## APS votes for officers and revisions to by-laws

The American Physical Society recently held its annual ballot election for several officers and for revisions to the Constitution and Bylaws. The results, as verified by the APS Board of Tellers, are as follows:

Sidney D. Drell (SLAC) was elected Society Vice-President; he will become the APS President in 1986. Melvin B. Gottlieb (Princeton) won the post of Chairman-Elect of the Nominating Committee; he will serve as Chairman in 1985. The newly elected Councillors-at-Large are Judy R. Franz (Indiana University), B. S. Chandrasekhar (Case Western Reserve University) and Albert M. Clogston (Bell Laboratories, retired). Each of these physicists will have the opportunity to play an influential role in the conduct of the Society's affairs in the near future.

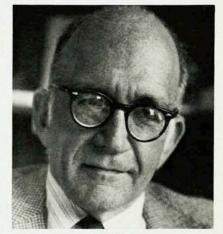
Drell is now executive head of theoretical physics, deputy director of the Stanford Linear Accelerator Center and Lewis M. Terman Professor at SLAC. He obtained his AB from Princeton in 1946 and his PhD from the University of Illinois in 1949. After spending two years on the Stanford faculty and four years at MIT, he returned to Stanford in 1956. In 1963 he began his career at SLAC, where he established and developed the theoretical physics group.

Drell is the author, together with James Bjorken, of two standard texts in relativistic quantum mechanics and fields. He has served the government as an adviser on national security issues and arms control and is active in Jason, a group of academic physicists who frequently consult for the govern-

ment on defense issues. He is now a member of the High Energy Physics Advisory Panel and was its chairman from 1974 to 1982. He has also served the APS in numerous capacities and is currently a member of POPA and the Division of Particles and Fields of the Forum on Physics and Society; in 1980 the Forum presented the Leo Szilard Award for Physics to him in recognition of his efforts in arms control.

Gottlieb is now professor emeritus of astrophysical sciences and director emeritus of the Plasma Physics Laboratory at Princeton University. He received his BS in 1940 and PhD in 1950 from the University of Chicago for his work with Marcel Schein in cosmic-ray physics. He pursued this interest working with James Van Allen at the State University of Iowa. His association with Princeton began in 1954 when he came to work with Lyman Spitzer Jr on the stellarator concept for controlled fusion; he has studied the low-momentum cutoff in the intensity of heavy nuclei in cosmic rays, plasma physics and controlled thermonuclear reactions. While at Princeton, he was professor of astrophysical sciences and head of the Experimental Division and associate director of the Plasma Physics Lab, as well as its director from 1961 to 1981. He has served APS by organizing the Plasma Physics Division and by serving as its first chairman; he has also been a Councillor, chairman of the Publications Committee and chairman of POPA; he continues to be active in APS public affairs.

Franz is currently a professor of physics at Indiana University, where



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she also served as associate dean of the College of Arts and Sciences (1980-82). She obtained her BA in 1959, MS in 1961 and PhD in 1965 from Cornell University. She worked for two years at the IBM research laboratory in Zurich before coming to Indiana in 1968. Her research has been in condensed-matter physics, recently focused on the properties of liquid and amorphous metals and alloys that undergo metal-insulator transitions. Within APS she has been particularly concerned with education issues. She has served as a member of the Committee on Education (1982-85) and as its chairwoman (1983-84), as APS delegate to a conference on physics education in Beijing, China, and as a member of the APS Panel on Faculty Positions for Women Physicists (1981-83). Formerly she was also a member and chairwoman of the Committee on the Status of Women in Physics.

Chandrasekhar is now Perkins Professor of Physics at Case Western Reserve University. His current research is in superconductors and disordered alloys. He received the DPhil from Oxford University in 1952, after studying at the Universities of Mysore and Delhi. He spent two years at the University of Illinois before he joined the staff at Westinghouse Research Labs. In 1963 he became professor of physics at Case Western, where he has also been department chairman and dean. Within the Society he has been chairman of the Division of Condensed



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Matter Physics and of the Nominating Committee (1979-80), and he was a member of the Physics Manpower Panel and the Committee on Applications of Physics.

Clogston, now retired from Bell Labs, received his SB in 1938 and PhD in 1941 from MIT, where he remained to conduct research on microwave magnetrons as head of the magnetron research group in the Radiation Lab. He joined Bell Labs in 1946 and has been head of the Electronics Research Department, head of the Physics of Solids Department, and director of the Physical Research Lab. In 1971 he became vice president for research at Sandia National Lab, returning to Bell in 1973 as executive director of physics research and academic affairs. His research has included work with electron beams and electron tubes, paramagnetic resonance and microwave masers, ferromagnetic and nuclear magnetic resonance and superconductivity. He has served the physics community in

numerous ways, including as a member of the Panel on Condensed Matter Physics of the Physics Survey Committee (1973-74), as a member of the Stanford Synchrotron Radiation Lab Policy Board, and as a member of the National Academy of Sciences Assembly of Mathematical and Physical Sciences (1978-81). In APS he has been a member of the Physics Manpower Panel, the Committee on Problems of Physics and Society, and the Committee on Applications of Physics. He is also active in the IUPAP Commission on Physics for Development and the US National Committee for IUPAP, and he has been on the DOE Energy Research Advisory Board since 1973.

