from Russian into English begins prior to, rather than after, publication of the Russian-language edition. This process helps to speed publication of *Superconductivity* outside the USSR.

A one-year subscription to *Superconductivity* is \$500.00 in the US; \$515.00 in Canada, Mexico and South America; and \$520.00 elsewhere. Subscriptions and sample copies are available from the American Institute of Physics, Marketing Services, Department SPT, 335 East 45 Street, New York NY 10017.

NSF MAKES GRANTS TO COLLEGES FOR PHYSICS INSTRUMENTATION

In its campaign to improve the state of laboratory equipment at undergraduate colleges and universities, the National Science Foundation awarded a total of \$22.7 million in grants in fiscal 1989. Of the 626 grants in engineering, computer science, mathematics and the physical, biological and social sciences, 87 were in physics and astronomy. Accordingly, physics and astronomy rang up \$2.3 million, or 10.1%, of the 1989 total. The average award for instruments in those two fields was \$26 000.

The grants were first awarded in 1985 under NSF's College Science Instrumentation Program and were restricted to institutions granting bachelor's and master's degrees. In 1988 the program was renamed the Undergraduate Instrumentation and Laboratory Improvement Program and extended to community colleges and to universities offering doctoral degrees. NSF also increased the number of grants from 362 in 1988 to 626 in 1989. At the same time, the total value of the awards was doubled from \$11.5 million in 1988.

NSF's funds for the program come from its Division of Undergraduate Science, Engineering and Mathematics Education and from its research directorates. Together they evaluated the 2090 proposals received for fiscal 1989. Under the rules of the program, recipient institutions are required to provide matching funds, which can be contributed by individuals, corporations and state governments, as well as the winning universities.

Among the 1989 winners, Union College in Schenectady, New York, received \$100 000, the largest physics grant, for a new tandem Pelletron accelerator to replace the college's aging Van de Graaff accelerator, which has been used in undergraduate research since 1965. Union College was one of seven institutions to be awarded two separate physics and astronomy grants. Its second award, for \$30 000, went for computer hardware and software, a frequency synthesizer and a spectral analyzer for its nonlinear dynamics laboratories.

Brandeis University in Waltham, Massachusetts, also received two grants: one, for \$12 000, for digital imaging hardware and software to analyze optical images from a TV camera; the other, for \$11 000, to purchase an ultra-high vacuum facility for teaching uhv techniques in engineering physics. Some matching funds for the second award were provided by IBM Corporation. Although the Brandeis proposals were submitted to the National Science Foundation in 1988, the grants were not received until the following year because NSF put off all instrumentation grants to major universities for one year when it was hit by cuts in research appropriations by Congress.

The University of California at Berkeley received \$26 000 to develop open-architecture optical spectrometers. These spectrometers, designed and built by staff at the university, enable students to follow the path of the light from source to detector. Howard Shugart, vice chairman of the physics department, expects be-

tween 2000 and 3000 students per year to use the new spectrometers for such experiments as measuring the temperature of a source by determining its Planck distribution.

To encourage undergraduate studies of galactic structure, Vassar College in Poughkeepsie, New York, has used its \$30 000 award to purchase a liquid nitrogen charge-coupled device camera and digital imaging system. The system will facilitate use of the school's 15-inch telescope by compensating for sky brightness from city lights as well as natural sources.

The University of Evansville in Indiana was awarded \$11 000 to purchase a closed-cycle refrigeration system for its solid-state physics laboratory. The system will allow experiments to be performed at temperatures as low as 10 K, using helium gas rather than liquid cryogenics. Alcoa Foundation provided a major portion of the matching funds.

Fiscal year 1990 grant winners are now being selected. Duncan McBride, program director for NSF's Division of Undergraduate Science, Engineering and Mathematics Education, expects that proposals for 1991 will be accepted through November of this year and that grants will be awarded in the summer of 1991. Interested schools may contact his division to request more information.

—AUDREY T. LEATH

IN BRIEF

The 1990 *Directory of Student Science Training Programs for High-Ability Precollege Students* is available from Science Service Inc, 1719 N Street NW, Washington DC 20036. Single copies cost \$3.00, and bulk prices are available upon request.

M. G. K. Menon, president of the International Council of Scientific Unions, was appointed Science Minister in the new Indian government that took office at the end of last year. Menon, a former associate of Homi Bhabha, leader of India's nuclear program, is the first professional scientist to hold the science portfolio in an Indian government.

Caltech has received a grant of \$980 000 from the L. K. Whittier Foundation of Pasadena to build a seismological observatory, which is to be designed and run by Caltech's Seismological Laboratory. The new observatory is the first stage of Caltech's planned Terrascope, a ten-seismometer array that will study the tectonics, mantle and core beneath southern California. ■