1951 from the University of Wisconsin, Adair joined the Cosmotron Department at Brookhaven National Laboratory. Six years later he moved to Yale, where he has served as department chairman and Director of Physical Sciences and is now professor of physics. A Fellow of APS and member of the National Academy of Sciences, at various times Adair has held Guggenheim, Ford and Sloan Fellowships. He has occupied several APS editorial positions, most recently serving as editor of *Physical Review Letters*.

Barschall received his doctorate from Princeton University. After serving short periods as an instructor at Princeton and at the University of Kansas, he joined the staff at Los Alamos in 1943. Since 1946 he has been at the University of Wisconsin, Madison, where he has served off and on as chairman of the physics department; he has also had appointments on the faculties of engineering and of medicine. He is chairman of the physics section of the National Academy of Sciences. In 1982 he will complete his service on the National Committee for IUPAP, and as chairman of the AIP Publication Board. Barschall is currently editor of Physical Review C. He was the first recipient of the APS Tom W. Bonner Prize in nuclear physics.

McDaniel was awarded his PhD degree from Cornell University in 1943. During World War II he served at the MIT Radiation Laboratory and at Los Alamos, and returned to Cornell thereafter. For many years he has held the dual appointments of professor of physics and director of the Newman Laboratory of Nuclear Studies. During the early 1970s, while on leave from Cornell, he occupied technical management positions at Fermilab. He has served on several significant boards and committees, and is currently a member of the International Committee for Future Accelerators in IUPAP. McDaniel is a Fellow of APS and a member of the National Academy of Sciences.

Elizabeth Baranger is professor of physics and Graduate Dean, Faculty of Arts and Sciences, at the University of Pittsburgh. She received her PhD degree from Cornell University in 1954. After spending two years at Caltech, she joined the faculty at the University of Pittsburgh. In 1969 she became a senior research associate in the MIT Center for Theoretical Physics. She returned to Pittsburgh in 1973. Her research field has been nuclear theory. Currently her primary interest is in the administration of graduate programs. An APS Fellow, Baranger has served on a number of Society committees including Status of Women in Physics, Nominating, Executive Committee of the Forum, and POPA. She was a

member of the APS Council (1975–79) and the Executive Committee (1976–78). She is serving currently on the Panel on Faculty Positions for Women. As Chairperson-Elect of the Nominating Committee, she succeeds Ernest Henley, who is Chairman for 1983.

## Holt and Treglio are APS Congressional Fellows

Rush D. Holt and James R. Treglio have emerged from a competitive selection process to become the 1982 APS Congressional Fellows, effective September 1982. The Fellowship Program, now in its tenth year, is aimed at providing qualified technical advice on pending physics-related legislation to members of the US Congress; Holt is now serving on the staff of Representative Robert Edgar (D-Pa.), while Treglio occupies the same position in the office of Senator Paul Tsongas (D-Mass.).

Each year, one or two promising young PhD physicists are selected to serve as APS Congressional Fellows for one year; they are provided with a stipend and placed in the office of a Congressman or Congressional Committee. The Society's vice-president (Mildred Dresselhaus in 1982) heads the special APS selection committee, and Mary L. Shoaf, Assistant Director of the Princeton Plasma Physics Laboratory, acts as Program Administrator.

James Treglio earned his PhD in physics at Stevens Institute of Technology and has since been involved in research in basic physics and applied technology for the US Navy, the Fusion Energy Corporation, General Dynamics/Convair, and the General Atomic Corporation. He has a number of publications and patents to his credit; his work focuses on nuclear-reactor operation, particle beams, high-voltage solar arrays, and superconducting magnets.





HOLT

Rush Holt received his PhD (1981) in physics from New York University. Until his appointment as a Fellow, he was an assistant professor of physics at Swarthmore College. His special interests are astrophysics, optical spectroscopy, fluid dynamics, energy research, and science and public policy. He has worked as an independent consultant on energy (especially solar energy), environmental planning, and environmental noise control.

