tiatives geared toward assisting Indians in energy resource management, including a handbook now in preparation describing new forms of contractual arrangements, tribal energy management models, and other factors to be considered by tribes who have to make energy development decisions. She also reported that FEA has before Congress a request for \$1 million to establish a fund within the new Department of Energy that would provide technical assistance to tribal governments. Later, Barney Old Coyote of the Crow Coal Authority cautioned the federal bureaucracy to take into account the Indian way of life in its dealings with the tribes. Regulating the environment, he said, could pose a threat to "vestiges of a lifestyle . . . that was centuries on this continent."

Seminar participants also heard Charles Lipton, an attorney specializing in international energy resource agreements, compare existing Indian contracts with those being negotiated with developing countries. He told the audience that many arrangements binding Indian tribes today are no more equitable than agreements made in the colonial era. Lipton urged Indian leaders to overcome political disunity within their tribes in order to form new contractual policies, and to look beyond agreements that simply offer more "front money." In terms of the future development of Indian coal, oil, uranium, and water, said Lipton, "we are not talking about millions of dollars; we are talking about billions."

NGO's Review Roles in 1979 U.N. Conference

Planners for the 1979 United Nations Conference on Science and Technology for Development (UNCSTD) met with representatives of nongovernmental organizations (NGO's) at the American Forestry Association in Washington, D.C., on 20 September.

The purpose of the gathering, sponsored by AAAS and three other groups (*Science*, 7 October 1977, page 38), was to define a role for NGO's in the preparation of the U.S. position paper for the Conference. Representatives of 80 groups, including the World Bank, Organization of American States, Phillips Petroleum, Indian Development Service, and International Institute for Environment and Development, were present at the planning meeting.

Observers of the Conference's progress have been worried about previous

CSFR to Hear Azbel

The AAAS Committee on Scientific Freedom and Responsibility (CSFR) will cosponsor a visit by Mark Azbel, a Russian "refusenik" physicist who recently emigrated to Israel. Azbel was the leader of the Moscow Seminar on Collective Phenomena for "refusenik" scientists, also called the "Sunday Seminar," which served as a gathering place for those scientists denied employment in their professions on the basis of their request for an emigration visa.

Azbel will meet with various scientific groups in several American cities during his visit, including a meeting in Washington, D.C., with members of the CSFR Clearinghouse on Persecuted Foreign Scientists. This meeting will be scheduled in mid-November; anyone interested in attending should contact Thomas Johnston, Committee on Scientific Freedom and Responsibility, at the AAAS address.

statements that the Conference would focus primarily on transfer of existing technology, perhaps excluding discussion of scientific/technological applications on a broader basis. At the NGO meeting, Jean Wilkowski, U.S. Coordinator from the Department of State, emphasized the U.S. commitment to utilizing science and technology to supply basic human needs in less-developed countries (LDC's).

Wilkowski revealed that the U.S. position paper would address five major issues: population, food, and health; energy, resources, and environment; climate, soil, and water; employment, trade, and industrialization; and urban and rural development.

Participants discussed integrating Conference proceedings with the concept of the New International Economic Order; the need for attention to appropriate technology and the involvement of people at all levels; the strengthening of science and technology infrastructures within LDC's; protection of technology proprietary rights by industry; the effects of technology transfer on employment; the "brain-drain" problem; and a number of other issues.

The conferees were unable to reach a consensus on issues and procedures to be adopted by NGO groups relevant to their participation in the preparatory

process for UNCSTD. One recommendation that emerged, however, was that a separate meeting should be organized by NGO groups, either to be held prior to or in conjunction with the U.N. Conference. AAAS has traditionally, over the past 5 years, sponsored such complementary meetings in conjunction with major U.N. conferences.

Annual Meeting Notes

Nutrition and Agriculture: Strategies for Latin America is the theme of the fifth Interciencia Symposium, to be held 13-14 February 1978 in conjunction with the AAAS Annual Meeting in Washington, D.C. The symposium, one of a series being sponsored by the Interciencia Association, will be cosponsored by AAAS Section O (Agriculture). Some 30 scientists from North and Latin America will participate in the four panels of the symposium on changing strategies for food production; the role of agroindustries in agricultural development; integrating nutritional planning into development planning; and strengthening hemispheric collaboration in applying science and technology to food and nutrition problems. Further information on the symposium is available from the executive secretary, Interciencia Association, at the AAAS address.

