and technology, does more harm than good.

Virtually all methods for effectively constraining the flow of information out of the country entail the imposition of restrictions on domestic circulation and publication as well. This would make duplication of efforts necessary, thereby slowing the process. Eventually, such a course of action could undermine the national security by weakening the nation technologically.

The exclusion of foreign nationals from university-based research would reduce the general pool of talented individuals at American universities. It would also have the more indirect effect of creating a feeling of distrust and ill will between this country and others.

Beyond these considerations is that of the traditional protections for freedom and openness that have always been part of American society and law.

Erecting significant new barriers to scientific communication, and establishing precedents with respect to prior constraints on publication and speech would degrade valuable American tradition and detract from the example of openness that this country has set for the rest of the world. It would also harm one of the few existing strands of international cooperation: that which links scientists and engineers across national boundaries.

The threat of expanding secrecy in technology merits the serious attention of scientists and engineers, both as professionals and as citizens.

NSF Committee to Hold Hearings at Annual Meeting

The AAAS Office of Opportunities in Science (OOS) will host a hearing on issues relevant to the participation of minorities in science for the National Science Foundation's Committee on Equal Opportunities in Science and Technology (CEOST). The hearing will be held Sunday, 3 January, from 7:00 until 9:00 p.m., in the Massachusetts Room of the Capital Hilton Hotel.

As part of the AAAS Annual Meeting, this will be the first structured setting for minority scientists, in particular, to communicate to the Committee their views on programming needs for minority science. Written testimony (two to three typewritten pages) is invited from persons who wish to be heard by the Com-

mittee, to offer insights, or to make recommendations in keeping with the mission of the Committee. A group of statements will be selected for oral presentation at the hearing and time for open discussion of the issues will be allowed.

Members of the CEOST will hear views on the needs and concerns of women during a panel convened by the Association for Women in Science and AAAS on Monday, 4 January, from 2:30 until 5:30 p.m., in the Chandelier Room of the Sheraton Carleton Hotel. Written testimony is invited, and interested individuals should attend and participate in the discussion.

The Committee on Equal Opportunities in Science and Technology was created by congressional legislation to advise the National Science Foundation "on policies and activities to encourage full participation of women, minorities, and other groups currently underrepresented in scientific and engineering fields." Cora B. Marrett, professor of sociology at the University of Wisconsin chairs the Committee whose members, appointed by the director of the National Science Foundation with concurrence of the National Science Board, represent a broad cross section of scientific and engineering disciplines.

Written statements should be sent, by 18 December, to Mary Poats, National Science Foundation, Room 537, 1800 G Street, NW, Washington, D.C. 20550.

Reminder

Edward E. Noble, chairman of the U.S. Synthetic Fuels Corporation, will give the keynote address at the December AAAS regional energy seminar.

"Western Oil Shale: Benefits, Risks, and Uncertainties," will be held in Boulder, Colorado, on 7 December (see *Science*, 6 November 1981, page 648.)

Meeting Notes

• Puerto Rican scientists and engineers will meet to lay the foundation for a national association for Puerto Ricans in scientific, medical, and technical fields. This meeting is planned as a follow-up to the April 1981 Conference of Puerto Ricans in Science and Biomedicine sponsored by AAAS and the National Institutes of Health. Regional coordinators, appointed at the April Conference, have been working to identify

Puerto Rican scientists and engineers who are interested in assisting in the formation of a national organization. The meeting will be held Monday, 4 January, in the Conservatory Room of the Washington Hilton Hotel.

- Annual Meeting participants are invited to attend an Open Forum sponsored by the Committee on Science, Engineering, and Public Policy on Tuesday, 5 January. Discussions will focus on major issues in the future of science and technology. The Open Forum will be held from 6:00 p.m. until 7:30 p.m. in the Senate Room of the Capital Hilton Hotel. A "no-host" reception will follow the meeting.
- Interested persons are welcome to attend an Open Forum of the AAAS Committee on Science, Arms Control, and National Security on Thursday, 7 January. The Forum will feature a description of ongoing and planned activities of this new AAAS initiative. Program suggestions from attendees are invited. The Open Forum will be held at 6:00 p.m. in the California Room of the Capital Hilton Hotel.
- Youth Activities: The special program for secondary school students at the AAAS Annual Meeting in Washington will begin on Sunday, 3 January, with an afternoon Youth Symposium at the Washington Hilton Hotel. The program includes special lectures, demonstrations, and Conversations with Scientists.

Additional Conversations with Scientists will be held on Monday, 4 January, and Tuesday, 5 January, at 10:00 a.m. until 11:00 a.m., and on Wednesday, 6 January, from 5:30 p.m. until 6:30 p.m. Student papers will be presented on Monday, 4 January, from 11:30 a.m. until 1:00 p.m. and from 1:30 p.m. until 3:00 p.m. For further information on Youth Activities contact Joseph M. Dasbach at the AAAS address.

Issues of Aging Subject of Seminar

A special seminar on "Work and Retirement in the Middle and Later Years" will bring scientists and legislators together to discuss some of the concerns of aging Americans.

