workshop coordinator. Under joint sponsorship of the National Science Foundation and the National Endowment for the Humanities, the 12-month project is designed to identify and develop criteria for evaluating the professional ethics activities of scientific and engineering societies affiliated with AAAS. The results of the project will be useful in coordinating these activities and in highlighting significant programs within the societies. The project reports will also be of assistance in developing a resource base for further study in reviewing professional ethics issues.

The Survey of Scientific and Engineering Associations polled 241 scientific and engineering societies affiliated with AAAS and received responses from 178 societies, a 74 percent response rate. The survey sought information (often previously unavailable) on topics such as the existence of ethical principles adopted by the societies (approximately 75 percent of the responding societies' aggregate membership are affected by such principles); the formation of committees or staff officers within the societies to review ethical concerns or individual complaints submitted to the societies; and the use of sanction and support mechanisms to implement and enforce the societies' codes. The project team has prepared a preliminary framework to classify these activities for further analysis.

The workshop focused on the results of the Survey of Scientific and Engineering Associations, changing attitudes toward professional rights and obligations, ethical issues in selected professions, and ethical issues in the development and use of scientific and technical knowledge. Wide-ranging discussions by workshop participants highlighted important topics for consideration by professional societies, including:

- ▶ the lack of consistent attention to professional ethics issues within the societies:
- ▶ the lack of common definitions for the various procedures used by the societies to respond to ethical concerns;
- ▶ the role of the public in participating in the development and application of ethical principles within the professions;
- ▶ the role of the societies in supporting members who run into difficulties with employers as a result of the members' efforts to uphold their professional ethical principles.

A final report of the AAAS Professional Ethics Project will be published in mid-1980 and will include comments from workshop participants and major conclusions. The final report will repre-

#### **Reviewers Sought**

Science Books & Films reviews science books and 16-millimeter films for all audience levels (kindergarten through college). All areas of science are covered, including mathematics and the physical, social, and life sciences. Reviews are written by scientists in the appropriate disciplines.

SB&F is expanding its coverage to include science filmstrips. Volunteer reviewers having access to filmstrip equipment are urgently needed in all areas of science. In addition, SB&F has a continuing need for book reviewers, especially in the fields of medicine, mathematics, and archeology.

If you would be interested in reviewing for *Science Books & Films*, please contact the editor, SB&F, at the AAAS address.

sent a unique collection of available information on professional ethics and should serve as a stimulus to further research, greater understanding of the importance of professional ethics in science and technology, and better definition of the role of professional societies in promoting responsible conduct by their members. Further information is available from the CSFR office at AAAS.

ROSEMARY CHALK SALLIE CHAFER

Committee on Scientific Freedom and Responsibility

# Implementation of Solar Energy Subject of Seminar

"Solar Energy: Issues and Priorities" featured proponents of solar energy describing solar technologies and factors affecting their implementation. Held in Long Beach, California, 2 and 3 November 1979, this was the last in the current series of AAAS Regional Energy Seminars funded by the U.S. Department of Energy.

Speakers and panelists represented state and federal government, industry, academia, utilities, and consumer advocacy groups. Participants generally agreed that the technology is now in place to make solar a viable energy alternative and that governmental and institutional factors are the primary barriers to be overcome.

In the keynote address, Bruce C. Murray, director of the Jet Propulsion Laboratory, described energy use as basically a regional problem. He enumerated the assets and liabilities of the Southwest region in adapting to solar. This section of the country, he said, is where solar energy will be most easily implemented.

Jon Veigel, assistant director for commercialization at the Solar Energy Research Institute, called solar energy "social security." He pointed to the fundamental choices which will have to be made before solar energy is truly competitive with more traditional forms. Decisions will have to be made between renewable versus nonrenewable sources, centralized versus decentralized administration, and economic costs versus social costs. These questions, he believes, will involve a change in the national will.

Congressman Barry M. Goldwater, Jr. (R-Calif.), advocated the deregulation of energy costs so that the market price could regulate supply and demand. Big oil, he felt, is being made the scapegoat for poor government handling of the energy situation.

Sheldon Butt, president of Solar Energy Industries Association, voiced the opinion that "neither gas nor oil became competitive without government help" (in the form of subsidies and price regulation) and, therefore, more federal financing of solar would hardly set a precedent.

Poor, confusing, and often contradictory information about solar energy, observed Phyllis Price, energy director of the League of Women Voters of California, has often made the public believe solar energy is more expensive and more complicated than it really is.

Representatives of four of the states now heavily involved in solar technologies described the differences in their approaches and incentives. Nevada, which now imports 90 percent of its energy, and Arizona, which imports 80 percent, see solar energy as a cost-effective source which they need to exploit. New Mexico, which now provides between 4 and 5 percent of the nation's total energy (and will provide 14 percent by the year 2000), is in a much less critical position. California, with its rapidly growing population, is moving into solar technologies at the local level. Some 35 jurisdictions in the state are in the process of considering some type of solar

legislation, and Santa Clara, California, now runs the nation's first solar municipal facility.

Cosponsors for the seminar, along with AAAS, were Sigma Xi; The Scientific Research Society; California State University, Northridge; the Energy Fair Foundation; and KPBS-TV Science Center, San Diego State University.

## Scroll of Honor Presented to Teague

A scroll of honor, awarded to former Congressman Olin E. Teague by the AAAS Board of Directors at the Association's 1979 meeting in Houston, Texas, was presented to him in Washington, D.C., on 20 November 1979.

