

This division of interest is reflected in the withdrawals of two Sematech members, LSI Logic of Milpitas, California, and Micron Technology of Boise, Idaho. A third company, Harris Corporation of Melbourne, Florida, has also given the required two-years' notice to withdraw and would be eligible to do so in January 1993. LSI Logic and Micron, who were the consortium's smallest members, were said to disagree with the general direction of Sematech's work and felt they were not getting a large enough return on their investment. (Members pay annual dues equal to 1% of their revenues.) Larger members such as Hewlett-Packard, IBM and Advanced Micro Devices, on the other hand, are reported to be well

satisfied with the consortium's strategy and accomplishments thus far.

Spencer has said that the departures will not affect the consortium's survival and that Sematech is now negotiating with three other companies that might become new members.

Other activities

In a separate development, Sematech signed an agreement of cooperation last September with JESSI, its European equivalent. The two parties agreed in principle to cooperate on projects involving shared activities, such as standards and quality management, and those involving complementary activities, such as modeling, packaging and materials.

—JEAN KUMAGAI

IRAN RESCUES TRIESTE PHYSICS CENTER FROM FINANCIAL CRISIS

Because of a peculiar legislative glitch in Italy, which provides about 90% of the budget for the International Centre for Theoretical Physics in Trieste, ICTP found itself facing a severe financial crisis as 1991 drew to a close. While the Italian government was preparing legislation to put funding for ICTP onto a longer-term basis, the center found itself without cash to cover a transitional period of about six months. As a result, by the end of October letters of dismissal were prepared for its 140 staff members, and the center issued urgent appeals to the Italian government and the world at large.

Those appeals were answered in mid-November with an offer from the minister of culture and higher education of Iran, Mostafa Moin, who offered to provide an interest-free loan of \$3 million, to be repaid as soon as funds from Italy once again became available. A message accompanying the loan offer said it was made "in appreciation of all the services Professor Abdus Salam [the founder and director of ICTP] has done for science, and in light of his commitment to the advancement of science in developing countries."

Concurrently with the Iranian offer, the Italian Foreign Ministry provided about \$2.5 million as an extraordinary contribution, and a regional government announced its willingness to guarantee a bank loan of about \$3.5 million. Meeting in early December, the board of governors of the International Atomic Energy Agency in Vienna, which is responsible for management of ICTP, approved the loan offer from Iran.

ICTP currently supports about 80 foreign scientists working at Italian universities and in Italian laboratories, as well as 50 postdocs at the center itself. It sponsors 40 workshops and conferences each year, involving about 4000 participants from all over the world. In the years since its founding in 1964, according to the center, more than 45 000 scientists from virtually every country in the world have worked and studied at ICTP. Roughly 60% of the visitors come from developing countries, and they spend on average about a month and a half at the center.

While the main emphasis at the center has always been physical and mathematical theory, it also sponsors some experimental programs, including the program for training and research in Italian universities, which is geared mainly to experimenters. The center operates three laboratories: a Microprocessor Laboratory, with the Italian National Institute for Nuclear Physics and the United Nations University, Tokyo; and, with the International Centre for Science and High Technology in Trieste, a High-Temperature Superconductivity Experimental Laboratory and a Laboratory of Lasers and Optical Fibers.

Italy's Ministry of Foreign Affairs traditionally has provided ICTP with about \$17 million per year, budgeted in four-year cycles; the IAEA has provided a little more than \$1 million a year and UNESCO about \$0.4 million. A new plan adopted by Italy's Parliament just before Christmas guarantees funding through to 1998, at the same level of \$17 million per year.

MOUNT GRAHAM OBSERVATORY WINS LEGAL ROUND

In mid-December a US court of appeals in San Francisco ruled that the University of Arizona may proceed with construction of the Mount Graham Observatory, despite concerns voiced by environmentalists over the fate of the red squirrel, an endangered species. The court found unanimously that legislation adopted by Congress in 1988 exempts the first phase of the project, in which three telescopes are to be installed, from further environmental review.

The appeals court remanded two points still in dispute back to a district court, which in the meantime also has found in the university's favor. While those points may be appealed again, university officials are beginning to sound confident that they will prevail and that construction will proceed without further hitches.

The University of Arizona still is seeking a new cosponsor or cosponsors for the Columbus Telescope Project, one of the three telescopes slated for Mount Graham. While it has received expressions of interest from several institutions, a firm commitment has yet to materialize.

Before Ohio State's withdrawal from the Columbus project, the plan was to start work on the Columbus mirror soon after a 6.5-meter mirror is cast this winter for the conversion of the Multiple Mirror Telescope to a single-mirror telescope. The MMT, located on Mount Hopkins in Arizona, is run by the Smithsonian Institution and the University of Arizona.

KAON FACTORY WINS FEDERAL, PROVINCIAL FUNDING IN CANADA

Canada's KAON project, a large K-meson factory that is to be built at the Tri-University Meson Facility near Vancouver, has made a big stride toward obtaining full funding, but it still is some way from being altogether out of the woods.

The plan for KAON is to upgrade the existing 500-MeV TRIUMF cyclotron to deliver a 100-microamp beam of 30-GeV protons, which in turn would yield intense secondary beams of K mesons, antiprotons, other hadrons and neutrinos (see PHYSICS TODAY, May 1989, page 17). Hence the acronym KAON.