The seminar, to be held 8 December at the Capitol in Washington, D.C., will focus on the economic, geographic, and political aspects of employment of the elderly. Participants will discuss the importance of older persons as economic

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Science Communication and Support Sessions Set for 3 January

How can scientists better communicate with the public? What is the future for basic research?

These are the subjects of two workshops to be held in conjunction with the AAAS Annual Meeting in Washington, D.C., in January.

"Communicating Science to the Public" will be held all day on 3 January, beginning at 9:00 a.m., in the Washington Hilton Hotel.

"The Support of Scientific Research in the '80s" will be held on 3 January at 1:30 p.m. in the Capital Hilton Hotel.

The workshops are on Sunday, before the official opening of the Annual Meeting, at 8:30 p.m., with the first public lecture. It is not necessary to register for the meeting in order to attend the sessions.

and social resources, the problems associated with underemployment of the elderly, and retirement benefit structures—public and private.

Panelists will include Robert L. Kahn, professor of psychology and medical care organization at the University of Michigan, and James H. Schulz, professor of welfare economics at Brandeis University, and incoming president, Gerontological Society of America. The session will be moderated by Ray Thornton, president, Arkansas State University, and former chairman, U.S. House of Representatives Subcommittee on Science, Research, and Technology. Chairing the session will be Frederick Mosteller, chairman, Department of Health Policy and Management, Harvard School of Public Health, and chairman, AAAS Board of Directors.

Along with AAAS, cosponsors of the seminar will be the U.S. Senate Special Committee on Aging and the Consortium of Social Science Associations.

Attending the seminar will be members of Congress, congressional staff, representatives of the Congressional Research Service, and public and private agencies concerned with research and problems related to older Americans.

Mass Media . . . and Engineering

Engineering has been added to the 1982 AAAS media fellowship program. With the change in name—Mass Media Science and Engineering Fellows Program—the AAAS hopes to encourage applications from outstanding engineering students.

Fellows work as reporters, researchers, and production assistants for 10 to

12 weeks during the summer at radio stations, television stations, newspapers, and magazines throughout the United States.

AAAS invites applications from students in the natural and social sciences and engineering, preferably at the graduate level. Students majoring in English, journalism, or other nontechnical fields are *not eligible*. The deadline for applications is 1 February 1982. For application information write: AAAS Mass Media Science and Engineering Fellows Program at the AAAS address.

Environmental Sciences Symposium Held in People's Republic of China

This fall a AAAS delegation participated in the first international symposium arranged by the China Association for Science and Technology (CAST). Cosponsored by the AAAS, CAST, and the Chinese Society of Environmental Sciences (CSES), the 5-day environmental sciences symposium was part of the 3-year-old AAAS-CAST cooperative exchange agreement.

The CSES was founded in 1979 in response to the realization of the need to promote environmental science and technology in China. Its chairman is Li Chaobo, who is also director of China's Environmental Protection Office. The organization's responsibilities are (i) academic exchanges involving both Chinese and foreign scientists, (ii) educating the scientific and lay communities, (iii) publications, and (iv) advice to the government.

CSES is a multidisciplinary organization whose members come from acoustics; biology; chemistry; geochemistry; geography; medicine; meteorology; and environmental management, engineering, quality assessment, monitoring and analysis, standards, and theory.

The delegation, led by Theodore M. Schad, deputy director, Commission on Natural Resources, National Research Council, was in China from 28 September to 17 October. Other delegation members were Lyndon R. Babcock, professor of environmental health science and engineering, School of Public Health, University of Illinois; William Back, ground-water geologist, Water Resources Division, U.S. Geological Survey; Kurt W. Bauer, executive director, Southeastern Wisconsin Regional Planning Commission; John T. Middleton, consultant in environmental management, professor emeritus of biology, University of California, and former director, U.S. Environmental Protection Agency's air pollution program; and Lisbeth A. Levey, AAAS program assistant for China exchanges.

There were about 50 Chinese scientists in attendance at the symposium. Primarily from Beijing, they represented research institutes, the Environmental Protection Organization, and the Beijing Municipal Protection Bureau. The symposium focused on three major areas: regional environmental planning, air pollution, and water pollution. The topics were chosen by CSES. There were plenary sessions at which both the Americans and Chinese read papers and small group meetings which often extended into the evening.

After the symposium's conclusion and while still in Beijing, the delegation visited the Institute of Environmental Physics, the Beijing Municipal Environmental Research Institute, Tianjin New Port, and the Yan Shan Petrochemical Works and its satellite town. Afterwards, traveling to Xian, Shanghai, Suzhou, and Guangzhou (Canton), the group participated in small symposia and gave lectures.

Further information about the AAAS China Exchanges and a trip report are available from Lisbeth A. Levey, executive office, at the AAAS address.

For more information about the activities and publications described in AAAS News, write to the appropriate office, AAAS, 1776 Massachusetts Avenue, NW, Washington, D.C. 20036, unless otherwise indicated.