

Revised Constitution allows for expanded election slate

An expanded slate of candidates for elected offices of The American Physical Society has resulted from changes in Society-election procedures that are stipulated in the recently adopted revised Constitution. The Constitution now specifies the following: A minimum of two candidates for each post will be presented to the membership, the number of elective positions in the Society will increase and, by Council action, each candidate will be given the opportunity to enter a statement. Ballots for this election, which are being mailed this month, should be returned by 7 January 1977.

Vice-President Elect

Lewis M. Branscomb, vice president and chief scientist of IBM Corp (Armonk, N.Y.), and Maurice Goldhaber, Associated Universities Inc distinguished scientist, Brookhaven National Laboratory, are candidates for the office of Vice-President Elect. They lead the slate of candidates prepared by the Nominating Committee under the chairmanship of Mildred Dresselhaus (Massachusetts Institute of Technology).

Branscomb received his PhD from Harvard University in 1948 and was a member of its Society of Fellows until 1951. He then joined the National Bureau of Standards atomic-physics division and subsequently held a number of academic appointments. In 1962 he served as the first chairman of the Joint Institute for Laboratory Astrophysics at the University of Colorado. He served as NBS director from 1969 to 1972, at which time he accepted his current position at IBM.

He is a member of the National Academy of Sciences, the National Academy of Engineering, and he is a Fellow of the APS. He was chairman of the IUPAP Commission on Atomic and Molecular Physics and Spectroscopy. Branscomb was a member of the President's Science Advisory Committee, 1964-68, and the advisory committee established by the National Science Foundation for the President in 1975-76. He served as US representative to CODATA (Committee on Data for Science and Technology) and is now chairman of the Office of Technology Assessment's panel on research and development applications. He has served as chairman of the Society's Division of Electron and Atomic Physics, as editor of *Reviews of Modern Physics* and as a member of the Nominating Committee.

Branscomb's research interests include

atomic-collision physics, particularly photodetachment studies of negative ions and the applications of this work to aeronomy, plasma physics and astrophysics.

Branscomb's statement: "The first duty of the Society is to sustain the vitality and integrity of physics research in America. The most important function of the Society is to support an effective and objective environment for the research communications—oral, written and processed—on which every physicist's professional life depends . . .

"The responsibility for maintaining quality standards in our profession must be accepted by the Society and not compromised by external pressures. Maintaining quality and integrity is not, however, incompatible with increased involvement by physicists in controversial societal issues; it is instead a necessary condition to societal purposes. We should pursue opportunities for physicists to contribute effectively in a way that preserves—indeed enhances—the reputation for objectivity and integrity essential for progress in physics itself . . .

"The prime responsibility for initiative is ours, but national policy and programs so dominate the environment within which physicists work and study that the Society's officers must attempt to influence this environment constructively. The main issues I see are: (a) policy for support of academic physics bringing manpower demand research needs into balance, (b) a commitment to unimpeded international flows of both ideas and research people, (c) measures to stabilize the financing of publications, information series and travel, (d) government policies to encourage industrial investment in R&D and cooperative research in solution of national problems and (e) promotion of the diffusion of physics capabilities into the full range of application disciplines and sister fields of science . . ."

Goldhaber received his PhD in 1936 from Cambridge University, England, where he worked at the Cavendish Laboratory and held the Charles Kingsley Bye Fellowship at Magdalene College, 1936-38. He was on the faculty of the University of Illinois from 1938 to 1950, when he joined Brookhaven National Laboratory as senior scientist. He became chairman of the department of physics there in 1960 and director in 1961. He served in this position until 1973. That year he was appointed Distinguished Scientist.



BRANSCOMB



GOLDHABER

During his career, Goldhaber has been appointed to numerous advisory committees and has held many distinguished lectureships in this country and abroad.

Goldhaber's main research contributions are in the fields of nuclear physics and fundamental particles, and they cover experiment, systematics, technique and theory.

