



WARD

of the American Academy of Ophthalmology and Otolaryngology. He has been a professor of otolaryngology, communication disorders, environmental health and psychology at the University of Minnesota since 1962. He was ASA vice president in 1986-87 and vice president-elect in 1985-86.

Ward has been concerned all his life with noise-induced hearing loss and its prediction. His laboratory and fieldwork have had practical applications in industrial health and safety. He has also conducted research on musical perception.

Ungar received his EngScD in mechanical engineering from New York University in 1957, after serving as an aero-ordnance engineer with the Sandia Corporation from 1951 to 1953. From 1954 to 1958, he lectured and conducted research at New York University. In 1958 he joined Bolt Beranek and Newman Inc., where he held several positions, including principal engineer (1977-83), and where he is now chief consulting engineer. For ASA he has served as chairman of the shock and vibration committee (1975-79), associate editor of the *Journal of the Acoustical Society of America*, executive councilor and participant in several other committees.

Ungar's research and consulting at BBN have centered on the vibration of complex structures and machines, particularly those employed in the construction of high-technology devices.

Jont B. Allen and Richard Stern are new members of the ASA executive council. Allen, a supervisor at AT&T Bell Laboratories, Murray Hill, received a PhD in electrical engineering at the University of Pennsylvania in 1971. Stern, associate director of research at Pennsylvania State University's Applied Research Laboratory, earned his PhD in physics at the

University of California, Los Angeles, in 1964.

Survey of physics bachelors finds that more plan to teach

The latest AIP survey of bachelor's degree recipients reveals significant shifts in the employment distribution of new graduates, especially between the industrial and military sectors, a substantial increase in the number of graduates choosing to go into teaching, and a significant increase in the number of blacks who reported earning bachelor's degrees in physics.

Of the 5214 recipients of bachelor's degrees in physics in the class of 1986, 2784 responded to the survey. Of these respondents, 49% opted for immediate employment after their undergraduate studies. Only 28% of those surveyed planned to enroll in physics graduate programs. This percentage is the lowest in the last decade and reflects a gradual but continuous increase in the number of employment-oriented graduates.

Of the 825 students who accepted full-time employment immediately after terminating their studies, 28% chose jobs with the military, an increase of 5 percentage points from last year. The percentage of new graduates joining industry dropped to 48% from 55%. Of those who went to work for the government, more than three-quarters of the men went to work for the military and more than three-quarters of the women for civilian branches.

Approximately 100 of the 1986 respondents joined high-school teaching staffs. This is almost double the number of students who reported going into teaching the year before, a fact that should be of some comfort to those concerned with the shortage of high-school science instructors. In 1981, only 23 graduates said they had taken entry-level teaching jobs.

Although the demand for physics bachelors remained high this year, the median salary for graduates fell 4.5% in 1986, to \$1900 per month. The median monthly salary for women, however, rose to \$2160 per month, \$300 higher than the median salary for men, which dropped 5% to \$1860. The decline in male emoluments is connected to the decrease in the proportion of bachelors taking industry positions and the increase in the proportion taking military jobs, which pay less: The shift from industry to the military was especially marked among men.

A record 51 black students reported receiving physics bachelor's degrees. The number compares favorably with the analogous figure of 42 reported in

1985, but the increase may be a spurious result of a greater response rate from minority students.

Of the bachelors who planned to enroll in graduate physics programs in the fall, 17% responded that physics was not offered at their high school or that they had not studied it there. This percentage almost triples the 6% figure reported in 1976 and is up 2 percentage points from last year.

The class of 1986 contained 169 astronomy bachelors. Forty percent of these planned to enroll in graduate astronomy programs, a 14% increase from the previous year and the highest percentage recorded in the last decade. This trend is the reverse of the one witnessed among physics bachelors. In the past two decades the percentage of physics bachelors who have continued with graduate work in physics has fallen from 55% to almost 30%.

The 1985-86 *Survey of Physics and Astronomy Bachelor's Degree Recipients* is available from Susanne D. Ellis, Education and Employment Statistics Division, American Institute of Physics, 335 East 45th Street, New York NY 10017.

in brief

A directory of science training programs for exceptionally able pre-college students this summer and during the 1987-88 academic year has been published. The programs generally involve special courses or research at colleges, universities or laboratories. For a copy of the 1987 *Directory of Science Training Programs for High Ability Pre-College Students*, send \$1 to Directory, Science Service, 1719 N Street NW, Washington DC 20036.

IEEE's Technical Committee for Computer Applications in Nuclear and Plasma Sciences has established a new award, consisting of \$1000 and a plaque, for "outstanding contributions to the profession of using computers in nuclear and/or plasma scientific research." Further information can be obtained from Lester Welch, Argonne National Laboratory, Argonne IL 60439-4843.

Cornell University has acquired the earliest known letters of André Marie Ampère, the self-taught French physicist known primarily for his contributions to electrodynamics. Cornell historian L. Pearce Williams, who is writing a biography of Ampère, learned during a visit to Paris of the 250 pages of letters, which had just been discovered in the barn of a château. Cornell paid \$30 000 for the collection. □