

Physics Enrollments Continue to Fall

First-year enrollments in US physics graduate programs dropped by 21 percent between 1992 and 1995, according to the latest survey of enrollments and degrees conducted by the American Institute of Physics. At the undergraduate level, the number of juniors majoring in physics fell 13% in the same period, while the number of bachelor's degrees awarded dropped 8% between 1989 and 1994.

Although such falloffs occurred among both US and foreign students, and at undergraduate, masters and PhD departments alike, the distribution was not uniform. For example, although total graduate enrollments fell 8% over three years, masters-granting institutions experienced a 17% drop but PhD departments only a 6% drop. Likewise, when Patrick J. Mulvey and Elizabeth Dodge, the report's authors, compared enrollments within large, medium and small physics departments over a five-year period (1990–95), they found that, on average, first-year graduate enrollments had decreased most among the large departments (those having more than 25 first-year students) and not at all among small departments.

Although PhD output continued to rise—there were 1481 recipients in 1994—the report noted that the roughly seven-year lag between first-year graduate enrollment and receipt of a PhD means doctorate production will soon begin to drop as well.

There were 1899 master's degrees awarded in 1994, and for the first time the number of “professional” or “terminal” master's degrees exceeded that of master's degrees earned en route to a PhD—the result of both a jump in the former category and a drop in the latter. The rise in professional and terminal master's degrees was particularly noticeable in PhD departments and “may be attributable to students exiting doctorate studies early,” the report suggested.

In astronomy, which is also covered by the report, there were 203 bachelors, 107 masters and 117 PhDs awarded in 1994. As in physics, first-year astronomy graduate enrollments dropped by 27% between 1991 and 1995, while the number of juniors majoring in astronomy fell 14%.

The report is based on a survey of US physics and astronomy departments conducted in the fall of 1994 and

winter of 1995. All of the PhD departments and 9 out of 10 of the masters- and bachelors-granting departments responded.

Single copies of the *1995 Enrollments and Degrees Report* are available free of charge. Contact the American Institute of Physics, Education and Employment Statistics Division, One Physics Ellipse, College Park, Maryland 20740-3843; phone 301-209-3067; e-mail stats@aip.org.

Molina Donates Nobel Money for Global Research

Mario J. Molina, a corecipient of last year's Nobel Prize in Chemistry, has given \$200 000 of his prize money to MIT to encourage environmental research in Latin America.

Molina, the Lee and Geraldine Martin Professor of Environmental Studies at MIT, shared the Nobel with F. Sherwood Rowland of the University of California, Irvine, and Paul Crutzen of the Max Planck Institute for Chemistry in Mainz, Germany, for work on atmospheric ozone depletion (see PHYSICS TODAY, December 1995, page 21). The prize money of \$1 million was shared equally among the three.

Molina said that for some time he had wanted to encourage greater interest in global issues in his native country of Mexico and other developing countries, where environmental research is not nearly as widespread as in the US. And so the endowment to MIT will support fellowships for graduate students and scientists from Latin America to do such research at MIT and possibly other US institutions. The Mexican government has agreed to set up a scholarship fund to help support these exchanges, and Molina hopes that US contributions will also be forthcoming. The gift to MIT was made jointly by Molina and his wife, Luisa, a native of the Philippines who is a research scientist in MIT's department of Earth, atmospheric and planetary sciences.

Although Molina believes the problem he has studied, ozone depletion, is now well understood, many others remain. “One that worries me the most is pollution from combustion sources—biomass, fossil fuels—the kind of pollution that develops as developing countries develop. It used to be rather localized to cities, but it is spreading and becoming a global problem.”

Amelio, a Physicist, Takes the Reins at Apple

In February, Gilbert F. Amelio became chairman and CEO of Apple Computer, succeeding Michael Spindler, who was ousted by the company's board of directors. Prior to joining Apple, Amelio was chairman, president and CEO of National Semiconductor Corp.

Born in New York City, Amelio attended Georgia Institute of Technology, earning a BS in 1965, an MS in 1967 and a PhD in 1969, all in physics. From 1968 to 1971 he was a member of the technical staff at AT&T Bell Telephone Laboratories, and from 1971 to 1983 he was manager of charged-coupled device development at Fairchild Camera and Instrument Corp. He then joined Rockwell International Corp as president of its communications systems group, leaving to head up National Semiconductor in 1991. Still a member of the American Physical Society although no longer active in physics research, Amelio holds 16 patents, including one for the co-invention of the charge-coupled image sensor, now used widely in consumer video cameras.

The author of a management-strategy book called *Profit from Experience*, Amelio clearly will profit at Apple: He is reportedly drawing a yearly salary of \$2.5 million for five years, with bonuses and options that could bring his annual pay to \$13 million, plus a \$10 million “golden parachute” if Apple is sold within the next year.

IN BRIEF

Mildred S. Dresselhaus is the new president-elect of the American Association for the Advancement of Science. An Institute Professor at MIT who holds joint appointments in the departments of physics and of electrical engineering and computer science, Dresselhaus will succeed to the AAAS presidency in 1997.

The Institute of Physics has moved. The new address is 76 Portland Place, London W1N 4AA, UK. The telephone and fax numbers are 44 (0)171 470 4800 and 44 (0)171 470 4848, respectively. IOP's e-mail address remains iop@ulcc.ac.uk. ■