# **AAAS Annual Elections**

Ballots for the Association's 1979 elections and this announcement should reach AAAS members at about the same time. All members will receive a general-election ballot for president-elect, members of the Board of Directors, and members of the Committee on Nominations. Each member who is enrolled in one of the 21 Electorates corresponding to the AAAS Sections will also receive an electorate-election ballot for Section chairperson-elect, member-at-large of the Section Committee, and members of the Electorate Nominating Committee. The ballots for Electorates A, B, C, D, E, G, and H will, in addition, list candidates for Council delegate.

The 1 June preliminary election announcement included the names of candidates and offered members the opportunity to place additional names in nomination by petition submitted not later than 16 July. No petitions were received.

Biographies of the candidates are given below, following interviews with the candidates for president-elect. The terms of all new officers, Council delegates, and committee members will begin on 9 January 1980.

"I view the AAAS as really the only organization in the United States that spans the whole spectrum of the sciences and increasingly, it seems to me, it's going to be important to have that kind of scope because the problems we're facing transcend the boundaries of the individual societies, the individual professions, and disciplines." Explaining why he has agreed to run for AAAS President-Elect, D. Allan Bromley added that he hopes "by working with the AAAS it might be possible to bring out more of that potential.'



Bromley, the 53-year old

Henry Ford II Professor of Physics at Yale University, was in Washington, D.C., recently en route to the People's Republic of China as head of the National Academy of Sciences' nuclear science delegation.

Communication, Bromley believes, is the single most important function of the AAAS. "And it's communication about science as much as, perhaps even more than, communications within science." In addition to *Science*, which he says he finds to be "required reading" at scientific meetings around the world, Bromley cites other communicating mechanisms of the AAAS.

The annual R & D report and colloquium, he points out, provide both information in readily accessible form and a forum for communicating within and outside the scientific community. The AAAS annual meeting, he adds, is the "most efficient information transfer that I know of."

"The appropriate role for AAAS," says Bromley, "is to provide the individual citizens, interested intelligent citizens, with the information they require so that they can use the normal political channels, dealing with their own representatives, their own senators, on the basis of that information, to influence public policy."

Controversial issues involving science and technology should not be shied away from, asserts the AAAS candidate. "We should arrange to have in *Science* specific articles targeted to the questions that are in the public mind at the time. They should give, as well as possible, a balanced view of what the real issues are, and if there are public fears—why there are fears—and a rational unbiased analysis of the situation. Secondly, when there are issues of this kind that have occupied the public mind for some time, there's a lot that could be said for recognizing formally that the issues often are not primarily scientific and technological, but they're frequently sociological, political, and behavioral. It seems natural that the AAAS could convene workshops, drawing on really outstanding people in the different areas to present balanced views of the issues involved. These could result, if we found the right mechanisms, in published proceedings which could form very effective bases for subsequent discussion and education in the areas involved."

"There is a very fascinating thing developing, as I see it, in the country. After years of worry about the effectiveness of our communication with the public and worry about whether there was growing public disinterest and alienation from things scientific and technological, we're seeing a positive explosion of various popular scientific magazines and publications addressed to the nonscientist public. AAAS has a very important role here, and I'm intrigued by the SCIENCE 80 initiative that we're about to launch. I'm hopeful that it will live up to all our expectations. I believe that there is a very real public interest in, and demand for, this increased access to things scientific."

Although Bromley strongly supports the AAAS publishing activities, he feels the AAAS definitely should also make an effort to affect the electronic media because, "we're no longer primarily a reading country. We listen occasionally, and we view substantially. I have been distressed for a long time to realize that generations of American children have grown up to believe that all scientists have British accents—from watching imports from the BBC."

Because television and radio are such important sources of information, Bromley encourages the AAAS to get involved, suggesting that the role we play should be conditioned by the resources available. "Because to do something badly, to do something in an amateurish fashion, it seems to me would be counterproductive. If AAAS had the resources to do it right, then by all means AAAS should produce programs for radio and television. But if we cannot find those resources we might better act as a coordinating center, to bring together people from private industry and the media, and get them involved with some of the outstanding scientists in the country."

Bromley, who is involved in the international science activities of several institutions, including the National Academy of Sciences, the National Science Foundation, and the U.S. Department of Energy, thinks the AAAS should work with its counterpart organizations in other countries in planning more joint ventures.

"In a very real sense, AAAS can back off and take a look at science policy *qua* science policy," Bromley notes. "It's something we already share with any developed nation and we increasingly are going to share it with the less developed nations as they try to establish what their policies in this area are

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going to be and what we in the United States may do to help them. In these latter cases in particular, the AAAS input should be useful because it is drawn on a much broader scientific and technological perspective than many of the other organizations involved."

Bromley is particularly anxious to increase participation of industrial scientists in AAAS affairs. "Although we have already made substantial progress there, much remains to be done, and I would hope that AAAS could provide a forum where the vital bridges between academia and the private sector—seriously damaged during the 1960's and early 1970's could be rebuilt." He hopes, too, that the physical scientists can be encouraged to play a greater role than they now do in AAAS affairs and in *Science*. "After all, the corresponding AAAS sections played crucial roles in the early days of these sciences in this country."

As for program changes within the AAAS, Bromley strongly believes the activities of the Office of Science Education must be more clearly linked with the goals of the Office of Opportunities in Science. "I have the feeling that it's going to be essential not only for science and technology per se, but also for the country, for us to go back and take a look at education in science and technology—not just at the graduate level where we usually tend to focus but way back, at secondary school, at elementary school, at pre-school—the stereotypes are cast much earlier than we tend to think."

"I'm convinced that in the case of women, and most particularly in the case of minorities, we have essentially joined the battle after it has been lost. If we're really going to bring women and minorities into the sciences in a creative, productive way—as we must—then I think we have to work out a way to go back and change the starting rules and remove the hurdles that both groups encounter in our educational system. We are not going to make any real progress by just trying to fine tune and fiddle with a fundamentally faulty mechanism."

The AAAS, contends Bromley, would be able to address this issue from a unique base encompassing all scientific activity and therefore having greater credibility both inside and outside the scientific community.

Stressing his feeling of responsibility and desire to make a larger contribution toward the goals of the Association, Chen Ning Yang, currently a member of the Board, agreed to run for AAAS President-Elect.

Yang, 57, has been the Albert Einstein Professor of Physics and director of the Institute for Theoretical Physics at the State University of New York at Stony Brook since 1966.

He sees an increasingly important role for the AAAS to play in the expanding interaction between science and

society. As society relies more heavily on sophisticated technologies, he believes that facilitating communication between scientists, nonscientists, and government leaders will become even more crucial. As the questions involving science and technology which face the public become more complex they will encompass more disciplines. Here, says Yang, is where the AAAS is especially suited to take the lead.

The new committee on climate, suggests Yang, is an example of how the AAAS might best use its resources. "This is the kind of thing AAAS can do well, and when done correctly it does produce an impact on scientific and social developments. I would think this type of looking ahead to identify and study future problems and their possible impacts is an area in which AAAS is bound to get progressively more involved."

One area of particular concern to Yang is the diminishing college enrollment expected over the next 10 years. As colleges and universities cut back their faculties, he says, there will be fewer jobs available for young scientists. "One very important responsibility of the AAAS is to look into this and try to help as much as possible, in a predictive way, and possibly in other ways as well. We should be very much aware of the likelihood that this problem is going to become worse over the coming years. If enough of us worry about it we may be able to identify some solutions." The AAAS could, using one example Yang cites, work with its participating organization, the Scientific Manpower Commission, to more widely distribute statistical information about college enrollment trends and career opportunities for science graduates.

Another topic on which Yang expresses strong feelings is the underrepresentation of blacks in science and technology. "While the programs of the AAAS Office of Opportunities in Science have achieved a number of important purposes, I am not very happy about the involvement of the black community in science. It is a basic and difficult problem and in my opinion all organizations—AAAS included—must pay continuing attention and see whether in some way we can improve the record. The problem transcends the responsibility of the AAAS, but merely because it is difficult, merely because the responsibility lies in many quarters, does not mean the AAAS should not concern itself with ways of improving the situation."

Yang believes the AAAS' role as a communicator is very important. In addition to *Science* and the AAAS annual meeting, he regards AAAS regional meetings, the annual R & D science policy colloquium, and *SCIENCE 80* as making significant contributions. "*SCIENCE 80* is a new adventure of tremendous potential importance. It will address one area that *Science* has not addressed in the past—the less professionally involved public. This audience is, however, increasingly involved in science just because of the complexity of society."

Further, Yang asserts that the AAAS could take an active role when matters of scientific controversy are before the public. "If the Board and the Council approve, there is no reason why the AAAS should not try to exert influence on national policy relative to scientific and technological matters. It would be difficult to make that decision on anything other than a case-by-case basis, however."

Yang also thinks it would be a mistake for the AAAS to summarily avoid involvement in special cases brought to the Association's attention by the Committee on Scientific Freedom and Responsibility. "These are difficult problems which need continual attention, but their difficulty should not prevent us from trying to tackle them. If supported by the general membership, then the AAAS should get involved in individual cases. I would not subscribe to the idea that there should be a general axiom that the AAAS would not get involved in special cases."



To the extent that the AAAS has the resources to do it, Yang suggests that the exchange of visits between the AAAS and the Scientific and Technical Association of the People's Republic of China (STAPRC) is a very good thing. After years of neglect the scientific establishment in China is getting back on its feet. Following an exchange of visits between the AAAS and STAPRC in late 1978 and 1979, the STAPRC will send a delegation to the 1980 AAAS annual meeting in San Francisco, "to observe how an annual meeting of the AAAS-type is organized and how it performs and what its effects are on American science and on American society," Yang points out. "Since China is very much emphasizing developments in science and technology, this exchange is extremely useful both for China and for the United States."

The international activities of the AAAS might well be expanded in other areas also, says the AAAS candidate. "Many of the problems facing society in its relation to science and technology in the future are very much international in character. Just to take one example, the problem of nuclear energy and the dangers associated with it are really in large part international problems. I think the basic orientation of the AAAS to push for international collaboration and international communication in areas of science development is very healthy."

"The kind of meeting that was held in Mexico City in 1973 (the AAAS annual meeting held in conjunction with the Consejo Nacional de Ciencia y Technologia de Mexico) involving the North American and South American countries was a very useful thing, according to Yang. "One could explore the possibility of holding joint meetings—let's say with European or Asian countries—for the purpose of international scientific and technological cooperation. A greater non-American participation in the AAAS and in its annual meetings certainly would be good and consistent with the goals of the Association."

Other involvements along the lines of the Interciencia Association (the federation of associations for the advancement of science in the Americas) would be welcome, believes Yang, "provided the AAAS in these endeavors is sensitive to the local problems and the local situation."

### **General Election**

Terms of office are as follows: president-elect, 3 years (the second year as president, the third year as retiring president and chairman of the Board); members of the Board of Directors, 4 years; members of the Committee on Nominations, 2 years.

President-Elect (one to be elected).

**D. Allan Bromley Chen Ning Yang** 

### **D. Allan Bromley**

D. Allan Bromley (physics), 1926; B.Sc., 1948, M.Sc., 1950, Queen's University; Ph.D., University of Rochester, 1952; M.A., Yale University, 1961; Dr. Nat. Phil., University of Frankfurt, 1978. With Yale University since 1960; Henry Ford professor since 1972; director, A. W. Wright Nuclear Structure Laboratory, since 1963. Previously with University of Rochester and Atomic Energy of Canada, Ltd. Fellow, American Academy of Arts and Sciences; Governor General of Canada Metal, 1948; National Research Council fellow, 1952; Guggenheim fellow, 1977-78; Humboldt fellow, 1978; Benjamin Franklin fellow, Royal Society of Arts, 1979; Council, American Physical Society, 1967-71; chairman, Physics Survey Committee, National Academy of Sciences, 1969-73; chairman, Office of Physical Science, NRC, 1975-78. Vice president, International Union of Pure and Applied Physics; chairman, National Science Foundation committee to review university based nuclear science laboratories: chairman. CSCPRC Delegation in Nuclear Science to China; U.S./U.S.S.R. Working Groups on Science Policy and on Research on Fundamental Properties of Matter. AAAS activities: chairman, Section on Physics, 1978; Council, 1979

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### **Chen Ning Yang**

Chen Ning Yang (physics), 1922; Ph.D., University of Chicago, 1948. Albert Einstein professor of physics and director, Institute for Theoretical Physics, State University of New York, Stony Brook, since 1966. Previously with University of Chicago and Institute for Advanced Study. Member, National Academy of Sciences; Albert Einstein Commemorative Award in Science, 1957; Nobel Prize in physics, 1957; Rumford Prize, 1979; Guggenheim fellow, 1962-63; Gibbs lecturer, American Mathematical Society; Loeb lecturer, Harvard University; Vanuxem lecturer, Princeton University; Lincoln lecturer, Board of Foreign Scholars, U.S. State Department; Member of Corporation, Woods Hole Oceanographic Institution, 1962-78; Council, 1963-66, and chairman, Division of Particles and Fields, 1969-70, American Physical Society; chairman, Panel on Theoretical Physics, Physics Survey Committee, NAS, 1964-65; Science Advisory Committee, IBM Corporation, 1966-71; High Energy Physics Advisory Panel, Atomic Energy Commission, 1967-69; Board of Trustees, Rockefeller University, 1970-76; chairman, Division of Particles and Fields, International Union of Pure and Applied Physics, 1972-75. Governing Council, Courant Institute of Mathematical Sciences; Board of Trustees, Salk Institute; president, National Association of Chinese Americans. AAAS activities: Board of Directors and Council. 1976-79.

Board of Directors (two to be elected).

Nancie L. Gonzalez Lloyd G. Humphreys Rolf M. Sinclair Harriet Zuckerman

### Nancie L. Gonzalez

Nancie L. Gonzalez (anthropology), 1929; B.S., University of North Dakota, 1951; M.A., 1955, Ph.D., 1959, University of Michigan. Vice chancellor for academic affairs,

University of Maryland, since 1977. Previously with Jamestown College, University of California, Berkeley, Institute of Nutrition of Central America and Panama, University of New Mexico, University of Iowa, Boston University, and National Science Foundation; visiting distinguished professor, Southern Methodist University, 1977. Ford Foun-



dation fellow, 1957-58; Executive Boards, Council on Anthropology and Education, 1969-72, Society for Applied Anthropology, 1970-73, American Ethnological Society, 1970-73, and Central States Anthropological Society, 1971-73; chair, Nominations Committee, American Anthropological So-ciety, 1970-71; coordinator, Women's Committee, Latin American Studies Association, 1973-75; president, SSA, 1974-75. Edi-torial Boards, Third World Studies, Human Organization, and Medical Anthropology; Advisory Committee, International Division, NSF; Advisory Committee, Office of Science and Technology Policy; International Committee and Executive Board, Council on Academic Affairs, National Association of State Universities and Land-Grant Colleges. AAAS activities: Section Committee, Section on Anthropology, 1976-78; Council, 1977-79; Committee on Council Affairs, 1977-78.

### Lloyd G. Humphreys

Lloyd G. Humphreys (education, psychology), 1913; B.S., University of Oregon, 1935; M.A., Indiana University, 1936; Ph.D., Stanford University, 1938. With University of Illinois, Champaign, since 1955; professor of education and psychology since 1971. Previously with Northwestern University, Army Air Forces, Aviation Psychology Program, University of Washington, Air Force Person-

nel and Training Research Center, San Antonio, and National Science Foundation. National Research Council fellow, Yale University, 1938-39; Carnegie fellow, Columbia Uni-1941-42: versity, president, Division of Military Psychology, 1957-58, and Division of Evaluation and Measurement, 1960-61, American Psychological Association; president, Psychometric Society, 1959-60; Organizing Com-



mittee, 1959-60, and chairman, Governing Board. 1962-63, Psychonomic Society; chairman, Conference of Chairmen of Graduate Training Departments of Psychology, 1962-66; editor, Psychological Bulletin, 1964-69; Board of Directors, APA, 1975-77. Editor, American Journal of Psychology; Commission on Human Resources, NRC; Board of Directors, American Institute for Research in the Behavioral Sciences; Finance Committee, APA. AAAS activities: Section Committee, Section on Psychology (J), 1957-60; Council, 1957-60, 1963, 1974-78; member-at-large, Section J, 1961-64; vice president, AAAS, and chairman, Section J, 1963: Council Committee on Fellows, 1976-77; chairman-elect, Section J, 1979.

### **Rolf M. Sinclair**

Rolf M. Sinclair (physics), 1929; B.S., California Institute of Technology, 1949: M.A., 1951, Ph.D., 1954, Rice Universi-Ph.D., ty. Program director, Physics Division, National Science Foundation, since 1969. Previously with Westinghouse Research Laboratories, University of Hamburg, Ecole Normale Superieure, Princeton University, and Culham Laboratory (Eng-



land). Rice Institute fellow, 1950-53; Program Committees, Division of Electron and Atomic Physics, 1974-77, and Division of Plasma Physics, 1976, and Panel on Public Affairs, 1976-77, American Physical Society. Advisory Committees to U.S. Fusion Program (AEC/ERDA/DOE); secretary, U.S. Interagency Committees on Atomic and Molecular Physics and Plasma Physics. AAAS activities: secretary, Section on Physics (B), 1972-; Council, 1972-73; chairman, Section B Electorate Nominating Committee, 1974-76; AAAS-Newcomb Cleveland Prize Committee of Judges, 1975-78, chairman, 1978.

#### Harriet Zuckerman

Harriet Zuckerman (sociology), 1937; A.B., Vassar College, 1958; Ph.D., Columbia University, 1965. With Columbia University since 1965; professor of sociology and department chair since 1978. Previously with Barnard College. Woodrow Wilson fellow, 1958-59; Center for Advanced Study in Behavioral Sciences fellow, 1973-74; visiting scholar, Russell Sage Foundation, 1972-73; Sigma Xi na-



tional lecturer, 1975-76. Board of Trustees, Center for Advanced Study in the Behavioral Sciences; Board of Directors, Annual Reviews Inc.; Committee on Scholarly Exchange with the People's Republic of China, National Academy of Sciences; Committee on Science Indicators, Social Science Research Council; Board, International Sociological Association Research Council on the Sociology of Science; Editorial Boards, American Journal of Sociology, Man and Medicine, and Scientometrics; advisory editor, Social Science Citation Index. AAAS activities: Committee on Public Understanding of Science, 1973-74; Section Committee, Section on Social and Economic Sciences (K), 1976-78; Section K Electorate Nominating Committee, 1978-80.

Committee on Nominations (four to be elect-

Helen S. Astin Lewis M. Branscomb Mary E. Clutter Howard R. Gould J. V. Martinez Benjamin S. P. Shen William A. Vogely Warren M. Washington

ed).

### Helen S. Astin

Helen S. Astin (psychology), 1932; B.A., Adelphi University, 1953; M.S., Ohio University, 1954; Ph.D., University of Maryland, 1957. Professor of higher education, University of California, Los Angeles, since 1978. Previously with U.S. Public Health Hospital, Lexington, Kentucky; University of Maryland Medical School; National Col-



lege of Education: Commission on Human Resources and Advanced Education, National Academy of Sciences; Stanford University; Bureau of Social Science Research: University Research Corporation; and Brown University. Award for outstanding contribution to research and literature, National Association of Student Personnel Administrators, 1976; Education and Training Board, 1972-74, and president, Division 35, Psychology of Women, 1974-75, American Psychological Association. Policy and Planning Board and Council, APA; trustee, Hampshire College; president, Association of Academic Women, UCLA. AAAS activities: Commission on Science Education, 1971-72; Ad Hoc Committee on Regional Centers, 1971-72: Advisory Committee on Chautauqua Courses, 1977-.

#### Lewis M. Branscomb

Lewis M. Branscomb (physics), 1926; A.B., Duke University, 1945; M.S., 1947, Ph.D., 1949, Harvard University. Vice president and chief scientist, IBM Corporation, since 1972. Previously with National Bureau of Standards (director, 1969-72). Member. National Academy of Sciences and National Academy of Engineering; fellow, American Academy of Arts and



Sciences; Rockefeller Public Service Award; Samuel Wesley Stratton Award; Gold Medal for Exceptional Service, U.S. Department of Commerce; Proctor Prize, Scientific Research Society of America: National Civil Service League Award. President, American Physical Society; chairman, NAS Committee on Scholarly Communication with the People's Republic of China; Governing Board, American Institute of Physics; trustee, Carnegie Institution of Washington. AAAS activities: Board of Directors, 1970-73; Council, 1970-74; Committee on Public Understanding of Science, 1971; Committee on Industry, Technology, and Society, 1972-73; Executive Committee of the Board, 1972-73; Committee on Nominations, 1973; Council Committee on Fellows, 1974.

### Mary E. Clutter

Mary E. Clutter (biology), 1930; B.S., College, Allegheny 1953; M.S., 1957 Ph.D., 1960, University of Pittsburgh. Program director, Developmental Biology, National Science Foundation, since 1976. Previously with Yale University. Educational Policy Committee, American Society for Cell Biology; Joint Council Committee on Recombinant DNA Research,



SEA, U.S. Department of Agriculture; Interagency Committee on Plant Sciences Research.

#### Howard R. Gould

Howard R. Gould (geology), 1921; B.A., University of Minnesota, 1943; Ph.D., University of Southern California, 1953. With Exxon Production Research Company since 1964; research scientist since 1967. Previously with University of California, U.S. Geological Survey, University of Washington, and Humble Oil & Refining Company. Councilor for mineralogy, 1963, vice president, 1968, and Honorary Membership Award, 1975, Society of Economic Paleontologists and Mineralogists; distinguished lecturer, 1966–67, Distinguished Service Award, 1972, and Honorary Membership Award, 1979, American Association of Petroleum Geologists; councilor, Geological Society of America, 1976-78. Visiting petroleum geologist and chairman, Committee on Publication, AAPG; Nominations Committee, GSA; Education Committee, American Geological Institute; Offshore Subcommittee, Committee on Exploration, American Petroleum Institute; Marine Geology Panel, U.S.-Japan Cooperation Program on Natural Resources, U.S. De-



partment of Interior; U.S. Geodynamics Committee Task Group on Continental Drillling for Scientific Purposes, National Academy of Sciences. AAAS activities: chairman, Section on Geology and Geography, 1977; Council, 1978.

### J. V. Martinez

J. V. Martinez (scientific research administration), 1932; B.S., Northern Arizona University, 1954; Washington M.S., State University, 1957; Ph.D., Oregon State University, 1962; S.M., Massachusetts Institute of Technology, 1978. Program manager, Office of Energy Research, U.S. Department of Energy, since 1974. Previously with Cornell University, Xerox Corporation, St. John Fisher College, and Eastman Kodak Re-

search Laboratories. Outstanding Alumnus Award, Northern Arizona University, 1975; Committee on Minorities, American Physical Society, 1970-75 (past chairman). DOE liaison to National Academy of Sciences-National Research Council Committee on Atomic and Molecular Sciences. AAAS activities. Advisory Panel on Hispanic Scientists, Office of Opportunities in Science, 1973-.

