

put of science and engineering technicians.

The need for more and better technicians has not been determined with any precision, but it is generally agreed that they are in short supply; the scarcity, according to a number of persons who have surveyed the problem, is an impediment to the most efficient use of the nation's scientists and engineers. What is not generally agreed upon, however, is the best means of turning out the needed technicians.

The technicians bill, offered by Congressman John Brademas (D-Ind.), seeks to develop a technical training program wholly apart from any connection, direct or indirect, with vocational training programs, which have lately branched out heavily into the technical training field under a provision of the National Defense Education Act.

The U.S. Office of Education's Division of Vocational Training, which administers the NDEA program, writes off the Brademas proposal as a needless duplication of its program. According to the division, under its NDEA-supported program 620 institutions were participating in one way or another, some \$47 million had already been expended, and, last year, over 48,000 students were enrolled for training.

The Brademas proposal, which has enlisted considerable support in industry and government, offers its respects to the NDEA program but insists that it is aimed at developing an altogether different creature from the NDEA technician. The intent of the bill is not to graft technical training programs onto existing vocational schools and junior colleges but to set up "college level" or post-high school institutes in association with engineering and other professional schools that will turn out technicians with a good theoretical grounding in their subjects.

Brademas says, for example, that the type of engineering curriculum he has in mind for technicians would roughly approximate the first 2 years of a full engineering course. The mechanical technology curriculum suggested by the Division of Vocational Training follows the full engineering course to some extent, but offers less than half as many hours of mathematics, while putting heavy emphasis on specialized courses. The date for the hearing has not been set, but it is expected to take place in the latter part of May.—D. S. GREENBERG

Announcements

A federal system of **regional technical report centers** has been established to increase the accessibility of unclassified scientific and technical reports produced by the Department of Defense, the National Aeronautics and Space Administration, and the Atomic Energy Commission. Planning and operation of the system will be the responsibility of the Department of Commerce's Office of Technical Services; funding and other assistance will be provided by the National Science Foundation through its Office of Science Information Service.

The 12 institutions where they are situated are Georgia Tech; M.I.T.; John Crerar Library, Chicago; Southern Methodist University; University of Colorado; Linda Hall Library, Kansas City, Mo.; U.C.L.A.; Columbia University; Carnegie Library of Pittsburgh; University of California (Berkeley); University of Washington; and the Library of Congress.

Television

Sixty Hours to the Moon, ABC-TV; 29 April, 7:30 P.M. (E.D.T.). Outline of America's future space exploration. Astronauts Glenn, Shepard, and Carpenter, along with various space scientists, will preview Carpenter's forthcoming three-orbit flight, the 18-orbit flights scheduled for late fall and 1963, the two-man, week-long Gemini space voyages, and the three-man Apollo moonshot. Latest developments on re-entry, rocket engines, fuels, medical problems, and weather and communication satellites will be explained.

Meeting Notes

The Diabetic Institute of America is soliciting original articles on **industrial, medical, and scientific aspects of diabetes** for presentation at the East-West Diabetic Workshop, to be held 27 to 30 May in Chicago. (B. R. Hurst, 1646 Pittsfield Bldg., 55 E. Washington, Chicago 2)

An advanced study institute on **algae and man**, sponsored by the North Atlantic Treaty Organization, will be held from 22 July to 11 August in Louisville, Ky. The NATO institute, the first

to be held in the United States, will cover taxonomy, cytology and genetics, physiology and biochemistry, ecology, primary productivity and algae culturing; and the impact of algae on human activities. (Daniel F. Jackson, Potamological Institute, University of Louisville, 3005 Upper River Rd., Louisville 7)

Technical papers on any phase of **communications** are being solicited for presentation at the 2nd Canadian Symposium on Communications, sponsored by the Institute of Radio Engineers. Deadline for submission of 350-word summary, subject title, and short biographical note: 1 June. (IRE, 1 E. 79 St., New York 21)

Courses

The following **summer courses** will be offered at Case Institute of Technology:

Relation of systems engineering to process control theory (4–22 June); applicants should have background in mathematics, including linear differential equations.

Application of digital techniques to military and engineering control problems (18–29 June); the science of logical design of such control systems will be stressed.

Theory and techniques for applying tunnel diodes in electronic circuits (20–31 Aug.); prerequisites include background in transistor and physical electronics. (CIT, University Circle, Cleveland 6, Ohio)

The University of Michigan's **engineering summer conferences**—a series of 26 intensive, 1- and 2-week non-credit courses in rapidly developing fields of technology—will begin during June. A descriptive brochure is available on request. (R. E. Carroll, Engineering Summer Conferences, Univ. of Michigan, Ann Arbor)

Teachers and research workers desiring an intensive introduction to **celestial mechanics** are invited to attend the 1962 Summer Institute in Dynamical Astronomy, to be held from 25 June to 3 August in New Haven, Conn. Tuition for selected participants from industry is \$100 per week; tuition is free for those from government. Accepted college and university teachers will receive stipends based on the number of

weeks in attendance and number of dependents. Deadline: *1 June*. (Dirk Brouwer, Yale University Observatory, Box 2023, New Haven, Conn.)

