

donating some personal computers to FSU institutions. Stan Woosley of the University of California, Santa Cruz, has chaired the AAS effort.

The American Institute of Physics has provided increasingly large numbers of journal subscriptions to individuals and libraries in the former Soviet states (see box, page 116), and the Physical Society of Japan has set up a similar journal donation program. Britain's Royal Society has provided about \$1 million per year for small joint projects and short visits.

Among such programs, the American Physical Society's has been perhaps the most ambitious and multifaceted. It has served to a great extent, as *Science* magazine recently noted, as "the model for the Soros initiative."

Relying on contributions from individual members totalling \$115 000 and on grants from NSF, the Soros Foundations, the Soros Humanitarian Foundations, the Sloan Foundation and the Meyer Foundation, the APS program has included small grants and fellowships; bulk journal distribution; matching memberships with journal subscriptions; support for summer and winter schools; travel grants for major meetings; grants of small equipment and parts; and, not least, support work for Soros's ISF.

Between June 1992, when the first APS small grants were awarded, to June 1993, when the last were made, APS committed a total of \$1.27 million in awards to 2561 scientists in 11 FSU states. APS used a three-tier selection process involving initial screening in the FSU, and US reviewers were asked initially to grade proposals excellent, good, fair or poor. But when reviewers were swamped with proposals, APS asked them in December to simply approve or reject.

APS has sent bulk shipments of 23 complete one-year back-issue sets of all APS publications to destinations in Russia, Ukraine, Estonia, Lithuania, Moldova and Uzbekistan. With NSF funding to support reduced-cost subscriptions for newly enrolled members, APS has sent selected society publications and AIP's *PHYSICS TODAY* to 104 Russian and 45 Ukrainian physicists. Since April it has been providing 12 subscriptions to all APS publications to AAAS, which distributes them to central libraries in Russia, Ukraine and Belarus, with support from the MacArthur Foundation.

Irving Lerch, the APS director for international scientific affairs and the main organizer of the society's FSU programs, reports that APS has made some effort to track delivery of the

journals, with assistance from Okun. His impression is that about half get through without any hitch and maybe an eighth disappear into a void.

Conceding that scientists in the former Soviet states haven't always known how and where to find the journals, Lerch observes that some FSU institutes "aren't used to cooperating and communicating with each other."

Unsurprisingly, given the known general conditions in the FSU, the school programs supported by APS also have had some problems. At one of the schools, according to an internal APS report, the session was plagued by "the inability of many Russian students to attend because of severe economic and unforeseen political problems, deteriorating physical conditions within the university, and failure to adequately screen some participants

who were ill-prepared."

Summer and winter school programs receiving APS support have included the Second St. Petersburg International School (August–September 1992), devoted to the standard model; the St. Petersburg Winter School in High Energy Theory (January–February 1993); the Kiev Summer School (June 1993), dedicated to new developments in condensed-state optics; and the Landau Institute Summer School (July 1993), on subjects in quantum mechanics and statistical physics.

Science Foundation

The FSU programs have imposed large administrative burdens on APS (and AAS), requiring the establishment of complex arrangements for transfer of funds in each state, as

AIP's Efforts to Aid FSU Science

One of the American Institute of Physics's major activities over the years has been translating and publishing Russian-language physics journals, which has involved close cooperation with researchers, editors and publishing agencies in what is now the FSU. So when it became obvious that the economic hardships brought on by the USSR's demise were jeopardizing FSU science, it seemed only natural that AIP would lend a hand. And, as a journal publisher and a representative of ten US member societies, the institute was uniquely positioned to act.

In 1991 shortly after the Soviet breakup, AIP began sending free journals to FSU researchers and to the editors of its translation journals (see *PHYSICS TODAY*, February 1992, page 90, and April 1992, page 82). More recently AIP agreed to participate in journal donation programs sponsored by the American Association for the Advancement of Science and the International Science Foundation for the FSU.

At present AIP sends about 320 free subscriptions to individual scientists in the FSU and the former Eastern Bloc countries. The recipients are chosen by AIP to ensure an even distribution by discipline and geography; there is also an understanding that the journals will be shared with colleagues, and many of the journals eventually get deposited in libraries. Under the arrangement with the ISF, AIP will increase the number of subscriptions to about 450, and the ISF will in turn handle the shipping and distribution for almost all of the AIP journals bound for the FSU. The ISF plans to send US science journals through the Russian Embassy in Washington, DC, via Aeroflot. The Library of Natural Science in Moscow will then distribute them to scientists throughout the FSU (except for the Baltic States and Ukraine).

The AAAS program, which targets libraries exclusively, sends science journals to 12 large libraries in Russia, Ukraine and Belarus. AIP is providing 120 journals (10 to each library) to this effort.

To maintain the health of its partnership journals in the FSU, AIP allows each of the 17 editors of its Russian-language journals to receive gratis any two journals published by AIP or its member societies. In addition, through the American Physical Society's matching membership program, AIP sponsors one person on each journal's editorial board to receive a free APS membership. The institute has also sent computers, photocopiers, facsimile machines and other supplies to the FSU journals' editorial offices.

Since 1989 AIP has sponsored the Chaos Conferences, which each summer bring together American chaos researchers with their FSU peers. The most recent, held in July in Woods Hole, Massachusetts, was attended by 20 US and 15 FSU scientists. In addition to organizing the event, AIP covered travel and living expenses for the FSU participants.

Telephone links and regular mail service remain less than reliable in the FSU. To help physicists keep in touch with colleagues there, AIP's electronic communications service, PINET, maintains an online electronic directory of scientists and institutions in the former Soviet Union. Electronic addresses—e-mail, fax numbers and telex numbers—are listed in the directory.

—JEAN KUMAGAI