### Benjamin S. P. Shen

Benjamin S. P. Shen (astrophysics, radiological sciences), 1931; A.B., Assumption College (Massachusetts), 1954; A.M., University, Clark 1956; D.Sc. d'Etat in Physics, University of Paris, 1964. With University of Pennsylvania since 1966; Reese W. Flower professor of astronomy and astrophysics since 1972; chairman, Department of Astronomy and Astrophysics, and director, Flower and

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Cook Observatory, since 1973. Previously with State University of New York, Albany, and New York University; guest chemist, Brookhaven National Laboratory, 1963-64 and 1965-70. Fellow, Royal Astronomical Society; Vermeil Medal for Science, Société d'Encouragement au Progres (France), 1978. Associate editor, Biosciences Communications, 1974-77; Editorial Board, 1974-78, and associate editor, 1978-, Earth and Extraterrestrial Sciences; general chairman, International Conference on Spallation Reactions and Their Applications in Astrophysics and Radiotherapy, 1975; adviser on science and technology, U.S. Senate Budget Committee, 1976-77; Board of Governors, New York Academy of Sciences, 1976-78; consultant, Office of Technology Assessment, U.S. Congress, 1977-78. Hayden Planetarium Committee of Board of Trustees, American Museum of Natural History; Advisory Committee, Science Series, Children's Television Workshop, New York. AAAS activities: Committee on Science, Engineering, and Public Policy, 1978-, chairman, Subcommittee on Federal R & D Budget and Policy, 1978-.

### William A. Vogely

William A. Vogely (mineral economics), 1924; A.B., Kenyon College, 1945; M.A., 1947, Ph.D., 1958, Princeton University. Professor of mineral economics, Pennsylvania State University, since 1974; department head since 1975. Previously with Kenyon College, State of New Jersey, State of Ohio, U.S. Depart-Interior, ment of RAND Corporation, U.S. Bureau of Mines (assistant director. 1967-70), and Internal



Revenue Service. Presidential Citation, 1960; Distinguished Service Award, DOI, 1965; chairman, Council of Economics, 1969-70, chairman, National Affairs Committee, 1973-74, and Mineral Economics Award, 1977, American Institute of Mining, Metallurgical and Petroleum Engineers. Consultant to U.S. Departments of Energy, Interior, and Commerce and to private firms; Advisory Committee to Applied Research Directorate, National Science Foundation; vice-chairman, Technical Advisory Committee, Natural Gas Survey, FERC.

### Warren M. Washington

Warren M. Washington (atmospheric sciences), 1936; B.S., 1958, M.S., 1960, Oregon State University; Ph.D., Pennsylvania State University, 1964. With National Center for Atmospheric Research since 1963; senior scientist and leader, Global Climate Modeling Group, since 1974. Previously with Stanford Research Institute, Pennsylvania State University, and University of Michigan. National Science Foundation Advisory Panel for Atmospheric Sciences, 1972-74; National Academy of Sciences-National Research Council Panel on Climatic Variation, 1972-75; Ad Hoc Committee on Increasing Number of Black Scientists in the American Meteorological Society, 1973-74; AMS Board on Women and Minorities, 1976; NAS Panel on the Mon-Experiment, soon 1974; NAS-NRC Panel on Energy and Climate of Geophysics Research Board, 1974-76: Panel on NSF Energy-Related Postdoctoral Fellowship Program, 1975-77; Governor's Science and Technology Advisory Council, State of Colorado, 1975-78.



President's National Advisory Committee on Oceans and Atmosphere; U.S. National Committee, International Union of Geodesy and Geophysics. AAAS activities: chairman, Youth Council, 1970; Committee on AAAS Meetings, 1970-72; Committee on Minorities in Science, 1971-72; Committee on Opportunities in Science, 1973-78, chairperson, 1976-78; chairperson, Panel on Black Scientists, 1973-78.

### **Electorate Elections**

Terms of office are as follows: Council delegates, 3 years; Section chairpersonselect, 3 years (the second year as chairpersons, the third year as retiring chairpersons); members-at-large of the Section Committees, 4 years; members of the Electorate Nominating Committees, 3 years.

### Section A-Mathematics

Council Delegate (one to be elected). Calvin C. Moore Victor Twersky

**Calvin C. Moore** (mathematics), 1936; A.B., 1958, M.A., 1959, Ph.D., 1960, Harvard University. With University of California, Berkeley, since 1961; professor of mathematics since 1966. Previously with University of Chicage, Sheap Ecurdotic follow, 1965 67

ics since 1966. Previously with University of Chicago. Sloan Foundation fellow, 1965-67; fellow, American Academy of Arts and Sciences; chairman, Committee to Review Society Activities, 1970, Council, 1970-72, Executive Committee of the Council, 1970-71, American Mathematical Society; Executive Committee, Mathematics Division, National Research Council, 1972-74. Board of Trustees, AMS; associate editor, Pacific Journal of Mathematics; Editorial Board, Advances in Mathematics.

Victor Twersky (mathematical physics), 1923; B.S., City College of New York, 1947; A.M., Columbia University, 1948; Ph.D., New York University, 1950. Professor of mathematics, University of Illinois at Chicago Circle, since 1966. Previously with Courant Institute, Sylvania-GTE Electronics Defense Laboratories, Stanford University, Technion, Hebrew University, and School Mathematics Study Group. Guggenheim fellow, 1972-73; director-at-large, Optical Society of America, 1961; member-at-large, Conference Board of the Mathematical Sciences, 1977-79. U.S. Commission B, International Union of Radio Science; associate editor, *Journal of Mathematical Physics*; Editoral Board, *SIAM Journal on Applied Mathematics*.

Chairperson-Elect (one to be elected). Ralph P. Boas Felix E. Browder

Ralph P. Boas (mathematics), 1912; A.B., 1933, Ph.D., 1937, Harvard University, Professor of mathematics, Northwestern University, since 1950. Previously with Harvard University, Duke University, U.S. Navy Pre-Flight School, and Brown University; executive editor, Mathematical Reviews, 1945-50; lecturer, Massachusetts Institute of Technology, 1948. National Research fellow, 1937-39; Guggenheim fellow, 1951-52; vice president, American Mathematical Society, 1959-60: president. Mathematical Association of America, 1973-74, AAAS activities: Section Committee, Section on Mathematics (A), 1962-63; Council, 1962-63, 1969-70; vice president, AAAS, and chairman, Section A, 1970; Section A Electorate Nominating Committee, 1974-76, chairman, 1975.

Felix E. Browder (mathematics), 1927; B.S., Massachusetts Institute of Technology, 1946: Ph.D., Princeton University, 1948, With University of Chicago since 1963; Louis Block professor of mathematics since 1972. Previously with MIT, Boston University, Brandeis University, and Yale University. Member, National Academy of Sciences; fellow, American Academy of Arts and Sciences; Guggenheim fellow, 1953-54, 1966-67; National Science Foundation fellow, 1957-58; Sloan Foundation fellow, 1959-63, Editor, Bulletin of American Mathematical Society; Executive Committee of the Council, AMS; chairman, Mathematics Panel, NSF National Needs Fellowships.

Member-at-Large of the Section Committee (one to be elected).

### Albert A. Blank Michael Golomb

Albert A. Blank (mathematics), 1924; A.B., Brooklyn College, 1944; M.S., Brown University, 1946; Ph.D., New York University, 1951. Professor of mathematics, Carnegie-Mellon University, since 1969. Previously with U.S. Navy, New York University, Columbia University, University of Illinois, University of Tennessee, and New York University. Rockefeller Foundation fellow, 1946-48. Chairman, Film Projects Advisory Committee, Committee on Educational Media, Mathematical Association of America.

Michael Golomb (mathematics), 1909; Ph.D., University of Berlin, 1933. With Purdue University since 1946; professor of mathematics since 1950; professor emeritus since 1975. Previously with Cornell University and Franklin Institute Research Laboratories; visiting professor, University of Wisconsin, 1957-59, 1964, 1970, 1977-78, Brown University, 1975, Northwestern University, 1976; visiting member and consultant, Argonne National Laboratories, 1960-70; lecturer, Ecole d'Ete d'Analyse Numerique, 1964. Memberat-large, Council, American Mathematical Society, 1973-76. Members of the Electorate Nominating Committee (two to be elected).

William J. LeVeque Gian-Carlo Rota Alice T. Schafer James B. Serrin

William J. LeVeque (mathematics), 1923; B.A., University of Colorado, 1944; M.A., 1945, Ph.D., 1947, Cornell University. Executive director, American Mathematical Society, since 1977. Previously with Harvard University, University of Michigan, and Claremont Graduate School. Fulbright research scholar, 1951-52; Sloan Foundation research fellow, 1957-60; executive editor, *Mathematical Reviews*, 1965-66; chairman, Conference Board of the Mathematical Sciences, 1973-75. AAAS activities: Section Committee, Section on Information, Computing, and Communication, 1973-76; Council, 1973.

Gian-Carlo Rota (mathematics), 1932; B.A., Princeton University, 1953; M.A., 1955, Ph.D., 1956, Yale University. Professor of applied mathematics and philosophy, Massachusetts Institute of Technology, since 1967. Previously with Courant Institute, Harvard University, and Rockefeller University. Fellow, American Academy of Arts and Sciences; president, Xi of Mathematics, Phi Beta Kappa; editor, Advances in Mathematics.

Alice T. Schafer (mathematics), 1915; B.A., University of Richmond, 1936; S.M., 1940, Ph.D., 1942, University of Chicago. Helen Day Gould professor of mathematics, Wellesley College, since 1962. Previously with Johns Hopkins Applied Physics Laboratory, University of Michigan, Douglass College, Swarthmore College, Drexel Institute of Technology, University of Connecticut, and Connecticut College. NSF Science Faculty fellow, 1958-59; Distinguished Alumnae Award, Westhampton College, University of Richmond, 1977; president, Association for Women in Mathematics, 1973-75; chair, Committee on Postdoctoral Fellowships, American Mathematical Society, 1973-76; recording secretary, Massachusetts State Conference, American Association of University Professors, 1975-77. Executive Committee, AWM; Committee on Affirmative Action Procedures. AMS; chair, Committee on Women, AMS-Mathematical Association of America-Society for Industrial and Applied Mathematics; Committee W, Massachusetts State Conference, AAUP.

James B. Serrin (mathematics), 1926; Ph.D., Indiana University, 1951. With University of Minnesota since 1954; professor of mathematics since 1959. Previously with Massachusetts Institute of Technology. George David Birkhoff Prize, American Mathematical Society, 1973; president, Society for Natural Philosophy, 1969-70; Council, AMS, 1971-73. Co-editor, Archive for Rational Mechanics and Analysis; Bulletin Editorial Committee, AMS.

### Section B–Physics

Council Delegates (three to be elected). Gordon A. Baym Peter G. Bergmann Leon N. Cooper Allan R. Hoffman Melba Phillips Lincoln Wolfenstein Gordon A. Baym (theoretical physics), 1935; A.B., Cornell University, 1956; A.M., 1957, Ph.D., 1960, Harvard University. Professor of physics, University of Illinois, since 1963. Previously with University of California, Berkeley; visiting professor, Universities of Tokyo and Kyoto, 1968, Niels Bohr Institute and NORDITA, 1970, 1976. NSF fellow, Institute for Theoretical Physics, Copenhagen, 1960-62; Sloan Foundation fellow, 1965-67. Advisory Board, National Institute for Theoretical Physics; associate editor, *Nuclear Physics*.

Peter G. Bergmann (theoretical physics), 1915; Dr. rer. nat., University of Prague, 1936. With Syracuse University since 1947; professor of physics since 1950. Previously with Institute for Advanced Study, Black Mountain College, Lehigh University, Columbia University, Woods Hole Oceanographic Institution, and Polytechnic Institute of Brooklyn; visiting professor, Yeshiva University, 1957-78; director, 6th Course, International School of Cosmology and Gravitation, Erice, Sicily, 1979. Boris Pregel Prize, New York Academy of Sciences, 1970; chairman, Federation of American Scientists, 1963-64. President, International Society for General Relativity and Gravitation; Assoc. Commission II, International Union of Pure and Applied Physics; Organizing Committee, ''Texas'' Symposia on Relativistic Astrophysics.

Leon N. Cooper (physics), 1930; A.B., 1951, A.M., 1953, Ph.D., 1954, Columbia University. With Brown University since 1958; Thomas J. Watson, Sr., professor of science since 1974. Previously with Institute for Advanced Study, University of Illinois, and Ohio State University; visiting professor, various universities. Comstock Prize (with J. R. Schrieffer), National Academy of Sciences, 1968; Nobel Prize (with J. Bardeen and J. R. Schrieffer). 1972; Award of Excellence, Graduate Faculties Alumni, Columbia University, 1974; Descartes Medal, Academie de Paris, 1977; member, National Academy of Sciences. Rumford Prize Committee, American Academy of Arts and Sciences.

Allan R. Hoffman (physics), 1937; B.E.P., Cornell University, 1959; M.S., University of Illinois, 1961; Ph.D., Brown University, 1967. Director, Advanced Energy Systems Policy Division, U.S. Department of Energy, since 1978. Previously with IBM Corporation, University of Illinois, Texas Instruments, Brown University, University of Massachusetts, and U.S. Senate Committee on Commerce, Science, and Transportation. NASA graduate trainee, Brown University, 1964-66; Congressional fellow, American Physical Society, 1974-75. AAAS activities: Subcommittee on Public-Private Sector Relationships in R & D. Committee on Science, Engineering, and Public Policy, 1978-

Melba Phillips (physics), 1907; A.B., Oakland City (Ind.) College, 1926; M.A., Battle Creek College, 1928; Ph.D., University of California, Berkeley, 1933. Professor emeritus, University of Chicago; currently residing in New York City. Previously with Battle Creek College, University of California, Berkeley, Connecticut College, Brooklyn College, University of Minnesota, Washington University, State University of New York, Stony Brook, and American Association of Physics Teachers (acting executive officer). Whiting fellow, 1932–33; Helen Huff research fellow, 1935–36; American Association of University Women fellow, 1936-37; Distinguished Service Citation, 1963, and Oersted Medal, 1973, AAPT; Commission on College Physics, 1960-68; Executive Board, 1962-65, president, 1966-67, AAPT; Governing Board, American Institute of Physics, 1965-68, 1975-77. Chairman, AAPT Fiftieth Anniversary Committee and Advisory Committee, AAPT Project on Production of Issue Oriented Modules for physics instruction; Executive Committee, Society of Physics Students; Committee, Section on Physics, AIP. AAAS activities: Council, 1977-79; Section Committee, Section on Physics, 1977-; Council Committee on Fellows, 1978.

Lincoln Wolfenstein (physics), 1923; S.B., 1943, S.M., 1944, Ph.D., 1949, University of Chicago. With Carnegie-Mellon University since 1948; University professor since 1978. Previously with National Advisory Committee for Aeronautics; visiting professor, University of Michigan, 1970-71. Guggenheim fellow, 1973-74; member, National Academy of Sciences; secretary, Federation of American Scientists, 1966-68; chairman, Division of Particles and Fields, American Physical Society, 1973-74. Associate editor, *Physical Review Letters*.

### Chairperson-Elect (one to be elected). Fay Ajzenberg-Selove Maurice Goldhaber

Fay Ajzenberg-Selove (physics), 1926; B.S., University of Michigan, 1946; M.S., 1949, Ph.D., 1952, University of Wisconsin. With University of Pennsylvania since 1970; professor of physics since 1973. Previously with Smith College, Boston University, and Haverford College. Smith-Mundt fellow, U.S. Department of State, 1955; Guggenheim fellow, 1965-66; national lecturer, Sigma Xi, 1973-74; Commission on College Physics, 1968-71; chairman, Division of Nuclear Physics, 1973-74. and member. Panel on Public Affairs. 1975-77, American Physical Society, Nuclear Science Advisory Committee to DOE and NSF, chairman, Subcommittee on Manpower; chairman, Commission on Nuclear Physics, International Union of Pure and Applied Physics. AAAS activities: Council, 1974-79; Committee on Council Affairs, 1977-78.

Maurice Goldhaber (physics), 1911; Ph.D., Cambridge University, 1936. With Brookhaven National Laboratory since 1950; AUI distinguished scientist since 1973. Previously with University of Illinois. Charles Kingsley Bye fellow, Magdalene College, Cambridge University, 1936–38; Tom W. Bonner Prize in Nuclear Physics, American Physical Society, 1971; U.S. Atomic Energy Commission Citation for Meritorious Contributions, 1973; chairman, Division of Nuclear Physics, APS, 1969–70. Boards of Governors, Weizmann Institute of Science and Tel-Aviv University.

Member-at-Large of the Section Committee (one to be elected).

#### Philip Anderson Katharine Way

Philip Anderson (theoretical physics), 1923; B.S., 1943, M.A., 1947, Ph.D., 1949, Harvard University; M.A., Cambridge University, 1967. With Bell Laboratories since 1949, consulting director, physics research, since 1976; professor of physics, Princeton University, since 1975. Previously with Naval Research Laboratory; Fulbright lecturer, University of

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Tokyo, 1953-54; visiting lecturer, 1961-62, and visiting professor, 1967-75, Cambridge University. Oliver E. Buckley Prize, 1964; Dannie Heinemann Prize, 1975; Nobel Prize in physics, 1977; Guthrie Medal and Prize, 1978; fellow, American Academy of Arts and Sciences. Council, National Academy of Sciences; Board of Trustees, Aspen Institute of Physics.

Katharine Way (nuclear and atomic physics), 1903; B.S., Columbia University, 1932; Ph.D., University of North Carolina, 1939. Adjunct professor, Duke University, since 1968. Previously with University of Tennessee, U.S. Naval Ordnance Laboratory, Manhattan Project, National Bureau of Standards, National Research Council, and Oak Ridge National Laboratory. Distinguished Alumnus of University of North Carolina, 1974; chairman, Subcommittee on the Techniques for the Distribution of Scientific Information, NRC Committee on Nuclear Science, 1964-68; president, Durham Branch, American Association of University Women, 1972-73. Editor, Atomic Data and Nuclear Data Tables.

Members of the Electorate Nominating Committee (two to be elected). Larry Biedenharn David Bodansky Bernice Durand Mary La Salle Shoaf

Larry Biedenharn (theoretical physics), 1922; S.B., 1944, Ph.D., 1949, Massachusetts Institute of Technology. Professor of physics, Duke University, since 1961. Previously with MIT, Oak Ridge National Laboratory, Yale University, and Rice University. Fulbright fellow and Guggenheim fellow, 1958; NSF fellow, 1964; Alexander von Humboldt Foundation Senior U.S. Scientist Award, 1976. Associate editor, *Hadronic Journal*; Advisory Committee for International Colloquia on Group Theoretical Methods in Physics.

**David Bodansky** (experimental nuclear physics), 1924; B.S., 1943, M.S., 1948, Ph.D., 1950, Harvard University. With University of Washington since 1954; professor since 1963; department chairman since 1976. Previously with Columbia University. Sloan Foundation research fellow, 1959-63; Guggenheim fellow, 1966-67, 1974-75; Editorial Board, *Review of Scientific Instruments*, 1967-69.

Bernice Durand (theoretical physics), 1942; B.S., 1965, Ph.D., 1971, Iowa State University. With University of Wisconsin-Madison since 1970; assistant professor since 1977. Visiting staff member, Los Alamos Scientific Laboratory, 1975; Institute for Advanced Study, 1975-76. Secretary-treasurer, Madison Chapter, 1973-74, and State Nominating Committee, 1974 and 1976, American Association of University Professors. President, Madison Chapter, Graduate Women in Science; Organizing Committee, 1980 High Energy Physics International Conference: University Senate, Dean's Committee on Communication Skills, and Committee on Faculty Rights and Responsibilities, University of Wisconsin-Madison.

Mary La Salle Shoaf (physics), 1932; B.A., Cardinal Stritch College, 1953; M.S., University of California, Berkeley, 1955; Ph.D., Purdue University, 1960. Head, Research Department, Princeton Plasma Physics Laboratory, since 1977. Previously with USAF-Wright Patterson Research & Development Command, East Carolina University, Tatnall School, and West Chester State College, Deputy executive secretary, 1973-79, chairman, Forum on Physics and Society, 1978, American Physical Society. Executive Committee, Panel on Physics Manpower, and administrator, Congressional Scientist Fellowship Program, APS: U.S. National Committee, International Union of Pure and Applied Physics; Committee on Science and the Arts, Franklin Institute; Advisory Committee, Physics Today; Advisory Committees, Project Intermod and Assessment of the Unsupported Research Activity of Scientists and Engineers, National Science Foundation. AAAS activities: Section Committee, Section on Information, Computing, and Communication, 1974-.

### Section C-Chemistry

Council Delegates (five to be elected). Edward M. Arnett Joseph F. Bunnett Marjorie C. Caserio Richard M. Lemmon Harry S. Mosher Rustum Roy Jean'ne M. Shreeve William P. Slichter M. Kent Wilson Albert C. Zettlemoyer

Edward M. Arnett (organic chemistry), 1922; B.S., 1943, M.S., 1946, Ph.D., 1949, University of Pennsylvania. With University of Pittsburgh since 1957, professor since 1964; adjunct senior fellow, Mellon Institute, since 1964. Previously with Max Levy and Company, Western Maryland College, and Harvard University; visiting lecturer, University of Illinois, 1963; visiting professor, University of Colorado, 1965, University of New Hampshire, 1966, University of Kent, 1970. Guggenheim fellow, 1968-69; Pittsburgh Award, 1976. James Flack Norris Award, 1977. American Chemical Society; director, Pittsburgh Chemical Information Center, 1967-70; Petroleum Research Fund Advisory Board, 1968-71; Committee on Chemical Information, National Research Council, 1969-71; summer organic lecturer, Northwestern University, and Kelly lecturer. Purdue University, 1977.

Joseph F. Bunnett (organic chemistry), 1921; B.A., Reed College, 1942; Ph.D., University of Rochester, 1945. Professor, University of California, Santa Cruz, since 1966. Previously with Reed College, University of North Carolina, Chapel Hill, and Brown University. Executive Committee, Division of Organic Chemistry, 1962-64, chairman, Rhode Island Section, 1964-65, American Chemical Society. Editor, Accounts of Chemical Research; Editorial Advisory Boards, Chemical Reviews and Nouveau Journal de Chimie; Executive Committee, Division of Organic Chemistry, and chairman, Commission on Physical Organic Chemistry, International Union of Pure and Applied Chemistry; trustee, Reed College.

Marjorie C. Caserio (organic chemistry), 1929; B.Sc., University of London, 1950; M.A., 1951, Ph.D., 1956, Bryn Mawr College. Professor, University of California, Irvine, since 1965. Previously with Fulmer Research Institute (England) and California Institute of Technology. Garvan Medal, American Chemical Society, 1975; Guggenheim fellow, 1975-76; Executive Committee, Division of Organic Chemistry, ACS, 1971-74. Editor, ACS *Monographs*; Appeals Board, ACS Committee on Professional Training; Chemical Abstracts Service Advisory Board; Advisory Committee, National Research Council.

**Richard M. Lemmon** (chemistry), 1919; A.B., Stanford University, 1941; M.S., California Institute of Technology, 1943; Ph.D., University of California, Berkeley, 1949. With University of California, Berkeley, since 1951; associate director, Laboratory of Chemical Biodynamics, since 1957. Previously with State of California and California Institute of Technology. U.S. Public Health Service fellow, 1950-51; Guggenheim fellow, 1964-65; chairman, California Section, American Chemical Society, 1961. National Council and Board of Directors, ACS.

