

early July last year, the consensus was that a single center would not be able to meet the demand for trained applied physicists in developing countries. Furthermore, the cost of equipment and maintenance was considered too high to be borne by a single center.

The current proposal calls for the nodes to be linked by a computer network to speed collection and distribution of information, especially on the availability of equipment. Each node would provide fellowships for applied physicists from developing countries to participate in training courses and research.

The study group recommended the creation of a node in Trieste to act provisionally as the coordinating center for the network. Organizational work is being handled through this year by a task force in which The American Physical Society, the European Physical Society and IUPAP are represented. A select advisory committee consisting of distinguished scientists has been established; those who have accepted invitations to join the committee include Leo Esaki (US), Joseph A. Johnson III (US), Robert E. Marshak (US), Nevill F. Mott (UK), J. Robert Schrieffer (US), Kai M. Siegbahn (Sweden) and Abdus Salam (Pakistan), director of ICTP.

Hundreds of British scientists pledge to boycott SDI research

A pledge to boycott research in Britain funded by the US Strategic Defense Initiative Organization, similar to the pledge drafted by scientists at Cornell University and the University of Illinois in the United States, has been circulating in Great Britain since last May. By early November it had been distributed in at least 30 science departments at 24 universities, according to its promoters, and just over half the scientists in the departments—545 out of 1051—had signed.

The pledge reads, in part:

We... believe that the Star Wars program is technically dubious. An antiballistic missile defense system of sufficient reliability to defend populations against a Soviet first strike is not technically feasible in the foreseeable future. A system of more limited capability will only serve to escalate the arms race.... Accordingly, as working scientists, we will not apply for or accept support from the Strategic Defense Initiative Organization, which funds Star Wars research.

According to reports from the British defense ministry, Britain had received

a total of £25.7 million (about \$35 million) in contracts from SDIO by last fall, of which £8 million went to government laboratories and £6.5 million to the European Architecture Study—a study of whether the various Star Wars technologies could be integrated into a

system suitable for defense of Europe. Visiting London on 8 December, US Secretary of Defense Caspar W. Weinberger assigned another \$10 million in work on Star Wars to the British defense ministry.

—WILLIAM SWEET

Education

OSA expands programs for teachers

A full-day special program honoring outstanding primary and secondary school science teachers was a featured event for the second year in a row at the 1986 annual meeting of the Optical Society of America. At a cost of \$40 000, OSA brought 100 teachers from Washington State, Oregon and British Columbia to Seattle on 23 October for a series of lectures, demonstrations and workshops. The previous year OSA spent about \$15 000 to bring teachers from Maryland, Virginia and Washington, DC, to the Washington Hilton for a similar one-day program (PHYSICS TODAY, October 1985, page 104).

In 1985 all the teacher participants drove to Washington and although OSA reimbursed school districts for substitute teachers to replace participants for a day, the reimbursements were limited to \$35. In 1986 OSA covered the full costs of compensating employers for lost staff time, and the society flew more than half of the participants to Seattle at considerable expense. This year, at its meeting in Rochester, OSA will try to reduce its expenses somewhat by selecting teachers who live within driving distance in New York State and Ontario.

The Seattle program included a historical talk, "From klystrons to lasers," by Robert L. Byer of Stanford University; a demonstration-lecture by Robert G. Greenler of the University of Wisconsin, Milwaukee, called "Blue skies, red sunsets and the green flash"; and a lecture by Davida Y. Teller of the University of Washington about research on vision in infants. The afternoon was devoted mainly to workshops, including one session in which Donald

C. O'Shea of the Georgia Institute of Technology introduced a hands-on optics kit for primary and secondary schools, which O'Shea had designed on behalf of OSA's education committee.

OSA has produced 200 prototypes of the kits, which are currently being tested in classrooms around the country. The kits will be revised in light of reactions from teachers.

As another part of its effort in pre-college education, OSA has awarded nine optics education grants totaling \$10 000 to individuals who proposed innovative development projects. These include several ideas employing holography, a laser demonstration and several hands-on or blackboard kits.

In the coming year John Walkup of Texas Technical University will be chairman of OSA's education committee, which was established in 1985 and renamed the Education Council last October. This year the committee is expected to start deliberating about optics education at the college and graduate levels.

This summer OSA will bring an education fellow to its Washington headquarters to work on a variety of projects, including one chosen by the fellow. This year the fellow will monitor the optics education grants and evaluate the results from the tests of the prototype kits, among other things.

An elementary school, high school or college educator with a strong interest in optics would be a suitable candidate for the education fellowship. The application deadline is 15 February, and requests for information should be addressed to William A. Borrelle, Optical Society of America, 1816 Jefferson Place NW, Washington DC 20036.

Education

AAS involves teachers in meetings

Taking inspiration from the Optical Society of America's new programs for schoolteachers and also from similar activities conducted by the Astronomical Society of the Pacific, the American Astronomical Society is planning to start including high school teachers in

its annual meetings. The first AAS program for teachers will take place in conjunction with the society's January 1988 meeting in Austin, Texas, and a program probably will be scheduled for the June 1988 meeting in Kansas City.

Peter Boyce, the executive officer of

AAS, says that the society considers the new teacher program to be an important undertaking that it expects to be very popular. Boyce says that AAS has been proceeding from the premise that a strong local commitment is essential to the program's success. Thus AAS has enlisted Austin astronomer Mary Kay Hemenway to drum up support for the program in the local schools. Hemenway is responsible for the laboratories, telescopes and other instruments used in undergraduate astronomy education at the University of Texas and also serves as the university's unofficial astronomy liaison to the Texas Education Agency.

