partment at Marquette University; authority on earthquakes; 12 Dec.

MARTIN GIL, Buenos Aires, Argentina; 86; astronomer; 9 Dec.

HORACE P. LIVERSIDGE, Bryn Mawr, Pa.; 77; electrical engineer; 9 Dec.

EGAS MONIZ, Lisbon, Portugal; 81; developer of cerebral angiography and prefrontal leucotomy; 1949 winner of the Nobel prize for medicine for having been the first man to cure a mental disorder by surgical operation; professor of neurology at the University of Lisbon from 1911–44; 13 Dec.

WOLFGANG PAULI, Zurich, Switzerland; 85; colloid chemist; professor emeritus, University of Vienna, Vienna, Austria; 4 Nov.

ROBERT E. SHELBY, Teaneck, N.J.; 49; vice-president and chief engineer of the National Broadcasting Company, New York; pioneer in the development of television; 9 Dec.

HERMANN WEYL, Zurich, Switzerland; 70; mathematician; one of the founders of the Institute for Advanced Study, Princeton, N.J. and professor emeritus since his retirement in 1951; author of many books, he was also recognized as an eminent historian in the philosophy of science; 8 Dec.

Education

■ The Atomic Energy Commission and the National Science Foundation have announced joint sponsorship with the American Society of Engineering Education of a special Summer Institute on Nuclear Engineering for engineering college faculty members. The AEC has approved use of the Argonne Laboratory School of Nuclear Science and Engineering for the institute, which will continue for 2 months beginning the latter part of June. Courses will be given in nuclear physics, nuclear engineering, metallurgy, instrumentation and other subjects. Sixty students will be enrolled.

NSF has approved establishment of a fund to provide cost-of-living stipends of about $600 to those attending the institute and to defray their travel expenses. These funds will be administered by Northwestern University. The American Society for Engineering Education will arrange for the selection of the students and make the necessary housing arrangements.

Purpose of the institute is to broaden the nation's educational base in atomic energy by equipping more college faculty members to teach students of nuclear sciences. In addition to the need for more fundamental-research scientists in nuclear energy, the AEC estimates that the developing American civilian atomic energy industry will create an annual demand for nearly 2000 trained nuclear scientists and engineers during the next 3 years and that the demand after that period will be even greater.

It will be the policy of the institute to accept from a single university or college two to four faculty members representing various engineering fields. This policy will permit spreading nuclear technology into the existing disciplines and make possible a better integrated program of nuclear training in the schools. No tuition will be charged. Inquiries concerning enrollment may be addressed to the Dean of Engineering, Northwestern University, Evanston, Ill. Applications must be submitted *by 1 Mar.*

■ The University of Wisconsin will build an $800,000 addition to Sterling Hall on the Madison campus to house the Mathematics Research Center of the U.S. Army. The general objective of the center is to ". . . provide a nucleus of highly qualified mathematicians who will carry on investigations in mathematics of interest to the Army and who can be called upon for advice on specific problems beyond the capability of Army facilities. In addition to fulfilling an Army need, the center will aid the national effort in mathematics research and will increase the availability of trained mathematicians."

R. E. Langer, professor of mathematics, will be the first director of the center. Investigations to be carried on at the center will be primarily concerned with four general fields: mathematical analysis and applied mathematics; statistics and probability; numerical analysis and the technology of high-speed electronic computing machines; and operations research, decision theory, optimization problems, and programming.

■ Sets of 156 drawings to enable schools in tropical countries to build low-cost science teaching laboratories have just been issued by UNESCO. The drawings cover equipment needed in primary and secondary science teaching and in the training of science teachers. They are intended to be particularly useful to countries that are short of science teaching equipment and lack foreign exchange to import apparatus, yet which have craftsmen and vocational schools where the equipment might be manufactured locally at low cost.

■ The 23rd session of the Norelco X-ray Diffraction School will be held at the North American Philips Company, Inc., 750 South Fulton Ave., Mount Vernon, N.Y., during the week of 30 Jan.–3 Feb. Registration 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.

On Monday through Thursday, the sessions will be devoted to extensive classroom and laboratory work during which participants discuss their own problems and become familiar with the use of the various types of equipment. The basic subjects to be considered include x-ray diffraction, diffractometry, and spectrography. There will also be discussion of new high- and low-temperature camera techniques, electron microscopy, and electron diffraction.

Application for attendance at the three Norelco X-ray Diffraction Schools held last year far outnumbered the available accommodations. It is recommended that those planning to participate in the coming meetings make their reservations at the earliest possible date. There is no registration fee.

Grants, Fellowships, and Awards

■ The American Therapeutic Society has announced its annual Oscar B. Hunter memorial award contest. The award is made in recognition of an outstanding contribution or series of contributions to therapy by an individual or a team of workers. The term *therapy* is used in a broad sense to include the use of any drugs, procedure, or device of benefit in the treatment of patients.

One object in making the award is to bring recognition to those who have not received awards for their work. The award consists of a bronze medal engraved with the name of the recipient. The winner will be expected to deliver a paper when the award is presented at the society's annual meeting; this paper must cover the work that forms the basis for the honor. Travel expenses to the meeting will be furnished.

The deadline for receiving nominations is *1 Feb. 1956.* For information write to the chairman of the award committee, Harry E. Ungerleider, 393 Seventh Ave., New York 1.

■ Grants from the Permanent Science Fund of the American Academy of Arts and Sciences are made in support of research in any field of science whatsoever in amounts that ordinarily do not exceed $1500. Applications for grants to be made next March *should be filed by 1 Feb.* on forms available from the Chairman, Permanent Science Fund Committee, American Academy of Arts and Sciences, 77 Massachusetts Ave., Cambridge 39, Mass.

Special consideration will be given to projects on new frontiers of science, those that lie between or include two or more of the classical fields and those proposed by investigators who may be on