The APS Congressional Fellowship Program is complemented by similar programs sponsored by other technical societies; the American Association for the Advancement of Science serves informally as the coordinator for these separate programs.

## APS places two Industrial Postdoctoral Fellows

Michael J. King and Stephen Millman have been selected as 1982 APS Industrial Postdoctoral Fellows; King has been placed at the Standard Oil Company Research Center in Cleveland, Ohio, and Millman at the IBM Research Laboratory in San Jose, California.

King received his PhD in physics from Syracuse University in August 1980 and was a postdoctoral research associate at Michigan State University until June 1982. His field of specialization has been direct-interaction theories and relativistic particle mechanics. In addition, he has had extensive laboratory experience in ultrasonics, cryogenics, vacuum technology and computer languages.

Millman earned all his university degrees at Boston University, receiving his PhD in 1982. His doctoral thesis involved the magnetic, electronic and structural properties of intercalated graphite compounds. His name either appears or will appear on ten publications based on his university work.





MILLMAN

Now in its sixth year, the Industrial Postdoctoral Fellowship Program was designed to open new opportunities for PhD physicists and to broaden the contribution of physicists and physics to American industry.

A selection committee headed by the APS president-elect (Robert Marshak in 1982) screens applications, selects the winners, and helps locate the host company. An effort is made to place the Fellows in those industries that normally do not hire many physicists. The stipends of the APS Industrial Postdoctoral Fellows are provided by the host companies.

## Apker Award to Sachdev for thesis at MIT

The APS Selection Committee has chosen Subir Sachdev of the Massachusetts Institute of Technology as the winner of the 1982 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: William A. Aiello, W. Michael Snow and Joel C. Wesson. Each of the finalists was presented with a certificate of congratulations from The American Physical Society during their interviews with the selection committee in Cambridge, Massachusetts, on 3 October.

Subir Sachdev did his undergraduate work at MIT following one year spent at the Indian Institute of Technology, Delhi. His senior thesis at MIT entitled "Quantum Electrodynamics in a Damped Cavity," is a theoretical study of the way the transition rate for an atomic oscillator is affected by its interaction with a tuned cavity. Sachdev is now a graduate student in physics at Harvard University. He will receive his award during the Ceremonial Session of the APS/AAPT Annual Meeting in New York on 25 January. Sachdev will also present an invited paper on his work at the meeting.

William Aiello presented works on several research topics, including elastic properties of terbium using an improved vibrating reed technique. He also submitted studies of the connection between superconductivity and elastic moduli in one-dimensional conductors. Aiello did all of this work as an undergraduate student at Stanford University

Michael Snow, as an undergraduate at the University of Illinois at Urbana-Champaign, did research on several topics, including nonscalar 1/f fluctuation in carbon, gold, and chrome films, tensor properties of resistance fluctuations,  $SU(N) \times SU(N)$  spin systems in two dimensions, and SU(N) chiral models in three dimensions. He is now doing graduate work in physics at Harvard University.

Joel Wesson did his undergraduate work at Swarthmore College. His senior thesis, making use of facilities at Bryn Mawr College, concerned pulsing in high-gain lasers. He is now doing graduate work at the University of Washington.

Several other students were nominated by their undergraduate physics departments for the Apker Award: Michael L. Blume (Jacksonville University), for thermal expansion of silver bromide; Philip H. Dickinson (University of Texas, Arlington), for antiferromagnetic chromium; David A. Fahey (Amherst College), for helium adsorbed



on exfoliated graphite; Raymond L. Ladbury (Colorado State University), for neutrino oscillations; Leslie J. Root (Northeastern University), for electron transfer theory; Thomas S. Statler (University of California, Berkeley), for models of galaxy dynamics and evolution, and June Tveekrem (College of Wooster), for impurity effects in a nearcritical binary fluid mixture.

Nominations invited. Nominations for the 1983 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 thousand-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 1983.

The Selection Committee, to be headed in 1983 by Arthur L. Schawlow (Stanford University), will review complete applications and will select the 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) 682-7341.