Teague, who served in the U.S. House of Representatives from 1946 until his retirement in 1978, was long involved in scientific and technological activities of the Congress. He chaired the Committee on Science and Technology and its predecessor, the Committee on Science and Astronautics.

In presenting the scroll to Teague, the Board of Directors acknowledged his many contributions to science and his leadership in enacting the National Science and Technology Policy, Organization, and Priorities Act of 1976.

### Pacific Division to Meet at Davis 22–27 June

The Pacific Division of the AAAS plans several events of interest to a variety of scientific disciplines during its annual meeting to be held 22-27 June 1980 on the Davis campus of the University of California. This year's symposia topics, which are being arranged by the Division's affiliate societies and sections, include the use and protection of San Francisco Bay, man and the atmosphere in semiarid regions, public health microbiology, fire ecology, 17th- and 18th-century science, effects of off-road vehicles, amphibian physiology, and "metamorphic education." Contributed papers organized into theme sessions by the program coordinators will also be presented. Abstracts of papers, due by 31 March, should be sent to the appropriate program coordinator.

To complement the symposia, field trips are being arranged to Mono Lake and the Tahoe basin, San Francisco Bay estuary, Sacramento Valley and the Sierra foothills, and the California Botanical Gardens at the University of Cali-

fornia, Berkeley. Among the special events for the meeting will be a tour of the Folsom gold rush site and the traditional division barbecue, held this year at Putah Creek.

The Pacific Division began as the Pacific Science Association and became a AAAS branch in 1915. It covers British Columbia and the states of California, Hawaii, Idaho, Nevada, Oregon, Utah, Washington, and part of Montana. As usual, a number of science groups based in the area will meet jointly with the Division, including the Society for the Protection of Old Fishes (devoted to the study of coelacanths and other primitive and ancient fish groups), West Coast History of Science Society, Western Society of Crop Sciences, Western Society of Soil Science, and Western Society of Malacologists. Many West Coast divisions of national science groups will be with the Division this year, including those of the American Meteorological Society, American Phytopathological Society, American Society for Microbiology, Botanical Society of America, and Ecological Society of America. The Division's Sections, E (Geology and Geography), G (Biological Sciences), K (Social and Economic Sciences), and O (Education), are also planning sessions. meeting encourages interdisciplinary exchanges among its members.

For a copy of the preliminary program, including instructions for submission of contributed papers and abstracts, write Alan E. Leviton, secretary-treasurer, Pacific Division AAAS, California Academy of Sciences, San Francisco, California 94118.

### 50-Year Members Acknowledged

Each year the AAAS expresses its appreciation to those persons who have remained members of the Association for 50 years. Upon reaching this anniversary, members receive a certificate of recognition and are exempt from further payment of dues.

AAAS members reaching the 50-year mark in 1980 are: Georgian Adams, Brewster, Massachusetts; Robert Ballentine, Baltimore, Maryland; Helen Battle, London, Ontario; Raymond Frank Blount, Galveston, Texas; Marion E. Bunch, St. Petersburg, Florida; Leslie A. Chambers, Houston, Texas; David B. Charlton, Portland, Oregon; H. H. Dukes, Des Moines, Iowa; H. Emory Fenimore, Muncie, Indiana; Frederick K. Herpel, Laguna Hills, California; Carroll A. Hochwalt, St. Louis, Missou-

ri; Sewell H. Hopkins, Gloucester, Virginia; Wendel F. Jackson, Annapolis, Maryland; Hans Jenny, Berkeley, California; Nelson E. Jodon, Crowley, Louisiana; Emanuel B. Kaplan, Teaneck, New Jersey; Sidney W. McCuskey, Cleveland, Ohio; T. M. McMillion, Beaver Falls, Pennsylvania; Robert Mitchell, New Concord, Ohio; Daniel Luzon Morris, Seattle, Washington; L. C. Norris, Davis, California; G. F. Otto, College Park, Maryland; Katherine V. Palmer, Ithaca, New York; Lasetta Pickard, Toledo, Ohio; Ervin J. Prouse, Austin, Texas; W. A. Shands, Salem, South Carolina; Hamilton Southworth, New York, New York; George F. Sprague, Urbana, Illinois; Charles Allen Thomas, St. Louis, Missouri; Paul C. Wilbur, San Jose, California; Hans Wilkens, Reading, Pennsylvania; and Cecil E. Yarwood, Berkeley, California.

### Elvin Charles Stakman 1885-1979

Elvin C. Stakman, former AAAS president and board chairman, died 22 January 1979. At the time of his death, Stakman was emeritus professor of plant pathology at the University of Minnesota.

In a tribute to Stakman prepared by Theodore C. Byerly, former vice president and chairman of Section O (Agriculture), the AAAS Board of Directors noted:

"E. C. Stakman was a major participant in the development and implementation of methods and institutions for the control of wheat rusts. His contribution to their control is a major and continuing factor in the assurance of the world's bread supplies.

Stakman was co-discoverer of the first biological race of *Puccinia graminis tritrici*, the phytopathogen. More than 200 such races are now known. He organized the Federal Cereal Rust Laboratory and participated in the establishment of International Rust Nurseries that are now operated in more than 50 countries. Stakman participated in the establishment of the cooperative Mexico-Rockefeller Foundation corn and wheat improvement program (CIMMYT) in 1943. Wheats developed in that program have increased the bread supplies for Mexico and for many other countries."

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.