

and employment statistics division, says the lengthening study time may be attributable to the fact that more students now do their PhD work as members of teams, especially in such subfields as elementary particles. In general an experimenter takes longer to earn a PhD than a theorist in the same subfield, Ellis notes, because a higher proportion of experimenters work in groups and considerable time is spent designing and constructing experimental apparatus.

The survey polled all graduate physics and astronomy students studying in the United States in 1987-88 to determine their educational background and employment prospects; of the 13 000 students, about 7300 replied.

Far and away the most popular physics subfield among graduate students is condensed matter, in which 32% of respondents chose to concentrate. A distant second is elementary particles, with 13%, and third is nuclear physics, with 8%. The survey also found that nearly 85% of all physics grad students, both American and foreign citizens, now receive some type of financial aid. The most common form of aid is assistantships: 44% hold research assistantships, 32% teaching assistantships. Other sources of financial support include fellowships (8%) and full-time employment (8%). Very few need to fall back on student loans or family support, the survey found.

PhD students are opting for postdoctoral fellowships more frequently than did their predecessors: 59% of American physics PhDs chose postdocs in 1988, a 20-point rise from 1978. Ellis says postdoc positions have become more attractive because they allow graduates to remain flexible for a year or two before deciding on more permanent work and are the customary route to tenure-track positions. The median monthly salary for a postdoc rose somewhat in 1988 to \$2150, compared with \$1900 in 1985, which was less than one could earn on average with just a physics bachelor's degree. Current postdoc salaries still don't quite match those for master's degree recipients (\$2600) or those for PhD recipients entering permanent positions (\$3400).

About a third of the 1988 doctoral recipients chose permanent employment, with 42% of that group entering jobs in industry, 20% at universities, 15% in US government laboratories, such as the Naval Research Laboratory in Washington, DC, and 10% in federally funded research centers. Of the nearly 700 students ending their graduate study at the

master's level, about half said they would take jobs in industry, 20% opted for employment in US government labs or Federal research centers and only 3% said they would work at universities.

The 1987-88 graduate student survey is available free from the Education and Employment Statistics Division, American Institute of Physics, 335 East 45 Street, New York NY 10017.

—JEAN KUMAGAI

AIP BOARD TO WEIGH MOVING NEW YORK OPERATIONS

The question of whether the Manhattan operations of the American Institute of Physics should be relocated, either to a less expensive site in New York City or to some other city, continues under active consideration by AIP's governing bodies. AIP currently has staff at two locations in midtown Manhattan (one of which also houses staff for some member societies), two locations on Long Island and two locations in Washington, D.C. Consolidation of at least some of the staff is considered a high priority by AIP management.

When the location question was under consideration in 1986-87, discussion centered on whether all or some of AIP's New York and Long Island operations should be moved to Washington, and the issue was submitted to AIP's 10 member societies for advice (PHYSICS TODAY, December 1987, page 75).

After the societies split rather evenly, with five against moving and five in favor of moving at least some of the divisions of the Physics Programs Branch (PHYSICS TODAY, May 1988, page 89), AIP management commissioned an independent consulting firm to prepare a report on the location question. The report, by Moran, Stahl & Boyer, recommended that Baltimore, Philadelphia and New York/Long Island be considered as possible future sites for consolidated AIP operations and found significant cost advantages in moving operations to Baltimore or Philadelphia. In preliminary discussions, city agencies in both Baltimore and Philadelphia expressed interest in hosting AIP and in having AIP establish some kind of local physics center.

After the MSB report was submitted to the AIP Governing Board last fall, AIP Board Chairman Hans Frauenfelder of the University of Illinois convened a meeting of member-society leaders in Chicago. Nine

of the ten societies were represented at the meeting on 28 November near O'Hare Airport. According to a report on the meeting that AIP Executive Director Kenneth W. Ford subsequently made to AIP staff, "It was the unanimous view of those present ... that AIP's publishing center should not move from Long Island in the foreseeable future." At a meeting in December, AIP's Executive Committee confirmed by vote its recommendation that publishing operations should not be moved from Long Island.

The location question now centers on whether AIP's Manhattan operations should be moved to some other site in New York or to another city. The operations currently are divided between a main building on East 45th Street near the United Nations, a valuable piece of real estate that AIP owns in full, and expensive rental space in an office building three blocks away on 45th Street. An ad hoc committee is reporting to Frauenfelder on financial aspects of the question. According to Frauenfelder, his immediate objective is to build as strong a consensus as possible in the Executive Committee in February, in preparation for the next meeting of the Governing Board on 30-31 March.

AAPT AND APS REORGANIZE MEETING SCHEDULES

The American Association of Physics Teachers and The American Physical Society are restructuring their meetings to replace their joint January meeting with a joint April meeting. APS will no longer participate in the January meeting after 1991; instead, AAPT probably will participate in the APS April meeting, which traditionally has featured policy-related talks, in addition to the usual agenda of scientific papers.