The program at Austin is supposed to be a kind of pilot event that could be duplicated at subsequent meetings, Hemenway explains, and Austin was selected partly because of the university's strong astronomy education programs—this year over 6000 undergraduate students at UT are taking astronomy courses, Hemenway says.

Hemenway and Boyce anticipate that it may be necessary to compensate school boards for the costs of hiring substitute teachers—OSA's practice—and AAS is raising money to that end. AAS also is working through local school systems to see if teachers could get some kind of credit for participating in conference programs.

Established AAS activities in education include the Harlow Shapley Visiting Lectureship Program, which brought 65 lecturers to 135 schools in 1985–86 according to Charles Tolbert of the University of Virginia, the chairman of the AAS education committee. Each school requesting a lecturer pays a fee of \$175 to cover part of the expenses of the visit, and the remainder is covered by money from the Shapley Endowment Fund, which was established in the 1950s as a memorial to Shapley.

AAS and the Astronomical Society of the Pacific also publish a newsletter for teachers, *The Universe in the Class-*

room, which comes out three times a year and is distributed free of charge. It started in 1984–85 with 6000 subscriptions and is expected to reach 13 000 subscriptions in 1986–87. The Canadian Astronomical Society recently joined as a cosponsor of the project, and this year for the first time costs will be shared equitably among the three sponsoring organizations. The newsletter originally was primarily a project of the Astronomical Society of the Pacific.

Taylor is first recipient of Royal Society's Faraday Award

The Royal Society has established a new prize, the Michael Faraday Award, for individuals who make outstanding contributions to the public understanding of science. The award will be made annually to the scientist or scientists who have done the most to promote understanding of science in the United Kingdom. The award consists of a silver gilt medal and a gift of £1000.

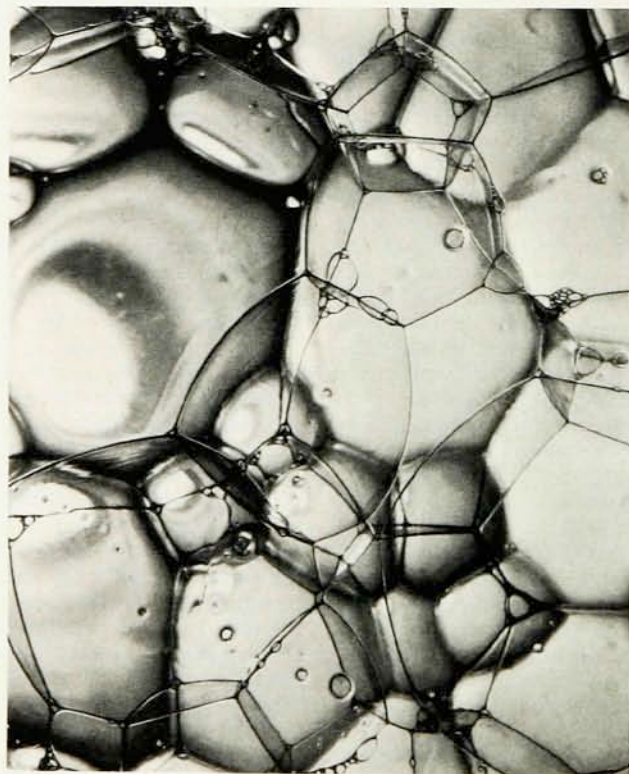
Charles Taylor, a professor of experimental physics at the Royal Institution, has been honored with the first Michael Faraday Award. He was recognized for demonstration lectures that he has delivered locally in South Wales, nationally at the Royal Institution, and in other parts of the world.

Scoville becomes director of Owens Valley Radio Observatory

Caltech astronomer Nicholas Z. Scoville has been appointed director of Caltech's Owens Valley Radio Observatory in Big Pine, California. Scoville succeeds Anthony C. S. Readhead, who has completed a five-year term as director.

The instruments at Owens Valley include two 27-m dishes used to study the Sun, a 40-m radiotelescope used primarily for extragalactic research and three 10-m dishes used as an interferometric array to study millimeter waves. Scoville played a key role in developing millimeter-wave astronomy for the study of interstellar molecular clouds, and in 1985–86 he was manager of the observatory's program for studies of cosmic millimeter waves.

Scoville received a BA in 1967 and a PhD in 1972 from Columbia University. He was a research fellow at Caltech in 1974, and from 1975 to 1984 he was at the University of Massachusetts, serving as associate director of the Five College Radio Astronomy Observatory from 1977 to 1983. He joined the Caltech faculty as a professor of astronomy in 1984. □



'Bubbles,' a photograph Berenice Abbott took around 1946, is currently on display in an exhibit at the New York Academy of Sciences. Sponsored by Novo Industri A/S of Denmark, "The beauty of physics: Berenice Abbott," will be at the academy until 27 March. Abbott, famous primarily for her portraits of artists and writers in Paris in the 1920s and her photographs of the New York cityscape in the 1930s, began systematic photographic studies of physics principles and phenomena in 1939. In the following years Abbott produced many physics photos of impressive precision and clarity, using a number of innovative techniques. In 1958 she was recruited into the PSSC project in Boston, where she produced photos for the first PSSC textbook. Her photo of a bouncing ball—a series of descending arcs—is still on the textbook cover.