Harry S. Mosher (organic chemistry), 1915; B.A., Willamette University, 1937; M.S., Oregon State College, 1939; Ph.D., Pennsylvania State College, 1942. With Stanford University since 1947; professor since 1954. Previously with Willamette University and Pennsylvania State University; visiting professor, Vrije Universiteit, 1975. U.S. Public Health Service fellow, 1959-60; Distinguished Alumni Award, Willamette University, 1966; 1959-60; PRF International Faculty Award, 1968-69, Ottenberg Award, Santa Clara Valley Section, 1978, American Chemical Society; chairman, California Section, ACS, 1955. Councilor and chairman. Committee on Professional Training, ACS.

Rustum Roy (solid-state chemistry, geochemistry, materials science), 1924; B.Sc., 1942, M.Sc., 1944, Patna University; Ph.D. Pennsylvania State University, 1948. With Pennsylvania State University since 1950; director, Materials Research Laboratory, since 1962; professor of the solid state since 1967; chairman, Science, Technology and Society Program, since 1977. Mineral Society of America Award, 1957; member, National Academy of Engineering; Executive Committee, Chemistry Division, National Research Council, 1967-72; Welch lecturer, Texas University, 1974; Fairchild lecturer, Lehigh University, 1976; Hibbert lecturer, Oxford University, 1979. Chairman, Committee on USSR and Eastern Europe, and Panel on Waste Solidification, Radioactive Waste Management Committee, NAS-NAE-NRC; chairman, Materials Advisory Panel, Pennsylvania Governor's Science Advisory Committee.

Jean'ne M. Shreeve (inorganic fluorine chemistry), 1933; B.A., University of Montana, 1953; M.S., University of Minnesota, 1956; Ph.D., University of Washington, 1961. With University of Idaho since 1961; professor since 1967; department head since 1973. National Science Foundation fellow, Cambridge, and U.S. Honorary Ramsay fellow, 1967-68; Sloan Foundation fellow, 1970-72; Distinguished Alumni Award, University of Montana, 1970; Garvan Medal, 1972, Award for Creative Work in Fluorine Chemistry, Fluorine Division, American Chemical Society; Outstanding Achievement Award, University of Minnesota, 1975; College Chemis-try Teacher Award, Manufacturing Chemists Association, 1979. Councilor, Inorganic Division, ACS; Advisory Committee for Chemistry, NSF. AAAS activities: Council, 1977-79.

William P. Slichter (chemistry), 1922; A.B., 1944, A.M., 1949, Ph.D., 1950, Harvard University. With Bell Telephone Laboratories since 1950; executive director of research, Materials Science and Engineering Division,

 American Physical Society, 1970; member, National Academy of Engineering. Chairman, Committee on Dielectrics, and member, Space Applications Board, Assembly of Engineering, National Research Council; Committee on Chemistry and Public Affairs, ACS; Advisory Council, NASA; Committee on Human Rights, National Academy of Sciences. AAAS activities: Section Committees, Sections on Physics and on Atmospheric and Hydrospheric Sciences, 1968-70; Council, 1968-70, 1978-79.
M. Kent Wilson (chemistry), 1920; B.S., University of Utab. 1943; Ph.D. California

since 1973. High Polymer Physics Prize,

University of Utah, 1943; Ph.D., California Institute of Technology, 1948. With National Science Foundation since 1966; director, Office of Planning and Resources Management, since 1977. Previously with Harvard University and Tufts University. Guggenheim fellow and Fulbright scholar, 1954-55; fellow, American Academy of Arts and Sciences; Advisory Council on College Chemistry, 1963-66; vice president, local optical society, Optical Society of America, 1977. Joint Board-Council Committee on Chemical and Public Affairs. CCPA Subcommittee on Regulatory Practices, and Science Commission, American Chemical Society; editor, Spectrochimica Acta; Editorial Advisory Board, Long Range Planning Journal; Advisory Board, Chemical and Engineering News; Admissions Committee, Cosmos Club.

Albert C. Zettlemoyer (colloid and surface chemistry), 1915; B.S., 1936, M.S., 1938, Lehigh University; Ph.D., Massachusetts Institute of Technology, 1941. With Lehigh University since 1941; provost and vice president since 1969. Mattiello Award, 1957; Ault Award, 1960; Bond Award, 1961; Elmer Voight Award, 1966; Honor Scroll Award, American Institute of Chemists, 1966; Kendall Award, American Chemical Society, 1968; Sigma Xi national lecturer, 1958. Director at large, Board of Directors, chairman, Committee on Public Affairs and Public Relations, member, Science Commission, Professional Programs Planning and Coordinating Committee, and Professional and Member Relations Committee, ACS; chairman, Gordon Research Conference on Science of Adhesion

### Chairperson-Elect (one to be elected). Richard T. Arnold Robert W. Parry

Richard T. Arnold (organic chemistry), 1913; B.Ed., Southern Illinois University, 1934; M.S., 1935, Ph.D., 1937, University of Illinois, Professor of chemistry and biochemistry, Southern Illinois University (Carbondale), since 1969. Previously with University of Minnesota, Alfred P. Sloan Foundation, and Mead Johnson & Company; science attaché, U.S. Embassy, Bonn, 1952-53. Guggenheim fellow, 1948-49; Award in Pure Chemistry, American Chemical Society, 1949; John R. Kuebler Award, 1976. President, Organic Syntheses, Inc. AAAS activities: Section Committee, Section on Chemistry, and Council, 1956-57; Committee on Cooperation among Scientists, 1959-65

**Robert W. Parry** (chemistry), 1917; B.S., Utah Agricultural College, 1940; M.S., Cornell University, 1942; Ph.D., University of Illinois, 1946. Distinguished professor, University of Utah, since 1969. Previously with University of Michigan. Award for Distinguished Service in Inorganic Chemistry, 1965, Award in Chemical Education, 1977, and Utah Award in Chemistry, 1978, American Chemical Society; Award for Excellence in the Teaching of College Chemistry, Manufacturing Chemists Association, 1972; Humboldt Award. 1980: member or chairman of various divisions and committees, ACS, 1960-77; Board of Directors, Gordon Research Conferences, 1965-72, chairman, 1968; Chemistry Panel, National Science Foundation, 1969-72; chairman, Committee on Chemical Education, International Union of Pure and Applied Chemistry, 1969-74. Board of Directors and chairman, Board Committee on Grants and Awards, ACS; Selection and Scheduling Committee, GRC; U.S. National Committee for IUPAC; Board of Editors, Inorganic Chemistry and Advances in Chemistry Series; associate editor, Journal of the American Chemical Society.

Member-at-Large of the Section Committee (one to be elected).

Charles K. Bradsher John Clark Sheehan

Charles K. Bradsher (organic chemistry), 1912; A.B., Duke University, 1933; M.A., 1935, Ph.D., 1937, Harvard University. With Duke University since 1939; James B. Duke professor of chemistry since 1965. National Research Council fellow, 1941-42; Fulbright lecturer, Leiden University, 1951-52; National Science Foundation fellow, 1959-60; chairman, North Carolina Section, American Chemical Society, 1950-51.

John Clark Sheehan (organic chemistry), 1915; Ph.D., University of Michigan, 1941. With Massachusetts Institute of Technology since 1946; professor emeritus and senior lecturer since 1977. Previously with National Defense Research Committee Project and Merck and Company. Award in Pure Chemistry, 1951, Award for Creative Work in Synthetic Organic Chemistry, 1959, American Chemical Society; Medal for Creative Research in Synthetic Organic Chemistry, Synthetic Organic Chemical Manufacturers Association, 1969; Outstanding Achievement Award, University of Michigan, 1971; chairman, Division of Organic Chemistry, ACS, 1959-60. Investment and International Activities Committees, ACS; chairman of the Board, Sheehan Institute for Research, Inc., and SISA, Inc.

Members of the Electorate Nominating Committee (two to be elected).

Alfred E. Brown Robert B. Carlin Rodney N. Hader H. Harry Szmant

Alfred E. Brown (chemistry), 1916; B.Sc., Rutgers University, 1938; M.S., 1940, Ph.D., 1942, Ohio State University. Director, Scientific Affairs, Celanese Corporation, since 1976. Previously with U.S. Department of Agriculture, OSRD, Harris Research Laboratories, and Celanese Research Company. Honor Award, Washington Chapter, American Institute of Chemists, 1964; member, National Academy of Engineering; Outstanding Engineering Award, Rutgers Engineering Society, 1976; chairman, Washington Science Bureau, 1962; president, Chemical Society of Washington, 1963, and Association of Research Directors, 1972. Technical Advisory Board, U.S. Department of Commerce; Board, Chemical Industry Institute of Technology; Advisory Boards, Franklin Institute Research Laboratories and *Chemical and Engineering News.* AAAS activities: Committee on Administration of Scientific Work, 1962; chairman, Section on Chemistry, and Council, 1966; Editorial Board, *Science*, 1971-76.

Robert B. Carlin (organic chemistry), 1916; B.Chem., 1937, Ph.D., 1941, University of Minnesota. With Carnegie-Mellon University since 1946; currently Becker professor of organic chemistry. Previously with University of Illinois and University of Rochester; Reilly lecturer, University of Notre Dame, 1954. Outstanding Achievement Award, University of Minnesota, 1972; president, Pittsburgh Chemists Club, 1955-56; chairman, Gordon Research Conference on Organic Reactions, Processes, 1956; chairman, Pittsburgh Section, American Chemical Society, 1960-61. Board of Directors, Health Research and Services Foundation; Council Policy Committee, ACS; chairman, Scholarship Committees for Pittsburgh Plate Glass Industries Foundation and Fisher Scientific Company.

**Rodney N. Hader** (chemical engineering), 1922; B.S., University of Illinois, 1944. With American Chemical Society since 1950; secretary since 1977. Council and secretary to Board of Directors, Council, Board Executive Committee, and Council Policy Committee, ACS.

H. Harry Szmant (chemistry), 1918; B.A., Ohio State University, 1940; Ph.D., Purdue University, 1944, Professor and chairman, Department of Chemistry and Chemical Engineering, University of Detroit, since 1968. Previously with Monsanto Chemical Company, Duquesne University, University of Oriente, University of Puerto Rico, and Puerto Rico Nuclear Center. Leonardo Igaravidez Award, Puerto Rico Section, American Chemical Society, 1976; chairman, Organic Division, Pittsburgh Section, 1955-56, chairman, 1964, councilor, 1965-68, Puerto Rico Section, chairman, 1973, and councilor, 1975-, Detroit Section, ACS, Council Committee on Public Relations and International Activities Committee, ACS.

### Section D—Astronomy

### Council Delegate (one to be elected). George O. Abell Donald M. Hunten

George O. Abell (astronomy), 1927; B.S., 1951, M.S., 1952, Ph.D., 1957, California Institute of Technology. With University of California, Los Angeles, since 1956; currently professor. Observer, National Geographic Society-Palomar Observatory Sky Survey, 1953-56; visitor, Max-Planck Institut fur Physik und Astrophysik, 1966-67; visiting professor, Royal Observatory, Edinburgh, 1976-77. Chairman, Committee on Education, 1966-72, councilor, 1969-72, American Astronomical Society; Board of Directors, 1967-71, president, 1968-70, Astronomical Society of the Pacific; U.S. National Committee, 1973-75, vice president, Commission 47 (Cosmology), 1976-79, International Astronomical Union. Committee for the Scientific Investigation of Claims of the Paranormal; visiting professor, AAS Shapley Visiting Professor Program; guest investigator, Hale Observatories; principal investigator, BBC film series, Understanding Space and Time. AAAS activities: member-at-large, Section on Astronomy, 1962-65, 1968-71; Council, 1968-71.

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**Donald M. Hunten** (planetary science), 1925; B.Sc., University of Western Ontario, 1946; Ph.D., McGill University, 1950. Professor, Lunar and Planetary Laboratory, Department of Planetary Sciences, University of Arizona, since 1977. Previously with University of Saskatchewan, Kitt Peak National Observatory, and NASA. NASA Public Service Medal; chairman, Division of Planetary Science, American Astronomical Society, 1977. Chairman, Space Sciences Advisory Committee, member, Advisory Council and Space Science Board, NASA; editorial boards of several journals.

### Chairperson-Elect (one to be elected). Halton Arp Owen Gingerich

Halton Arp (astronomy), 1927; A.B., Harvard University, 1949; Ph.D., California Institute of Technology, 1953. Staff member, Hale Observatories, since 1957. Previously with Carnegie Institution and Indiana University. Helen Warner Prize, American Astronomical Society, 1961; AAAS-Newcomb Cleveland Prize, 1963. Vice president, Astronomical Society of the Pacific. AAAS activities: AAAS-Newcomb Cleveland Prize Committee of Judges, 1965-67; Section Committee, Section on Astronomy, and Council, 1969-71.

Owen Gingerich (astronomy), 1930; A.B., Goshen College, 1951; A.M., 1953, Ph.D., 1962, Harvard University. With Harvard University since 1960, professor of astronomy and of the history of science since 1969; astrophysicist, Smithsonian Astrophysical Observatory, since 1962. Previously with American University of Beirut and Wellesley College. George Darwin lecturer, Royal Astronomical Society, and Sigma Xi national lecturer, 1971; John F. Lewis Prize, American Philosophical Society, 1976; Council, American Association of Variable Star Observers, 1965-70; Editorial Board, Journal for the History of Astronomy, 1970-74; president, Commission 41, International Astronomical Union, 1970-76; councilor, 1973-76, chairman, Educational Advisory Committee, 1975-77, American Astronomical Society. Associate director, Central Bureau for Astronomical Telegrams, IAU; Advisory Committee on History of Physics, American Institute of Physics; chairman, Editorial Advisory Board, General History of Astronomy; Editorial Board, The American Scholar; trustee, Boston Museum of Science. AAAS activities: Section Committee, Section on Astronomy, 1970-73, 1975; Council, 1970-73; chairman, Section on History and Philosophy of Science, 1974.

Member-at-Large of the Section Committee (one to be elected).

### Helmut A. Abt David Morrison

Helmut A. Abt (astronomy), 1925; B.S., 1946, M.S., 1948, Northwestern University; Ph.D., California Institute of Technology, 1952. Astronomer, Kitt Peak National Observatory, since 1959. Previously with Lick Observatory and Yerkes Observatory. Council, American Astronomical Society, 1965-68; Board of Directors, 1965-71, president, 1967-69, Astronomical Society of the Pacific; associate editor, Astronomical Journal, 1967-70. Managing editor, Astrophysical Journal; NASA consultant. AAAS activities: Section Committee, Section on Astronomy (D), and Council, 1968-71; chairman, 1970, and Electorate Nominating Committee, 1974, Section D.

David Morrison (planetary astronomy), 1940; B.A., University of Illinois, 1962; M.A., 1964, Ph.D., 1969, Harvard University. Associate professor, Institute for Astronomy, University of Hawaii, since 1969. Visiting associate professor, University of Arizona, 1975-76; visiting astronomer, Kitt Peak National Observatory, 1976; assistant deputy director/ staff scientist, Planetary Division, Office of Space Science, NASA Headquarters, 1976-78; program scientist, NASA Galileo Mission, 1977-78. Co-investigator, NASA Mariner 10 infrared radiometer experiment, 1970-75; secretary-treasurer, Division for Planetary Sciences, American Astronomical Society, 1971-77; Editorial Board, Icarus, 1975-78. Board of Directors, Astronomical Society of the Pacific; associate editor, Journal of Geophysical Research; Organizing Committees, Commissions 15 and 16, and Working Group on Planetary System Nomenclature, International Astronomical Union; COSPAR Working Group 7; Imaging Science Team, NASA Voyager Mission; NASA Comet Science Working Group. AAAS activities: Electorate Nominating Committee, Section on Astronomy, 1976-78, chairman, 1977.

Members of the Electorate Nominating Committee (two to be elected). Katharine B. Gebbie

Robert E. Murphy Carl B. Pilcher Jill J. Wittels

Katharine B. Gebbie (astrophysics), 1932; B.A., Bryn Mawr College, 1954; B.Sc., 1960, Ph.D., 1964, University of London. Physicist, National Bureau of Standards, Boulder, since 1968; with Joint Institute for Laboratory Astrophysics since 1967, fellow since 1978; with University of Colorado since 1969, professor adjoint, Department of Astro-Geophysics, since 1977. Previously with Polaroid Corporation, Jungfraujoch Research Station (Switzerland), and University College, London; coeditor, *The Observatory*, 1966–67. Secretary, Commission 36, International Astronomical Union, 1970–73.

**Robert E. Murphy** (planetary astronomy), 1941; B.S., Worcester Polytechnic Institute, 1963; M.A., Georgetown University; Ph.D., Case Western Reserve University, 1969. Discipline scientist, Planetary Atmospheres, NASA Headquarters, since 1977. Previously with University of Hawaii, Maryland Academy of Sciences, and NAS Committee on Earth Sciences. Board of Directors, Association of Science and Technology Center, 1975-76. Program scientist for Galileo (Jupiter orbiter probe); vice-chairman, Project Science Group; program scientist for Pioneer Venus. AAAS activities: Section Committee, Section X-General, 1974-77.

**Carl B. Pilcher** (planetary science), 1947; B.S., Polytechnic Institute of Brooklyn, 1968; Ph.D., Massachusetts Institute of Technology, 1973. With University of Hawaii since 1973; assistant professor, Institute for Astronomy, and Department of Physics and Astronomy, since 1977. Nominating Subcommittee, Division for Planetary Sciences, American Astronomical Society, 1977-79, chairman, 1979. Project Galileo Imaging Science Team; Mars Science Working Group.

Jill J. Wittels (physics); S.B., 1970, Ph.D., 1975, Massachusetts Institute of Technology.

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Congressional science fellow, staff of Senator William Proxmire, since 1978. Previously with MIT, NASA Johnson Space Center, and National Academy of Sciences (senior visiting scientist to the USSR). Committee on the Status of Women in Physics, American Physical Society, 1973; MIT Equal Employment Opportunities Committee, 1973-75. MIT Educational Council.

### Section E-Geology and Geography

Council Delegates (two to be elected). Charles L. Drake Lawrence W. Lundgren Helen M. McCammon Ernest H. Muller

Charles L. Drake (geology), 1924; B.S.E., Princeton University, 1948; Ph.D., Columbia University, 1959. With Dartmouth College since 1969; dean of graduate studies and associate dean of sciences since 1978. Previously with Columbia University and Lamont Geological Observatory. Distinguished lecturer, American Association of Petroleum Geologists, 1961; National Sigma Xi lecturer, 1978-79; past president, Geological Society of America. U.S. Geodynamics Committee, Geophysics Research Board, and Geophysics Study Committee, National Academy of Sciences-National Research Council; Interunion Commission on Geodynamics, International Council of Scientific Unions; Research Committee, AAPG; U.S. National Committee on Geology, Sea Grant Advisory Committee, NOAA; Geodynamics and Geology Advisory Subcommittee, NASA; U.S./U.S.S.R. Cooperative Programs in Science, Working Group on Marine Geology and Geophysics. AAAS activities: AAAS-Rosenstiel Selection Panel, 1975.

Lawrence W. Lundgren (geological sciences), 1932; A.B., Brown University, 1953; Ph.D., Yale University, 1958. With University of Rochester since 1956; professor since 1967; department chairman since 1976. Shell fellow, 1954-55; National Science Foundation fellow, 1955-56; Fulbright lecturer, University of Oulu (Finland), 1967-68; NSF faculty fellow, 1975-77. Committee for Reform of the Curriculum, University of Rochester.

Helen M. McCammon (environmental geology), 1933; B.Sc., University of Manitoba, 1955; M.Sc., University of Michigan, 1956; Ph.D., Indiana University, 1959. With Department of Energy since 1976; director, Division of Ecological Research, beginning in 1979. Previously with Manitoba Department of Mines and Natural Resources, University of North Dakota, University of Pittsburgh, University of Illinois, Field Museum of Natural History, and U.S. Environmental Protection Agency, Indiana University Graduate Foundation fellow, 1957-59; Organization of American States fellow, 1968-69; Marine Biology Research Committee, Marine Technology Society, 1972-76; Connecticut Resources Research Advisory Board, 1973-76; Womens' Geosciences Committee, 1973-76. Educational Board and Nominating Committee, American Geological Institute; Panel on International Program and International Cooperation in Ocean Affairs; Interagency Committee on Ocean Pollution.

Ernest H. Muller (glacial geology, geomorphology), 1923; B.A., College of Worcester, 1947; M.A., 1949, Ph.D., 1952, University of Illinois. Professor, Syracuse University, since 1959. Previously with U.S. Geological Survey, Cornell University, and Natturugripasafnid (Iceland); visiting professor, University of Canterbury (New Zealand), 1973, and Alaska Pacific University, 1979. Geomorphology Panel, 1962-64, 1966-68, 1975-77, program chairman, Northeastern Section, Geological Society of America; president, Syracuse Chapter, Sigma Xi, 1965-67. Onondaga County (N.Y.) Environmental Management Council; INQUA Commission on Genesis and Lithology of Quarternary Deposits.

### Chairperson-Elect (one to be elected). Randolph W. Bromery Jack A. Simon

Randolph W. Bromery (geophysics), 1926; B.S., Howard University, 1956; M.S., American University, 1962; Ph.D., Johns Hopkins University, 1968. With University of Massachusetts since 1969; chancellor since 1972; executive vice president since 1977. Previously with U.S. Geological Survey and Connecticut Geological and Natural History Survey. Gilman University fellow, 1965-66; Special Service Award, U.S. Geological Survey, 1967. Advisory Panel, Earth Science Curriculum Project, Minority Program Council, American Geological Institute; Advisory Committee on Developing Colleges, National Science Foundation: Special Presidential Advisory Panel on Minority Participation in Science and National Commission on Natural Resources and Environment, National Academy of Sciences; chairman, Advisory Committee, Earth Science Teacher Preparation Project and Environmental Studies: Nominating Committee. American Geophysical Union: Committee on Minority Participation in Earth Sciences and councilor, Geological Society of America; chairman, Advisory Committee to the Secretary of Interior; Advisory Committee, 12th edition of American Men and Women of Science; Board of Trustees, Hampshire College, Fairfield University, Mark Hopkins College; corporation member, Woods Hole Oceanographic Institution; Board of Directors, Singer Corporation and Exxon Corporation; chairman, Sea Grant Review Panel, U.S. Department of Commerce; NASA Advisory Council; Council of Foreign Relations.

Jack A. Simon (geology), 1919; B.S., 1941, M.S., 1947, University of Illinois. With Illinois State Geological Survey since 1945; chief since 1975. Gilbert H. Cady Medal, Geological Society of America: chairman. Coal Geology Division, GSA, 1962-63; past chairman, Midwest Coal Subsection, American Institute of Mining, Metallurgical and Petroleum Engineers; vice president, American Institute of Professional Geologists, 1973-74. Committee on Chemistry of Coal Utilization, National Academy of Sciences-National Research Council: Federal Coal Rights Advisory Committee, Office of Technology Assessment; Geosciences Advisory Panel, Los Alamos Scientific Laboratory; Environmental Committee. American Association of Petroleum Geologists; Council and chairman, Membership Committee, Coal Geology Division, GSA. AAAS activities: Section Committee, Section on Geology and Geography (E), 1970-77; Council, 1970-73; Section E Electorate Nominating Committee, 1974-76.