As plans currently stand (subject to approval by the AAPT council in January), the last joint AAPT-APS January meeting will take place next year in San Antonio, and the first joint April meeting will be held three months later. AAPT plans to move its summer meeting, which traditionally has been held in June, to August, so that it will have three meetings per year spaced at roughly four-month intervals. It hopes to beef up the January meeting to make up for sessions, papers and speakers that APS has contributed in the past.

The reasons for the revised meetings schedule are somewhat complex.

APS has been concerned for some time about the relatively small number of participants and contributed papers from APS members at the January meeting. As stated in the September issue of AAPT's *Announcer*, "The annual AAPT-APS joint meeting in January was extraordinarily healthy from the AAPT viewpoint, but was quite weak from the APS viewpoint." APS was concerned that its April meeting also was rather poorly attended and that it was getting to be a disappointing venue for the outgoing president's retirement address. Consequently, there was a strong desire on the part of APS leaders to try to create at least one strong APS general meeting.

AAPT traditionally has held just two annual meetings. When APS decided to withdraw from the January meeting and offered AAPT the option of joining its April meeting, AAPT was left with "a perplexing decision," as the *Announcer* put it. If AAPT moved its January meeting to April, it then would be left in the position of conducting its two annual meetings just two months apart, and one of the two meetings would always have to be in the Washington area. If on the other hand it continued alone with the January meeting, its membership would lose its one major opportunity to interact with the APS membership. Under the circumstances, AAPT's leadership decided to adopt a three-meeting agenda on an experimental basis, so that its members still would be offered a joint annual meeting with APS and two annual meetings that rotate throughout the US and Canada.

STITH IS THE NEW VICE PRESIDENT OF AAPT FOR 1990

James H. Stith, an associate professor of physics at the US Military Academy, West Point, is the new vice president of the American Association of Physics Teachers. Stith, who was elected last fall and took office at the AAPT winter meeting held last month in Atlanta, succeeded Thomas D. Rossing of Northern Illinois University. Rossing is now president-elect for 1990 and will become president in 1991. The current AAPT president is Judy R. Franz of West Virginia University; she succeeded Gerald F. Wheeler of Montana State University.

Stith received his BS (1963) and MS (1964) from Virginia State University and his doctorate in physics education



James H. Stith

from the Pennsylvania State University (1972). From 1965 to 1967 Stith was an officer in the US Army. He worked as an engineer at RCA from 1967 to 1969. In 1972 Stith reentered the Army and joined the physics department faculty of the US Military Academy at West Point. His research has been in x-ray optics and physics education.

Within AAPT Stith has chaired the committees on physics in minority education and science education for the public and has served on the editorial board of *The Physics Teacher*. He is currently a member of the Introductory University Physics Project steering committee. Stith's priorities for the association include enhancing scientific literacy, attracting more minorities and women to physics and working with other scientific societies to address national problems in science.

The following officers were also elected last fall and took office in January: Robert F. Sears Jr, a physics professor at Austin Peay State University in Clarksville, Tennessee, is the new AAPT treasurer; Carol Ann W. Tripp, a physics and chemistry teacher at Providence Country Day School in East Providence, Rhode Island, is the new executive board member representing high schools.

AVS CHOOSES KAZMERSKI AS PRESIDENT-ELECT

The American Vacuum Society has chosen Lawrence L. Kazmerski, principal scientist and manager of the photovoltaic measurements and performance branch at the Solar Energy Research Institute, as its president-

elect for 1990. Kazmerski, who was elected last summer and took office in January, succeeds David W. Hoffman of Ford Motor Co, who is now president. Kazmerski will become society president in 1991.

Kazmerski studied electrical engineering at the University of Notre Dame, where he earned his BS in 1967, his MS in 1968 and his PhD in 1970. From 1971 to 1977 he was on the faculty of the University of Maine, Orono. In 1977 he joined the Solar Energy Research Institute, where his research has included photovoltaic-device reliability, semiconductors, vacuum processing, surface analysis and the correlation of microchemistry with macroscopic-device properties.

Before becoming president-elect, Kazmerski served two years on the AVS board of directors. He has also participated in numerous society committees, including those of the thin film division, electronic materials and processing division and applied surface science division. He served on the AVS short course committee and on the editorial board of the *Journal of Vacuum Science and Technology*, and he is currently a member of the long-range planning committee.

AVS elected several other officers last summer: William D. Westwood, manager for materials research and gallium arsenide devices at Bell-Northern Research Ltd in Ottawa, Ontario, was reelected clerk; N. Rey Whetten, a staff physicist in the VLSI Technology Laboratory of the General Electric Research and Development Center in Schenectady, New York, was reelected treasurer; and Donna Bakale-Sherwin, president of Technical Marketing Programs in Santa Clara, California, William D. Sproul, PVD group leader at North-

Lawrence L. Kazmerski

