raphy at Ohio State University; 29 Nov. JOHN T. MILLEN, Detroit, Mich.; 72; retired director of the Detroit Zoo; 7 Dec

ARTHUR S. PEARSE, Durham, N.C.; 79; retired professor of zoology at Duke University; 11 Dec.

DONALD S. PISTON, Fresno, Calif.; 56; head physicist at the Twining Laboratories; 30 Sept.

HORACE S. UHLER, Meriden, Conn.; 84; professor emeritus of Physics at Yale University; 6 Dec.

FORBES B. WILEY, Granville, Ohio; 76; professor emeritus of mathematics at Denison University; 14 Dec.

## Education

■ The National Science Foundation has awarded \$303,000 to the Massachusetts Institute of Technology to support a 2-year study of physical-science teaching in secondary schools. Some of the foremost physical scientists of the United States will serve on an MIT-sponsored committee, under the direction of Jerrold R. Zacharias, professor of physics at MIT.

The committee will make an intensive effort to improve presentation of highschool subject matter in the physical sciences. The group will examine all possible means of improving instruction in the area, realizing that this may lead to preparation of new textbooks, new laboratory manuals, new experimental equipment, new teaching techniques, and extensive use of films. The committee will be aided by leading members of the faculties of the California Institute of Technology, the University of Illinois, and Cornell University, as well as by representatives from the Bell Telephone Laboratories, who will attempt to outline materials necessary to accomplish the objectives of the project.

James R. Killian, Jr., president of M.I.T., will be chairman of a larger group, composed of scientists, high-school administrators and teachers, representatives of state departments of education, and others, to advise, and make recommendations on problems of acceptance and distribution.

■ Steps involved in establishing and operating an educational television station are outlined in a new booklet just published by three national organizations involved in the development of educational television in this country: the Educational Television and Radio Center, Ann Arbor, Mich.; the Joint Council on Educational Television, Washington, D.C.; and the National Association of Educational Broadcasters, Champaign—Urbana, Ill. Entitled Educational Television for Your Community, the booklet gives costs

of establishing an educational station, offers case studies of present stations, and indicates staff needs for ETV units. Copies of the booklet may be obtained by writing to the Educational Television and Radio Center, Ann Arbor, Mich.

■ Each year, under the program of the International Association for the Exchange of Students for Technical Experience, U.S. industries are asked for summer industrial placements for foreign science and engineering students. The request is made by the Institute of International Education as the administering agency for the IAESTE program. Placements include a maintenance allowance for the foreign student and a nominal administrative fee to cover program costs. Since the IAESTE program is reciprocal, the number of placements offered by American business to foreign students determines in general the number of American students who will have the opportunity to train abroad.

Last summer, 45 U.S. firms received 75 students from abroad, while 58 American students of science and engineering trained in 13 European countries. The U.S. IAESTE National Committee met early in the fall at the Institute of International Education to evaluate the 1956 program and to make plans for increased activity in 1957.

Reports on the program indicate that American participation increased markedly during the year since the committee's establishment. Although the increase is a substantial one, American participation is still far below that of the leading European countries. The committee voiced the hope that there would be even greater participation in the program by American industry in 1957.

Under this program, in which 22 countries participate, students are sent abroad for training in industry during their summer vacations. In 1956, more than 2500 industries in these countries provided training for more than 5700 visiting students from other member countries.

U.S. colleges are asked to nominate American students of engineering and the sciences who wish practical training abroad. Each applicant must have completed his third year of study, must have had practical experience in this country, and must be able to pay for his international travel. Endorsement by an official of the candidates' schools is required with regard to the students' general and technical qualifications. The 58 U.S. students who trained abroad in 1956 represented 24 American colleges.

The 75 foreign students who trained with American firms last summer came from the following European countries: Austria, Belgium, Denmark, Finland, France, Germany, Great Britain, Italy,

the Netherlands, Norway, Spain, Sweden and Switzerland. The 58 American students trained in these same countries.