Member-at-Large of the Section Committee (one to be elected).

J. Christopher Hepburn William H. Matthews III J. Christopher Hepburn (geology), 1942; A.B., Colgate University, 1964; A.M., 1966, Ph.D., 1972, Harvard University. With Boston College since 1971; associate professor and department chairman since 1977. Program Committee, Northeast Section, Geological Society of America, 1976.

William H. Matthews III (geology), 1919; B.S., 1948, M.A., 1949, Texas Christian University. With Lamar University since 1955; currently Regents' professor of geology. Previously with Texas Christian University and Texaco, Inc. Neil Miner Award and past president, National Association of Geology Teachers; Minnie Stevens Piper Award, Piper Foundation; Regents' Merit Award, Lamar University; past president, Beaumont Geological Society, and Earth Science Section, Texas Academy of Science. Director of education, American Geological Institute; Committee on Geology Teaching, International Union of Geological Sciences; Publications Committee, Society of Economic Paleontologists and Mineralogists; chairman, Advisory Board, Crustal Evolution Education Project. AAAS activities: Electorate Nominating Committee, Section on Geology and Geography, 1975-77.

Members of the Electorate Nominating Committee (two to be elected).

Michael F. Dacey David L. Fluharty Paul L. Hilpman C. John Mann

Michael F. Dacey (geography), 1932; B.A., University of Kansas, 1954; M.A., 1955, Ph.D., 1960, University of Washington. With Northwestern University since 1964; professor of geography since 1968 and of geological sciences since 1970; department chairman since 1976. Previously with University of Pennsylvania. Award for Meritorious Contributions, Association of American Geographers, 1971.

David L. Fluharty (natural resource management), 1946; B.A., 1968, M.A., 1972, University of Washington; Ph.D., University of Michigan, 1977. Research associate, North Pacific Project, University of Washington, since 1976. Institute for Environmental Quality fellow, 1974-76; American Center fellow/ Japan and Republic of Korea, 1977.

Paul L. Hilpman (geology), 1932; A.B., Brown University, 1954; A.M., 1956, Ph.D., 1969, Kansas University. Professor of geosciences, University of Missouri-Kansas City, since 1974. Previously with Kansas Geological Survey and Kansas University. Erasmus Haworth Graduate Honors Award in Geology, Kansas University, 1967; president, Kansas Section, 1969, Missouri Section, 1978, Association of Professional Geological Scientists; National Executive Committee, APGS, 1970; National Management Board, Engineering Geology Division, 1974, chairman of Division, 1976, Geological Society of America. Long-Range Planning Committee, Engineering Geology Division, GSA; Joint Committee on Engineering Geology, ASCE-GSA-Association of Engineering Geologists.

C. John Mann (geology), 1931; B.S., 1953, M.S., 1957, University of Kansas; Ph.D., University of Wisconsin, 1961. With University of Illinois since 1965; associate professor since 1969. Previously with Gulf Oil Corporation, U.S. Army Corps of Engineers, University of Kansas, California Company, University of Wisconsin, Chevron Oil Company, and Hazleton-Nuclear Science Corporation. Erasmus Haworth Senior Award, 1953. Erasmus Haworth Graduate Award, 1957, University of Kansas; Excellent Teacher Recognition, University of Wisconsin, 1959; Distinguished Service Award, Mississippi Petroleum Council, 1964; Excellent Teacher Recognition. University of Illinois, 1973, 1974. 1975; president, Mathematical Geologists of the United States, 1976-78. Coordinator, Lithostratigraphic Working Group of Project 148, International Geological Correlation Programme, International Union of Geological Sciences; Executive Committee, MGUS.

### Section G—Biological Sciences

Council Delegates (eight to be elected). **Ronald H. Alvarado** Joseph T. Bagnara **Robert L. Barnes** Ruth R. Bennett Stephen H. Bishop Mary Ella Feinleib Victor H. Hutchison Lionel F. Jaffe Jerry J. Kollros Joseph R. Larsen Michael Menaker **Florence Moog** Jane M. Oppenheimer Howard L. Sanders Betty M. Twarog Bruce L. Umminger

Ronald H. Alvarado (zoology, physiology), 1933; B.A., University of California, Riverside, 1956; M.S., 1959, Ph.D., 1962, Washington State University. Professor and chairman, Department of Zoology, Arizona State University, since 1974. Previously with Washington State University and Oregon State University. National Science Foundation fellow, 1959; National Institutes of Health fellow. 1960-62; Carter Award, Oregon State University, 1970; Task Force on Comparative Physiology, 1976-77, and nominations chairman, Comparative Physiology Section, 1977, American Physiological Society; panelist, NIH Physiology Study Section, 1977, and NSF Minority Graduate Fellowship Program, 1978. Advisory Committee for Physiology, Cellular, and Molecular Biology, NSF.

Joseph T. Bagnara (developmental biology, endocrinology), 1929; B.A., University of Rochester, 1952; Ph.D., University of Iowa, 1956. With University of Arizona since 1956; professor of zoology since 1964. Visiting professor, Washington State University, 1965, University of Washington, 1972, University of Karlsruhe, 1977. Fulbright research scholar, 1963-64, 1970-71; research fellow, Japan Society for the Promotion of Science, 1979; managing editor, *American Zoologist*, 1971-75; chairman, Division of Comparative Endocrinology, American Society of Zoologists, 1976-77. Editorial Board, *General and Comparative Endocrinology*; Steering Committee, International Pigment Cell Society.

**Robert L. Barnes** (forest tree physiology), 1926; B.S., 1950, M.F., 1951, Ph.D., 1958, Duke University. Professor, School of Forestry and Environmental Studies, Duke University, since 1965. Previously with University of Florida and U.S. Forest Service. National Science Foundation fellow, 1955-57; Committee on Tree Physiology, Society of American Foresters, 1963-64. AAAS activi-

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ties: Section Committee, Section on Agriculture, and Council, 1969.

Ruth R. Bennett (biology), 1934; B.S., 1956, Ph.D., 1965, Tufts University. With University of Massachusetts, Boston, since 1966; associate professor since 1972. Chapter president, American Association of University Professors.

Stephen H. Bishop (biochemistry, zoology), 1936; B.A., Gettysburg College, 1958; M.A., Duke University, 1960; Ph.D., Rice University, 1964. With Iowa State University since 1977; professor, Zoology Department, beginning in 1979. Previously with University of Kansas Medical Center and Baylor College of Medicine. Member of the Corporation, Marine Biological Laboratory; Editorial Board, *Journal of Experimental Zoology*; Panel on Regulatory Biology, National Science Foundation.

Mary Ella Feinleib (plant physiology, photobiology); B.A., Cornell University, 1959; M.A., Radcliffe College, 1961; Ph.D., Harvard University, 1965. With Tufts University since 1965; associate professor of biology since 1972; department chairman since 1976. Fulbright research scholar, 1975-76. Advisory Screening Committee in Life Sciences, Council for International Exchange of Scholars; Radcliffe Seminars Advisory Council.

Victor H. Hutchison (comparative physiology, physiological ecology), 1931; B.S., North Georgia College, 1952; M.A., 1956, Ph.D., 1959, Duke University. George Lynn Cross research professor and chairman. Department of Zoology, University of Oklahoma, since 1970. Previously with University of Rhode Island; research associate, New York Zoological Society, 1964-69; visiting research professor, Universidad de los Andes (Colombia), 1965-66. Southern Fellowship Fund teaching fellow, 1958-59; Guggenheim fellow, 1965-66; National Research Council visiting scientist exchange fellow, 1969; Executive Council, Herpetologists League, 1968-71; Board of Governors, American Society of Icthyologists and Herpetologists, 1969-74; Editorial Board, Copeia, 1971-77. Chairman, Committee on Stoye Award, ASIH; honor lecturer, Middle America State University Association. AAAS activities: organizer and participant in Annual Meeting symposia.

Lionel F. Jaffe (biology), 1927; S.B., Harvard University, 1948; Ph.D., California Institute of Technology, 1954. Professor, Purdue University, since 1967. Previously with Brandeis University and University of Pennsylvania. National Research Council and National Science Foundation fellow, 1953-55; Marine Biology fellow, 1955-56. Editorial Boards, *Gamete Research, Journal of Theoretical Bi*ology, and Plant Science Letters.

Jerry J. Kollros (zoology, developmental biology), 1917; S.B., 1938, Ph.D., 1942, University of Chicago. With University of Iowa since 1946; professor since 1957. Previously with University of Chicago; visiting assistant professor, University of California, Los Angeles, 1950. Treasurer, 1958-61, chairman, Division of Developmental Biology, 1964, and Executive Committee, 1975-78, American Society of Zoologists; Cell Biology Study Section, National Institutes of Health, 1960-64; Executive Committee, American Association of Anatomists, 1963-66; Biological Sciences Training Review Committee, National Institute of Mental Health, 1967-70; chairman, Commission on Undergraduate Education in the Biological Sciences, 1969-71.

Joseph R. Larsen (entomology), 1927; B.S.,

1950, M.S., 1952, University of Utah; Sc.D., Johns Hopkins University, 1958. With University of Illinois since 1963; professor since 1968; director, School of Life Sciences, since 1975. Previously with University of Utah, U.S. Army Chemical Corps, University of Pennsylvania, and University of Wyoming. AAAS activities: Section Committee, Section on Biological Sciences, and Council, 1962-63.

Michael Menaker (biology), 1934; B.A., Swarthmore College, 1955; Ph.D., Princeton University, 1960. Director, Interdisciplinary Program in the Neurosciences, and professor, University of Oregon, beginning in 1979. Previously with Harvard University and University of Texas. Guggenheim fellow, 1971-72; Career Development Award, National Institutes of Health, 1970-75.

Florence Moog (development biology), 1916; A.B., New York University, 1936; Ph.D., Columbia University, 1944. With Washington University since 1942; Charles Rebstock professor of biology since 1975. Previously with U.S. Department of Labor and University of Delaware. AAAS-Westinghouse Prize for Science Writing, 1948; Merck fellow, 1954-55; chairman, Education Committee, 1959-62, and Section on Developmental Biology, 1976, American Society of Zoologists; Executive Council, American Society of Cell Biology, 1964-67; Study Section on Human Embryology and Development, National Institutes of Health, 1966-70. Editorial Board, Growth. AAAS activities: Electorate Nominating Committee, Section on Biological Sciences, 1974-76, chairperson, 1974.

Jane M. Oppenheimer (embryology, history of biology), 1911; B.A., Bryn Mawr College, 1932; Ph.D., Yale University, 1935. With Bryn Mawr College since 1938; William R. Kenan, Jr., professor of history of science since 1975. Previously with University of Rochester; visiting professor, Johns Hopkins University, 1969-70. Hadassah Medical School (Jerusalem), 1974. Sterling fellow, 1935-36; American Association of University Women fellow, 1936-37; Guggenheim fellow, 1942-43, 1952-53; Rockefeller Foundation fellow, 1950-51; National Science Foundation fellow, 1959-60; Otto H. Hafner Award, 1966; Lucius Wilbur Cross Medal, 1971; Committee on Award of International Study Grants, AAUW, 1949-55; Panel of Experts, Committee for Award of International Fellowships, International Federation of University Women, 1955-75; treasurer, 1957-59, Executive Committee, 1962-64, chairman, Division of Development Biology, 1967, and president, 1973, American Society of Zoologists; member-at-large, Governing Board, American Institute of Biological Sciences, 1974-77; Council, American Association for the History of Medicine and History of Science Society, 1975-77; U.S. National Committee, International Union of Biological Sciences, 1975-77. AAAS activities: secretary, Section on History and Philosophy of Science, and Council, 1955-57; Committee on Nominations, 1975-76; Committee on Scientific Freedom and Responsibility, 1976-77.

Howard L. Sanders (marine benthic ecology), 1921; B.A., University of British Columbia, 1949; M.S., University of Rhode Island, 1951; Ph.D., Yale University, 1955. Senior scientist, Woods Hole Oceanographic Institution, since 1965; associate in invertebrate zoology, Harvard University, since 1968. Previously with Marine Biological Laboratory. Environmental Biology Advisory Panel, National Science Foundation, 1966-68; Biological Methods Panel and Advisory Panel for the Central American Sea Level Canal, 1969-70, National Academy of Sciences; chairman, Working Group on Benthic Productivity, 1968. Visiting Committee, Ecosystem Center, Marine Biological Laboratory. AAAS activities: AAAS-Rosenstiel Selection Panel, 1975-76, chairman, 1976.

Betty M. Twarog (physiology), 1927; A.B., Swarthmore College, 1948; M.S., Tufts College, 1949; Ph.D., Radcliffe College, 1952. Professor of anatomical sciences, State University of New York, Stony Brook, since 1975. Previously with Harvard University, Cleveland Clinic Foundation, Tufts University, and New York University School of Medicine; visiting professor, University of Mel-bourne, 1973; director, Regulatory Biology Program, National Science Foundation, 1977-78. Atomic Energy Commission fellow, 1949-52; U.S. Public Health Service fellow, 1960-61; Guggenheim fellow, 1973; Council, 1974-76, president, 1978-79, Society of General Physiologists. Education Committee, American Physiological Society; executive secretary. External Advisory Committee to Philadelphia Muscle Institute; Research Review Committee A, National Heart, Lung and Blood Institute; Editorial Advisory Board, Journal of Pharmacology and Experimental Therapeutics; associate editor, Marine Biology Letters.

Bruce L. Umminger (comparative physiology), 1941; B.S., 1963, M.S., 1966, M.Phil., 1968, Ph.D., 1969, Yale University. Program director, Regulatory Biology Program, National Science Foundation, beginning in August 1979. Previously with University of Cincinnati; visiting investigator, Duke University Marine Laboratory, 1966. National Science Foundation fellow, 1964; Distinguished Research Award, 1973, president, 1977-79, University of Cincinnati Sigma Xi; secretary, Division of Comparative Physiology and Biochemistry, American Society of Zoologists, 1976-77. Program officer, Comparative Physiology Section, and Program Advisory Committee, American Physiological Society; secretary and Executive Committee, ASZ; Editorial Board, Journal of Experimental Zoology; Life Sciences Advisory Screening Committee. Council for International Exchange of Scholars; AIBS-NASA Space Shuttle Proposal Review Panel in Life Sciences; Advisory Board, Campbell Commercial College.

### Chairperson-Elect (one to be elected). John A. Moore John L. Roberts

John A. Moore (evolutionary biology), 1915; A.B., 1936, M.A., 1939, Ph.D., 1940, Columbia University. Professor of biology, University of California, Riverside, since 1969. Previously with Brooklyn College, Queens College, Barnard College, Columbia University, and University of Washington. Fulbright research scholar, 1952–53; Guggenheim fellow, 1959–60; Gold Medal, XVI International Congress of Zoology, 1963; fellow, American Academy of Arts and Sciences; member, National Academy of Sciences; president, Society for the Study of Evolution, 1963, American Society of Naturalists, 1972, American Society of Zoologists, 1974. Editorial Board, American Zoologist; U.S. National Committee, International Union of Biological Sciences; Panel on School Science, National Research Council. AAAS activities: member-at-large of the Section Committee, Section on Zoological Sciences, 1956-59, 1964-67; Council, 1966-67; Commission on Science Education, 1967-72, chairman, 1971-72; AAAS-Newcomb Cleveland Prize Committee of Judges, 1968-70; AAAS-Westinghouse Science Writing Awards Committee of Judges, 1969; Committee on Regional Centers, 1971-72.

John L. Roberts (zoology, comparative physiology), 1922; B.S., 1947, M.S., 1948, University of Wisconsin; Ph.D., University of California, Los Angeles, 1952. With University of Massachusetts since 1952; professor since 1970. Visiting instructor, Duke University Marine Laboratory, 1965, 1970. National Institutes of Health special fellow, 1966-67; senior research associate, NRC-NOAA, La Jolla, 1973-74; secretary, Division of Comparative Physiology and Biochemistry, 1970-72, secretary and member, Executive Committee, 1976-79, American Society of Zoologists. Panel on Regulatory Biology, National Science Foundation; Editorial Board, *Physiological Zoology*.

Member-at-Large of the Section Committee (one to be elected).

### T. Delevoryas David Epel

T. Delevoryas (botany), 1929; B.S., University of Massachusetts, 1950; M.S., 1951, Ph.D., 1954, University of Illinois. Professor, University of Texas, since 1972; department chairman since 1974. Previously with Michigan State University, Yale University, and University of Illinois. Rockefeller fellow, 1954-55; Guggenheim fellow, 1964-65; treasurer, 1968-72, president, 1974, Merit Award, 1978, Botanical Society of America: Governing Board, American Institute of Biological Sciences, 1975-77; fellow, Linnean Society of London. President, International Organization of Paleobotany; Council, International Society of Plant Morphologists; Editorial Boards, BioScience and Paleobiology

David Epel (cell and developmental biology), 1937; B.A., Wayne State University, 1958; Ph.D., University of California, Berkeley, 1963. Professor of biological sciences, Stanford University, since 1978. Previously with University of Pennsylvania Medical School (Johnson Research Foundation fellow) and Scripps Institution of Oceanography. Guggenheim fellow, 1977-78; Overseas fellow, Cambridge University, 1977-78. Council and chairman, Educational Policy Committee, American Society of Cell Biology; associate editor, Developmental Biology and Gamete Research.

Members of the Electorate Nominating Committee (two to be elected).

Albert F. Bennett Judith P. Grassle John Gutknecht Audrey E. V. Haschemeyer

Albert F. Bennett (biology, physiological ecology), 1944; B.A., University of California, Riverside, 1966; Ph.D., University of Michigan, 1971. With University of California, Irvine, since 1974; associate professor of biological sciences since 1978. Previously with University of Michigan and University of California, Berkeley. Woodrow Wilson fellow, 1966–67; National Science Foundation fellow, 1966–70; Miller research fellow, 1971–73; Phi Sigma Award, 1968; Research Career

Development Award, National Institutes of Health, 1978-83.

Judith P. Grassle (marine biology), 1936; B.Sc., University of Queensland, 1960; Ph.D., Duke University, 1968. With Marine Biological Laboratory since 1970; independent investigator since 1972. Previously with Duke University Marine Laboratory and University of Queensland. Walter and Eliza Hall fellow, 1958; National Institutes of Health training fellow, 1962.

John Gutknecht (membrane physiology), 1937; B.A., Ohio Wesleyan University, 1959; Ph.D., University of North Carolina, Chapel Hill, 1964. With Duke University since 1967; associate professor since 1975. Previously with U.S. Bureau of Commercial Fisheries and University of East Anglia (England).

Audrey E. V. Haschemeyer (biological chemistry), 1936; B.S., University of Illinois, 1957; Ph.D., University of California, Berkeley, 1961. With Hunter College since 1969; professor of biology and biochemistry since 1974. Previously with Massachusetts Institute of Technology, Massachusetts General Hospital, and Harvard Medical School. National Science Foundation fellow, 1957-59; Proctor and Gamble fellow, 1959-60; National Institutes of Health fellow, 1962-64; Helen Hay Whitney fellow, 1964-67; American Cancer Society research scholar, 1976; Board on Fellowships and Associateships, National Research Council, 1974-76; Council, 1976-79, and Executive Committee, 1978-79, Biophysical Society. Editorial Board, Marine Biology Letters; Membership Advisory Committee, American Physiological Society; Board, Zero Population Growth.

### Section H—Anthropology

### Council Delegate (one to be elected). Roberta L. Hall Glynn Isaac

**Roberta L. Hall** (physical anthropology), 1939; B.A., Indiana University, 1963; M.A., 1969, Ph.D., 1970, University of Oregon. With Oregon State University since 1974; currently associate professor. Previously with University of Victoria. NDEA fellow, 1968-69; founding member, Canadian Association for Physical Anthropology, 1973; Elections Committee, 1975-78, and chairman, Bylaws Revision Committee, 1977-78, Human Biology Council. Executive Committee, HBC.

Glynn Isaac (anthropology, archaeology), 1937; B.Sc., University of Cape Town, 1958; B.A., 1961, Ph.D., 1969, Cambridge University. Professor, University of California, since 1966. Previously with University of Cape Town, Kenya National Parks, and Centre for Prehistory and Palaeontology, Nairobi. Guggenheim fellow, 1975-76. Board member and Research and Grants Committee, Foundation for Research into the Origins of Man; International Scientific Advisory Council, Louis Leakey Memorial Institute for African Prehistory.

### Chairperson-Elect (one to be elected). Alan R. Beals

Douglas W. Schwartz

Alan R. Beals (anthropology), 1928; B.A., University of California, Los Angeles, 1948; Ph.D., University of California, Berkeley, 1954. Professor and department chairman, University of California, Riverside, since 1968. Previously at Stanford University. Cofounder and secretary-treasurer, Kroeber Anthropological Society, 1950–51; secretary, 1962–63, vice president, 1963–64, president, 1964–65, and Advisory Board, 1965–73, Southwestern Anthropological Association; memoirs and special publications editor, *American Anthropologist*, 1963–65; Ethics Committee, American Anthropological Association, 1972–75. Associate editor, *Annual Reviews in Anthropology*.

Douglas W. Schwartz (archaeology), 1929; B.A., University of Kentucky, 1950; Ph.D., Yale University, 1955. President, School of American Research, since 1967. Previously with University of Oklahoma and University of Kentucky. American Association for State and Local History Award for Conceptions of Kentucky Prehistory, 1968; president, Society for American Archaeology, 1973; chairman, Secretary of the Interior's Advisory Board on National Parks, 1977-78; vice chairman, Harvard Overseers' Committee on the Peabody Museum, 1978, Council, Secretary of the Interior's Advisory Board on National Parks; president, Witter Bynner Foundation for Poetry; trustee, Jane Goodall African Wildlife Research Institute; Public Broadcasting Associates Advisory Board.

Member-at-Large of the Section Committee (one to be elected).

Bryant Bannister Don E. Dumond

**Bryant Bannister** (dendrochronology), 1926; B.A., Yale University, 1948; M.A., 1953, Ph.D., 1960, University of Arizona. With University of Arizona since 1960; director, Laboratory of Tree-Ring Research, since 1964; professor of dendrochronology since 1965; associate dean, College of Earth Sciences, since 1973. Editor, *Tree-Ring Bulletin*, 1958-69. Collaborator, National Park Service; research associate, Museum of Northern Arizona.

Don E. Dumond (anthropology, archaeology), 1929; B.A., University of New Mexico, 1949; M.A., Mexico City College, 1957; Ph.D., University of Oregon, 1962. With University of Oregon since 1962; professor of anthropology since 1971: department head since 1972; director, Oregon State Museum of Anthropology, since 1977. Research training fellow, Social Science Research Council, 1961-62; fellow for independent study and research, National Endowment for the Humanities, 1976-77; visiting research professor, Japan Society for the Promotion of Science, 1978. Planning and Editorial Committee, Arctic volume. Handbook of North American Indians, Smithsonian Institution. AAAS activities: Electorate Nominating Committee, Anthropology Section, 1976-78, chairman, 1978.

Members of the Electorate Nominating Committee (two to be elected).

