

## 1981 Election Results

The successful candidates in the 1981 general and electorate elections are listed below. Terms begin on 9 January 1982.

### General Election

President-Elect: Anna J. Harrison  
Members of the Board of Directors: Lawrence Bogorad and Sheila E. Widnall

Members of the Committee on Nominations: Robert W. Berliner, Phyllis L. Kahn, Rolf M. Sinclair, and Linda S. Wilson

### Electorate Elections

#### Section A—Mathematics

Chairperson-Elect: Lipman Bers  
Member-at-Large of the Section Committee: Mary W. Gray  
Members of the Electorate Nominating Committee: Patricia J. Eberlein and Steve Smale

#### Section B—Physics

Chairperson-Elect: James A. Krumhansl  
Member-at-Large of the Section Committee: Ralph A. Alpher  
Members of the Electorate Nominating Committee: Bernard L. Cohen and Roger G. Newton

#### Section C—Chemistry

Chairperson-Elect: Murray Goodman  
Member-at-Large of the Section Committee: Barbara Roth  
Members of the Electorate Nominating Committee: Rodney N. Hader and Bradford R. Stanerson

#### Section D—Astronomy

Chairperson-Elect: Paul W. Hodge  
Member-at-Large of the Section Committee: Clark R. Chapman  
Members of the Electorate Nominating Committee: Loren W. Acton and Julie Lutz

#### Section E—Geology and Geography

Chairperson-Elect: Daniel F. Merriam

Member-at-Large of the Section Committee: James F. Davis

Members of the Electorate Nominating Committee: Robert E. Boyer and Randolph W. Bromery

#### Section G—Biological Sciences

Chairperson-Elect: Charlotte P. Mangum  
Member-at-Large of the Section Committee: Peter W. Frank  
Members of the Electorate Nominating Committee: Paula T. Beall and Palmer Rogers

#### Section H—Anthropology

Chairperson-Elect: Richard A. Gould  
Member-at-Large of the Section Committee: John E. Yellen  
Members of the Electorate Nominating Committee: Mary Elizabeth King and Jeffrey R. Parsons

#### Section J—Psychology

Council Delegates: Roger Brown, Gregory A. Kimble, and Edith D. Neimark  
Chairperson-Elect: Janet T. Spence  
Member-at-Large of the Section Committee: Lewis P. Lipsitt  
Members of the Electorate Nominating Committee: Richard J. Herrnstein and Richard F. Thompson

#### Section K—Social, Economic, and Political Sciences

Council Delegate: Patricia Kendall  
Chairperson-Elect: Kenneth J. Arrow  
Member-at-Large of the Section Committee: Kenneth Prewitt  
Members of the Electorate Nominating Committee: Warren O. Hagstrom and Charles Perrow

#### Section L—History and Philosophy of Science

Council Delegate: Arthur L. Norberg  
Chairperson-Elect: Daniel J. Kevles  
Member-at-Large of the Section Committee: George Basalla  
Members of the Electorate Nominating Committee: Edwin T. Layton, Jr., and Linda Wessels

#### Section M—Engineering

Council Delegates: Peter Elias, Edward W. Ernst, and F. Karl Willenbrock  
Chairperson-Elect: Eric A. Walker  
Member-at-Large of the Section Committee: John G. Truxal  
Members of the Electorate Nominating Committee: Richard M. Emberson and Anthony B. Giordano

#### Section N—Medical Sciences

Council Delegates: William B. Bean, Anne M. Briscoe, Louis Lasagna, Edmund D. Pellegrino, Jonathan E. Rhoads, Jonas Salk, and Jay Tepperman  
Chairperson-Elect: Norman Kretschmer  
Member-at-Large of the Section Committee: Helen M. Ranney  
Members of the Electorate Nominating Committee: Henry Blackburn and M. Jean McManus

#### Section O—Agriculture

Council Delegate: Ralph J. McCracken  
Chairperson-Elect: Walter I. Thomas  
Member-at-Large of the Section Committee: Charles O. Gardner  
Members of the Electorate Nominating Committee: Dale E. Baker and William D. Pardee

#### Section P—Industrial Science

Council Delegate: John D. Caplan  
Chairperson-Elect: Nat C. Robertson  
Member-at-Large of the Section Committee: Lawrence M. Kushner  
Members of the Electorate Nominating Committee: William P. Hettinger, Jr., and Charles F. Larson

#### Section Q—Education

Chairperson-Elect: Hans O. Andersen  
Member-at-Large of the Section Committee: Jack L. Carter  
Members of the Electorate Nominating Committee: Rodger W. Bybee and Michael Szabo

#### Section R—Dentistry

Chairperson-Elect: Erling Johansen  
Member-at-Large of the Section Committee: Andrew D. Dixon  
Members of the Electorate Nominating Committee: Harald Løe and A. H. Melcher

### *Section S—Pharmaceutical Sciences*

Chairperson-Elect: Stanley A. Kaplan  
Member-at-Large of the Section Committee: Betty-ann Hoener

