similar to other bilateral agreements. The bilateral agreements generally contain provisions concerning activities covered, management, dissemination of information and use of proprietary information, patents and copyrights, and so on. Probably the most significant aspect of the agreement, according to Michael Roberts, director for international programs in fusion energy at DOE, is the provision for a joint coordinating committee that is to meet annually.

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Roberts anticipates that US researchers will work under the agreement at facilities such as the Joint European Torus at Culham in the United Kingdom and Tore Supra in Cadarache, France, as well as at Asdex in Garching, West Germany, and Textor at West Germany's Nuclear Research Facility in Jülich. Europeans are to be expected at major US facilities such as the ones at Princeton, Oak Ridge, MIT and Lawrence Livermore National Laboratory.

-WILLIAM SWEET

Programs provide services for scientists with disabilities

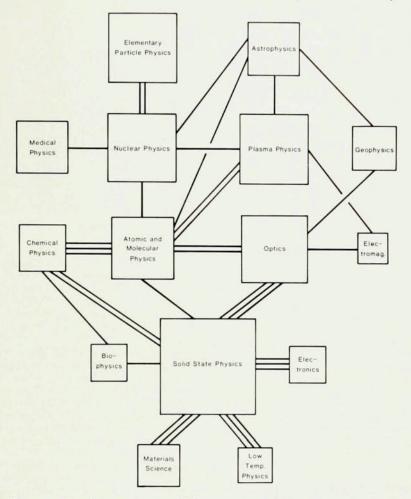
Several government-supported programs provide services for scientists with disabilities.

Scientists and engineers who need advice about how to cope with disabilities may be interested in the Resource Directory of Scientists and Engineers with Disabilities. Prepared by the Project on Science, Technology and Disability at the AAAS, the directory was first published in 1978. A second edition, prepared with funding from the NSF, appeared this spring. It contains the names of about 1000 scientists and engineers with disabilities who are willing to provide counsel to other disabled scientists and engineers. The directory is considered especially useful for individuals who have become disabled in mid-career and need to learn new coping skills.

Orders for the directory should be placed with Diane Lifton, Project on Science, Technology and Disability, AAAS, 1333 H Street NW, Washington DC 20005; telephone (202) 326-6678. (The telephone is set up to be compatible with telecommunications devices for the deaf.) Individuals who wish to be included in the database of resource scientists and engineers with disabilities also should contact Lifton.

A more general source of information for disabled individuals in higher education is available from the heath Resource Center, a program conducted by the American Council on Education

AIP publishes profile of member society membership



The associations between physics subfields, as members of AIP member societies report them, are depicted in the diagram shown here. The size of each square reflects the number of physicists that identify themselves as working primarily in that subfield. The connections and the numbers of connections between the squares reflect the extent to which physicists in each subfield report that they also work in one or more other subfields.

The diagram is from AIP's fifth annual Society Membership Profile: The Pattern of Subfield Associations, which was prepared by Roman Czujko, W. Keith Skelton, Beverly Fearn Porter and Robert Cox of AIP's Education and Employment Statistics Division. The report is based on questionnaires returned by 6700 members of AIP member societies during the summer of 1983. It accordingly does not reflect the membership of the American Geophysical Union, which joined AIP only a year ago. In one's mind's eye, therefore, one should enlarge the box in the upper right-hand corner of the diagram by a large factor.

In contrast to the four annual surveys published by the Education and Employment Statistics Division, which focus on trends in colleges, universities and the job market for graduating physicists, the membership profile provides a cross section of physicists over their entire careers. The major finding of the latest report is that industry continues to attract a growing proportion of AIP's constituents.

Universities employed 35% of AIP society members in 1983, and industry 32%. Of the physicists who earned their PhDs after 1980, more went into industry than academic research or teaching. "Professional self-identification is closely associated with the specific sphere of employment," the report notes. Members who consider themselves physicists and chemists are evenly divided between academe and areas outside of the academic sector, while engineers and computer scientists are heavily based in industry. Astronomers work for universities predominantly.

PhDs in industry earned a median income of \$48 000 in 1983, making them the highestpaid AIP society members. But the report comments, "Although academic salaries remained substantially lower than those in the nonacademic employment spheres, the 7.5% increase from 1982 to 1983 was twice the inflation rate." Single copies of the report, AIP publication R-306.1, are available free from the Education and Employment Statistics Division, AIP, 335 East 45th Street, New York NY 10017.

with support from the US Department of Education. The HEATH Resource Center operates the National Clearinghouse on Postsecondary Education for Handicapped Individuals and prepares fact sheets that are not copyrighted and can be freely reprinted and distributed. A new edition of one such fact sheet, "Access to the science and engineering laboratory and classroom," appeared in late 1986. Further information can be obtained by calling (800) 544-3284.

NSF facilitation awards. Since August 1984, the National Science Foundation has run a program that provides grants to enable disabled scientists and engineers to participate in projects supported by the foundation.

