

that month, the originators found Drell "most enthusiastic," Voloshin recalls. Okun was left to fill in many of the details of an international foundation to save FSU science, including searching for possible sponsors who would put up at least \$100 million per year (see PHYSICS TODAY, June 1992, page 67).

In September 1991, Okun, a former member of CERN's scientific advisory committee, discussed the plan with such prominent European physicists as Carlo Rubbia, director of CERN, and Volker Sorgel, director of DESY. They in turn described it in letters to several European leaders in late 1991. The idea was subsequently adopted by France's President François Mitterrand, who pledged his government's assistance in putting together a fund of 100 million ECUs (about \$150 million) to support Russian scientists in about 5000 research groups ranging over many disciplines. In his official statement, Mitterrand went on to solicit contributions from other members of the Group of Seven industrialized nations. As Mitterrand envisioned it, the fund would be administered by an international foundation, modeled on NSF or France's own Centre National de la Recherche Scientifique, which would distribute grants of about \$20 000 to some 5000 research groups after peer review. Since then, the foundation has been transformed into an association involving all European Community member states and other countries who decide to join by kicking in funds (see PHYSICS TODAY, September, page 63).

Encouraging other ventures

Foundation officials say they will amass about 24 million ECUs (about \$36 million) when the organization begins operating early this year. Though the association failed to attract the US and Japan, it has gone on to encourage cooperative research ventures with laboratories and institutes in Western Europe, and while the intention is to benefit science in Eastern Europe the money could be spent in the West for research equipment, for instance, or telecommunications to assist scientists and their institutions. Up to now, however, no funding has been forthcoming from this association.

By contrast, Soros has already distributed \$100 million through foundations he set up in former Communist countries of Central and Eastern Europe over the last five years. These foundations support educational, cultural and economic restructuring projects, however, not scientific oper-

ations. As an expression of his goal of furthering freedom in former Communist states, Soros founded in 1990 The Central European University, offering postgraduate programs in history, economics, government and social sciences at campuses in Prague and Budapest.

Born in Budapest in 1930, Soros emigrated to London in 1947 and attended the London School of Economics, where he took a class with John Meade, who later won a Nobel Prize in economics in 1977 ("though I didn't get much out of that course," he told us), and attended lectures by Harold Laski, a political economist and Labor Party leader. After his graduation in 1952 he became a friend and disciple of LSE's Karl Popper, the noted philosopher of science. He moved to New York in 1956 and established himself as a Wall Street investor. He is now president of Soros Fund Management and chief investment adviser to Quantum Fund, which is domiciled in the Netherlands Antilles island of Curaçao. Quantum has grown from \$4.8 million at its founding in 1969 to a family of four funds valued by Soros's own reckoning at \$7 billion. US investors are prohibited by law from participating in such offshore funds

that are not regulated by the Securities and Exchange Commission. Soros's own holdings are said to total more than \$1 billion.

Although he is lauded as a savior of science in Eastern Europe by many US and Russian scientists, Soros is sometimes criticized as a scoundrel by bankers and the press in Great Britain. He speculated against Britain's pound sterling during the currency market turmoil last September. On 16 September, a day known as Black Wednesday in Britain, the Bank of England spent about \$25 billion to defend the pound and the Bundesbank bought almost \$5 billion in pounds to maintain the EC's exchange rate mechanism. Soros was so confident the pound would be devalued that he borrowed heavily in order to bet \$10 billion against sterling, and at the end of the day, by his own admission to *The Times* of London, made about \$950 million. He told the newspaper he made \$1 billion more out of further chaos in the currencies of Italy and Sweden and in the Tokyo stock market. *The Times* later called him in a front page headline "The Man Who Broke the Bank of England." Soros's associates say he was simply "maximizing his profits."

—IRWIN GOODWIN

EUROPE REORIENTS SPACE SCIENCE PROGRAM WITH RUSSIA IN MIND

For those who love to hate manned space activity, but not necessarily for European space enthusiasts, the latest developments at the European Space Agency are good news: At a ministerial meeting held in Granada, Spain, on 9–10 November, it was decided to further delay development of Hermes, the space plane proposed by France's aerospace industry, to reorient the manned space program to emphasize cooperation with Russia, and to sharply reduce spending on microgravity research in space. At the same time, as an ESA release puts it, "the agency will negotiate with NASA on the exploitation costs of the international space station, aiming to achieve a firm ceiling, within which a significant portion of the agency's contribution will be made 'in kind'..."

While European plans for a free-flying platform for the space station were indefinitely deferred, a data-relay satellite system received full approval, and planning for an attached pressurized module remains more or less on track—"means to

provide full funding [for the APM] will be clarified, with specific measures being taken over the next few years to align development with the financial resources available."

Pressure to curtail ESA commitments came primarily from Germany, which has been strapped for funds because of reunification and world recession. At an ESA meeting held in Munich in 1991, Germany made known that it would have to reduce its planned contributions to the agency between 1992 and 2000 from 20 billion marks to 16 billion. Before the Granada meeting Germany let it be known that further reductions to around 11 billion marks would be necessary.

But even in France, the largest contributor to the ESA program and the main advocate of the Hermes shuttle and Ariane V launcher programs, manned space activity has come under unprecedented attack in recent months. Early last fall an evaluation committee established by research minister Hubert Curien recommended scrapping Hermes and es-

establishing a strong space committee to better coordinate and regulate government policy.