John Buettner-Janusch Robert L. Carneiro Jeremy A. Sabloff Nancy M. Williams

John Buettner-Janusch (physical anthropology), 1924; Ph.B., 1948, S.B., 1949, A.M., 1953, University of Chicago; Ph.D., University of Michigan, 1957. Professor and department chairman, New York University, since 1973. Previously with University of Utah, University of Michigan, Yale University, and Duke University. National Science Founda-

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tion fellow, 1952-53, 1962-63; U.S. Public Health Service Research Career Development Award, 1963-73; Outstanding Professor Award, Associated Students, Duke University, 1966-67; associate editor, *American Journal of Physical Anthropology*, 1970-77; NSF Advisory Panel for Anthropology, 1971-74; Executive Committee, 1971-74, vice president and program chairman, 1974-76, American Association of Physical Anthropologists. Seminar associate, Columbia University; Bobbs-Merrill Editorial Selection Committee in Anthropology.

**Robert L. Carneiro** (cultural anthropology), 1927; B.A., 1949, M.A., 1952, Ph.D., 1957, University of Michigan. Curator of anthropology, American Museum of Natural History, since 1957. Previously with University of Wisconsin, Columbia University, University of California, Los Angeles, Pennsylvania State University, and University of Victoria. Advisory Board, *Abstracts in Anthropology*; advisory editor, *Behavior Science Research*.

Jeremy A. Sabloff (anthropology, archaeology), 1944; B.A., University of Pennsylvania, 1964; M.A. and Ph.D., 1969, Harvard University. Professor of anthropology, University of New Mexico, since 1978. Previously with Harvard University and University of Utah. Editor, *American Antiquity*, Society for American Archaeology.

Nancy M. Williams (social anthropology), 1929; B.A., Stanford University, 1950; M.A., 1969, Ph.D., 1973, University of California, Berkeley. Assistant professor, University of Washington, since 1973. Previously with University of California, Berkeley. Whitney fellow, 1950-51; Danforth fellow, 1968; National Institute of Mental Health fellow, 1969; research fellow in social anthropology, Australian Institute of Aboriginal Studies, 1974. Supervising/Consultative Committee, Research Project on the Effectiveness of Commonwealth Government Programs and Services for Children in Tradition-oriented Aboriginal Communities, Department of Social Security, Commonwealth of Australia; Executive Committee, Society and Justice Program, University of Washington.

### Section J—Psychology

### Chairperson-Elect (one to be elected). Gregory A. Kimble George A. Miller

Gregory A. Kimble (general psychology), 1917; A.B., Carleton College, 1940; M.A., Northwestern University, 1942; Ph.D., State University of Iowa, 1945. Professor and department chairman, Duke University, since 1977. Previously with Brown University, Yale University, and University of Colorado. President, Division of Experimental Psychology, American Psychological Association, 1963-64, and Rocky Mountain Psychological Association, 1974-75; secretary-treasurer, Society of Experimental Psychologists, 1976-79. Editor, Journal of Experimental Psychology: General. AAAS activities: member-at-large of the Section Committee, Section on Psychology, 1975-78.

George A. Miller (psychology), 1920; B.A., 1940, M.A., 1941, University of Alabama; A.M., 1944, Ph.D., 1946, Harvard University. Professor, Rockefeller University, since 1968. Previously with Massachusetts Institute of Technology and Harvard University; member, 1950, 1970-72, and visitor, 1972-76, Institute for Advanced Study; visiting professor, MIT, 1976-79. Fulbright research fellow, 1963-64; Distinguished Scientific Contribution Award, American Psychological Association, 1963; Warren Medal, Society of Experimental Psychologists, 1972; Distinguished Service Award, American Speech and Hearing Association, 1976; president, Eastern Psychological Association, 1961-62, and APA, 1968-69. Visiting Committee, Graduate School of Education, Harvard University; Sloan Science Book Committee.

Member-at-Large of the Section Committee (one to be elected).

### Leslie H. Hicks

Alvin M. Liberman

Leslie H. Hicks (psychology), 1927; B.S., Howard University, 1949; M.A., 1952, Ph.D., 1954, University of Wisconsin. With Howard University since 1962; professor and department chairman since 1970. Previously with University of California, Los Angeles; exchange scientist, U.S.S.R., 1963, 1965, 1976; fellow, Center for Advanced Study in the Behavioral Sciences, 1978–79. Advisory Council, Department of Psychology, Princeton University; Biological Sciences Training Review Committee, National Institute of Mental Health. AAAS activities: Committee on Minorities in Science, 1971–72; Panel on Black Scientists, 1973–.

Alvin M. Liberman (psychology), 1917; B.A., 1938, M.A., 1939, University of Missouri; Ph.D., Yale University, 1942. Professor, University of Connecticut, since 1949; adjunct professor of linguistics, Yale University, since 1968; with Haskins Laboratories since 1944, president and research director since 1975. Previously with Weslevan University; fellow, Center for Advanced Study in the Behavioral Sciences, 1964-65; visiting professor, University of Tokyo, 1971-72, and Massachusetts Institute of Technology, 1974. U.S. Public Health Service research fellow, 1964-65; Guggenheim fellow, summers, 1964-65; Warren Medal, Society of Experimental Psychologists, 1975; member, National Academv of Sciences: Alumni Association Award for Excellence in Research, 1977, distinguished professor, 1979, University of Connecticut. Board of Trustees, Center for Applied Linguistics; General Research Support Review Committee Study Section, National Institutes of Health; Research Associateship Program and Committee on Hearing, Bioacoustics and Biomechanics, National Research Council.

Members of the Electorate Nominating Committee (two to be elected).

Rachel Keen Clifton Charles A. Kiesler Gardner Lindzey Betty H. Pickett

**Rachel Keen Clifton** (psychology), 1937; B.A., Berea College, 1959; M.A., 1960, Ph.D., 1963, University of Minnesota. With University of Massachusetts since 1968; professor since 1976. Previously with University of Iowa; visiting professor, Stanford University, 1975-76. National Institute of Child Health and Human Development fellow, 1963-66; associate editor, *Psychophysiology*, 1972-75, and *Child Development*, 1977-79; Experimental Psychology Study Section, National Institutes of Health, 1974-77; Board of Directors, Society for Psychophysiological Research, 1975-78. Secretary, Society for Research in Child Development; Publications Board, SPR; Social and Behavioral Science Research Advisory Committee, National Foundation; Boyd R. McCandless Awards Committee, Division 7, American Psychological Association.

Charles A. Kiesler (psychology), 1934; B.A., 1958, M.A., 1960, Michigan State University; Ph.D., Stanford University, 1963. Executive officer, American Psychological Association, since 1975; beginning in September 1979, Walter Van Dyke Bingham professor of psychology, Carnegie-Mellon University. Previously with Michigan State University, Stanford University, Ohio State University, Yale University, and University of Kansas; visiting research professor, Mannheim University, 1973. Board of Directors, Mershon Foundation, Ohio State University, 1963-64; program chairman, 1971, and Executive Committee, 1973-76 (chairman, 1974-75), Society of Experimental Social Psychology; founding vice president, Council of Applied Social Research, 1976-77; editor, American Psychologist, 1975-79. Editorial Board, European Journal of Social Psychology; Board of Directors and Council, APA; secretary, Board of Directors, American Psychological Foundation; Liaison Group for Mental Health.

Gardner Lindzey (psychology), 1920; A.B., 1943, M.S., 1945, Pennsylvania State University; Ph.D., Harvard University, 1949. Director and president. Center for Advanced Study in the Behavioral Sciences, since 1975. Previously with Syracuse University, University of Minnesota, Harvard University, and University of Texas; fellow, Center for Advanced Study in the Behavioral Sciences, 1955-56, 1963-64, 1971-72. Pennsylvania State University Distinguished Alumnus Award, 1975; fellow, Institute of Medicine and American Academy of Arts and Sciences; president, Division of Social and Personality Psychology, 1963-64, and Division of General Psychology, 1970-71, American Psychological Association; president, APA, 1966-67. President, Society for the Study of Social Biology; Publications Board, APA; chairman, Committee on Substance Abuse and Habitual Behavior. National Academy of Sciences; Panel on National Needs for Biomedical and Behavioral Research Personnel, NAS; Commission on Future of Psychiatry, Josiah Macy, Jr., Foundation; Committee on the Study of Quality of Research Doctoral Programs, Conference Board of Research Councils; Board of Trustees, APA Insurance Trust. AAAS activities: AAAS Socio-Psychological Prize Committee of Judges, 1962-63; Editorial Board, Science, 1972-73; Section Committee, Section on Psychology, 1975-

Betty H. Pickett (psychology), 1926; A.B., 1945, Sc.M., 1947, Ph.D., 1949, Brown University. Deputy director-designate, National Institute of Child Health and Human Development, beginning in 1979. Previously with University of Minnesota, University of Nebraska, University of Connecticut, Smithsonian Institution, National Institutes of Health, U.S. Department of Health, Education and Welfare, National Institute of Mental Health, and National Institute on Aging. Superior Service Award, 1972, and Distinguished Service Award, 1975, DHEW; citation for Scientific and Professional Achievement, Graduate School, Brown University, 1978; Harold M. Hildreth Award, American Psychological Association, 1979.

Section K-Social and Economic Sciences

### Chairperson-Elect (one to be elected). Amos H. Hawley James G. March

Amos H. Hawley (sociology, demography, human ecology), 1910; A.B., University of Cincinnati, 1936; M.A., 1938, Ph.D., 1941, University of Michigan. Kenan professor emeritus, University of North Carolina, Chapel Hill. Previously with University of Michigan. Fellow, American Academy of Arts and Sciences; president, Population Association of America, 1971, and American Sociological Association, 1978. Council, ASA; chairman, Advisory Committee on Rural Development Policy, U.S. Department of Agriculture.

James G. March (political science), 1928; B.A., University of Wisconsin, 1949; M.A., 1950, Ph.D., 1953, Yale University. With Stanford University since 1970; Fred H. Merrill professor of management, Graduate School of Business, beginning in 1979; concurrently, professor of political science, sociology, and education, and senior fellow, Hoover Institution. Previously with Carnegie Institute of Technology and University of California, Irvine. Wilbur Cross Medal, Yale University, 1968; member, National Academy of Sciences and National Academy of Education. Assembly of Behavioral and Social Sciences, National Research Council: chair, Committee on Aging of the National Research Council, NAS.

Member-at-Large of the Section Committee (one to be elected).

### Heinz Eulau Seymour Martin Lipset

Heinz Eulau (political science), 1915; A.B., 1937, M.A., 1938, Ph.D., 1941, University of California, Berkeley. William Bennett Munro professor of political science, Stanford University, since 1958. Previously with Antioch College and Center for Advanced Study in the Behavioral Sciences. Guggenheim fellow, 1979-80; fellow, American Academy of Arts and Sciences: associate editor for political science, International Encyclopedia of the Social Sciences, 1961-68; chairman, Political Science Panel, Behavioral and Social Science Survey, Social Science Research Council, 1967-69; Executive Committee, Behavioral Sciences Division, National Research Council, 1969-72; president, American Political Science Association, 1971-72. Chairman, Board of Overseers, National Election Studies, Center for Political Studies, University of Michigan; associate director, Inter-University Consortium for Political and Social Research. AAAS activities: member-at-large of the Section Committee, Section on Social and Economic Sciences, 1965-68; Council, 1966-68.

Seymour Martin Lipset (political science, sociology), 1922; B.S., City College of New York, 1943; Ph.D., Columbia University, 1949. Professor of political science and sociology, Stanford University, and senior fellow, Hoover Institution, since 1975. Previously with Social Science Research Council, University of Toronto, Columbia University, University of California, Berkeley, and Harvard University; visiting professor, Yale University, 1960-61. Member, National Academy of Sciences; MacIver Award, 1962; Gunnar Myrdal

Award, 1970; Townsend Harris Medal of CCNY, 1971; Guggenheim Award, 1972. Vice president, American Academy of Arts and Sciences; chairman, American Professors for Peace in the Middle East; co-editor, *Public Opinion* magazine; trustee, International Council for the Future of the University; president, International Society of Political Psychology; International Economic and Social Commission, World Jewish Congress. AAAS activities: AAAS Socio-Psychological Prize Committee of Judges, 1964; chairman, Section on Social and Economic Sciences, 1975; Committee on Nominations, 1978-79.

Members of the Electorate Nominating Committee (two to be elected).

Charles E. Bidwell Judith Blake Renée C. Fox Patricia Kendall

Charles E. Bidwell (sociology), 1932; A.B., 1946, M.A., 1950, Ph.D., 1956, University of Chicago. With University of Chicago since 1961; professor of sociology and education since 1970; chairman, Department of Education, since 1978. Previously with Harvard University; visiting professor, University of Toronto, 1970. Guggenheim fellow, 1971-72; chairman, Section on Sociology of Education, American Sociological Association, 1966-67. 1978-79; editor, Sociology of Education, 1969-72, and American Journal of Sociology, 1973-78; vice president, American Educational Research Association, 1973-75. Board of Scholars, Higher Education Research Institute.

Judith Blake (demography, sociology), 1926; Ph.D., Columbia University, 1961. Bixby professor of population policy, University of California, Los Angeles, since 1976. Previously with Conservation Foundation, University of California, San Francisco, and University of California, Berkeley. Population Council fellow, 1954; Guggenheim fellow, 1976-77; Phi Beta Kappa visiting scholar, 1976-77; Sorokin Awards Committee, American Sociological Association, 1974-77; Executive Committee, 1975-78, and president, 1977-78, Sociological Research Association: Irene B. Taeuber Memorial Award Committee, Population Association of America, 1976-79. Assembly of Behavioral and Social Sciences, National Academy of Sciences-National Research Council; Academic Advisory Board, RAND Graduate Institute; Scientific Advisory Panel, Joint Center for Studies of Health Programs, UCLA School of Public Health, University of Copenhagen Institute of Social Medicine. AAAS activities: Council and Section Committee, Section on Social and Economic Sciences, 1979-81.

Renée C. Fox (sociology), 1928; A.B., Smith College, 1949; Ph.D., Radcliffe College, 1954. Professor, University of Pennsylvania, since 1969; Annenberg professor of the social sciences since 1978. Previously with Barnard College, Columbia University, and Harvard University. Guggenheim fellow, 1962; E. Harris Harbison Gifted Teaching Award, Danforth Foundation, 1970; Medal, Universite de Liege, 1976-77; Radcliffe Graduate Society Medal, 1977; member, Institute of Medicine, National Academy of Sciences; fellow, American Academy of Arts and Sciences; visiting scholar, Phi Beta Kappa, 1973-75; Boards of Directors, Institute of Society, Ethics and the Life Sciences, 1969-76, and Social Science Research Council, 1971-74; Council, American Sociological Association, 1973-76; president, Eastern Sociological Society, 1976-77. Council. Institute of Medicine, NAS; secretary and Board, Institute for Intercultural Studies; National Board, Robert Wood Johnson Clinical Scholars Program; Board of Trustees, Women's Law Project; Advisory Board, Center for the Study of Drug Development; Editorial Committee, Annual Review of Sociology; Advisory Boards, Technology in Society and Journal of Medicine and Philosophy. AAAS activities: AAAS Socio-Psychological Prize Committee of Judges, 1971; Committee on Science in the Promotion of Human Welfare, 1972-74; Board of Directors and Council, 1977-80; AAAS-American Bar Association National Conference of Lawyers and Scientists, 1979 -

Patricia Kendall (sociology), 1921; B.A., Smith College, 1942; Ph.D., Columbia University, 1954. Professor, Graduate School and Queens College, City University of New York, since 1965. Previously with Bureau of Applied Social Research and Columbia University. Smith College Alumnae fellow, 1942-, 43; Rockefeller fellow, 1943-44; University fellow of Columbia University, 1944-45; member, various committees, American Sociological Association and Eastern Sociological Society; Committee on Medical Education, New York Academy of Medicine, 1970-75. Vice president, ESS; Jessie Bernard Award Committee, ASA; Cancer Center Support Grant Review Committee, National Cancer Institute.

### Section L-History and Philosophy of Science

### Chairperson-Elect (one to be elected). Camille Limoges Harry Woolf

**Camille Limoges** (history of science), 1942; Ph.D., University of Paris, 1968. With University of Montreal since 1973; professor since 1977. Previously with Johns Hopkins University. Council, History of Science Society, 1976–78. Research scholar, Johns Hopkins University; Committee on *Isis*, HSS.

Harry Woolf (history of science), 1923; B.S., 1948, M.A., 1949, University of Chicago; Ph.D., Cornell University, 1955. Director, Institute for Advanced Study, since 1976. Previously with Boston University, Brandeis University, University of Washington, and Johns Hopkins University. Sigma Xi Bicentennial lecturer, 1976. Trustee, Associated Universities, Inc.: trustee and chairman of the Board, University Research Association; Councils, History of Science Society and National Institute of Child Health and Human Development, NIH; Advisory Board, Smithsonian Research Awards; Editorial Advisory Board, The Writings of Albert Einstein. AAAS activities: vice president, AAAS, chairman, Section on History and Philosophy of Science, and Council, 1960.

Member-at-Large of the Section Committee (one to be elected). Mark B. Adams

#### Noretta Koertge

Mark B. Adams (history and sociology of science), 1944; A.B., 1966, Harvard College; A.M., 1969, Ph.D., 1973, Harvard University. With University of Pennsylvania since 1970; assistant professor since 1973. Mellon fellow,

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Aspen Institute for Humanistic Studies, 1976-77; American Council of Learned Societies/ Soviet Academy of Sciences senior scholar exchangee, 1976; exchange scientist, National Academy of Sciences and Soviet Academy of Sciences, 1977. Editorial Boards, *Mendel Newsletter* and *Soviet Science Technology*.

Noretta Koertge (philosophy of science), 1935; B.S., 1955, M.S., 1956, University of Illinois; Ph.D., University of London, 1969. Associate professor, Indiana University, since 1970. Previously with Elmhurst College, American College for Girls (Istanbul), and Ontario Institute for Studies in Education; visiting assistant professor, Harvard University, 1973. Board of Governors, Philosophy of Science Association, 1977-79. American representative, British Society for the Philosophy of Science; book review editor, *Erkenntnis*; Editorial Advisory Panel, *British Journal for the Philosophy of Science*; Advisory Board, *Cadernos*.

Members of the Electorate Nominating Committee (two to be elected).

Ronald N. Giere Peter Machamer Alex C. Michalos Roger H. Stuewer

**Ronald N. Giere** (philosophy of science), 1938; B.A., Oberlin College, 1960; M.S., 1963, Ph.D., 1968, Cornell University. Professor, Indiana University. Associate research scientist, Courant Institute of Mathematical Sciences, 1971-72; visiting associate professor, University of Pittsburgh, 1974. Governing Board, Philosophy of Science Association, 1976-78. Editorial Board, *Philosophy of Science*; chairperson, 1980 Biennial Meeting, PSA. AAAS activities: Section Committee, Section on History and Philosophy of Science, 1974-77; Council, 1976-77.

Peter Machamer (history and philosophy of science), 1942; B.A., Columbia University, 1964; B.S., 1966, M.A., 1971, Cambridge University; Ph.D., University of Chicago, 1972. With University of Pittsburgh since 1976; professor and department chairman since 1978. Previously with Ohio State University, Operating Committee, 8th Ohio Junior Science of Humanities Symposium, Ohio Academy of Sciences Junior Academy, 1969-71; Program and Local Arrangements Committee, American Society for 18th Century Studies Midwest Regional Meeting, 1974. Associate editor, Philosophy of Science; research associate, Center for the Philosophy of Science, University of Pittsburgh.

Alex C. Michalos (philosophy of science, sociology), 1935; B.A., Western Reserve University, 1957; B.D., M.A., 1961, Ph.D., 1965, University of Chicago. Director, Social Indicators Research Program, University of Guelph, Ontario, since 1966. Previously with St. Cloud State College and State University of New York at Plattsburgh; visiting professor, University of Pittsburgh, 1969-70, University of Waterloo, 1971, University of Western Ontario, 1974-75. Secretary, Canadian Philosophical Association, 1968-69; Nominating Committee, Society for Value Inquiry, 1973; chairman, Program Committee, Philosophy of Science Association, 1974. Governing Board, PSA; editor and founder, Social Indicators Research; Editorial Boards, Journal of Medicine and Philosophy and Research in Philosophy and Technology; Canadian Committee on Social Science and Environmental Studies.

Roger H. Stuewer (history of science), 1934; B.S., 1958, M.S., 1964, Ph.D., 1968, University of Wisconsin. Professor of the history of science and technology, University of Minnesota, since 1972. Previously with Boston University. American Council of Learned Societies fellow, 1974-75; secretary, History of Science Society, 1972-77; Council, American Studies Association, 1976-79. U.S. National Committee, International Union of the History and Philosophy of Science; Council, HSS; Advisory Board, American Institute of Physics Center for History of Physics: editor. AAPT Resource Letters/Reprint Books; HSS delegate to the American Council of Learned Societies.

### Section M—Engineering

### Chairperson-Elect (one to be elected). Michael Michaelis Gerard A. Rohlich

Michael Michaelis (technological innovation), 1919; B.Sc., University of London, 1940. With Arthur D. Little, Inc., since 1951; senior consultant since 1972. Previously with General Electric Company and United Kingdom Atomic Energy Authority Radiochemical Centre; consultant to President's special assistant for science and technology. 1961-63. Executive director, White House Panel on Civilian Technology, 1961-63; chairman, Committee on Criteria for Federal Support of Research and Development, U.S. Chamber of Commerce, 1963-64; director, Interdisciplinary Communications Associates (Smithsonian Institution), 1968-78. Executive director, Research Management Advisory Panel to Committee on Science and Technology, U.S. House of Representatives; director, World Future Society; Technical Advisory Board to U.S. Secretary of Commerce; Advisory Committee to President's Policy Review of Industrial Innovation. AAAS activities: Electorate Nominating Committee, Section on Engineering, 1979-81.

Gerard A. Rohlich (civil and environmental engineering), 1910; B.S., Cooper Union Night School of Engineering, 1934; B.S.Ci.E., 1936, M.S.Ci.E., 1937, Ph.D., 1940, University of Wisconsin-Madison. C. W. Cook professor of environmental engineering and professor of public affairs, University of Texas, Austin, since 1972. Previously with Carnegie Institute of Technology, Pennsylvania State University, War Department, and University of Wisconsin-Madison; visiting professor, University of Helsinki, 1970; Walker Ames lecturer, University of Washington, 1974. Member, National Academy of Engineering; Harrison Prescott Eddy Medal for Noteworthy Research, Water Pollution Control Federation, 1955; Benjamin Smith Reynolds Medal, University of Wisconsin, 1962; Wisconsin's Water Man of the Year, American Water Works Association, 1969: Karl Emil Hilgard Award, American Society of Civil Engineers, 1972. Science Advisory Boards, Technology Assessment and Pollution Control Committee, Executive Committee, and (chairman) Water Quality Criteria Review Committee, Environmental Protection Agency; chairman, Phosphorus Management Strategies Task Force, International Joint Commission on the Great Lakes; Ecology Committee, Water Pollution Control Federation; chairman, Planning Committee, Utilization of Wastes in Developing Countries, National Research Council.

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Member-at-Large of the Section Committee (one to be elected).