A pamphlet describing the program is available from the Institute of International Education. Industries interested in this exchange are advised to address their requests to: Secretary U.S. IAESTE Committee, Institute of International Education, 1 E. 67 St., New York 21, N.Y.

■ A gift of \$500,000 toward founding a medical library has been received by the Albert Einstein College of Yeshiva University. The donation came from the D. S. and R. H. Gottesman Foundation in memory of the late D. Samuel Gottesman, who was president of Gottesman and Company, pulp and paper merchants, and of Central National Corporation, investment bankers.

Construction of the three-story library building, which will cost \$1 million, will begin early next spring on the medical school's 16-acre site in the Bronx. It is scheduled to be completed before the opening of the college's third academic year in September 1957.

The D. Samuel Gottesman Library, as it will be known, will have shelving for 200,000 volumes. The building will include a reading room that will accommodate 150 people, reading corrals, special study-typing rooms, and a current periodical room, as well as two below-level stack floors for books and periodicals.

The library will serve as a reference center for physicians in the Bronx-West-chester area. It will also be the repository of a historical collection dealing with the contributions of Jewish physicians and scientists to the development of medical knowledge.

## Grants, Fellowships, and Awards

- Seven national awards in engineering education will be given by the American Society for Engineering Education at its 1957 annual meeting at Cornell University, 17–21 June. Competitions for all the awards are now open, and nomination blanks are ready for distribution. The seven awards are as follows:
- 1) The Lamme award, given annually to an engineering educator for distinguished achievements contributing to the advancement of the profession. This is the Society's oldest award and its highest honor.
- 2) The George Westinghouse award, an annual \$1000 prize for distinguished contributions to teaching engineering students. The Westinghouse Award is especially intended to encourage younger men who show superior teaching ability.
- 3.) The Vincent Bendix award, a gold medal given annually for top achieve-

ment in engineering research in colleges and universities. It is to recognize contributions through original research, research administration, leadership influencing the productive research of others, and the effective application of research results to the advancement of engineering education.

- 4) The Curtis W. McGraw research award to honor young staff members for contributions through engineering college research. This \$1000 prize, to be given for the first time next year, is to recognize outstanding early research achievements and to encourage the continuance of such activity in the future.
- 5) The James H. McGraw award in technical institute education is an annual prize of \$500 presented for established achievement in technical institute education—teaching, administration, publications, and other forms of leadership.
- 6) The president's awards to young engineering teachers, given annually for papers written by young engineering teachers on a phase of engineering education. The contest seeks to encourage the participation of young teachers, 36 years or younger, in the problems of engineering education. Prizes of \$200 and \$100 are given for the two-top-ranking papers.
- 7) The engineering drawing award of a certificate for distinguished service by a member of the society's engineering drawing division. The qualifications include a record of successful teaching, improvement of the tools and conditions for teaching, scholarly contributions to engineering drawing, and service to the Division.

The society's awards are given to winners selected, in each case, by special committees assigned to study the records of each nominee. Further information and blanks for nominations are available from the secretary of the society, Prof. W. Leighton Collins, University of Illinois, Urbana, Ill.

■ The Earth Sciences Program of the National Science Foundation is now receiving proposals for research grants that will be made in June and July 1957. The deadline date for receipt of applications is 8 Feb. 1957.

There are no formal application blanks, but an NSF pamphlet describes application procedure, including an outline of the information needed in a proposal. This pamphlet may be obtained by writing to the National Science Foundation, Washington 25, D.C., Attention: Earth Sciences Program.

■ The mycological herbarium of Dr. Gertrude Simmons Burlingham, consisting of some 10,000 collections of Russula, Lactaria, and other genera of fleshy Basi-

diomycetes, and her library of books and pamphlets on fungi were bequeathed to the New York Botanical Garden in 1952. Under the will of her friend and executrix, Miss Gertrude Sturges, the Garden is to receive an endowment for the Gertrude S. Burlingham scholarship in mycology, assuring the continuation of this scholarship first offered in 1956. No appointment will be made for 1957, but under present plans the scholarship will subsequently be awarded annually.