He is a member of the National Academy of Sciences and the American Philosophical Society. He is a Fellow of the APS and the American Academy of Arts and Sciences. Goldhaber has served as an associate editor of the *Physical Review* and chairman of the APS Nuclear Physics Division. He received the Tom W. Bonner Prize in 1971.

Goldhaber's statement: "The American Physical Society must continue to emphasize the unity of physics in spite of fragmentation resulting from the growth of specialized subfields. There must be strong support of frontier research as well as of refinement and re-evaluation of 'established' ideas.

"We all know of the problems and difficulties faced by the physics community in recent years. Short-range efforts to ameliorate the situation most certainly continue, but it is also very important to choose and then pursue long-range goals. A large part of physics funding comes from Government, making it vital that the public appreciate the excitement connected with the great ideas of physics and the value likely to be derived from a strong physics effort. Our Society can play an increasingly important role in reaching laymen (for example, by arranging public lectures). It should also continue to foster awareness of the growing role of physics in the neighboring sciences and practical arts, a trend which may appear more obvious to physicists than it does to other scientists, doctors, engineers, etc.

"Since physics is an international en-



BRINKMAN



BYERS



FOWLER



LIND



OVERHAUSER



SPIGHT

terprise, a closer connection with Physical Societies in other countries may be desirable. Here our Society could use its influence to encourage closer personal interactions among physicists as well as cooperation in research."

Councillors-at-Large

The following members of the Society have been nominated to serve four-year terms as Councillors-at-Large for the Society: William F. Brinkman, Nina Byers, Earle C. Fowler, David A. Lind, Albert W. Overhauser and Carl Spight.

Brinkman is at Bell Laboratories. He received his doctorate from the University of Missouri in 1965. After spending one year as a National Science Foundation Post-Doctoral Fellow at the University of Oxford, he joined the technical staff at Bell Laboratories, where he has been up to the present time. In 1972 he became head of the infrared physics and electronics research department at the Holmdel, N.J. location. He was appointed director of the chemical physics research laboratory at Murray Hill, N.J. in 1974. He is a Fellow of the APS and has served on the Executive Committee of the Division of Solid State Physics.

Brinkman's statement: "Besides the traditional role of the Society in organizing meetings, editing publications and other scientific activities, it must be responsive to the professional concerns of the members. One of these concerns is the continuing problems of employment that young physicists are encountering. The Physical Society must enhance its response to this issue by encouraging the education of physics students so that they can be more effective in applying physics to problems facing our society. At the same time it must work to convince the American public of the importance of science to a technological-based society

such as ours. Responsible efforts in this regard using summer study groups, symposia on applications to physics and other means should be encouraged.

"The Society must continue to inform the public of important scientific discoveries so as to communicate the excitement of the physics community. At the same time it must exercise judgement to insure that such activities are not misleading and are performed in the best interest of science."

Byers, professor of physics at the University of California at Los Angeles, received her PhD from the University of Chicago in 1956. She was research fellow in the department of theoretical physics at the University of Birmingham (England) from 1956 to 1958, and then joined the Stanford University faculty. In 1961 she accepted a faculty position at UCLA where her research has been mainly concerned with phenomenology in particle physics.

In 1967 she was elected Fellow of Somerville College, Oxford and was also appointed university lecturer in the University of Oxford. During 1968-74, Byers held a joint appointment as Janet Watson Visiting Fellow of Somerville College, as a member of the University of Oxford department of theoretical physics and as professor of physics at UCLA.

Byers's statement: "In my view the APS is doing a creditable job of carrying out its mandate and responsibilities as a professional society. In particular, its publications and its sponsorship and organization of meetings facilitate and further communication among physicists. Also its activities recording the history of physics, sponsoring summer studies on matters pertinent to public policy... are worthy responses to felt needs....

"In addition, I am in favor of expressing APS concern for, *inter alia*, government support for basic research and the human rights of physicists....