### Leo L. Beranek Andrew P. Sage

Leo L. Beranek (communications, physics, acoustics), 1914; B.A., Cornell College, 1936; M.S., 1937, D.Sc., 1940, Harvard University. Founding partner and director, Bolt Beranek & Newman, Inc., since 1953; with Massachusetts Institute of Technology since 1947, lecturer since 1958. Biennial Award, 1944, Wallace Clement Sabine Award, 1961, and Gold Medal Award, 1975, Acoustical Society of America; Gold Medal Award, Audio Engineering Society, 1971; fellow, American Academy of Arts and Sciences: member, National Academy of Engineering; president, World Affairs Council of Boston, 1975-78. Public Relations Committee, American Physical Society; trustee, Emerson College; director, Flaschner Judicial Institute of Massachusetts.

Andrew P. Sage (engineering), 1933. B.S.E.E., The Citadel, 1955; S.M.E.E., Massachusetts Institute of Technology, 1956; Ph.D., Purdue University, 1960. Lawrence R. Quarles professor and associate dean, School of Engineering and Applied Science, University of Virginia, since 1974; chairman, Department of Engineering Science and Systems Engineering, since 1977. Previously with Purdue University, University of Arizona, University of Florida, and Southern Methodist Universitv. Frederick Emmonds Terman Award for Excellence in Engineering Education, American Society for Engineering Education, and Barry Carlton Award for outstanding paper, Institute of Electrical and Electronics Engineers, 1970; general chairman, IEEE International Symposium on Cybernetics and Society, 1974. Editor, IEEE Trans. on Systems, Man, and Cybernetics; chairman, Publications Committee, IEEE Systems, Man and Cybernetics Society; Editorial Board, Computers and Electrical Engineering; associate editor, Journal of Interdisciplinary Modeling and Simulation and Automatica; editor, Circuits and Systems.

Members of the Electorate Nominating Committee (two to be elected).

Raymond L. Bisplinghoff Nathan Cohn E. Joe Middlebrooks F. Karl Willenbrock

Raymond L. Bisplinghoff (engineering, physics), 1917; B.S., 1940, M.S., 1942, University of Cincinnati; Ph.D., Swiss Federal Institute of Technology, 1957. Director and vice president, Tyco Laboratories, since 1977. Previously with Massachusetts Institute of Technology, National Science Foundation (deputy director), and University of Missouri-Rolla. Sylvanus Reed Award, 1958; Distinguished Service Medal, NASA, 1967; Extraordinary Service Medal, FAA, 1968; Carl F. Kayan Medal, 1971; Godfrey L. Cabot Award, 1972; Distinguished Service Award, NSF, 1973; president, American Institute of Aeronautics and Astronautics, 1966; member, National Academy of Sciences and National Academy of Engineering; fellow, American Academy of Arts and Sciences. National Science Board; chairman, USAF Scientific Advisory Board, and NRC Committee on Transportation; president, International Council of the Aeronautical Sciences; Defense Science Board; trustee, MITRE Corporation.

Nathan Cohn (electrical engineering), 1907; S.B., Massachusetts Institute of Technology, 1927. Consulting engineer since 1972. Previously with Leeds & Northrup Company (executive vice president, 1968-72). Member, National Academy of Engineering; IEEE Lamme Medal, Franklin Institute Wetherill Medal, and Instrument Society of America Sperry Medal, 1968; Scientific Apparatus Makers Association Award, 1978; president, Instrument Society of America, 1963, and SAMA, 1970-71; chairman, Fellow Committee, 1974-76, and Awards Board, 1977-78, IEEE; Board of Directors, Engineers Joint Council, 1975-77. Board of Managers, Franklin Institute (chairman, 1972-75); Centennial Committee, IEEE; Social Effects of Automation Committee, International Federation of Automatic Control; chairman, Hoover Medal Board of Award, ASME-IEEE-ASCE-SIME; Commission on International Relations, EJC.

E. Joe Middlebrooks (environmental engineering), 1932; B.C.E., 1956, M.S.E., 1960, University of Florida; Ph.D., Mississippi State University, 1966. Professor of civil and environmental engineering, Utah State University, since 1970; dean, College of Engineering, since 1974. Previously with U.S. Public Health Service, University of Arizona, Mississippi State University, and University of California, Berkeley. Harrison Prescott Eddy Medal, Water Pollution Control Federation, 1969; Outstanding Educator of America, 1973; past president, Association of Environmental Engineering Professors and Utah Water Pollution Control Association. Numerous committees, WPCF, UWPCA, and American Society of Civil Engineers; Accreditation Visiting Committee, Engineers Council for Professional Development; national director, WPCF.

F. Karl Willenbrock (engineering education), 1920; B.S., Brown University, 1942; M.A., 1947, Ph.D., 1950, Harvard University. Dean, School of Engineering and Applied Science, Southern Methodist University, since 1976. Previously with Harvard University, State University of New York, Buffalo, and National Bureau of Standards. Distinguished Engineering Award, Brown University, 1962; Gold Medal, U.S. Department of Commerce, 1975: member, National Academy of Engineering; president, Institute of Electrical and Electronics Engineers, 1969; Board of Directors, ASTM, 1972-75. Board of Directors, Engineering Index; Long-Range Planning Committee, IEEE; Research and Technical Planning Committee, ASTM. AAAS activities: Editorial Board, Science, 1977-.

### Section N-Medical Sciences

### Chairperson-Elect (one to be elected). Morton D. Bogdonoff Harriet P. Dustan

Morton D. Bogdonoff (internal medicine), 1925; M.D., Cornell University, 1948. Professor of medicine, Cornell University Medical College, since 1975. Previously with National Heart Institute, Duke University, University of Miami, and University of Illinois. National Resident Award, American College of Physicians, 1953; editor, *Clinical Research*, 1959-64; national councilor, American Federation for Clinical Research, American Psychosomatic Society, 1962-65; president, AFCR, 1964; chief editor, *Archives of Internal Medicine*, 1967-76; Presidential Advisory Heart Council, 1973. AAAS activities: Electorate Nominating Committee, Section on Medical Sciences, 1978-80, chairman, 1979.

Harriet P. Dustan (hypertension research), 1920; B.S., 1942, M.D., 1944, University of Vermont. Director, Cardiovascular Research and Training Center, and professor of medicine, University of Alabama Medical Center, since 1977. Previously with University of Vermont, National Heart Institute, Case Western Reserve University, and Cleveland Clinic Foundation. Distinguished Service Award, University of Vermont Medical Alumni Association, 1973; Distinguished Service Award, Modern Medicine, 1976; president, American Heart Association, 1976-77; member, Institute of Medicine. Review Committee B, Hypertension Task Force, and Scientific Exchange Program of USA, National Heart, Lung, and Blood Institute; Board of Governors, Residency Review Committee in Internal Medicine, Finance Committee, and Cert. Exam Committee, American Board of Internal Medicine.

Member-at-Large of the Section Committee (one to be elected).

### Jules Hirsch Victor A. McKusick

Jules Hirsch (medicine), 1927; M.D., University of Texas, Dallas, 1948. Professor and senior physician, Rockefeller University, since 1967. Previously with Duke University Hospital, New York College of Medicine, and Rockefeller Institute for Medical Research. Board of Directors, Scientists' Committee for Public Information, 1962-69; vice chairman, Scientists' Institute for Public Information, 1963-67; Advisory Council, National Association for Mental Health, 1965-66: Executive Committee, Council on Arteriosclerosis, American Heart Association, 1966-68; Nutrition Study Section, National Institutes of Health, 1968-72; Council, American Psychosomatic Society, 1968-71, Society for Experimental Biology and Medicine, 1972, and American Society for Clinical Nutrition, 1972-74; president, ASCN, 1978. Editorial Boards, Journal of Lipid Research, International Journal of Obesity, Psychosomatic Medicine, and Medical Letter.

Victor A. McKusick (medical genetics), 1921; M.D., Johns Hopkins University, 1946. With Johns Hopkins University since 1947; professor of medicine since 1960; department chairman and physician-in-chief, JHU Hospital, since 1973. John Phillips Award, American College of Physicians, 1972; Wm. A. Allan Award, American Society of Human Genetics, and Gairdner International Award, 1977; vice president, American Society for Clinical Investigation, 1967; president, ASHG, 1974. Medical Institute; Council, American Philosophical Society; Nominating Committee, National Academy of Sciences.

Members of the Electorate Nominating Committee (two to be elected).

Robert J. Glaser Alexander Leaf Arnold S. Relman James V. Warren

**Robert J. Glaser** (medicine), 1918; S.B., 1940, M.D., 1943, Harvard University. President and chief executive officer, Henry J. Kaiser Family Foundation, since 1972. Previously with Washington University, University of Colorado School of Medicine, Harvard University, Stanford University, and Columbia University College of Physicians and Surgeons. Council, Western Association of Physicians, 1960-63; Board of Directors, National Fund for Medical Education, 1968-75; charter member, Executive Council, 1970-73, Executive Committee, 1971-73, Institute of Medicine; Executive Board, 1970-76, and vice president, 1972-76, American Academy of Arts and Sciences; vice president, Commonwealth Fund, 1970-72, and American Clinical and Climatological Association, 1974-75; Committee on the Study of National Needs for Biomedical and Behavioral Research Personnel, NAS-NRC, 1974-77. Board of Trustees, Commonwealth Fund; Boards of Directors, Hewlett Packard Company, Dynapol, Inc., and Palo Alto Medical Research Foundation; director, California Water Service Company. AAAS activities: Section Committee, Section on Medical Sciences, and Council, 1962.

Alexander Leaf (medicine), 1920; B.S., University of Washington, 1940; M.D., University of Michigan, 1943. With Massachusetts General Hospital and Harvard Medical School since 1949: chief of medical services. MGH, and Jackson professor of clinical medicine. Harvard, since 1966. Previously with University of Michigan Medical School; visiting fellow, Balliol College, Oxford, 1971-72. Outstanding Achievement Award, University of Minnesota, 1964; member, National Academy of Sciences; president, American Society for Clinical Investigation, 1965; Scientific Advisory Committee, National Institute of Arthritis, Metabolism, and Digestive Diseases, 1968-70; Board of Overseers, Dartmouth Medical Center, 1974-78. Editorial Board, Journal of Membrane Biology; Board of Scientific Counselors, National Institute on Aging; Steering Committee on Scholarly Communication with the People's Republic of China, Advisory Committee for the Promotion of Health and Prevention of Disease, and Committee on Aging and Medical Education, NAS.

Arnold S. Relman (medicine, medical journalism), 1923; A.B., Cornell University, 1943; M.D., Columbia University, 1946. Editor, New England Journal of Medicine, and professor of medicine, Harvard Medical School, since 1977. Previously with Boston University and University of Pennsylvania. Fellow, American Academy of Arts and Sciences: Josiah Macy, Jr., Foundation Faculty Scholar Award, 1975-76; president, American Federation for Clinical Research, 1960-61, and American Society for Clinical Investigation, 1968-69; editor, Journal of Clinical Investigation, 1962-67; Board, American Board of Internal Medicine, 1965-69. Council, Institute of Medicine and Association of American Physicians; Boston University Medical Center Trustee Council.

James V. Warren (internal medicine), 1915; B.A., Ohio State University, 1935; M.D., Harvard Medical School, 1939. Professor of medicine and department chairman, Ohio State University, since 1961. Previously with Yale University Medical School, Emory University Medical School, Duke University School of Medicine, and University of Texas School of Medicine. Member, Institute of Medicine, National Academy of Sciences; Gold Heart Award, 1966, and James B. Herrick Award, 1976, American Heart Association; Duke University Medical Center Distinguished Alumnus Award, 1970; Ohio State University Medical Alumni Association Merit Teaching Award, 1973; Cummings Humanitarian Award, 1976; president, American Federation for Clinical Research, 1952–53, and Association of Professors of Medicine, 1967–68; chairman, Section on Experimental Medicine and Therapeutics, 1961, and Section on Internal Medicine, 1965, American Medical Association; president, 1962–63, and Board of Directors, 1965–67, AHA; chairman, Council of Academic Societies, Association of American Medical Colleges, 1970–71; vice chairman, American Board of Internal Medicine, 1971– 72. Editorial Board, *Heart and Lung*.

### Section O—Agriculture

### Chairperson-Elect (one to be elected). B. J. Liska Martin A. Massengale

B. J. Liska (food science), 1931; B.S., 1953, M.S., 1956, Ph.D., 1957, University of Wisconsin. With Purdue University since 1959; professor of food science since 1965; director, Agricultural Experiment Station, since 1975. Previously with University of Wisconsin, U.S. Army, and University of Florida. Chairman, Journal Management Committee, American Dairy Science Association, 1967-69; Environmental Biology and Chemistry Study Section, U.S. Public Health Service, 1969-70; Babcock Hart Award Jury, 1969-73, councilor from Indiana Section, 1970-74, vice chairman, Expert Panel on Food Safety and Nutrition, 1974-76, Institute of Food Technologists; Editorial Boards, Journal of Food Science and Journal of Milk and Food Technology, 1970; secretary, North Central Regional AES Directors Association, 1975-77; chairman, Advisory Board, American Dietetic Association, 1976-77. Governing Board, Agricultural Research Institute; vice chairman, ESCOP Legislative Committee (chairman, 1980-82); scientific editor, Journal of Food Science.

Martin A. Massengale (agronomy, plant physiology, crop ecology, botany), 1933; B.S., Western Kentucky University, 1952; M.S., 1954, Ph.D., 1956, University of Wisconsin. Vice chancellor for agriculture and natural resources, University of Nebraska, since 1976. Previously with Western Kentucky University, University of Wisconsin, U.S. Army, and University of Arizona. Outstanding Educators of America Award, 1970; Faculty Recognition Award, Tucson Retail Trade Bureau, 1971; Appreciation Award for Contributions to Seed Industry, Pacific Seedsman Association, 1971; Award and Honorary Lifetime Membership, Arizona Crop Improvement Association. Past offices held: Executive Committee. Board of Directors, associate editor, Agronomy Journal, and member of various committees, American Society of Agronomy; president, Executive Committee, Board of Directors, chairman of Division C-2 (Crop Physiology), associate editor, Crop Science, and chairman of various committees, Crop Science Society of America; secretarytreasurer, president, and program chairman, Western Society of Crop Science. President of the Corporation and chairman, Board of Directors, Mid-America International Agricultural Consortium; EPA-USDA Land-Grant University Coordinating Committee for Environmental Quality Research and Development; Board of Directors and Issues Committee, Agriculture Council of America.

AAAS activities: member-at-large of the Section Committee, Section on Agriculture, 1977-80.

Member-at-Large of the Section Committee (one to be elected).

William P. Flatt Thomas S. Ronningen

William P. Flatt (animal nutrition), 1931; B.S., University of Tennessee, 1952; Ph.D., Cornell University, 1955. With University of Georgia since 1969; director, Agricultural Experiment Stations, since 1970. Previously with U.S. Department of Agriculture. Presidential Citation, 1965; USDA Superior Service Award, 1967; co-winner, Hoblitzelle National Award in the Agricultural Sciences, 1968. Chairman, ESCOP Legislative Subcommittee; chairman-elect, Experiment Station Section, National Association of State Universities and Land-Grant Colleges.

Thomas S. Ronningen (agronomy), 1918; B.S., 1939, M.S., 1947, Ph.D., 1949, University of Wisconsin. With U.S. Department of Agriculture since 1949; acting associate deputy director, SEA-Cooperative Research, since 1978. Previously with E. I. du Pont de Nemours & Co., University of Wisconsin, and University of Maryland, USDA Certificate of Merit, 1963 and 1969; president, Northeast Branch, American Society of Agronomy, 1958; president, Organization of Professional Employees of the USDA, 1964-66; Board Member, 1971-73, president, 1973, Federal Executive Institute Alumni Association. AAAS activities: Electorate Nominating Committee, Section on Agriculture, 1976-78, chairman, 1977.

Members of the Electorate Nominating Committee (two to be elected).

John D. Axtell Frank H. Baker Richard R. Davis John Pesek

John D. Axtell (plant breeding and genetics), 1934; B.S., 1957, M.S., 1965, University of Minnesota; Ph.D., University of Wisconsin, 1967. With Purdue University since 1967; professor of genetics since 1975. Previously with University of Minnesota and University of Wisconsin. Sigma Xi Faculty Research Award, 1975: Alexander von Humboldt Award for Agricultural Research, 1976; Crop Science Society of America Crops Research Award, 1977. Board for Agriculture and Renewable Resources, National Research Council; Title XII Sorghum and Millet Consortium Technical Committee; Monograph Committee on Genetic Improvement of Protein Quality in Cereals, American Society of Agronomy; project coordinator, Purdue/ AID Sorghum Project.

Frank H. Baker (animal nutrition), 1923; B.S., 1947, M.S., 1951, Ph.D., 1954, Oklahoma State University. Dean of agriculture, Oklahoma State University, since 1974. Previously with Kansas State University, University of Kentucky, USDA, and University of Nebraska. Agricultural Achievement Award, AK-SAR-BEN Foundation; Service Award, Beef Improvement Federation; Outstanding Service Award and Special Merit Award, USDA; Animal Science Alumni Hall of Fame, Oklahoma State University; Education Hall of Merit, American Polled Hereford Association; past president, American Society of Animal Science; past secretary, National Beef Improvement Federation; past member, Beef Advisory Council, USDA. President, Council for Agricultural Science and Technology; team leader, Baseline Study of Ecuador, Board for International Food and Agricultural Development.

**Richard R. Davis** (agronomy, crop science), 1923; B.S., Auburn University, 1947; M.S., 1949, Ph.D., 1950, Purdue University. Assistant to vice president, Division of Agriculture, Forestry and Veterinary Medicine, Mississippi State University, since 1978. Previously with Ohio Agricultural Research and Development Center and Ohio State University. President, International Turfgrass Society, 1969–73; Executive Committee, American Society of Agronomy and Crop Science Society of America, 1973–75; president, CSSA, 1974.

John Pesek (agronomy), 1921; B.S., 1943, M.S., 1947, Texas A&M College; Ph.D., North Carolina State College, 1950. With Iowa State University since 1950; professor since 1958; department head since 1964. Previously with Texas A&M College and North Carolina State College. President and Executive Committee, American Society of Agronomy; Technology Assessment Committee, Joint Council, USDA; chairman, Advisory Council, Potash-Phosphate Institute; trustee, Iowa State University Agricultural Foundation; trustee, Committee for Agricultural Development; Board of Directors, Iowa Crop Improvement Association.

### Section P-Industrial Science

Chairperson-Elect (one to be elected). John Diebold Aaron J. Gellman

John Diebold (automation, business management), 1926; B.S., U.S. Merchant Marine Academy, 1946; B.A., Swarthmore College, 1949; M.B.A., Harvard Business School, 1951. Chairman, The Diebold Group, Inc., and John Diebold Incorporated; president, Diebold Institute for Public Policy Studies, Inc. Secretary of Labor's Advisory Committee on Manpower and Automation, 1962-66: trustee and Executive Committee. Council of the Americas, 1971-74; Advisory Council on Japan-U.S. Economic Relations, 1972-74. Executive Committee, Rockefeller University Council; trustee, National Planning Association, Carnegie Institution of Washington, and Committee for Economic Development; vice chairman, American Council on Germany: trustee, treasurer, and Executive Committee, National Committee on U.S.-China Relations: Advisory Committee on Ethical and Human Value Implications of Science and Technology and Industrial Panel on Science and Technology, National Science Foundation; Boards of Directors, Academy for Educational Development and International Cybernetics Association. AAAS activities; member-at-large of the Section Committee, Section on Industrial Science, 1976-82.

Aaron J. Gellman (economic and academic consultant), 1930; B.A., University of Virginia, 1950; M.B.A., University of Chicago, 1951; Ph.D., Massachusetts Institute of Technology, 1968. President, Gellman Research Associates, Inc. Previously with MIT, Northwestern University, North American Car Corporation, and Budd Company. National Standards Policy Advisory Committee; Council on Trends and Perspective, U.S. Chamber of Commerce; Transportation Research Forum; Group I Council, Transportation Research Board; Technical Advisory Board, U.S. Department of Commerce; director, Railweight, Inc. AAAS activities: Council, 1974-78; Council Committee on Fellows, 1977-78; Section Committee, Section on Industrial Science, 1978.

Member-at-Large of the Section Committee (one to be elected).

Nancy L. Clark

**Robert S. Cutler** 

Nancy L. Clark (industrial hygiene), 1947; B.A., State University of New York, 1976; M.A., New York University, 1977. Industrial hygienist, International Chemical Workers Union, since 1978. Previously with Buffalo Women's Health Center, Williamsburg Community Printshop, State University of New York College at Old Westbury, All Craft Center. Outstanding Student Award, City University of New York, 1974; National Institute of Occupational Safety and Health Training Grant, 1976-77. Occupational safety and health consultant, Department of Social Medicine, Montefiore Hospital and Medical Center.

**Robert S. Cutler** (management science), 1933; B.S., University of Massachusetts, 1955; M.S., Stevens Institute of Technology, 1966. Senior staff associate, Evaluation Staff, National Science Foundation, since 1973. Previously with Bell Telephone Laboratories; Ford, Bacon & Davis, Inc.; U.S. Department of Transportation; and National Bureau of Standards. Advisor, Program Committee, Society for Research Administrators; International Conference on Interdisciplinary Research Groups, AAAS activities: Electorate Nominating Committee, Section on Industrial Science, 1977-79, chairman, 1977 and 1979.

Members of the Electorate Nominating Committee (two to be elected). Joel D. Goldhar Ward J. Haas James C. Melrose Robert H. Pry

Joel D. Goldhar (industrial marketing), 1942; B.Ch.E., Rensselaer Polytechnic Institute, 1963; M.B.A., Harvard Business School, 1965; D.B.A., George Washington University, 1971. Executive Secretary, Committee on Computer Aided Manufacturing, Assembly of Engineering, National Research Council, since 1978; adjunct appointments, American University, University of Pennsylvania, and Hartford Graduate Center, since 1973. Previously with Northeastern University, Harvard Business School, U.S. Army, and Rensselaer Polytechnic Institute of Connecticut. AAAS activities: Section Committee, Section on Industrial Science, 1974-.

Ward J. Haas (research management), 1921; B.S., 1943, Ph.D., 1949, Massachusetts Institute of Technology. Vice president, Research and Development, Cheesebrough Pond's, Inc., since 1976. Previously with E. I. du Pont de Nemours & Company, U.S. Foreign Service, Charles Pfizer & Company, University of Missouri, Warner-Lambert, and S. C. Johnson & Son, Inc. Board of Trustees, Educom (Interuniversity Communications Council), 1966-68; Board of Directors, Industrial Research Institute, 1975. Program Committee (Innovation), IRI; Board of Directors, MIT Alumni Association; R&D Council, American Management Association.

James C. Melrose (physical chemistry), 1922; S.B., Harvard University, 1943; Ph.D., Stanford University, 1958. With Mobil Oil Corporation since 1947; senior research associate, Mobil Research & Development Corporation, since 1965. Previously with Shell Oil Company. Socony Mobil Incentive fellow, 1951-54; National Colloid Symposium Committee, 1968-74, chairman, 1973-74. Technical Advisory Committee, Petroleum Recovery Institute, Calgary, Canada; Advisory Board, "Progress in Surface and Membrane Science"; Advisory Panel, U.S. Department of Energy Project on Tertiary Oil Recovery Processes; Visiting Panel for Chemistry, University of Texas, Dallas; Editorial Board, *Colloids and Surfaces*.