■ The National Science Foundation will award individual grants to defray partial travel expenses for a limited number of American scientists who wish to participate in the 30th session of the International Statistical Institute and in the Congress of the International Union of the Scientific Study of Population. These two congresses are scheduled to meet in Stockholm, Sweden, 8–15 Aug. 1957.

Application blanks may be obtained from the National Science Foundation, Washington 25, D.C. Completed application forms must be submitted by *1 Mar.* 1957.

## In the Laboratories

- Vitro Engineering Division of New York, a division of the Vitro Corporation of America, has received a contract for engineering services on a CP-5 nuclear reactor research facility to be built in Milan, Italy. The reactor will be a heavy water plant using enriched uranium as fuel. It will be of the same type as the CP-5 reactor operated by the Atomic Energy Commission and Argonne National Laboratory at Lemont, III.
- The 26th session of the Norelco X-ray Diffraction School for research and industrial registrants who can visit the New York City area will be held at the plant of North American Philips Company, Inc., 750 S. Fulton Ave., Mount Vernon, N.Y., during the week of 4–8 Feb. Registration for the school will be limited to 125 for the first 4 days and to 150 on Friday, the day devoted to actual application problems when guest speakers discuss methods currently in use by researchers and industrial plants. It is recommended that those planning to attend the February meetings make their reservations at the earliest possible date. There is no registration fee.
- On 20 Nov. the library of the Ortho Research Foundation, Raritan, N.J., was dedicated to Carl G. Hartman, director emeritus of the foundation. On this occasion, George W. Corner delivered an address on "Reprints, their use and abuse."

## Miscellaneous

■ Tetrahedron, an international journal of organic chemistry, has been announced by the chairman of the honorary editorial board, Sir Robert Robinson of Great Missenden, Bucks., England. Contributions will be printed in English, French, or German. Original memoirs of an experimental or theoretical nature will be accepted, in addition to preliminary communications and short presentations of stimulating ideas. Longer papers describing an extended investigation will be welcomed. It is hoped that this type of longer paper will make it easier for the reader to become acquainted with the results of the work of his colleagues in other countries.

The international character of the new periodical will be emphasized, for the publication is not intended to compete with existing national journals; the aim will rather be to complement them. It is hoped that a special feature will be the publication in English, French, or German of outstanding research work that has already appeared in another language, such as Russian, Czech, Hungarian, Chinese, or Japanese. In this connection, mere translations are not contemplated but rather a synthesis of older matter with additions of newer results.

Tetrahedron is intended to cover all aspects of organic chemistry, whether theoretical or practical, analytic or synthetic, physical or biological. Papers on applied chemistry that have a pure organic chemical content will be acceptable in many cases.

Honorary regional editors are as follows: Dr. M. S. Kharasch, Department of Chemistry, University of Chicago, Chicago 37, Ill., U.S.A.; Prof. R. H. Martin, Laboratoires de Chimie Organique, Université Libre de Bruxelles, 50 Ave. F. D. Roosevelt, Brussels, Belgium; and Academician A. N. Nesmeyanov, Academii Nauk SSSR, Bolshaya Kaluzkskaya 14, Moscow, U.S.S.R. The executive editor is Emeritus Professor H. Stephen, O.B.E., D.Sc., F.R.I.C.

■ A cross section of the recently discovered pine tree that probably attained the greatest age of anything that ever lived on earth [Science 124, 884 (2 Nov. 1956)] has been offered to the American Museum of Natural History for exhibition in the Hall of North American Forests that is to be opened late next year. The 4000-year old bristlecone pine from which the section will be cut was discovered by Edmund Schulman, dendrochronologist of the University of Arizona Laboratory of Tree-Ring Research, who has announced his intention to present the section to the museum.