"If elected, I shall try to function as a representative of APS members, particularly women and other minorities in physics, on the Council. However, my overriding principle will be to further the stated purpose of APS to promote the advancement and diffusion of the knowledge of physics."

Fowler, professor and head of the department of physics at Purdue University, received his PhD from Harvard Univer-

sity in 1949. Having held appointments at Brookhaven National Laboratory, Yale University and Duke University, he joined the Purdue University physics faculty in 1971. His current research focuses on the interaction of neutrinos with electronic and chemical detectors. He is a Fellow of the APS, Secretary-Treasurer of its Division of Particles and Fields, and has served as chairman of the executive committee of the Fermi National Accelerator Laboratory Users Group.

Fowler's statement: "The most important objective of our Society is to foster scientific research and the dissemination of its results. We have a large membership spanning a great variety of activities and points of view. I am especially interested in the efforts of our Society to be truly representative of all its membership and to integrate the different disciplines within APS. If elected, I would concentrate my own efforts in this area."

Lind, professor and chairman of the department of physics and astrophysics at the University of Colorado, received his PhD from the California Institute of Technology in 1948. After a year as a Guggenheim Fellow and an appointment at the University of Wisconsin, he joined the faculty at the University of Colorado in 1956.

Lind's statement: "The APS has and should continue to have as its first responsibility the promotion of physics as a basic science. However, at a time when science and technology are challenged and public issues having scientific ramifications are being argued almost without reference to the technical factors, perhaps the APS should become more active in the means by which physicists can contribute to a sound political process.... The Society should act to reinforce and strengthen its role as spokesman on a national scale (for general and scientific education)....

"... the Society needs to be active in promoting scientific education and in disseminating information about possible professional career opportunities for trained physicists, whether in industry, education, research or governmental service."

Overhauser, Stuart Professor of Physics at Purdue University, earned his doctorate at the University of California, Berkeley in 1951. He held positions at the University of Illinois and Cornell

Revised Constitution adopted

The revised Constitution has been adopted by a majority vote of the APS membership and Council has voted to accept the revised Bylaws. Vera Kistiakowsky headed the Committee on the Constitution and Bylaws that had reviewed and modified these documents. A detailed report of the changes will appear on this page in a subsequent issue.



GOOD



HAMERMESH

University and then joined the Ford Motor Co scientific research staff, later becoming director of the physical sciences research laboratory. He left there in 1973 to accept his current position. His research activity is concerned mainly with theoretical solid-state physics.

A member of the National Academy of Sciences and a Fellow of the APS, Overhauser received the Oliver E. Buckley Solid State Physics Prize in 1975. He has been a member of the board of editors of the *Journal of Applied Physics* and has been a member and chairman of the Buckley Prize Committee.

(No statement by Overhauser was provided.)

Spight, professor and chairman of the physics department at Morehouse College, received his PhD in plasma physics from Princeton University in 1971. He served on the physics faculty at Southern University, 1970-72, before coming to Morehouse College. He is principally involved in theoretical investigations in plasma kinetic theory and in theoretical and experimental research in magnetogas dynamics. He has been active recently as an invited speaker in the areas of minority participation in science, sociology of science and philosophy of science.

Spight is a member and past-chairman of the APS Committee on Minorities. He is also a member of the Committee on Education and Employment of Minority Group Members in Science (National Research Council Commission on Human Resources), and he serves as a consultant to Bell Laboratories.

Spight's statement: "In this post-industrial era the practice of physics as a suprasocietal activity manifests itself as an illusion. The programmatic recognition of this is not the politicization of physics but the avoidance of both hubris and pessimism. Both individually as professionals/scholars and as a society, we accrue in the world community the responsibility for the convivial utilization of physics as rigorous tool and as humanistic vision."

Nominating Committee Chairperson-Elect

This year under the newly adopted Constitution, members of the Society will choose the Chairperson-Elect of the Nominating Committee. Nominees for

the post are Roland H. Good Jr, professor and head of The Pennsylvania University physics department, and Morton Hamermesh, professor and immediate past-chairman of the physics department at the University of Minnesota.