Members of the Electorate Nominating Committee: Walter D. Conway and Edward G. Rippie

### *Section T—Information, Computing, and Communication*

Chairperson-Elect: Robert Lee Chartrand

Member-at-Large of the Section Committee: Robert S. Taylor

Members of the Electorate Nominating Committee: Ted Brandhorst and Linda C. Smith

### *Section U—Statistics*

Chairperson-Elect: Lincoln E. Moses  
Member-at-Large of the Section Committee: Ramanathan Gnanadesikan

Members of the Electorate Nominating Committee: Agnes M. Herzberg and I. Richard Savage

### *Section W—Atmospheric and Hydrospheric Sciences*

Chairperson-Elect: Hans A. Panofsky  
Member-at-Large of the Section Committee: Barry Saltzman

Members of the Electorate Nominating Committee: William R. Holland and Warren M. Washington

### *Section X—General*

Chairperson-Elect: Lora M. Shields  
Member-at-Large of the Section Committee: Rosemary Chalk

Members of the Electorate Nominating Committee: Rae Goodell and Walter A. Rosenblith

## Science and Secrecy

In recent years the U.S. government has attempted to slow down the flow of selected technologies outside its borders by drawing a veil of secrecy around many areas of scientific research. It has placed restrictions on foreign scientists attending scientific meetings, classified nonmilitary research, and made proposals to isolate foreign students at American universities from certain fields of research.

What are the impacts of these actions on the scientific and technological community? The AAAS Committee on Scientific Freedom and Responsibility formed a subcommittee on national security and scientific communication to find out. The subcommittee is chaired by

Stephen Unger, professor of electrical engineering and computer science at Columbia University, who has prepared a background paper describing the situation and offering proposals. The Committee will also sponsor a symposium on this topic at the 1982 AAAS Annual Meeting.

The following report is taken from Unger's paper, "National Security and the Free Flow of Technical Information." (Unger's paper will be published in *Technology Review* in early 1982.)

Historically, there have been two types of restrictions placed on scientific and technical information. The government has classified information relevant to military purposes, and the private sector has restricted access to information concerning commercially important processes and devices. The government has also controlled sensitive technical products through weapons and export control regulations.

Over the past few years, however, several governmental actions have been directed at broadening control to include not only the technical hardware but also the technical knowledge generated by private investigators outside the government. Growing government concern is also seen through its efforts to make U.S. technology in areas such as microelectronics and computer research less accessible to foreign nationals and to impose prior restraint on selected publications.

The growing field of cryptology is a case in point. Cryptology was, until recently, primarily used by the military, intelligence service, and diplomatic corps. However, large-scale digital communications, electronic fund transfers, the storage of huge amounts of data on individuals and businesses in computer banks, and the increased concern about privacy in general, has made cryptology a subject of much broader concern.

On several occasions federal officials have asked that technical papers involving encryption devices not be presented at scientific meetings. Patent applications for these devices have been delayed.

The government's arguments for concealing cryptology work are that open publication would endanger national security.

This has been challenged on the grounds that, because the United States is so heavily dependent on electronic communications, a strong civilian capability in encryption and verification systems is necessary to prevent "data sabotage." It is also noted that this technol-

ogy is much more important to the United States than to the Soviet Union, which is far behind in the use of digital data systems.

In early 1980 the organizers of a scientific meeting on computer technology (the American Vacuum Society) and of a meeting on laser fusion (the Optical Society of America and the Institute of Electrical and Electronics Engineers) were asked by the U.S. government to restrict participation of certain invited foreign nationals. Both meetings were held with some government controls imposed.

The U.S. Senate has suggested that foreign students should be prevented from working with certain research programs involving high-speed integrated circuits. The large (probably more than one-third) proportion of engineering, physics, and computer science graduate students at American universities who are foreign nationals would make this restriction difficult, at best.

The constitutional conflicts over the government's right to classify nongovernmental information were well documented in the case of *The Progressive*, in which a journalist, working from unclassified documents, assembled information on the construction of the H-bomb. In this case, the government sought to classify the result of an independent researcher's work, not the documents used to support that work.

The overriding reason given to support secrecy in these and other areas of science and technology is national security. The military strength of the country has depended in large measure on the preeminent status of U.S. technology. Yet, in recent years, fears have been expressed that we cannot continue to disseminate "know-how" abroad without further eroding our leadership. Furthermore, America's technological predominance in the commercial sector has been called into question by nations such as Japan and West Germany. Why, proponents of secrecy ask, should sensitive industrial knowledge be exported?

But does secrecy actually promote security? The futility of trying to suppress scientific knowledge is illustrated by what happened in the early 1940's. Prior to the initiation of the Manhattan Project, American scientists agreed not to publish papers dealing with nuclear fission. Intrigued by this absence of publications, G. N. Flyorov, a Soviet physicist, assumed that the U.S. government had begun a secret nuclear project and urged the U.S.S.R. to do the same.

An argument can be made that secrecy, in the pursuit of high-quality science