of the coordinating council of natural history activities at the Museum of Natural History; past president of the American Nature Study Society; 26 Jan.

ROBERT CHARR, Philadelphia, Pa; 52; specialist in internal medicine; assistant professor of medicine at Jefferson Medical College; 29 Jan.

HORTENSE P. DRAPER, Hastings-On-Hudson, N.Y.; 82; lecturer on conservation, who had been active in furthering related legislation; 27 Jan.

NATHANIEL FUCHS, Newark, N.J.; 57; research chemist for the General Aniline and Film Corporation, Linden, N.J.; 25 Jan.

FRED W. HOWARD, Burlingame, Calif.; 71; structural engineer; 27 Jan.

R. H. JESSE, Missoula, Mont.; 72; vice president emeritus and professor emeritus of chemistry at Montana State University; 23 Dec.

HENRY SCHRECK, Queens, N.Y.; 75; retired mechanical engineer; 29 Jan.

CHARLES E. TAYLOR, Los Angeles, Calif.; 87; designer and builder of the airplane engine used by the Wright brothers in their Kitty Hawk, N.C. flight; 30 Ian.

JOHN W. TETER, Chicago, Ill.; 48; director of catalysis research for the Sinclair Research Laboratories, Inc.; member of the advisory board of the AAAS Gordon Research Conferences; 26 Jan.

## Education

- A major expansion of clinic and research facilities has begun in the dental school at the Northwestern University Medical Center, Chicago. Two new clinics, one designed especially for treatment of handicapped children, are under construction and two research laboratories are being extensively remodelled. A third clinic has just been completed.
- The University of Tampa, with the aid of a \$300,000 3-year contract with the United States Government under the Point IV Program, has established an aircraft technical school in San Julian, Cuba. An American teaching staff has been obtained by the university.
- A plan to increase the supply of highly qualified high-school science teachers by enabling them to increase their annual incomes has been devised by Arthur D. Little, Inc., Cambridge, Mass., in conjunction with the Lexington (Mass.) School Committee. Under the "Lexington Plan," ADL will find two new graduates with bachelor's degrees in chemistry, physics, biology, or mathematics (fields in which the company is interested) who will be given 3-year contracts to fill one high-school science teacher's

position in the Lexington High School.

At the end of the contract they will be qualified for full-time teaching, and consequently, will not be hired on a full-time basis by ADL. If the two candidates need education courses to qualify for teaching, the Arthur D. Little Foundation will provide scholarships for such work during the first summer.

One of the pair will teach during the first semester, and the other during the second semester. Each of them will work at ADL in their respective fields for the rest of the calendar year. Since the Lexington school system will pay the two teachers for their work at the usual rate for those with such qualifications and the company will apply its customary salary scale, the total annual income will be considerably above that possible for beginning teachers. At the end of the 3 years, these teachers will have enough training to enable them to work every summer at ADL or some other company while teaching full time, and so they will always be able to earn a higher rate than they could by teaching alone.

Raymond Stevens, senior vice president of ADL, conceived the idea and asked a committee consisting of Sanborn C. Brown of Massachusetts Institute of Technology, James M. Jagger, and Austin W. Fisher, Jr., both of ADL, to implement the plan. This committee worked out details with John Blackhall Smith, Superintendent of Schools in Lexington, and George P. Wadsworth of MIT, chairman of the Lexington School Committee. It is hoped that similar arrangements can be made with other nearby school systems as soon as possible.

■ The University of Michigan's College of Engineering has established what is perhaps the first general program in applied meteorology. There are now five professional meteorologists at the university participating in various phases of teaching and research: Frank R. Bellaire; A. Nelson Dingle; Floyd C. Elder; Gerald C. Gill; and E. Wendell Hewson. The program is centered, for administrative purposes, in the department of civil engineering, Earnest Boyce, chairman, and is under the supervision of E. Wendell Hewson, professor of meteorology.

The program features studies in which weather and climate play an important part. A recent grant by the National Institutes of Health of \$325,000 for a 5-year study of atmospheric pollution by aeroallergens brings together in a cooperative effort specialists in medicine, meteorology, botany, ecology, biochemistry, and public health.