The following **audio-visual conference and workshops**, designed for teachers, consultants, and audio-visual coordinators, will be held during June at Indiana University:

Self-instructional materials workshop (11–15 June); will cover commercially programmed instructional materials.

Educational media conference (25–26 June) and *workshop* (25–29 June); will stress the use of educational television and related audio-visual materials in effective classroom presentation. The conference may be attended separately or as a part of the workshop.

A \$5 registration fee for each workshop will be charged participants who are not enrolled for credit; there is no fee for the 2-day conference. (Mendel Sherman, Audio-Visual Center, Indiana University, Bloomington)

Scientists in the News

Frederick Seitz, chairman of the department of physics at the University of Illinois since 1951, has been elected president of the National Academy of Sciences–National Research Council. Seitz, also vice-chairman of the Defense Science Board, served as science adviser to NATO from 1959 to 1960. He succeeds **Detlev W. Bronk**, NAS president since 1950, who will continue as president of the Rockefeller Institute.



Frederick Seitz

William J. Darby, professor and head of the biochemistry department at Vanderbilt School of Medicine, has received the American Institute of Nutrition's 1962 Osborne and Mendel award of \$1000 for his work on anemias and metabolic pathways of folic acid.

Albert H. Coons, an American Heart Association career investigator at Harvard Medical School, will receive the 1962 Passano Foundation award of \$5000 for his development of fluorescent antibodies.

Humberto Fernandez-Moran, former head of the department of biophysics at the University of Caracas and founder-director of the Venezuelan Institute for Neurology and Brain Research, has been appointed professor of biophysics at the University of Chicago.

Recent staff appointments at Weinschel Engineering Company in Kensington, Md., manufacturers of microwave test equipment:

John E. Ebert, former vice president and chief microwave engineer for FXR, Inc., of Woodside, N.Y., has been named vice president in charge of research, development, and engineering.

John W. Sachs, chemical engineer with the Naval Ordnance Laboratory, has been named head of the physical chemistry section.

The following are recipients of the Atomic Energy Commission's \$5000 E. O. Lawrence awards for 1962:

Andrew A. Benson, University of California (Los Angeles); biochemistry.

Richard P. Feynman, California Institute of Technology, Pasadena; physics.

Herbert Goldstein, Columbia University, New York; reactor science.

Anthony L. Turkevich, University of Chicago; chemistry.

Herbert F. York, chancellor, University of California (San Diego), La Jolla; nuclear applications.

Edward DeLaney, of Union Carbide Chemical Company, has been named head of the space physics department of Astrosystems, Inc., a New Jersey firm engaged in design and production of space environment simulation systems and rocket engines. **John J. Nichol**, of Thiokol Chemical Corporation, has been appointed senior physicist in the department.

Russell R. Johnston, former project engineer for Statham Instruments, has been appointed research physicist for Data Sensors, Inc., in Gardenia, Calif.

Richard H. Wilhelm, head of the department of chemical engineering at Princeton University, will present the Peter C. Reilly lectures at the University of Notre Dame during the week of 13 May.

Charles B. Huggins, professor of urology at the University of Chicago, is the first recipient of the New York Academy of Medicine's \$2000 Ferdinand C. Valentine award.

At the April meeting of the Metallurgical Society of AIME:

William O. Philbrook, of Carnegie Institute of Technology, received the first Charles H. Herty, Jr., award for his paper on kinetics of basic oxygen steelmaking.

Robert Durrer, of Gerlafingen, Switzerland, won the acid converter and basic oxygen steel committee prize for his work in the field.

John D. Price, of Colorado Fuel and Iron Corp., Pueblo, won the first Joseph Becker award for his work in coal carbonization.

Carroll V. Newsom, mathematician and former president of New York University, has been elected president of Educational Services Incorporated in Watertown, Mass., a nonprofit organization devoted to research and development in education. He succeeds **James Webb**, who resigned when appointed administrator of the National Aeronautics and Space Administration.

Recent Deaths

George F. Reddish, 67; chief bacteriologist with Warner Lambert Pharmaceutical Company in St. Louis, Mo.; 17 Apr.

Sharat K. Roy, 64; specialist on meteorites and volcanoes and chief curator at Chicago Natural History Museum since 1947; 17 Apr.

Albert M. Weber, 65; retired geophysicist for Coast and Geodetic Survey; 15 Apr.

Erratum: In a news article on 23 March (p. 1051) it was erroneously stated that the International Institute of Arts and Letters is not listed in the *World of Learning*, a directory of learned societies. The institute was first listed in the 1959–60 edition and has been included in the two succeeding editions.