**Robert H. Pry** (physics), 1923; B.S., Texas College of Arts and Industry, 1947; M.A., Ph.D., Rice University, 1951. Vice president, Research and Development, Gould, Inc., since 1977. Previously with General Electric Company and Combustion Engineering. Vice President, American Management Association, chairman, R&D Council.

### Section Q-Education

### Chairperson-Elect (one to be elected). Ann C. Howe John F. Schaff

Ann C. Howe (science education), 1924; B.A., University of Richmond, 1945; M.A., University of North Carolina, 1949; Ph.D., University of Texas, 1969. Professor, Syracuse University, since 1970. Previously with University of Puerto Rico, University of North Carolina, University of Chicago, and Southwest Educational Research & Development Center. Executive Boards, National Association for Research in Science Teaching and Association for the Education of Teachers of Science; Editorial Board, Journal of Research in Science Teaching; abstractor, Investigations in Science Education.

John F. Schaff (science education), 1931; B.S., Illinois State University, 1953; M.S., Kansas State University, 1955; Ed.D., Florida State University, 1968. Professor of science education and associate dean, College of Education, University of Toledo, since 1972. Previously with several Illinois high schools, North Florida Junior College, Florida State University, and Syracuse University; visiting professor of chemistry, SUNY Geneseo, University of Wyoming, and Owens Technical College; visiting scholar, Indiana University. Director, Placement Program, 1969-71, and Annual Convention Program Committee, 1973-76, National Association for Research in Science Teaching: regional chairman, NASA-NSTA Skylab Student Project, 1972-73; secretary-treasurer, 1974-77, and president, 1978-79, Association for the Education of Teachers in Science. Boards of Directors, National Science Teachers Association and AETS; Executive Committee, AETS; chairman, Toledo Section, American Chemical Society; Membership Committee, University of Toledo Chapter, Sigma Xi.

Member-at-Large of the Section Committee (one to be elected).

Julian R. Brandou

Willard J. Jacobson

Julian R. Brandou (science education), 1929; B.S., 1950, M.A., 1956, University of Michigan; Ph.D., Michigan State University, 1963. With Michigan State University since 1959; assistant dean, College of Natural Science, since 1976. Previously school teacher in Michigan. Outstanding Science Educator, Michigan, 1979; vice president, 1967, and president, 1969, Michigan Science Teachers Association; Board, National Science Teachers Association, 1969-72; president, Michigan Association of Science Education Specialists, 1974-75. Editor, MSTA *Bulletin*; Board, Cranbrook Institute of Science; president, Board of Education, St. Thomas School.

Willard J. Jacobson (science education), 1922; B.S., University of Wisconsin, 1946; M.A., 1948, Ed.D., 1951, Columbia University. Professor of natural sciences, Teachers College, Columbia University, since 1952. Previously school teacher in Wisconsin and New York; science consultant, Royal Afghan Ministry of Education; visiting professor, University of Hawaii. Distinguished Alumnus, University of Wisconsin, River Falls, 1975; Citation for Distinguished Service to Science Education, National Science Teachers Association, 1977; president, Council for Elementary Science International, 1958-59, Association for the Education of Teachers in Science, 1962-63, and National Association for Research in Science Teaching, 1968-69. Board of Governors and chairman, Science Education Section, New York Academy of Sciences; History of Science Education Committee, NSTA; Advisory Board, Investigations in Science Education, ERIC. AAAS activities: Council, 1967-68; chairman, Section on Education, 1968.

Members of the Electorate Nominating Committee (two to be elected).

Charlotte M. Boener Marvin Druger Delmar Janke J. Paschal Twyman

Charlotte M. Boener (science education), 1927; B.A., University of Minnesota, 1947; M.S., University of Arizona; Ph.D., State University of Iowa. Professor, Science Teaching Center, Indiana State University, since 1965. Collegiate Panhellenic Outstanding Alumnae Award, 1968; Program Committee, Indiana Science Supervisors Association, 1970-71; Board of Directors, 1971-72, program chairman, 1972-73, and president, 1973-74, Hoosier Association of Science Teachers; Yearbook Editorial Committee, Association for the Education of Teachers of Science, 1973-75; Board of Directors, 1973-76, and Executive Committee, 1975-76, School Science and Mathematics Association; Committee on College Science Teaching, National Science Teachers Association, 1975-76; Membership Committee, National Association for Research in Science Teaching, 1977-78. Chairman, Bylaws Committee, Pi Lambda Theta local chapter; Finance Committee, SSMA; Membership Committee, HAST; membership and attendance chairman, Wabash Valley Section, American Chemical Society; editor, The Hoosier Science Teacher.

Marvin Druger (biology, genetics, science education), 1934; B.S., Brooklyn College, 1955; A.M., 1957, Ph.D., 1961, Columbia University. With Syracuse University since 1962; professor of biology and science education since 1971. Previously with Scientific Industrial Research Organization, Australia. James Howard McGregor Prize for Teaching, Columbia University, 1959; Science Teaching Achievement Recognition Award, National Science Teachers Association, 1968; Fulbright lecturer, University of Sydney, 1969-70; Outstanding Achievement Award, Syracuse University, 1973; Gustav Ohaus-NSTA Award, 1978. President, Syracuse Chapter, Sigma Xi, 1970-71; Executive Board, National Association for Research in Science Teaching, 1973-76; Fulbright Advisory Committee, 1973-76; chairman, Education Committee, Genetics Society of America, 1974-78. Board of Directors, Eastern Region, Association for the Education of Teachers in Science. AAAS activities: Council and Section Committee, Section on Education, 1973.

Delmar Janke (science education), 1939; B.S., Northern State College, 1961; M.Ed., Texas A&M University, 1965; Ph.D., University of Wisconsin-Madison, 1969. Associate professor of science education, Texas A&M University. Previously math and science teacher, South Dakota; research fellow, University of Wisconsin-Madison. "Teacher of the Year" citation, Student Education Association, 1978; Educational Committee, Texas Section, National Association of Geology Teachers, 1969-70; Texas Advisory Committee on Conservation Education, 1972-78, chairman, 1976-77; Advisory Board, Earth Awareness Foundation, 1973-76; AETS Editorial Review Board, Science Education, 1973-76; executive secretary, Science Teachers Association of Texas, 1973-78; secretarytreasurer, Southwest Region, Association for the Education of Teachers of Science, 1974-77. Editor, STATellite; Board of Editors, The Journal of Environmental Education.

J. Paschal Twyman (educational administration), 1933; B.A., 1955, M.A., 1959, Ph.D., 1962, University of Missouri, Kansas City. With University of Tulsa since 1967; president since 1968. Previously with Oklahoma State University and University of Missouri, St. Louis. Executive Committee, Oklahoma's Future, 1968; Board of Trustees, Hillcrest Medical Center, 1969. Commission on Institutions of Higher Education, North Central Association of Colleges and Schools; Boards of Trustees, Technical Education Research Center and Oklahoma Health Sciences Foundation; Boards of Directors, Thomas Gilcrease Museum Association, Tulsa Area Health Education Center (acting chairman), and Oklahoma Council on Economic Education; member director, International Petroleum Exposition and Congress.

### Section R-Dentistry

### Chairperson-Elect (one to be elected). Maynard K. Hine Ira L. Shannon

Maynard K. Hine (dentistry), 1907; D.D.S., 1930, M.S., 1932, University of Illinois. Professor of periodontics emeritus. Indiana University, and chancellor emeritus, Indiana University-Purdue University, Indianapolis, since 1978. Previously with University of Illinois and University of Rochester. President, American Association of Endodontics, 1947, International Association for Dental Research 1952, American Association of Dental Schools, 1953, American Dental Association, 1955-56, American Fund for Dental Health, 1958-62, American Academy of Periodontology, 1962, and Federation Dentaire Internationale, 1975-77; Distinguished Service Award, ADA and Indiana Dental Association. Chairman, National Dental Quality Assurance Advisory Committee, Kellogg Foundation-American Fund for Dental Health; chairman, Publication Committee, Academy of Periodontology. AAAS activities: vice president, AAAS, chairman, Section on Dentistry, and Council, 1959.

Ira L. Shannon (research in oral biology), 1918; D.M.D., University of Oregon, 1951;

M.S.D., University of California, 1955. Director, Oral Desease Research Laboratory, VA Medical Center, and professor of biochemistry, University of Texas Dental Branch, Houston, since 1967. Previously with U.S. Air Force School of Aerospace Medicine. Silver Service Medal, Helsinki University Medical School, 1973; Chief Medical Directors' Commendation (VA), 1975; Administrator's Commendation (VA), 1977; Basic Research in Oral Therapeutics Award, International Association for Dental Research, 1979; Oral Biology and Medicine Study Section, National Institute of Dental Research, 1972-76; president, Houston Chapter, American Association for Dental Research, 1973-74. Medical program specialist in oral biology for VA system; Research and Development Committee, VA Medical Center, Houston; consultant in preventive dentistry to NASA; foreign editor, Journal of the Indian Dental Association; Council, Houston Chapter, AADR. AAAS activities: Section Committee (R), 1978-.

Member-at-Large of the Section Committee (one to be elected).

### Max A. Listgarten Charles F. Schachtele

Max A. Listgarten (periodontal research), 1935; D.D.S., University of Toronto, 1959. With University of Pennsylvania since 1968; professor of periodontics and director of periodontal research since 1971. Previously with Harvard University and University of Toronto. International Association for Dental Research Award for Basic Research in Periodontal Disease, 1973; Committee on Research in Periodontal Pathology, 1969-73, Subcommittee on Research Forum, 1971-76, and Subcommittee on Orban Prize, 1975-77, American Academy of Periodontology; Editorial Boards, Journal of Periodontal Research, 1972-75, and Journal of Dental Research, 1975-77; Subcommittee for Basic Science Award in Periodontology, IADR, 1973-78. Committee on Research in Periodontology, AAP; consultant to Editorial Board, Journal of Periodontology; adviser to Editorial Board, Oral Sciences Review; U.S. editor, Journal de Biologie Buccale.

Charles F. Schachtele (microbiology), 1942; B.A., Macalester College, 1963; M.S., 1965, Ph.D., 1968, University of Minnesota. With University of Minnesota since 1968; professor of dentistry and microbiology since 1978. U.S. Public Health Service Career Development Award. 1971-76; Basic Research in Oral Science Award, International Association for Dental Research, 1977; president, 1975-76, councilor, 1977-80, Minnesota Section, and president, Microbiology and Immunology Group, 1977-78, American Association for Dental Research. IADR International Science Awards Subcommittee for Oral Science Research Award; Editorial Board, Infection and Immunity; Advisory Editorial Board, Journal of Dental Research; Oral Biology and Medicine Study Section.

Members of the Electorate Nominating Committee (two to be elected).

Harold R. Englander Samuel Pruzansky Gordon H. Rovelstad Svein U. Toverud

Harold R. Englander (dental public health and epidemiology, dental research), 1923; B.S., College of the City of New York, 1945; D.D.S., 1948, M.P.H., 1951, Columbia University. Professor of dentistry, Health Sci-

ence Center, University of Texas, San Antonio, since 1975; professor of dental public health, University of Texas, Houston, since 1977; visiting professor, Howard University, since 1968; visiting lecturer, Johns Hopkins University School of Public Health, since 1970. Previously with the U.S. Navy, University of Illinois, and National Institute of Dental Research. First Award Honor, Scientific Exhibit, American Dental Association, 1975; secretary-treasurer, 1957, president, 1958, Chicago Section, International Association for Dental Research. Advisory Editorial Board, Journal of Dental Research; U.S. Army Medical Service Advisory Committee to Surgeon General on Preventive Dentistry; Ad Hoc Promotions and Tenure Committee, University of Southern California School of Dentistry. AAAS activities: Section Committee, Section on Dentistry, and Council, 1971-72.

Samuel Pruzansky (teratology, clinical genetics, orthodontics), 1920; D.D.S., University of Maryland, 1945; B.S., College of the City of New York, 1947; M.S., Tufts University, 1949. With University of Illinois since 1950; director, Center for Craniofacial Anomalies, since 1968; professor of orthodontics, Abraham Lincoln School of Medicine, since 1973. Previously with Tufts University and National Institute of Dental Research; Kazanjian visiting professor of plastic surgery, New York University, 1972. Commemorative Medal, Univ. Comeniana Bratislevensis, 1965; Distinguished Alumnus Award, Baltimore College of Dental Surgery, University of Marvland, 1967: Gies Award, American College of Dentists, 1968; Honors Award, American Cleft Palate Association, 1976; Sheldon Friel Memorial Lecture, 1977; Louise Jarabak Memorial Award and Lecture, 1978; Strang Memorial Award and Lecture, 1979; president, American Cleft Palate Association, 1960-61, and Teratology Society, 1971-72. Editorial Board, Teratology, The Journal of Abnormal Development: associate editor for clinical conference, The Cleft Palate Journal; Executive Committee, Medical Advisory Committees, and chairman, Health Education Committee, Metropolitan Chicago Chapter, National Foundation-March of Dimes.

Gordon H. Rovelstad (dentistry, oral biology), 1921; D.D.S., 1944, M.S.D., 1948, Ph.D., 1960, Northwestern University. Professor of pediatric dentistry. University of Mississippi, since 1974; assistant dean of educational programs, School of Dentistry, since 1976. Previously with U.S. Navy. Commendation Medal, Commandant U.S. Marine Corps; Meritorious Service Medal, Legion of Merit, Secretary of the Navy; Hinman Medallion; Northwestern University Alumni Merit Award; president, International Association of Dental Research, 1971, and American Academy of Pedodontics, 1978. Consultant, National Caries Program Adviso-Committee; Constitution Committee, American Association for Dental Research; president-elect, American College of Dentists; Board of Directors, American Academy of Pedodontics. AAAS activities: member-atlarge of the Section Committee, Section on Dentistry (R), 1969-72, 1977-80; Council, 1969-74; Section R Committee, 1973-76.

Svein U. Toverud (pharmacology, endocrinology), 1929; D.M.D., Harvard University, 1954; Cand. Odont., Norwegian State Dental School, 1956; Dr. Odont., University of Oslo, 1964. With University of North Carolina, Chapel Hill, since 1969; professor, Departments of Pharmacology and of Oral Diagnosis, since 1976. Previously with University of Oslo and Odontological Research Institute, Oslo. U.S. Public Health Service international postdoctoral research fellow, Harvard School of Dental Medicine, 1964-66; Subcommittee on Basic Oral Science Award, International Association of Dental Research, 1974-78, chairman, 1978; advisory editor, *Calcified Tissue Research*, 1967-76.

### Section S-Pharmaceutical Sciences

### Chairperson-Elect (one to be elected). Jane C. Sheridan Anthony P. Simonelli

Jane C. Sheridan (pharmaceutics), 1925; B.Sc., Sydney University, 1948; Ph.D., Rutgers University, 1956. With Hoffman-La Roche, Inc., since 1966; assistant vice president, director of quality control, since 1976. Previously with Michigan State University and New York University. PAC chairperson, American Pharmaceutical Association, 1978. APhA delegate; USP committeeperson; PMA/QC Advisory Committee.

Anthony P. Simonelli (pharmaceutics), 1924; B.S., B.A., 1955, University of Connecticut; M.S., 1958, Ph.D., 1960, University of Wisconsin. Professor of pharmaceutics, University of Connecticut, since 1972. Previously with Medical College of Virginia and University of Michigan; Upjohn summer visiting professor, 1965. Coauthor, Ebert Prize Winning Paper, 1969 and 1971; chairman, Pharmaceutics Section Screening Committee. 1969-71, Pharmaceutics Program Committee, 1970-71, 1974, Pharmaceutics Section, 1975, and Pharmaceutics Fellows Nominating Committee, 1976-78, House of Delegates, 1974 and 1976, Executive Committee, 1975, American Pharmaceutical Association Academy of Pharmaceutical Sciences. Chairman, Committee for Research and Federal Funding, Academy of Pharmaceutical Sciences, AAAS activities: Electorate Nominating Committee, Section on Pharmaceutical Sciences, 1974-76.

Member-at-Large of the Section Committee (one to be elected).

### Milo Gibaldi Charles H. Nightingale

Milo Gibaldi (pharmacy), 1938; B.S., Columbia College of Pharmacy, 1960; Ph.D., Columbia University, 1963. Dean, School of Pharmacy, and professor of pharmaceutical sciences, University of Washington, since 1978. Previously with Columbia University and State University of New York, Buffalo. American Pharmaceutical Association Foundation/Academy of Pharmaceutical Sciences Research Award for Stimulation of Research. 1976. Pharmacology Study Section, National Institutes of Health; Editorial Boards, Drug Metabolism Reviews and Clinical Pharmacology and Therapeutics; Editorial Advisory Board, Journal of Pharmacokinetics and Biopharmaceutics.

Charles H. Nightingale (biopharmaceutics, pharmacokinetics), 1939; B.S., Fordham University, 1961; M.S., St. John's University, 1966; Ph.D., State University of New York, Buffalo, 1969. Director, Pharmacy Services, Hartford Hospital, since 1978; with University of Connecticut since 1970, currently associate research professor. Previously with St. John's University, Mercy Hospital (New York), and State University of New York, Buffalo. Scientific Review Panel and chairman, Section on Vitamin Therapy, American Pharmaceutical Association Drug Interactions Project; Lederle Faculty Research Award, 1971. AAAS activities: Electorate Nominating Committee, Section on Pharmaceutical Sciences, 1977-79, chairman, 1979.

Members of the Electorate Nominating Committee (two to be elected).

Lewis P. Amsel Martin I. Blake Everett N. Hiestand William J. Jusko

Lewis P. Amsel (pharmaceutics), 1942; B.Sc., Columbia University, 1963; Ph.D., State University of New York, Buffalo, 1969. With Pennwalt Pharmaceutical Division since 1972; director, Pharmaceutical Development, since 1974. Previously with Sterling-Winthrop Research Institute. Aerosol Specification Committee, American Pharmaceutical Association; Task Force OTC Drugs, Proprietary Association.

Martin I. Blake (pharmacy), 1923; B.S., Long Island University, 1947; M.S., Rutgers University, 1949; Ph.D., Ohio State University, 1951. Professor of pharmacy and department head, University of Illinois, since 1960. Previously with Duquesne University, North Dakota State University, and Argonne National Laboratory. Sigma Xi and Phi Kappa Phi lecturer; various offices, Red River Valley Section, American Chemical Society; various offices. University of Illinois Medical Center Chapter, Society of Sigma Xi; National Formulary Board, 1965-75, and Committee on Professional Affairs, 1976-77, American Pharmaceutical Association; various offices, Greater Chicago Chapter, Illinois Pharmaceutical Association; chairman, Board of Pharmacy, State of Illinois, 1977-78. Committee of Revision, Executive Committee, Dispensing Information Committee, Reference Standard Committee, and chairman. Subcommittee 7. U.S. Pharmacopeial Convention; NABPLEX Review Committee and Committee on Foreign Pharmacy Graduates, National Association of Boards of Pharmacy.

Everett N. Hiestand (pharmacy), 1920; B.S., Bluffton College, 1942; Ph.D., Ohio State University, 1950. Research scientist, Upjohn Company, since 1955; adjunct professor of pharmacy, University of Michigan, since 1965. Previously with South Dakota State College and Battelle Memorial Institute. Ebert Prize, 1978; vice president, Basic Pharmacy Section, Academy of Pharmaceutical Sciences, 1973-74. Chairman, Ebert Prize Committee; editor, International Journal of Pharmaceutics.

William J. Jusko (pharmaceutics, pharmacokinetics), 1942; B.S., 1965, Ph.D., 1969, State University of New York, Buffalo. With State University of New York, Buffalo, since 1972, professor of pharmaceutics since 1977; director, Clinical Pharmacokinetics Laboratory, Millard Fillmore Hospital, since 1972. Previously with Boston University Medical Center and VA Hospital, Boston; visiting scientist, Mario Negri Institute, Milan, 1978-79 (Fulbright-Hays Award). U.S. Public Health Service fellow, 1966-69. Editorial Advisory Board, Journal of Pharmaceutical Sciences; Editorial Boards, Antimicrobial Agents and Chemotherapy, Biopharmaceutics and Drug Disposition, Journal of Pharmacokinetics and Biopharmaceutics, and Developmental Pharmacology.

Section T—Information, Computing, and Communication

### Chairperson-Elect (one to be elected). Russell Shank George W. Tressel

Russell Shank (librarianship), 1925; B.S., 1946, B.A., 1949, University of Washington; M.B.A., University of Wisconsin, 1952; D.L.S., Columbia University, 1966. University librarian and professor, University of California, Los Angeles, since 1977. Previously with University of Washington, University of Wisconsin, Milwaukee Public Library, University of California, Berkeley, Columbia University, and Smithsonian Institution. Distinguished Alumnus, University of Washington School of Librarianship, 1968; president, Information Science and Automation Division, American Library Association, 1968, and Association of College and Research Libraries, 1972; Board, Association of Research Libraries, 1973-76. President, ALA; trustee and Users Council, OCLC, Inc. AAAS activities: Section Committee, Section on Information, Computing, and Communication, 1974-.

George W. Tressel (communication research), 1926; Ph.B., University of Chicago, 1943. Director, Public Understanding of Science Program, National Science Foundation, since 1976. Previously with University of Chicago, WBKB, Tressel Studio, GE Aircraft Nuclear Propulsion Division, Argonne National Laboratory, and Battelle Memorial Institute. His science films have won seven awards; director, Chicago Film Council, 1963-67; manager, Ohio and Chicago SMPTE Chapters, 1965-71; chairman, Film Panel, Ohio Arts Council, 1971-74. Chairman, Informal Education Meeting, Society for Applied Learning Technology; Public Energy Education Task Force; Task Force on Museum Funding, Federal Council on the Arts and Humanifies.

Member-at-Large of the Section Committee (one to be elected).

### Melvin S. Day Lois F. Lunin

Melvin S. Day (information science and technology), 1923; B.S., Bates College, 1943. Director, National Technical Information Service, since 1978. Previously with Atomic Energy Commission, National Aeronautics and Space Administration, National Science Foundation, and National Library of Medicine. AEC Sustained Superior Performance Award; NASA Exceptional Service Medal, 1971; NLM Director's Award, 1975; U.S. Public Health Service Superior Service Award, 1976; Council, 1974-77, and president, 1975-76, American Society for Information Science. President, International Council of Scientific Unions Abstracting Board; UNESCO General Information Program Advisory Committee; Editorial Board, Health Communications and Informatics.

Lois F. Lunin (information science); A.B., Radcliffe College, 1946; M.S., Drexel University, 1966. Vice president, Herner and Company, since 1978; instructor, associate, Public Health Administration, Johns Hopkins University, since 1971. Previously with Washington University, Columbia University, University of Texas M. D. Anderson Hospital and Tumor Institute, and Johns Hopkins Medical Institutions. Watson Davis Award, 1976, secretary, National Advisory Board, 1964-65, chairman, Membership Committee, 1965-68, chairman, Special Interest Group, Information Analysis Centers, 1970, and secretary, 1971-72, American Society for Information Science. Editor-in-chief, Bulletin of the American Society for Information Science; Editorial Board, Journal of the American Society for Information Science; chairman, ASIS SIG/Information Publishing; Committee on Aims and Goals, Council of Biology Editors.