Other research is in progress on various phases of meteorology: penetration of particulates into buildings, dynamic wind loading of structures, and industrial air pollution. A large part of the re-

search is sponsored by private industry.

Eleven courses in theoretical and applied meteorology are offered and further courses are planned. The graduate school has established a program of study leading to the degree of master of science in meteorology.

■ Brandeis University has announced the initiation of a graduate program in physics leading to the M.A. and Ph.D. degrees. Fellowships and teaching assistantships are available to qualified students. Inquiries should be addressed to the Chairman of the Graduate School of Arts and Sciences, Brandeis University, Waltham 54, Mass.

## Grants, Fellowships, and Awards

■ The Donner Foundation, Philadelphia, has announced that it will donate 12 Van de Graaff x-ray generators to hospitals and clinics for treatment of deepseated cancers. The machines, valued at \$68,500 each, are 2-million-volt x-ray generators developed and manufactured by High Voltage Engineering Corporation, Cambridge, Mass. Each institution to receive the equipment must provide the necessary physical facilities and operators, and must pay for installation. Recipient hospitals will provide treatment with the machine on a nonprofit basis. The primary goal in the program is to make advanced therapy available to as many cancer patients as possible.

Delivery of the equipment, at the rate of one generator a month, will begin late in 1956. All of the machines should be installed and in use by the end of 1957. Tentative selection of the recipient institutions has already been made; final determination will be announced within 3 months. The determination will be based upon the needs of the various population areas and upon the interest and experience of the radiological groups that would be available in those areas.

■ An annual award of \$250 has been established by Henry and Ida Schuman of New York for an original prize essay in the history of science and its cultural influences. This competition is open to undergraduate and graduate students in any American or Canadian college, university, or institute of technology. Papers submitted for the prize competition should be approximately 5000 words in length, exclusive of footnotes, and thoroughly documented. It is hoped that the prize-winning essay will be suitable for publication in *Isis*, the journal of the History of Science Society.

It is the wish of the donors that "history of science and its cultural influences" should be broadly interpreted. The papers—which should in each case

be original contributions to learningmay deal with the ideas and accomplishments of scientists in the past; they may trace the evolution of particular scientific concepts; or they may study the historical influences of one branch of science on another. The phrase "cultural influences" is taken to include studies of the social and historical conditions that have influenced the growth of science, or the effects of scientific developments on society in the realms of philosophy, religion, social thought, art and literature, economic progress, and so forth. Essays dealing with medical subjects are not acceptable, although papers dealing with the relationships between medicine and the natural sciences will be welcomed.

Papers submitted for competition should be sent to the chairman of the prize committee, Prof. Charles C. Gillispie, Department of History, Princeton University, Princeton, N.J. Papers must be received on or before 1 June.

## In the Laboratories

■ Nearly 4000 curies of cobalt-60 has been installed at the General Mills Research Laboratories, Minneapolis, Minn., to be used in studies of foods and chemicals. The material was shipped by truck from the Oak Ridge National Laboratory in a 6000-pound lead container.

The only major cobalt source in the area and one of the largest in the country, its radiation energy is equivalent to about 6000 grams of radium. The cobalt will be kept submerged under a shield of 12 feet of water in a 4- by 6-foot well. Material to be irradiated will be placed on the bottom of the well adjacent to the cobalt

Installation of the material involved lowering the 3-ton lead container through a hatch in the roof of a small building built over the well, and to the bottom of the well. Then, six stainless steel "pencils," ½ inch in diameter and 9 inches long, each containing 56 cobalt disks, were removed from the container and placed in mechanical holders in the well. When it is necessary to remove the water from the well, as for maintenance or repair work, the cobalt pencils may be lowered into a 3-inch stainless steel pipe that extends another 12 feet below the bottom of the well.

■ Assignment of additional development and production work to the Atomic Energy Commission's Mound Laboratory in Miamisburg, Ohio, will require about \$1,300,000 in new equipment and plant changes, as well as increased employment. Advance notices will be sent to prospective bidders asking for sealed proposals on the construction work as soon

Since its establishment in 1948, Mound Laboratory has been operated for the AEC by Monsanto Chemical Company. The laboratory will continue to

as plans and specifications are available.

pany. The laboratory will continue to conduct classified research on production processes in the nuclear field and will undertake development and production in another field.

