

Atkinson, "when—not if but when—the student-body enrollments have dropped by 20%?" This factor, together with a distribution of faculty ages that will mean no significant level of retirements for 10–15 years, could close out young people from university positions. Young people aren't the only ones able to do worthwhile research, he added, but without a flow of people there can be no vital, continuing program in science. Possible remedies under consideration at NSF include the establishing of research institutes (located at universities and having an active interchange with them, but without academic tenure for researchers), the promotion of early retirement and the spon-

soring of "research professorships" that would free a faculty member for full-time research and assign his other duties to a new, young scientist. "What worries me," says Atkinson, "is that the handwriting has been on the wall for some time now" concerning the future of student enrollments and universities' difficulties, but corrective measures have yet to win broad support.

Science courses too tough. It was the Soviets' launching of Sputnik, Atkinson told us, that prompted NSF, in the face of widespread public concern over lagging American science education, to develop a set of curricula in physics, mathematics, chemistry and so on that was sophisti-

cated and highly targeted at the excellent students in the nation's high schools. But the result, he said, has been that—while the outstanding students achieve higher test scores every year—the scores in science of the population as a whole are dropping steadily. Once students opt out of the high-school science curriculum, Atkinson says, they find it very difficult to take up science in their college studies; he fears that "many really talented people, who might make very valuable contributions in the sciences but who aren't prepared to make the real commitment necessary in their high school years, are being isolated" from science forever.

—FCB

the physics community

Flanagan and Blackstock elected to ASA posts

James L. Flanagan of Bell Laboratories has been chosen the new president-elect of the Acoustical Society of America. In the same election, David T. Blackstock of the University of Texas, Austin was named vice president-elect. Both will serve one year in these posts before assuming the offices of president and vice-president, respectively. The 1976 president-elect, John C. Snowdon (Pennsylvania State University), has succeeded to the office of president, and Tony F. W. Embleton (National Research Council of Canada) has become vice-president.

Flanagan is the head of the Bell Labs acoustics research department. He earned his PhD in electrical engineering from the Massachusetts Institute of Technology in 1955, having joined the Air

Force Cambridge Research Laboratories one year before. In 1957 he became a member of the technical staff at Bell Labs, where he headed the speech and auditory research department, 1961–67, and then accepted his current post. Flanagan's research interests include digital communications, acoustic theory of speech production, psychoacoustics of speech perception and computer simulation. He has served as vice-president of the ASA for a one-year term, and as a member of the AIP Governing Board.

Blackstock received his doctorate from Harvard University in 1960. He then worked for three years at the General Dynamics and Electronics Corp in the nonlinear acoustics research department before taking up a faculty position at the University of Rochester. Since 1970, Blackstock has been a faculty research scientist at the University of Texas applied research laboratories. His research specialties are nonlinear acoustics and wave motion.

Marine Biological Association before joining the faculty of the University of Miami's Rosensteel School of Marine and Atmospheric Science in 1970. In 1974 he began working for the NOAA laboratories in Miami and then moved to the Rockville, Md. offices of the National Ocean Survey two years later.

Chemical oceanography is Segar's major research interest. In addition, he has published extensively on the use of atomic-absorption spectroscopy for the detection of trace metals and has contributed to the interface between chromatography and atomic spectroscopy used for identification of metal species. His work in 1975 with George A. Berberian (NOAA, Miami), assessing the causes and consequences of oxygen depletion in the New York Bight, predicted the disaster that struck Long Island beaches in 1976. □



FLANAGAN

OSA names Segar as Congressional Fellow

Douglas A. Segar, a chemical oceanographer with the National Oceanic and Atmospheric Administration (Rockville, Md.), has been chosen as the 1977–78 Congressional Science and Engineering Fellow of the Optical Society of America. The fellowship, which is being presented for the second time, will allow Segar to spend one year with the US Congress working on the staff of a Senator, a Representative, or one of the Congressional committees. The American Association for the Advancement of Science is a co-sponsor of the program.

Segar received his doctoral degree in oceanography from the University of Liverpool, England. For one year he worked as a research fellow at the UK



SEGAR