Last fall TRIUMF received a commitment of \$236 million (in Canadian

dollars) from the national government in Ottawa for KAON, matching an identical commitment it already had received from the British Columbia provincial government. That left just one-third of the capital budget to be raised, mainly from international sources, plus an estimated \$100 million in annual operating costs, which would be shared between the provincial and national governments according to a formula yet to be negotiated.

Erich W. Vogt, director of TRIUMF, says that the plan has been to find support on the HERA model—an allusion to the proton-electron accelerator that is nearing completion at Germany's DESY. Like the KAON project, Vogt says, HERA is not dominated by the domestic physics community but is a unique machine that would be heavily used by physicists from other countries.

According to Vogt, Canada soon will be sending a delegation abroad, presumably to the United States, Japan and Britain, in hopes of negotiating firm commitments of support for KAON. As far as the US is concerned, what the Canadians are looking for is a firm promise of "in-kind" contributions of equipment (not cash), reflecting the expectation that the machine will be more heavily used by US physicists than by Canadians.

While the US Nuclear Science Advisory Committee has declared itself in favor of US participation in KAON, contrary to what is sometimes reported, the US government has never made a firm final decision in favor of US support.

RUSSIANS REQUEST HELP WITH SUBSCRIPTIONS

Seven members of the Russian Academy of Sciences have issued an urgent appeal to the world scientific community for assistance in continuing to obtain science journals from abroad.

The appeal, which was signed by several physicists, including Zhores I. Alferov, Vitaly L. Ginzburg and Vitalii I. Goldanskii, asks for help in assuring delivery of scientific periodicals "on the same scale as in 1991" or at least on a sufficient scale to guarantee continued deliveries to the central scientific libraries of major cities and to the libraries of the largest institutes of the Russian Academy of Sciences.

The journals problem facing scientists in the new Commonwealth of

Russian Appeal for Journal Subscriptions

We appeal from the pages of your magazine to the world scientific community to express our deep concern about this dramatic situation: *An absence of hard currency is completely depriving scientific institutions of Russia and other states of the former USSR of subscriptions to foreign scientific periodicals in 1992.* Our scientists turn out to be totally isolated from the most important sources of scientific information. At a time when scientific progress is simply inconceivable without the tightest international cooperation among scientists, when the development of each field of science proceeds like a chain reaction, and when positive feedback between scientific publications and response to them is of decisive importance, the isolation of hundreds of thousands of our scientists from the outside world, which is inevitable under the conditions of deprivation of foreign scientific literature, will have pernicious consequences for the worldwide scientific community.

Therefore we appeal for urgent help—for the sake of humanitarian purposes and our mutual interests—to find ways of continuing delivery of foreign scientific periodicals to our country in 1992 on the same scale as in 1991, or—at least—on a scale sufficient to provide the 1991 subscription level to the central scientific libraries of Moscow, St. Petersburg, Novosibirsk, Ekaterinburg [formerly Sverdlovsk], Vladivostok and capitals of other states of the former USSR and to the libraries of the largest institutes of the Russian Academy of Sciences.

We thank our foreign colleagues in advance for any manifestation of goodwill in providing assistance to overcome the most serious difficulties met by our scientists.

[Signed] Members of the Russian Academy of Sciences:

Zhores I. Alferov
Vitaly L. Ginzburg
Vitalii I. Goldanskii
Vladimir I. Keilis-Borok
Leonid V. Keldysh
Victor P. Maslov
Aleksandr S. Spirin

Independent States would appear to be too big to be solved by any one nongovernmental organization outside the commonwealth. Last year the Soviet Academy of Sciences—which has now been largely supplanted by the Russian academy—spent about \$13.5 million on subscriptions to foreign journals, Goldanskii told PHYSICS TODAY. Goldanskii's institute alone, the N. N. Semenov Institute of Chemical Physics in Moscow, spent \$60 000 on foreign journal subscriptions in 1991.

It bears noting that commonwealth scientists are entitled to apply for subsidized society memberships via programs operated by several AIP member societies. Such memberships generally provide for subscriptions to society journals and magazines at advantageous rates or gratis (see PHYSICS TODAY, October 1991, page 104). Under the APS matching membership program, for example, APS memberships and journals are provided to individual physicists in developing and dollar-poor countries, as long as an APS member or another organization pays half the costs.

These programs include, in addition to the APS sponsored-membership program, the American Geophys-

ical Union's Berkner membership grants and Partners in Physics, the sponsored-membership program of the American Association for Physicists in Medicine. AAPM members also can donate their subscriptions to *Medical Physics* to designated recipients, via the society. And medical physicists overseas are eligible to be corresponding members of AAPM at reduced rates.

The sponsored-membership program of the American Association for Physics Teachers is being phased out but may be supplanted by a similar program that is in an early phase of organization.

The American Institute of Physics, The American Physical Society and AIP's other member societies are cooperating to provide journals to the 20 commonwealth editors of the (formerly) Soviet physics journals that are translated by AIP. Each of the 20 editors is entitled to receive any two journals published by AIP or its member societies. All of the nine member societies that publish journals are cooperating in this assistance program. Where sponsored memberships are concerned, AIP typically serves as the cosponsoring organization.