■ On 1 Feb. Lucius Pitkin, Inc., metallurgical chemists and consultants, New York, took over the operation of the Atomic Energy Commission's domestic uranium ore buying program for the western United States. The 160 persons who have been working on the program remained in their positions but changed employers. The group's responsibilities include the buying, receiving, weighing, sampling and assaying of domestic uranium and vanadium ores and concentrates in all western states.

Ore buying stations are scattered in strategic locations in the radioactive minerals country at Monticello, Marysvale, Moab and White Canyon, Utah; Edgemont, S. Dakota; Globe and Tuba City, Ariz.; Riverton, Wyo.; and Grants, N.M. In addition to operating these stations Pitkin is operating the concentrate sampling plant and assaying laboratory at Grand Junction, Colo.

■ The Atomic Energy Commission's Isotopes Division has been placed under the Division of Civilian Application and has been designated the Isotopes Extension. The Isotopes Extension will remain at Oak Ridge, Tenn., and Paul C. Aebersold will continue as director.

## Miscellaneous

■ Papers and abstracts of the conference for management on "The place of the atom in your business," which was sponsored by the Cleveland Engineering Society in December in conjunction with the Nuclear Congress, are now available from the society in the form of a special issue of Cleveland Engineering. At the conference eight authorities considered how far and in what direction industry should move in the atomic field.

The speakers were Lewis L. Strauss, Clinton P. Anderson, Charles Robbins, Eugene Zuckert, L. R. Zumwalt, Richard S. Morse, A. W. Meyer, and O. B. Falls, Jr. Copies of the special issue may be ordered from the Cleveland Engineering Society, 2136 E. 19 St., Cleveland 15, Ohio, and will be available in any quantity at \$1 a copy.

■ The Air Force Armament Center at Eglin Air Force Base is at present expanding and there is urgent need for physicists, mechanical engineers, ballistic experts, and, especially, electronic engineers. The center has recently been given the responsibility for the development of aerial munitions, including guns, bombs, rockets, fuzes, guided missile warheads, and related equipment, exclusive of nuclear weapons.

The positions that are available are primarily for those qualified for Civil Service grades between and including GS-5 and GS-14. Applicants chosen in these grades may expect to receive from \$3,670 to \$10,320 annually. Interested persons should send a standard Federal employment Form 57 to the Civilian Personnel Office, 3201st Air Base Wing, Eglin Air Force Base, Fla.

- The Microcard Foundation at the University of Wisconsin has announced the publication on microcards of the unclassified reports of the U.S. Atomic Energy Commission from 1947 through 1954. The AEC microcard reports cover nearly 10,000 cards—approximately half a million pages of print. The unclassified reports of AEC for 1955 are now being prepared for card publication. It is expected that they will be available by spring.
- The Eastern Psychiatric Research Association is a newly organized association of psychiatrists chartered in New York State. The protocol of this new organization's aims and purposes includes the following: "To initiate, encourage and foster research in psychiatry and related fields of medicine; . . . to stimulate scientific study and research into the nature and development of human behavior; to organize and coordinate public and private research and efforts in the application of sound principles of phychiatric knowledge; . . . to encourage the exchange of scientific knowledge and information in all fields of medicine and especially in the field of psychiatry and mental hygiene.'

The first president is David Impastato of New York; the vice president is Leo Alexander of Boston; and Theodore R. Robie, of East Orange, N.J., is secretary-treasurer. The association will hold four meetings per year, including the annual meeting in October. At that meeting, an incentive prize will be awarded for the presentation of the best scientific report. Official transactions will be published in Diseases of the Nervous System.

■ The Upjohn Company, Kalamazoo, Mich., has introduced SCOPE Weekly, a new weekly newspaper for physicians. Printed by offset process in tabloid-size format, SCOPE carries medical news, feature articles, and illustrations. It presents reports on medical meetings, research laboratories, and medical publishing.