Good worked as an automotive engineer with the Chrysler Corp for five years before entering the University of Michigan to study physics in 1947. After receiving his PhD in 1951, he held academic posts at the University of California, Berkeley, Pennsylvania State University and Iowa State University. He then returned to the faculty at Pennsylvania State University; his current research interests include dispersion relations for nonlinear systems and polarization of electrons in parallel external fields. Good is a Fellow of the APS, has served as co-chairman of the Forum Conference on Tradition and Change in Physics Graduate Education, and will serve as a member of the Nominating Committee through 1977.

Good's statement: "The first consideration of the Nominating Committee must always be to propose capable and talented people . . . the Committee can provide for a reasonable representation of various divisions and geographical areas and a reasonable balance among industrial, governmental and academic physicists. It is essential that the Committee propose at least two people, of comparable stature, but different views, for each opening, so that the electorate is given a decision to make . . ."

Hamermesh received his PhD in physics from New York University in 1940. During World War II he worked at Harvard University Radio Research Laboratory on radar countermeasures and operational analysis. In 1948 he joined the staff of Argonne National Laboratory where he held a number of administrative posts—the last being that of Associate Director. He joined the faculty of the University of Minnesota in 1965.

He has served as the editor of *Soviet Physics-Technical Physics* and is now editor of the *Journal of Mathematical Physics* and chairman of the APS Publications Committee.

Hamermesh is a Fellow and Councillor (through January 1977) of the APS, a member of the Argonne Universities Association board of trustees, and is the recipient of the Townsend Harris Medal of the City College of the City University of New York. His research interests include work on the optical properties of neutrons, electron-neutron interaction, accelerator design, the Mössbauer effect and applications of symmetry principles.

Hamermesh's statement: "Despite efforts in this direction, there has been little increase in the participation of different groups of physicists in the management of The American Physical Society. The Nominating Committee must try to extend further the areas from which people are invited to serve. This can best

be accomplished by pairing candidates of equal prominence for a given office, instead of pitting 'outsiders' against better known members of an entrenched in-group . . ."

Polymer short course will precede March meeting

The Division of High Polymer Physics will offer the Society's second short course, "Spectroscopic Techniques for Polymers," 19-20 March 1977, the weekend preceding the March meeting of The American Physical Society in San Diego at the Town and Country Hotel.

Jack L. Koenig (Case Western Reserve University), Samuel Krimm (University of Michigan), Robert Snyder (Midland Macromolecular Institute, Michigan) and Giuseppe Zerbi (University of Milano) will teach the 12-hour course designed to acquaint students with fundamentals and recent developments in the spectroscopic studies of macromolecules. Subjects to be discussed will include:

- ▶ characteristic features of infrared and Raman spectra of high polymers
- ▶ basic principles of infrared absorption and Raman scattering
- ▶ measurement techniques for infrared-absorption and raman-scattering polymers
- ▶ group-theoretical analysis of selection rules
- ▶ calculation of normal modes of vibration and dispersion relations
- ▶ vibrations of three-dimensional crystals
- ▶ analysis of defect structures in polymer chains and
- ▶ application of spectroscopic techniques to problems in synthetic and biological macromolecules.

Participants are required to have a minimum background of a BS degree or its equivalent in a physical science or engineering program. Lecture notes will be provided for the six lectures and discussion hours. Tuition is \$100, and the course will meet from 8:30 am to 12 noon and from 1:30 pm until 5:00 pm each day.

A registration blank and information on housing may be found in the October and November issues of the APS *Bulletin*. For further information, contact Jack L. Koenig, Department of Macromolecular Science, Case Western Reserve University, Cleveland, Ohio 44106; tel (216) 368-4176. □

Reminder

The deadline for applications to the 1977-78 Congressional Scientist Fellowship Program is 15 March 1977. Requests for information and application forms may be sent to Mary L. Shoaf, APS, 335 East 45th Street, New York, N.Y. 10017.