tion and development of the Photon type-composing machine.

JACQUES Y. P. SEJOURNET, managing director of Comptoir Industriel d'Etirage et Profilage de Metaux, Persan, France, also received a John Price Wetherill medal for his invention of the Ugine-Sejournet extrusion process for metals, which stressed the utilization of glass as a lubricant.

RICHARD Y. CASE, assistant manager and chief engineer for the power transmission department, United States Rubber Company, received an Edward Longstreth medal for his invention of a timing belt for precision timing among shafts of industrial machines.

CARLETON K. STEINS, a mechanical engineer for the Pennsylvania Railroad, received the George R. Henderson medal for inventions that have contributed to the progress and efficiency of the railroad transportation system.

The following are among those who have received honorary doctoral degrees.

McGill University, Montreal: J. B. COLLIP, dean of medicine at the University of Western Ontario and director of the division of medical research, Canadian National Research Council; отто MAASS, a principal research officer in the division of pure chemistry of the Canadian National Research Council; E. G. D. MURRAY, bacteriologist, research professor at the University of Western Ontario.

Lehigh University: HOWARD A. RUSK, chairman of the department of physical medicine and rehabilitation of the New York University–Bellevue Medical Center.

The following appointments to assistant professor have been announced. State University of Iowa: IAIN MACLEAN SMITH and JACK M. MARTT, internal medicine.

Necrology

SIEGFRIED BLOCK, New York, N.Y.; 73; neurologist and psychiatrist; instructor in nervous and mental diseases at Long Island Medical College; advocate of children's courts; 18 Oct.

LEWIS R. BURDICK, Silver Spring, Md.; 54; senior fuels engineer with the branch of bituminous coal, Bureau of Mines, Washington, D.C.; 13 Oct.

HARRY B. HUMPHREY, Los Altos, Calif.; 82; retired U.S. Department of Agriculture plant pathologist; 13 Oct.

CARL R. MOORE, Chicago, Ill.; 62; chairman of the department of zoology at the University of Chicago; international authority on the biology of sex; 1943 vice president for AAAS Section F --Zoological Sciences; 16 Oct.

GEORGE T. RENNER, Leonia, N.J.; 55;

professor of geography at Teachers College, Columbia University; author or co-author of 19 books and numerous papers and pamphlets; 14 Oct.

Education

The 100th anniversary of the founding of the department of metallurgy at Yale University was celebrated on 14 and 15 Oct. The convocation also marked the 50th anniversary of the university's Hammond Metallurgical Laboratory.

The Research Unit of the Blue Bird Children's Clinic for Neurological Disorders, Houston, Tex., was officially opened on 15 Oct. This unit is for fundamental research in the physiology of the nervous system. The clinic and research unit are affiliated with Baylor University College of Medicine and Methodist Hospital, Houston, Tex.

Claude Fortier has been appointed director of the laboratories of neuroendocrinology, the first section of the Research Unit to be activated. Fortier was formerly assistant professor in the Institute of Experimental Medicine and Surgery at the University of Montreal and more recently research associate in the department of neuroendocrinology at the Institute of Psychiatry, University of London. In addition to his appointment in the Blue Bird Children's Clinic, Fortier has been appointed to the faculty of Baylor University College of Medicine as associate professor of physiology.

Operation of the high-altitude wind tunnel has begun at the University of California's Engineering Field Station in Richmond. The tunnel is four times more powerful than the university's former model. Under the supervision of F. C. Hurlbut, a physicist, the new facility will be used to study the behavior of objects traveling more than six times the speed of sound at altitudes 20 to 80 miles above the earth. Support for the research program comes from the Office of Naval Research, the National Advisory Committee for Aeronautics, and the Office of Scientific Research and the Air Research and Development Command of the U.S. Air Force.

The University of Michigan has initiated a new and more liberal foreign language requirement for Ph.D. candidates. The plan will permit students in certain departments to substitute an integrated program of graduate course work—at least 9 hours—for one of the languages usually required for the doctorate. In other cases students will be permitted to substitute another foreign language for the customary French or German. Also, a student whose native language is not English, and who plans to return to his home country at the completion of his study, will be permitted to offer English as one language toward the requirement.

Individual departments of the graduate school are now submitting suggested programs of course work that might be substituted for a language. Two departments have had such programs approved —psychology and fisheries. Examples of course-work areas that have been approved in psychology are: mathematics, including statistics; anthropology; biochemistry; comparative literature; and programs in various area studies.

The new plan is in line with a general trend toward liberalizing doctoral language requirements. Institutions that have already established similar plans include Harvard University, Columbia University, the University of Chicago, and the University of Minnesota.

Grants, Fellowships, and Awards

Nominations are invited for the \$1000 Osborne and Mendel award, which was established by the Nutrition Foundation, Inc., for the recognition of outstanding accomplishments in the general field of exploratory research in the science of nutrition. It shall be given to the investigator who has made the most significant published contribution in the year preceding the annual meeting of the American Institute of Nutrition, or who has published a series of contemporary papers of outstanding significance. The award will be presented at the institute's annual meeting.