Any disabled participant in a project funded by the NSF, from principal investigator to student research assistant, is eligible for a Facilitation Award for Handicapped Scientists and Engineers. Such awards are available for the purchase of special equipment, modification of equipment or supporting services.

Requests for facilitation awards may be included in an initial proposal to the NSF or may be submitted for supplemental funding. General inquiries about the program should be addressed to Lola Rogers, Coordinator, Facilitation Awards for Handicapped Scientists and Engineers, Room 1225, National Science Foundation, Washington DC 20550. -WILLIAM SWEET

Morrison is first recipient of AIP's Gemant Award

Philip Morrison of MIT has been named the first recipient of AIP's Gemant Award, which recognizes significant contributions to understanding the relationship of physics to the surrounding culture and to the communication of that understanding (see PHYSICS TODAY, January, page 73). Morrison was selected by a committee consisting of Donald Holcomb (Cornell University), Bernard F. Burke (MIT) and David Lazarus (University of Illi-

Morrison is to receive a cash award of \$5000 and a citation, which reads as follows: "The 1987 Andrew Gemant Award is given to Philip Morrison for deep and broad contributions to our understanding of the aesthetic dimension of physics. In our day of specialists, he is the ultimate generalist. celebrating the joy of unbridled intellectual curiosity. Through his writings, his stimulation of others, his teaching of colleagues and students, his films and television production, he has epitomized the values embodied in the



MORRISON

Gemant Award."

Morrison received a BS from the Carnegie Institute of Technology in 1936 and a PhD in theoretical physics from the University of California, Berkeley, in 1940. He worked as a physics instructor at San Francisco State College in 1941 and at the University of Illinois in 1941-42. He was a physicist at the Manhattan Project's Metallurgical Laboratory in Chicago in 1943-44 and a physicist and group leader at Los Alamos from 1944 to 1946. He taught at Cornell University from 1946 to 1965, when he joined the faculty at the Massachusetts Institute of Technology.

Morrison is book editor at Scientific American, in which his reviews appear monthly, and he is the author or coauthor of numerous books including Introducing Nuclear Theory, Winding Down: The Price of Defense and Powers of Ten. In addition to his work as a physicist, physics teacher and popularizer of physics research, he is well known for his involvement in matters of public policy such as arms control. He was chairman of the Federation of American Scientists from 1972 to 1976.

Under the terms of the Gemant Award, Morrison will designate a physics department to receive a \$3000 grant for a fellowship or lecture series and he will deliver a lecture at a scientific meeting, probably the January APS-AAPT meeting, on cross-disciplinary aspects of physics.

AVS produces video courses for use in industry and labs

The American Vacuum Society has produced two video courses for use in industry and at national laboratories, one on properties of vacuum systems, one on sputter deposition and ion beam processes. The decision to sponsor a series of video courses was made several years ago by the AVS education committee, headed at the time by Edward N. Sickafus of Ford Motor Company. On the basis of discussions held with researchers at national laboratories, the committee decided that courses on basic vacuum equipment and technology would be of interest.

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"Properties of vacuum system materials" consists of eight 50-minute tapes and 20 copies of the workbook, and it covers materials such as metals, glasses, ceramics, polymers, elastomers, oils, greases and solvents. It was designed by William F. Brunner, a consultant for 30 years at Lawrence Livermore National Laboratory and the author of Practical Vacuum Techniques. The video course sells for \$2500.

"Sputter deposition and ion beam processes" also consists of eight tapes and a workbook, and it sells for \$2500. It was designed by William D. Westwood of Bell-Northern Research Laboratories, whose lectures cover material transport, film growth, alloy and compound deposition and reactive processes. Two additional video courses are being prepared, "Fundamentals of vacuum pumps I" and "Introduction to pressure gauges."

Orders should be addressed to AVS Video, American Institute of Physics. Marketing Services, 335 East 45th Street, New York NY 10017.

SPS announces 1987 Allied and Marsh White Awards

The Society of Physics Students has announced its 1987 SPS-Allied Awards and the Marsh W. White Awards.

The SPS-Allied Awards are supported by the Allied Corporation Foundation and go to support scientific research projects proposed by SPS chapters. This year's awardees are the University of Missouri, Kansas City, for "A proposal to study the bond structure of benzotriazol," David Wieliczka, adviser; Sonoma State University, for "Radiotelescope," Lynn R. Cominsky; the University of Wisconsin, Platteville, for "Laser desorption of CO from molybdenum," John L. Daniels: and Wright State University, for "Evaluation of a mechanism for irradiationenhanced adhesion," Jerry Clark.

The Marsh W. White Awards, named in honor of the man who served as Sigma Pi Sigma executive secretary from 1930 to 1967 and as president from 1967 to 1970, are made by the American Institute of Physics. They are given to support projects proposed by SPS chapters to promote interest in physics among the general student