

Goldberg, Lyden and Novak are new industrial fellows

Harris A. Goldberg (University of Toronto), Joseph K. Lyden (Columbia University) and Stephanie Novak (Syracuse University) have been named American Physical Society Industrial Postdoctoral Fellows for 1978-79. This program, now in its second year, continues Society efforts to identify new opportunities for physics postdoctoral work and to broaden the interaction between the physics and the industrial communities.

Goldberg will spend his fellowship year at the Celanese Research Company, Summit, New Jersey, where he will work on exploratory projects such as the electrical conductance in modified solids and the application of metallurgical concepts to polymer alloys. Goldberg received his PhD in 1975 from the University of Massachusetts for theoretical solid-state physics studies of defect motion in quantum crystals. He then accepted a postdoctoral fellowship at the University of Toronto to study defect motions, phase

diagrams and phase transitions in alloys.

The Union Carbide Corporation of Tarrytown, New York will be fellowship host for Joseph Lyden, who did his thesis work at Columbia University on the hydrodynamic properties of superfluid helium-3. Lyden will be working in the materials-science group of the Medical Products Division on a variety of corporate research problems involving the properties of semiconductors and on certain physics problems associated with medical instrumentation.

Stephanie Novak, whose dissertation focussed on the general-relativity theory of gravitational radiation, received her doctorate this year. She has been awarded a fellowship for work in the Physical and Materials Sciences Laboratory of the Exxon Corporate Research Laboratories, Linden, New Jersey, for work on problems in applied mathematics.

The three fellowship recipients were chosen by a Selection Committee, headed by Lewis M. Branscomb (IBM), APS vice-president. Of the 27 applicants, seven were invited to come to Washington last April for interviews. The three finalists visited eight potential host companies and the fellowships were awarded when both the finalist and an industrial organization stated that there was mutual interest in a specific fellowship assignment.

Reports of future plans have now been received from the members of the first class of Fellows who began their appointments last fall. John Barrett's fellowship at W.R. Grace & Co has been extended for six months. Stephan Jacob has accepted an offer to join the technical staff of the International Paper Company, his fellowship host this year. Joan Lurie, after her year at Colgate Palmolive, will return to the physics department at Rider College.

Chairmen nominate students for Apker award

Twenty-one nominations for the Apker Award have been received from chairmen of physics departments, according to J. A. Burton, program administrator. The Apker Award, which will recognize outstanding achievement in physics by an undergraduate student, was established as a memorial to LeRoy Apker through an endowment donated to The American Physical Society by Jean Dickey Apker (PHYSICS TODAY, October, page 75).

The nominations are now being reviewed by the selection committee headed by William A. Fowler (California Institute of Technology), past president of the Society. Four finalists will be interviewed by the committee at the University of Rochester on 17 October.

The names of the students who have been nominated, their institutional affiliation and the title of their research projects are listed below (in alphabetical order):

Charles L. Bennett (University of Maryland), Variations in the metric flux of Cassiopeia A; **Peter F. Byrne** (University of

California, Berkeley), Cosmic-ray propagation calculation and comparison of recent iron isotope data; **Roy K. Campbell** (Southern Missionary College), Periodic table of the diatomic molecules; **Maynard S. Dewey** (State University of New York, Stony Brook), Magnetic moment measurement of the $\text{Cs}^{129} 11/2^-$ isomer; **James J. DeYoreo** (Colby College), The Magellanic-cloud cepheids;

David E. Heckerman (UCLA), Gravity-capillary waves in narrow channels and in liquid He^4 below the lambda point; **Tony F. Heinz** (Stanford University), Topological properties of orthostochastic matrices; **Toshiko Ichiye** (Rice University), Statistical mechanical study of helix-coil transitions in collagen; **William E. Kleppinger** (Princeton University), Second-class currents and the beta-decay of Ne^{19} ; **Gregory C. Kolodziejczak** (US Naval Academy), Radiation-induced dielectric relaxation in rare-earth-doped calcium fluoride;

Russell M. Levraut (University of Rochester), A high-resolution polarization study of S106; **Richard C. Lye** (California Institute of Technology), Laser-induced fluorescence measurements of the turbulent jet; **Elizabeth K. Mann** (Case Western

Reserve University), Neutral excitation current in liquid helium; **Ronald O. Masciulli** (California State University, Fullerton), Bi and Pb^{208} microdistributions in ordinary chondrites; **Mark T. Mueller** (MIT), Time-dependent one-dimensional model field theory for the nuclear many-body system;

David B. Murphy (University of California, Irvine), Role of conduction electrons in valence fluctuations; **Charles E. Reece** (Baylor University), Measurement of the dielectric constants of Ar and CO_2 with microwave resonant cavities; **Scott J. Shenker** (Brown University), Variational real-space renormalization group transformation based on the cumulant expansion; **Daniel G. Stearns** (University of Michigan), Determination of the differential cross section for excitation of neon to the $^3\text{P}_2$ state using metastable-scattering angular-distribution analysis; **Marvin M. Theimer** (New Mexico State University), Computer simulation of statistical plasma mechanics and Analysis of sunspot-cycle periodicities, and **Robert S. Turley** (Brigham Young University), Linear and nonlinear models of Jupiter's magnetic field. □