## AIP SURVEY FINDS MORE WOMEN MAJORING IN PHYSICS

The number of women awarded bachelor's degrees in physics increased by a factor of 2.5 in the 15-year period 1974–89, from 320 to 840, and the proportion of women majoring in physics grew by a similar factor, from 7% to 16%. These are among the findings of the latest survey of bachelor's degree recipients conducted by the American Institute of Physics. The survey, conducted annually by AIP's education and employment statistics division, polls graduating physics and astronomy majors to determine their educational backgrounds and future plans.

While more women are opting for physics majors, as the AIP surveys have shown, the total number of physics bachelor's degrees has remained flat for the past five years, at around 5200. Astronomy, on the other hand, appears to be growing in popularity: Since 1983, when 137 astronomy bachelor's degrees were awarded, the graduating class has grown steadily each year, to 196 degrees in 1989.

Among physics majors who planned to go on to graduate school—roughly half of the 1989 class—male and female respondents differed somewhat in their planned fields of study. About 30% of male respondents said they planned to do physics graduate work, and 20% said they would do graduate work in some other field. Among female respondents, the number planning to do physics graduate study roughly equaled the number opting for nonphysics graduate study—about 27% in each group. A larger proportion of women than men do graduate work in education (10% versus 3%), in biophysics and the life sciences (10% versus 3%) and in the earth sciences (8% versus 4%).

During the past decade there has been a steady decline in industrial manufacturing jobs for physics bachelor's degree holders, while employment in the military and in the service industries—insurance, banking and so on—has risen. In 1980, for example, 41% of job-seeking physics graduates found work in manufacturing, 16% work for the military (including those who took positions in Defense Department labs and military training programs) and 20% work in the service industries. In 1989, by contrast, 25% took jobs in manufacturing, 27% military jobs and 24% jobs in the service industries.

This year's respondents reported slightly higher monthly salaries than their counterparts a year before—$1960, compared with $1930 in 1988. This increase was not enough to keep pace with inflation. As in the previous ten years, the average starting salary for female physics majors exceeded that of their male peers: $2180 for women, compared with $1925 for men.

The 1988–89 survey of bachelor's degree recipients is available free of charge from Susanne Ellis, Education and Employment Statistics Division, American Institute of Physics, 335 East 45 Street, New York NY 10017.

—JEAN KUMAGAI

## CICERONE IS NEW PRESIDENT-ELECT OF AGU FOR 1990–92

Ralph J. Cicerone of the University of California, Irvine, is the new president-elect of the American Geophysical Union. Cicerone began his two-year term on 1 July. He succeeds G. Brent Dalrymple of the US Geological Survey, who becomes president. Cicerone will become president in July 1992.

Cicerone's research involves theoretical and experimental studies of the Earth's atmosphere. He has performed theoretical analyses and numerical modeling studies of atmospheric chemistry and the impacts of greenhouse gases, and he has taken field measurements of sources and sinks of gases such as methane.

Cicerone earned his PhD in electrical engineering and physics from the University of Illinois in 1970. He was a member of the research staff at the University of Michigan's space physics research laboratory from 1970 to 1978, after which he became a research chemist at the Scripps Institution of Oceanography. From 1980 to 1989 Cicerone led the atmospheric chemistry division of the National Center for Atmospheric Research in Boulder, Colorado. Last September he became chairman of the geosciences department at Irvine.

**Ralph J. Cicerone**

## LEDERMAN IS PRESIDENT-ELECT OF THE AAAS

Leon Lederman, director emeritus of Fermilab and professor of physics at the University of Chicago, is the new president-elect of the American Association for the Advancement of Science. He will become AAAS president in February 1991, succeeding Donald N. Langenberg, who has just been named chancellor of the University of Maryland, College Park. Richard C. Atkinson, chancellor of the University of California, San Diego, became chairman of the AAAS board of directors in February, succeeding Walter E. Massey, vice president for research and for Argonne National Laboratory at the University of Chicago.

Lederman, well known for his leadership in physics as well as his achievements in research, has in recent years concerned himself especially with science education in the United States. As director of Fermilab he encouraged the development of laboratory-sponsored education programs and helped persuade the State of Illinois to establish an elite residential high school science academy (see PHYSICS TODAY, March 1986, page 104). Since last spring, Lederman has been teaching an introductory physics course for nonscience majors at the University of Chicago, and according to an alumni bulletin, "it has met with an enthusiastic response, literally standing room only."

As AAAS president, Lederman can be expected to focus national attention on declining US enrollments in science and engineering, a theme addressed by outgoing president Atkinson in a speech at the AAAS meeting in New Orleans on 19 February. Well known as a vocal and effective champion of the Superconducting Super Collider, Lederman also can be expected to address general science funding needs. ■