Members of the Electorate Nominating Committee (two to be elected). Susan Crawford Davis B. McCarn

Vladimir Slamecka Isaac D. Welt

Susan Crawford (library and information science); B.A., University of British Columbia, 1948; B.L.S., University of Toronto, 1950; M.A., 1956, Ph.D., 1970, University of Chicago. Director, Division of Library and Archival Services, American Medical Association. since 1974. Previously with Columbia University. Certificate of Achievement, U.S. Public Health Service, 1975; Eliot Award, Medical Library Association, 1976; Board of Regents, National Library of Medicine, 1971-75. Editorial Boards, Index of Scientific Reviews, Medical Socioeconomic Research Sources, and Bulletin of the Medical Library Association; International Steering Committee, Universal Guide for Contributors to Scientific Publications; Committee on Surveys and Statistics and Publications Panel, MLA; Arthritis Information Clearinghouse, National Institute for Arthritis, Metabolism, and Digestive Diseases.

**Davis B. McCarn** (information systems), 1928; B.A., Haverford College, 1951. President, Online Information International, Inc. Previously with Air Force Intelligence Center, Defense Intelligence Agency, and National Library of Medicine. William A. Jump Memorial Award, 1961; Superior Service Award, U.S. Department of Health, Education and Welfare, 1972. Advisory Board, National Information Center for Special Education Materials; Editorial Board, Online Review.

Vladimir Slamecka (information/computer science), 1928; D.L.S., Columbia University, 1962. Professor, Georgia Institute of Technology, since 1964; clinical professor, School of Medicine, Emory University, beginning in 1979. Previously with Brookvale Brewery (Australia), Columbia University, and Documentation, Inc. Past member, Education Committee, AFIPS, International Committee, American Society for Information Science, and Conference Committee, Association for Computing Machinery. Chairman, U.S. National Committee for FID; vice chairman, U.S. National Committee for UNESCO/PGI; Computer Science Board; Technical Advisory Board, U.S. Department of Commerce; member, Editorial Boards of five journals.

Isaac D. Welt (information science), 1922; B.Sc., 1944, M.Sc., 1945, McGill University; Ph.D., Yale University, 1949. With American University since 1964; professor of information science and director, Scientific and Technical Information Systems, Center for Technology and Administration, since 1967. Previously with Public Health Research Institute of the City of New York, Baylor University College of Medicine, National Academy of Sciences, and Institute for the Advancement of Medical Communication. Chairman, Potomac Valley Chapter, 1959-61, and founding chairman, Special Interest Group in Biomedical and Chemical Information, 1967-68, American Society for Information Science; chairman, Committee on Education, Division of Chemical Literature, American Chemical Society, 1964-65; chairman, Washington, D.C., Chapter, Society of Technical Writers and Publishers, 1966-67, and Mid-Atlantic Chapter, American Medical Writers Association, 1969-70; Board, Drug Information Association, 1966-68. Committee on the Future of Information Science, ASIS. AAAS activities: Section Committee, Section on Information, Computing, and Communication, and Council, 1966-68.

### Section U—Statistics

### Chairperson-Elect (one to be elected). Stephen E. Fienberg John Neter

Stephen E. Fienberg (statistics), 1942; B.Sc., University of Toronto, 1964; A.M., 1965, Ph.D., 1968, Harvard University. With University of Minnesota since 1972; professor, Department of Applied Statistics, since 1976. Previously with Wellesley College and University of Chicago; visiting associate director, Center for Analysis of Health Practices, Harvard School of Public Health, and visiting lecturer, Harvard University, 1975-76. Science Research Council fellow, University of Newcastle upon Tyne, 1978; Outstanding Statistician of the Year, Chicago Chapter, American Statistical Association, 1978; associate editor, Ecology and Ecological Monographs, 1974-76; Committee on Special Papers, 1974-77, chairman, 1975-76, and Committee on Future Directions, 1978-79, Institute of Mathematical Statistics; Council, 1975-76, vice chairman, 1976, ASA; Statistical Advisory Panel, National Commission on Employment and Unemployment Statistics, 1978-79; Statistical Standards Advisory Panel, Office of Federal Contract Compliance Programs, 1978-79. Coordinating and applications editor, Journal of the American Statistical Association: Panel on Research on Rehabilitative Techniques and Committee on National Statistics, National Academy of Sciences-National Research Council; chairman, ASA Ad Hoc Committee on Law and Criminal Justice Statistics. AAAS activities: Electorate Nominating Committee, Section on Statistics, 1978-80.

John Neter (applied statistics), 1923; B.S., University of Buffalo, 1943; M.B.A., University of Pennsylvania, 1947; Ph.D., Columbia University, 1952. Distinguished professor of management sciences and statistics, University of Georgia, since 1975. Previously with Syracuse University and University of Minnesota; supervisory mathematical statistician. U.S. Bureau of the Census, 1959-60. Faculty research fellow, Ford Foundation, 1957-58; Award for best (top 4) article in 1968 Journal of Risk and Insurance; Outstanding Educators of America Award, 1973; Council, American Statistical Association, 1963-64, 1967-70; president, University of Minnesota Chapter, American Association of University Professors, 1969-70; lecturer, National Science Foundation Visiting Lecturers Program in Statistics, 1970-72. Editor, *The American* Statistician; Board of Directors, ASA; president, chairman, Executive Board, and chairman, Policy and Planning Committee, American Institute for Decision Sciences.

Member-at-Large of the Section Committee (one to be elected).

### Stephen M. Stigler Roy E. Welsch

Stephen M. Stigler (statistics), 1941; B.A., Carleton College, 1963; Ph.D., University of California, Berkeley, 1967. Professor of statistics, University of Chicago, beginning in fall 1979. Previously with University of Wisconsin, Bell Telephone Laboratories, and Center for Advanced Study in the Behavioral Sciences; visiting associate professor, University of Chicago, 1972-77; distinguished visiting professor, Bucknell University, 1976; visiting professor, University of Chicago, 1977. Standard Oil Award for Excellence in Teaching, 1971; Guggenheim fellow, 1976-77. Chairman, Nominating Committee for the National Medal of Science, Institute of Mathematical Statistics; Committee on Applied and Theoretical Statistics, National Research Council; editor, Theory and Methods Section, Journal of the American Statistical Association.

Roy E. Welsch (statistics), 1943; B.A., Princeton University, 1965; M.S., 1966, Ph.D., 1969, Stanford University. With Massachusetts Institute of Technology since 1969; associate professor of management science and statistics since 1973. Previously with Midwest Research Institute, University of Wisconsin, and Stanford University; senior research associate, National Bureau of Economic Research, 1973-78. National Science Foundation fellow, 1965-69; Committee on Special Papers, Institute of Mathematical Statistics, 1974-76; associate editor, Annals of Statistics, 1974-77; publications liaison officer, 1975, and secretary-treasurer, 1978, Statistical Computing Section, American Statistical Association; Review Panel, NSF Postdoctoral Fellowships, 1976-78, chairman, 1978. Associate editor, Journal of the American Statistical Association and Communications in Statistics, Series B: Simulation and Computation; Growth Data Study Group, Faculty Seminar on Human Experimentation in Health and Medicine, Harvard School of Public Health.

Members of the Electorate Nominating Committee (two to be elected).

David Blackwell Donald P. Gaver Joseph B. Kadane Judith M. Tanur

David Blackwell (mathematics, statistics), 1919; A.B., 1938, A.M., 1939, Ph.D., 1941, University of Illinois. With University of California, Berkeley, since 1954; professor of statistics and mathematics and director. Study Center University of California, United Kingdom and Ireland, since 1973. Previously with Institute for Advanced Study (Rosenwald fellow), Brown University, Office of Price Administration, Southern Agricultural and Mechanical College, Clark University, and Howard University. AAAS activities: Council and member-at-large of the Section Committee, Section on Mathematics, 1969-72; Committee on Nominations and Elections, 1970-71; Board of Directors, 1970–72; Committee on Governance, 1971; Commission on Science Education (ex officio), 1972.

**Donald P. Gaver** (mathematics), 1926; S.B., 1950, S.M., 1951, Massachusetts Institute of Technology; Ph.D., Princeton University, 1956. Professor of operations research, Naval Postgraduate School, since 1971. Previously with Stanford University, Westinghouse Research Laboratories, and Carnegie-Mellon University; visiting professor, University of California, Berkeley, 1967-68. Past Council member and treasurer, and chairman, Publicity Committee, Transportation Science Section, and past member, Publications Committee, Operations Research Society of America; associate editor, Journal of the American Statistical Association, 1965-68; ASA visiting lecturer, 1970-75; chairman, Section on Statistics in the Physical and Engineering Sciences, ASA, 1976-77. Board of Directors, ASA; Visiting Lecturer Program and Committee on Sections, ORSA.

Joseph B. Kadane (applied and mathematical statistics), 1941; B.A., Harvard University, 1962; Ph.D., Stanford University, 1966. With Carnegie-Mellon University since 1969; professor of statistics and social sciences and head, Department of Statistics, since 1972. Previously with Yale University and Center for Naval Analyses. Expert, President's Commission on Federal Statistics, 1970-71, and Bureau of Labor Statistics, U.S. Department of Labor, 1972-73; associate editor, Journal of the American Statistical Association, 1968-73, deputy editor, Theory and Methods Section, 1976-78; Standing Publications Committee and Standing Meetings Committee, ASA, 1971-73; Committee on the Assessment of Demand for Outdoor Recreational Facilities, National Academy of Sciences-National Research Council, 1974-75; associate editor, Annals of Statistics, 1974-76. Chairman, Computation Committee, Seminar on Bayesian Inference in Econometrics; ASA Advisory Committee, U.S. Bureau of the Census.

Judith M. Tanur (sociology, statistics), 1935; B.S., 1957, M.A., 1963, Columbia University; Ph.D., University of New York, Stony Brook, 1972. With State University of New York, Stony Brook, since 1967; associate professor of sociology since 1977. Previously with New York State Department of Hygiene Biometrics Research and International Encyclopedia of Social Sciences. Past publications officer, Section on Statistical Education, American Statistical Association; Editorial Board, Sociology of Education; editor, Statistics: A Guide to the Unknown; Joint Committee, ASA and National Council of Teachers of Mathematics. Council, Section on Statistical Education, ASA; Nominating Committee, Section on Social Psychology, American Psychological Association.

## Section W—Atmospheric and Hydrospheric Sciences

Chairperson-Elect (one to be elected). John R. Apel Julius London

John R. Apel (oceanography, remote sensing), 1930; B.S., 1957, M.S., 1961, University of Maryland; Ph.D., Johns Hopkins University, 1970. With National Oceanographic and Atmospheric Administration since 1970; director, Pacific Marine Environmental Laboratory, since 1976; adjunct professor of physics, University of Miami, since 1970; affiliate professor, University of Washington, since 1976. Previously with National Bureau of Standards and Applied Physics Laboratory, Johns Hopkins University. Gold Medal for Distinguished Service, U.S. Department of Commerce, 1974; Distinguished Authorship Award, NOAA, 1976; William S. Parsons felmerce. low, Johns Hopkins University, 1967-68; secretary, Greater Washington Plasma Physics Colloquium, 1968-69; chairman, NOAA- NASA-Navy Conference on Sea Surface Topography from Space, 1971; general chairman, GEOP IV Conference, 1973; NASA Applications Advisory Committee, 1975-77; chairman, Sea Use Council Science and Technology Board, 1977. URSI, Commission F; Seasat-A Scientific Steering Group; IUGG/ URSI Inter-Union Commission on Radio Meteorology; trustee, Pacific Science Center, and chairman, Science Council; chairman, Aerospace Remote Sensing Group, International Council for Exploration of the Sea.

Julius London (atmospheric physics), 1917; B.A., Brooklyn College, 1941; M.S., 1948, Ph.D., 1951, New York University. Professor, University of Colorado, since 1961. Previously with U.S. Weather Bureau, U.S. Air Force, New York University, and Columbia University; visiting professor, Pennsylvania State University, 1955, and Eidg. Technische Hochschule, Zurich, 1967, 1974-75. Chairman. Panel on Ozone, Committee on Atmospheric Sciences, National Academy of Sciences, 1964-65; Board of Trustees, University Corporation for Atmospheric Research, 1971-74. President, International Radiation Commission, IAMAP; Executive Council, COSPAR; Scientific Advisory Council, IRAORS; Panel on Stratospheric Chemistry and Transport and Panel on Human Resources, National Research Council; International Ozone Commission: Committee on Upper Atmosphere and chairman, Committee on Fellows, American Meteorological Society; Scientific Advisory Committee, Upper Atmosphere Research Satellite, NASA; editor, Contributions to Atmospheric Physics; International Editorial Board, Il Nuovo Cimento.

Member-at-Large of the Section Committee (one to be elected).

### Donald L. Gilman Hans A. Panofsky

**Donald L. Gilman** (meteorology), 1931; A.B., Harvard University, 1952; S.M., 1954, Ph.D., 1957, Massachusetts Institute of Technology. With NOAA/National Weather Service since 1958; meteorologist and acting chief, Prediction Branch, Climate Analysis Center, since 1978. NOAA Public Service Award, 1977. Working Group on Forecasting, Commission on Atmospheric Sciences, World Meteorological Organization; Panel on Solar-Weather Relationships, NAS-NRC Geophysics Research Board.

Hans A. Panofsky (meteorology), 1917; A.B., Princeton University, 1938; Ph.D., University of California, Berkeley, 1941. With Pennsylvania State University since 1951; Evan Pugh professor since 1966. Previously with Wilson College and New York University. Meisinger Award, 1965, C. G. Rossby Memorial Medal, 1976, and Council, 1958-60, American Meteorological Society. Committee on Impact of Stratospheric Change, National Academy of Sciences; Advisory Committee, FOF, National Center for Atmospheric Research; Visiting Committee, Brookhaven National Laboratory.

Members of the Electorate Nominating Committee (two to be elected).

Kristina B. Katsaros Eric B. Kraus James D. McQuigg Ward R. Seguin

Kristina B. Katsaros (air-sea interaction), 1938; B.S., 1960, Ph.D., 1969, University of Washington. With University of Washington since 1962; research associate professor, Department of Atmospheric Sciences, since 1977. Previously with Luftundersökningsgruppen and Chalmers Tekniska Högskola (Göteborg). National Defense Act Title IV fellow; president of Council, Pacific Northwest Region, American Geophysical Union, 1972-73; secretary, Puget Sound Chapter, American Meteorological Society, 1974-75. Chairperson, National Committee on Interactions of Sea and Air, AMS; associate editor, Transactions of the American Geophysic cal Union; Experiment Team, "Scanning Multifrequency Microwave Radiometer" on Seasat-A; Planning Group, "Storm Transfer and Response Experiment (STREX)."

Eric B. Kraus (meteorology, physical oceanography), 1912; Ph.D., Charles University (Prague), 1946. Professor, University of Miami, since 1966: director, Cooperative Institute for Marine and Atmospheric Studies, since 1977. Previously with Commonwealth Scientific and Industrial Research Organization, University of Sydney, Snowy Mountains Authority (Australia), Woods Hole Oceanographic Institution, and Yale University. Rossby fellow, Woods Hole Oceanographic Institution, 1960-61; "Weather" Memorial Prize, Royal Meteorological Society; chairman, Australia National Committee for Oceanography, 1956-61, Committee for Air-Sea Interaction, American Geophysical Union, 1962-65, and Scientific Program Evaluation Committee, National Center for Atmospheric Research, 1975; CRC Advisorv Board, 1972-74; NAS Committee for Storm Surges, 1974-76. Associate editor, Journal of Physical Oceanography; trustee, University Corporation for Atmospheric Research; NOAA/ERL Advisory Committee for Equatorial Oceanic Climate Studies. AAAS activities: AAAS-Rosenstiel Selection Panel, 1977.

James D. McQuigg (atmospheric science), 1920; B.S., Cornell College, 1941; M.S., 1960, Ph.D., 1964, University of Missouri. Consultant since 1976. Previously with U.S. Army Air Corps, U.S. Weather Bureau, U.S. Air Force, and National Oceanographic and Atmospheric Administration. Gold Medal, U.S. Department of Commerce, 1973; chairman, Agricultural Meteorology Commission, American Meteorological Society, 1970-72.

Ward R. Seguin (meteorology), 1942; Ph.D., Florida State University, 1972. Chief, Data Operations Division, National Climatic Center, Asheville. Previously with University of Virginia and Center for Experiment Design and Data Analysis. Silver Medal, U.S. Department of Commerce. Chairman, Asheville Chapter, American Meteorological Society.

### Section X—General

### Chairperson-Elect (one to be elected). Joseph F. Coates Herman Pollack

Joseph F. Coates (civil service), 1929; B.S., Brooklyn Polytechnic Institute, 1951; M.S., Pennsylvania State University, 1953. Senior associate, Office of Technology Assessment, U.S. Congress, since 1973; adjunct professor, George Washington and American Universities. Previously with Atlantic Refining Company, Onyx Chemical Company, Institute for Defense Analyses, and National Science Foundation. Editorial Board, *Technological Forecasting and Social Change*. AAAS activities: secretary, Section X, 1974–78.

Herman Pollack (international science policy), 1919; B.S.S.S., City College of New York, 1940; Graduate, National War College, 1964; M.A., George Washington University, 1964. Research professor of international affairs, George Washington University, since 1974. Previously with Office of Price Administration, War Shipping Administration, Foreign Economic Administration, and U.S. Department of State (director, Bureau of International Scientific and Technological Affairs, 1964-74). U.S. Department of Commerce Technical Advisory Board, 1975-77; Task Force for Technology Transfer, U.S. Chamber of Commerce, 1977-78: Weather Modification Advisory Board, 1977-78. U.S. coordinator, U.S.-Japan Scientific Relationships; Advisory Committee on International Programs, National Science Foundation; Committee on Alternatives for the Reduction of Chlorofluoromethane Emissions, National Research Council. AAAS activities: Electorate Nominating Committee, Section X, 1976-78, chairman, 1978.

Member-at-Large of the Section Committee (one to be elected).

### Thomas F. Jones Frederick Seitz

Thomas F. Jones (education), 1916; B.S., Mississippi State University, 1939; M.S., 1940, Sc.D., 1952, Massachusetts Institute of Technology. With MIT since 1974; vice president for research since 1975; professor, School of Engineering, since 1977. Previously with Naval Research Laboratory, Purdue University, and University of South Carolina (president, 1962-74). Meritorious Civilian Service Award, U.S. Navy, 1947; member, National Academy of Engineering: Divisional Committee for Engineering, 1962-64, Science Information Council, 1964-66, and chairman, Task Group on Interaction between NSF and the Public, 1977-78, National Science Foundation; director-at-large, 1964-67, and vice president for educational activities, 1975, Institute of Electrical and Electronics Engineers: Executive Committee, Highway Research Board, 1967-70; vice chairman, Long-Range Planning Committee, National Science Board, 1969-72; chairman, Ad Hoc Committee on Accreditation, American Society for Engineering Education, 1974. Board of Directors, Industrial Nucleonics; NSF Task Group on Accountability in Research; chairman, NSF Advisory Committee for Applied Science and Research Applications Policy.

Frederick Seitz (physics, administration), 1911; A.B., Stanford University, 1932; Ph.D., Princeton University, 1934. President emeritus, Rockefeller University. Previously with University of Rochester, University of Pennsylvania, Carnegie-Mellon University, University of Illinois, and National Academy of Sciences (president). Franklin Medal, 1965; Hoover Medal of Stanford University, 1968; National Science Medal, 1973. National Cancer Advisory Board; Boards, Georgetown University Center for International and Strategic Studies, National Center for Atmospheric Research, and Sloan Kettering Institute for Cancer Research. AAAS activities: vice president, AAAS, chairman, Section on Physics, and Council, 1959; AAAS-Westinghouse Science Writing Awards Committee of Judges, 1967; chairman, Section X, 1974.

Members of the Electorate Nominating Committee (two to be elected). Rufus E. Miles, Jr.

E. Leigh Secrest George C. Sponsler D. C. Spriestersbach

Rufus E. Miles, Jr. (public administration), 1910; A.B., Antioch College, 1932. Senior fellow, Woodrow Wilson School of Public and International Affairs, Princeton University, since 1975. Previously with U.S. Bureau of the Budget, Federal Security Agency, U.S. Department of Health, Education and Welfare, and Population Reference Bureau (president). Rockefeller Public Service Award. 1956; Superior and Distinguished Service Awards, DHEW; Louis Brownlow Award, National Academy of Public Administration, 1975. Visiting Committee, Kennedy School of Government, Harvard University; chairman of various committees, NAPA; panel member on the federal role in education, National Academy of Education.

E. Leigh Secrest (management science, physics), 1928; B.S., 1947, M.S., 1948, North Texas State University; Ph.D., Massachusetts Institute of Technology, 1951. With Texas Christian University since 1965; president, TCU Research Foundation, since 1965; professor of management science since 1972; interim vice chancellor and dean of the University since 1978. Previously with North Texas State University, Convair-Fort Worth Division of General Dynamics, Babcock and Wilcox Company, General Dynamics/Fort Worth, and University of Oklahoma. Distinguished Alumnus, North Texas State University; past president, Association of Texas Graduate Schools and TCU Chapter, Sigma Xi. Corporation Visiting Committee for Sponsored Research, MIT; vice chairman, Board of Trustees, Gulf Universities Research Consortium.

George C. Sponsler (engineering physics), 1927; B.S.E., 1949, M.A., 1951, Ph.D., 1952, Princeton University. President, International Planning Management Corporation, since 1970. Previously with MIT Lincoln Laboratory, Office of Naval Research, Hoffman Science Center, U.S. Navy Bureau of Ships, IBM Corporation, and National Academy of Sciences-National Research Council (executive secretary, Division of Engineering). NAS Advisory Committee to the White House Office of Emergency Preparedness, 1967-72, chairman, Automation Subcommittee, 1966-68; NAS-NRC Civil Defense Subcommittee on the Electromagnetic Pulse, 1969-74; Foreign Policy Task Force of the Coalition for a Democratic Majority, 1974-76.

D. C. Spriestersbach (speech pathology, audiology), 1916; B.Ed., Winona State Teachers College, 1939; M.A., 1940, Ph.D., 1948, University of Iowa. With University of Iowa since 1948; dean, Graduate College, since 1965; vice president for educational development and research since 1966. Previously with U.S. Army and Pacific Portland Cement Company. Honors of the Association, American Speech and Hearing Association, 1969; Distinguished Service Award, American Cleft Palate Association, 1973; president, ACPA, 1961-62, and ASHA, 1965; secretary general, First International Congress on Cleft Palate, 1969. Board of Trustees and Nominating Committee, Easter Seal Research Foundation; National Institute of Dental Research Special Grants Review Committee; presidentelect, Association of Graduate Schools; president, Midwestern Association of Graduate Schools; chairman, Board of Directors, Midwest Universities Consortium for International Activities; Program and Conference Committees, National Conference on the Advancement of Research. AAAS activities: Council and Section Committees, Sections on Psychology, Medical Sciences, and Education, 1966-68.