Foreign graduate students studying in the United States are invited to apply for grants of up to \$200 toward covering the expense of attending the Annual Meeting. Up to 20 grants are available through the AAAS Office of International Science, which is planning activities for foreign graduate students in cooperation with several organizations in Washington, D.C. Applicants should send a curriculum vitae and a short statement (250 to 300 words) describing focus of current research, career plans (how training is expected to be applied on return to home country), and interest in attending the Annual Meeting, to the AAAS Office of International Science. Applications must be received no later than 15 December

AAAS People

Herbert W. Hoffman, a meteorological technician for the National Weather Service in Chicago and a member of the AAAS Project on the Handicapped in Science Resource Group, received one of ten outstanding handicapped federal employee awards for 1977. The awards

were presented on 6 October at the U.S. Commerce Department Auditorium in Washington, D.C., by Rosalynn Carter.

Hoffman, who has cerebral palsy, has been employed by the National Weather Service since 1973 and is concurrently studying for a master's degree in earth science at Northeastern Illinois University. His most recent project for the Weather Service involved a study of temperature patterns in Lake Michigan and Lake Superior as observed by satellites.

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Irene Tinker, head of the AAAS Office of International Science for 3½ years, was confirmed by the Senate on 15 September as assistant director for policy and planning of ACTION, the federal agency for volunteer service. Tinker left AAAS in June of this year after being nominated for the ACTION post by President Carter. She will be responsible for developing and evaluating new approaches to volunteer programs in the United States and in developing countries around the world.

AAAS and AISLE to Aid Maryland Legislature

AAAS will participate in a workshop/ conference titled "The Energy Dilemma-A Challenge for Maryland," to be held 1-3 December 1977. The Conference will be hosted and conducted by the Maryland General Assembly with the help of AISLE, an interprofessional council which includes AAAS and several of its affiliates. AISLE focuses its energies on helping build technical analytic capability in state legislatures (see Science, 1 April 1977, page 46). For further information contact Diane Chapman Willis, State Department of Legislative Reference, 90 State Circle, Annapolis, Maryland 21401.

For the Library

The Directory of North American Arid Land Research Scientists, containing names of more than 1000 scientists in Mexico, Canada, and the United States who have contributed to a clearer perception of the processes of desertification, is now available.

Originally prepared for the United Nations Conference on Desertification as a joint effort by the AAAS Committee on Arid Lands and the University of Arizona Office of Arid Land Studies, the di-

rectory contains an introduction by Harold Dregne of the International Centre for Arid and Semi-Arid Lands Studies at Texas Tech University. The volume is indexed to describe each scientist's specific field of research and geographic expertise, and also includes key word and institutional affiliation indices. The cost of the Directory is \$10. Forward orders and inquiries to Publication Sales, AAAS, 1515 Massachusetts Avenue, NW, Washington, D.C. 20005.

A new eighth edition of Salaries of Scientists, Engineers and Technicians: A Summary of Salary Surveys, published by the Scientific Manpower Commission, is now available. This 128-page report brings together current salary data (both published and previously unpublished) from more than 40 sources to provide a comprehensive picture of current salaries by field, age, sex, degree level, years since degree, geographic area, type of employer, principal work activity, and other variables.

Brief analytical text begins each major section, and data on starting salaries and salaries of experienced scientists and engineers in each major employment setting are presented. The cost is \$15 prepaid. Order from the Scientific Manpower Commission at the AAAS address.

Program in Marine Science for Precollege Handicapped

Twenty-three precollege handicapped students between their 11th and 12th grades recently completed a program at the Marine Science Consortium's Wallops Island, Virginia, station. This 5week program was the first all-handicapped Student Science Training (SST) program supported by the National Science Foundation (NSF). E. C. Keller, Jr., professor of biology at West Virginia University and a member of the AAAS Committee on the Handicapped in Science, was the director of the program. The idea for the all-handicapped program was generated by the activities of the AAAS committee on the handicapped and by Keller's findings, in 1976, that handicapped (SST) applicants for all programs were far fewer than their expected numbers.

The program was successful in most of its aspects, especially with regard to attaining a high degree of interactive peer learning in a field experience. Deaf and blind students utilized their respective

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senses in a complementary fashion (for example, manual hand communication was used betwen the blind and the deaf). Elementary signing was taught by the deaf to the partially sighted and was thereafter used by the partially sighted throughout the program. Evaluation of the students' performances indicated that the totally or profoundly deaf had the greatest difficulty with the material presented while the partially sighted and partial hearing tended to do the best (most of the students in the latter groups were from public schools in the "mainstream"; the students in the former group were in special schools).

The program was staffed by a multifacilitation team comprised mainly of West Virginia University faculty and students, but augmented by personnel from the Gallaudet High School, Salem (West Virginia) College, and the West Virginia School for the Blind and Deaf. The staff was composed essentially from within the biology discipline, but two of the staff members were signers and reverse interpreters. One staff member was a braille reader.



Handicapped high school students hear a signed lecture during the first all-handicapped Student Science Training program. The AAAS Committee on the Handicapped in Science was instrumental in expanding the participation of the handicapped in the program, which is funded by the NSF.

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