In France as in the US, there always has been a very considerable hostility in science circles to expensive manned space activities. But over and above that, Hermes has come under particularly sharp criticism in recent years as projected costs have climbed (especially after safety features were added following the Challenger disaster) and capabilities have been scaled back. Moreover, as the development schedule for Hermes has been stretched out, the technology itself has come to seem increasingly old-fashioned, and alternative proposals have seemed more attractive. A Future European Space Transportation Investigation Program was given a go-ahead at Granada to look into alternatives.

ESA remains fully committed to development of Ariane V, to be completed by 1995, at which time the agency's budgetary situation will be somewhat eased. In the meantime the agency is to thoroughly reevaluate plans for Hermes in light of Russian capabilities. Overall, ESA's project spending for 1993-2000 was cut about 5%; only telecommunications and space science—not counting microgravity work—came out unscathed.

Research on the global environment and climate now ranks higher than ever in ESA's priorities. The Granada meeting gave full support to Envisat-1, a remote-sensing mission dedicated to environmental processes; to Metop-1, a polar-orbiting meteorological satellite, which is a new element in the Eumetsat program; and to development of a second-generation Meteosat, a geosynchronous meteorological satellite system. (EUMETSAT, based in Darmstadt, Germany, operates satellites for European meteorological organizations.)

France has been a partner with NASA on Topex-Poseidon, an ocean-observing satellite launched on 10 August 1992. But US space scientists complain that NASA has not been doing much to encourage US cooperation with Russia and that funds for university-based space science in the US are being cut sharply. An exception in this respect is an x-ray polarimeter experiment, developed by scientists at Columbia University, Lawrence Livermore National Lab, the Marshall Space Flight Center and two Italian institutes. The experiment will be placed on the Spectrum-Roentgen-Gamma satellite scheduled for launch by the Russians in mid-1995.

—WILLIAM SWEET

FRAUENFELDER AND FORD TO RETIRE; SCHMITT SLATED TO HEAD AIP BOARD

Kenneth W. Ford, the executive director and CEO of the American Institute of Physics, and Hans Frauenfelder, the chair of AIP's governing board, announced in recent months their intentions to retire in 1993. A search currently is in progress for a successor to Ford, who plans to leave AIP on 31 October, around the time of the organization's relocation to College Park, Maryland. The designated new chair of the governing board, Roland Schmitt, is the current president of Rensselaer Polytechnic Institute in Troy, New York.

Ford has been the head of AIP since March 1987, when H. William Koch retired as executive director (see *PHYSICS TODAY*, December 1986, page 67). Frauenfelder, an emeritus professor of physics at the University of Illinois, Urbana-Champaign, succeeded Norman Ramsey of Harvard University as governing board chairman in spring 1986 (see *PHYSICS TODAY*, April 1986, page 57). An important AIP development that occurred during the Frauenfelder-Ford stewardship was

the decision to relocate the organization to the vicinity of Washington, DC. Ford credits Frauenfelder with having "worked hard and patiently to achieve a consensus in the board" in favor of the move.

Schmitt was recommended by a search committee headed by Eugen Merzbacher of the University of North Carolina, Chapel Hill, and the recommendation was accepted by the AIP governing board at a meeting held in October in conjunction with the Corporate Associates meeting in Palo Alto. It is expected that the board will formally ratify the selection at its March meeting. Schmitt will retire as RPI president at the end of June and will be free to devote a significant proportion of his time to AIP affairs during the crucial transition to the Washington, DC, area.

As a former research chief at General Electric and a former chair of the National Science Board (the National Science Foundation's statutory governing body), Schmitt is conversant with the Washington scene and has especially strong views on applied research and industrial policy, matters of key concern to the incoming Clinton Administration. "I feel confident I can bring a perspective into the board of AIP and into the member societies that will be helpful to them," Schmitt says. "The Clinton Administration is going to be heavily oriented toward technology, and they are interested in the whole issue of competitiveness. . . . What you sense is that they feel that the support of basic research is in good shape now, and that their main interest and thrust will be in technology and in getting the impact of technology into the economy."

Schmitt notes that some of his public policy positions have not always been totally in line with those of some prominent members of the physics community and that he discussed this quite thoroughly with the search committee. "But I think that [because of] my knowledge of the Washington scene and involvement with policy issues, I can foster the cause of physics, both by helping the community itself address things that the nation thinks are important and by convincing the nation that physics is an important contributor. So I think I can help on both sides of that equation."

Regarding the main business of AIP, Schmitt says he is well aware of the problems associated with the rising cost of scientific journals, and he

APS Creates Rahman Prize

During the 1960s and 1970s Aneesur Rahman was one of the first to make use of computers for solving problems in molecular spectroscopy. In honor of his pioneering work, the American Physical Society has established the Aneesur Rahman Prize, which will recognize contributions to computational physics.

A native of India, Rahman earned a DSc in physics at Louvain University in Belgium in 1953. He then returned to India, where he worked at Osmania University and the Tata Institute for Fundamental Research. In 1960 he moved to Argonne National Laboratory, where he remained for the next 25 years. In 1985 he became a physics professor at the University of Minnesota and a fellow of the Supercomputer Institute there. Rahman died in June 1987.

The annual prize, sponsored by IBM, consists of \$5000 and a travel allowance. It is open to scientists of any nationality. The first Rahman Prize will be awarded in June 1993 during the annual meeting of the APS division of computational physics in Albuquerque, New Mexico. The chair of the nominating committee is Jay Boris of the Naval Research Laboratory.