In addition, the 1983 ballot called for a vote on proposed revisions to the Constitution and Bylaws of APS. This vote (which totaled over 25% of the entire membership) registered approval of the changes by a margin of 90%. Accordingly, these revisions will be put

into effect.

## MIT student wins Apker Award

The APS Selection Committee has chosen Raymond E. Goldstein of the Massachusetts Institute of Technology as the winner of the 1983 Apker Award.

The Apker Award recognizes outstanding achievement in physics by an undergraduate student who demonstrates great potential for future scientific accomplishment. The award consists of \$2000, a certificate citing the selected research project and the school where the work was done, and an allowance for travel to the APS Annual Meeting. The Apker Award is the only national prize that recognizes undergraduate achievement in physics.

The Selection Committee also made special mention of the excellent work of the three other finalists in this competition: Robert V. Kowalewski, Richard C. Leavitt and John H. Sloan. Each of the finalists was congratulated by Arthur L. Schawlow, Chairman of the Selection Committee, following their interviews in New York on 1 October.

Ray Goldstein did his undergraduate work as a double major in physics and chemistry at MIT. His senior-thesis subject was "Molecular Theory of Reentrant Phase Transistions in Binary Liquid Mixtures." In this work, he used renormalization-group-theoretical methods to study critical phenomena in a variety of condensed-matter systems, including binary liquid mixtures and biopolymer solutions. Goldstein is now a graduate student in physics at Cornell University. He will receive his award during the Ceremonial Session of the APS-AAPT Annual Meeting in San Antonio on 31 January

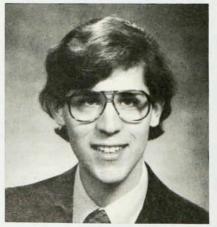
and will also present an invited paper on his work at this meeting.

Robert Kowalewski did his undergraduate work at the University of Rochester, where the focus of his research was the study of "Elastic Pion Compton Scattering at Fermilab Energies." He is now continuing his graduate work in physics at Cornell.

Richard Leavitt presented his senior dissertation at Reed College entitled "A Photon Mass Experiment: an Experimental Verification of Gauss' Law." These laboratory results determined that the photon rest mass must be below  $7.3 \times 10^{-48}$  grams. Leavitt is now continuing graduate work in physics at Johns Hopkins University.

John Sloan presented his work on two projects, "General Relativistic Magnetohydrodynamics" and "Numerical Lattice Gauge Theory Calcula-

GOLDSTEIN



tions," both done as a physics undergraduate at the University of Illinois at Urbana-Champaign. Sloan is now doing graduate work at Princeton University.

Other students nominated by their physics departments for the 1983 Apker Award competition include: Keith J. Cerny (University of California, Berkeley) for "Magnetospheric-Ionospheric Auroral Region Particle Population Simulation"; Ian R. Chandler (Fairleigh Dickinson University) for "Attenuated Total Reflection"; Min-Chung Chu (California Institute of Technology) for "Autoionizing States of the Hydrogen Atom in Strong Magnetic Fields"; Randal L. McEachern (Stanford University) for "Sparks and Quarks"; Stephen G. Naculich (Case Western Reserve) for "Physical Null Zones"; Brent A. Richert (US Air Force Academy) for "Laser Induced Damage in Plastics"; Ron K. Unz (Harvard University) for "Non-Trivial Curvature Couplings and Functional Techniques", and Betty A. Young (San Francisco State University) for "A Search for Fractional Charges in Water."

Nominations invited. Nominations for the 1984 Apker Award are open to students at colleges or universities in the US who were enrolled as undergraduates during at least part of the 12month period preceding the 15 June deadline. Only one candidate may be nominated by each physics department. To be considered, the candidate should have completed the requirements for an undergraduate degree with an excellent academic record and should have demonstrated exceptional potential for scientific research by an original contribution to physics.

The application should include a letter of nomination from the head of the physics department; a copy of the student's academic transcript; a senior thesis, publication or other document written by the student (including a 1000-word summary describing the original contribution to physics submitted for this award); and two letters of recommendation from physicists who know the candidate's individual contribution to the work submitted. The deadline for completed applications is 15 June 1984.

The Selection Committee, to be headed in 1984 by former APS President Maurice Goldhaber (Brookhaven National Laboratory), will review applications and choose the award winner from among four finalists invited for interviews in September or October. Interested students or faculty should contact J. A. Burton, Apker Award Administrator, The American Physical Society, 335 East 45th Street, New York, NY 10017; telephone (212) 682-