

educate crystallographers who are complete masters of their powerful techniques and also cognizant of frontier knowledge in the relevant sciences. In this way they may be able to make their own distinctive contributions in both academic and industrial environments."

Education in acoustics

The Acoustical Society of America is actively at work on a program to improve acoustics education at all levels of the curriculum. Through its committee on education in acoustics, the society is seeking to determine the present status and needs of acoustics education. The committee is also compiling a book of acoustics experiments and preparing a career booklet.

At a conference on acoustics education held two years ago, ASA found that the acoustics profession was experiencing many of the problems encountered by workers in optics. The need for trained acousticians far exceeded the available supply. Manpower requirements were met mainly by the expensive and wasteful on-the-job training of scientists and engineers from other fields. The very concept of acoustics was being misunderstood not only by the public, but by scientists as well (ASA considers acoustics to be the science of mechanical radiation in all its aspects, including origin, transmission and reception). Acoustics courses, almost always elective, were taken by relatively few students. Physics textbooks contained little on such modern, exciting branches of acoustics as ultrasonics. A further weakness was lack of an intermediate text in general radiation physics that covered wave propagation from an analytical viewpoint, with emphasis on both mechanical and electromagnetic radiation.

To attack these problems, the Acoustical Society set up a committee on education in acoustics headed by Alan Powell of the David Taylor Model Basin. One committee group, consisting of Frank Andrews, Douglas Muster, and Robert Lambert, is compiling a collection of experiments suitable for graduate students and senior undergraduates. When completed the collection will be available

to all acoustics teachers to help them set up programs in experimental acoustics.

Another working group, comprising Alan Powell, Mark Harrison, and David Saltus, is studying the present status of education in acoustics. Initial emphasis has been on the PhD level, but eventually the study will embrace the master's level, short courses, and nondegree courses. A third working group, headed by John C. Johnson, is determining needs in acoustics education, again concentrating initially on the doctoral level. Finally, a group under R. Bruce Lindsay is completing work on a career booklet directed primarily to high-school students.

Hawaii expands astronomy program

The University of Hawaii in Honolulu has introduced graduate courses in astronomy and plans to offer a PhD in the field before long. A \$500 000 NASA contract will enable the school to build an observatory for an 84-inch telescope, which will be used mainly for infrared planetary observations. Hawaii already operates a solar observatory and sky-glow station on Maui. Concurrent with the new astronomy program Hawaii's Physics Department, under John R. Holmes, has changed its title to the Department of Physics and Astronomy.

Computer research associates

The Massachusetts Institute of Technology computation center is awarding a limited number of post-doctoral research-associate appointments during the 1966-67 academic year. The awards, supported by International Business Machines Corp., will be based on each candidate's proposed research program and his indicated ability to carry it out. Although the MIT associateships are academic appointments, they require no teaching duties other than optional supervision of thesis students. Applicants should submit an outline of proposed research, a list of graduate courses taken with grades and degrees, two letters of recommendation and an indication of the desired appointment period and stipend. The material should be sent before 1 March to Director, MIT

Computation Center, Room 26-142, MIT, Cambridge, Mass. 02139.

NSF college teachers awards

The National Science Foundation has announced grants in support of 30 conferences for college teachers of science, mathematics and engineering. Since the conference directors will choose participants, applicants should address their inquiries to the directors and not to the foundation. The directors include the following:

Ferdinand Baer, Department of Atmospheric Science, Colorado State University, Fort Collins, Colo.

John T. Marshall, Department of Physics and Astronomy, Louisiana State University, Baton Rouge, La.

Allen L. King, Department of Physics, Dartmouth College, Hanover, N.H.

James A. Eyer, Institute of Optics, University of Rochester, Rochester, N. Y.

William L. Parker, Department of Physics, Reed College, Portland, Ore.

Charles W. Burmeister, Department of Physics, Trinity University, San Antonio, Tex.

Claude C. Barnett, Department of Physics, Walla Walla College, College Place, Wash.

Daniel Frederick, Department of Engineering Mechanics, Virginia Polytechnic Institute, Blacksburg, Va.

Science journalism at BU

Next September Boston University's School of Public Communication will enroll its first students in a three-semester MS program in science communication. Under the direction of Associate Professor James D. B. O'Toole, the program will include two semesters of 15 credits each, followed by a summer internship, and a final semester devoted to thesis writing. The program is directed at science, engineering and mathematics graduate students who are seeking careers in science writing, rather than further specialization in their fields.

Correction: A University of Maryland college-teacher summer program was incorrectly reported in Jan. PT. Item should read: "NSF support includes weekly stipends of \$75 for predoctoral and \$100 for postdoctoral participants."