As a general policy, the award will be made to one person; however, if in the judgment of the jury of award an injustice would otherwise be done, it may be divided among two or more persons. Normally, preference will be given to research workers in the United States and Canada, but investigators in other countries, especially those sojourning in the United States or Canada for a period of time, are not excluded from consideration. Membership in the Institute of Nutrition is not a requirement for eligibility and there is no age limitation.

Nominations may be made by anyone. Nominations for the 1956 award, accompanied by data relative to the accomplishments of the nominee, must be sent *before 1 Jan. 1956* to the chairman of the nominating committee, Dr. Otto A. Bessey, Department of Biochemistry and Nutrition, University of Texas Medical Branch, Galveston, Tex.

The School of Mathematics of the Institute for Advanced Study will allocate a small number of grants-in-aid to gifted young mathematicians and mathematical physicists to enable them to study and to conduct research at Princeton during the academic year 1956–57. Candidates must show evidence of ability in research comparable at least with that expected for the degree of doctor of philosophy. Blanks for application may be obtained from the School of Mathematics, Institute for Advanced Study, Princeton, N.J., and are returnable by 1 Jan. 1956.

• The National Wildlife Federation has announced the availability of a series of graduate fellowships and undergraduate James Hopkins scholarships in conservation education for 1956–57. Applications for these fellowships and scholarships must be on file at the office of the National Wildlife Federation, 232 Carroll St., NW, Washington 12, D.C., by 31 Dec. Applications must show approval of the project by the head of the department in which the work is to be carried out.

These fellowships and scholarships are supported in part by the sale of the Wildlife Stamps issued annually by the National Wildlife Federation, by a permanent grant yielding a limited endowment, and by other income available to the federation, the amount of which cannot be determined before the beginning of the year. Awards granted in the past have ranged from \$500 to \$1000.

■ In the first decade of its existence the Life Insurance Medical Research Fund has given more than \$7 million for research in heart and circulatory diseases. Support has been given to 247 research programs and 302 fellowships. Grants and fellowships have aided research in 110 medical colleges, hospitals, and other institutions in the United States and Canada. The awards for 1955 total \$929,400, a record high. This includes \$816,200 for 66 research grants and \$113,200 for 27 fellowships.

The Life Insurance Medical Research Fund was organized in 1945 by several life insurance companies as a means of making joint contributions to medical research; it was the first agency to devote all of its resources to the support of heart research.

During the recent 10th anniversary luncheon, it was pointed out that results in the past 10 years have been encouraging. Fruitful means of attacking heart problems have been found, whereas 10 years ago a defeatist attitude was prevalent. In 1945 few scientists were interested in studying heart disease; today a large number of experts are at work in the field.

The speakers at the anniversary luncheon included Alan Gregg, vice president of the Rockefeller Foundation, and Francis R. Dicuaide, scientific director of the fund. Dieuaide described a survey of current activities of 100 fellows whose awards were given 5 years ago and longer. About 60 percent are still engaged in research. Many of the remaining 40 percent have become heart specialists.

It also was announced at the luncheon that C. Sidney Burwell, professor of research medicine at Harvard Medical School, will be chairman of the fund's Scientific Advisory Council for 1955–56. There are three new members of the council: Louis S. Goodman, professor of pharmacology at the University of Utah; Henry A. Lardy, professor of biochemistry at the University of Wisconsin; and W. Barry Wood, Jr., vice president of Johns Hopkins University.

A full account of the work of the fund appears in the *Tenth Anniversary Report*. Copies may be obtained from the Scientific Director, Life Insurance Medical Research Fund, 345 E. 46th St., New York 17.

• The National Institute of Mental Health has announced that 15 Dec. is the closing date for filing applications for grants under the National Mental Health Act for the year beginning 1 July 1956. Grants are made in support of training programs in psychiatry, clinical psychology, psychiatric social work, and psychiatric nursing. Applications may also be made by university training centers for the support of career teacher programs for the preparation of teaching personnel in the mental health disciplines.

The deadline date for filing applications for the support of pilot and evaluation studies proposing new methods of teaching, or evaluation of teaching and training methods in the mental health disciplines, is 15 Jan. 1956. Application forms and details regarding the types of support available may be obtained from the Chief, Training and Standards Branch, National Institute of Mental Health, Bethesda 14, Md.

• The Social Science Research Council has announced the fellowships, grantsin-aid, and other appointments to be offered in 1956. Except as otherwise noted in the descriptions of certain programs, applications should be filed *not later than 9 Jan. 1956*, and awards will be announced on or about 2 Apr. 1956. Applications received after the closing date will receive attention only if time permits after consideration has been given to those previously filed. Fellowships and grants will be awarded only at the stated times, so that all applicants may compete on an equal basis.

Prospective applicants should obtain from the council the necessary application forms and detailed instructions well in advance of the closing date. In requesting these, it is essential to state age, place of permanent residence, academic status, present position or activity, and vocational aims; and to indicate briefly the nature of the training or research for which support is sought. Without all this preliminary information, it is often impossible to determine whether or not an application would be technically acceptable and, if so, which of several types of forms should be furnished. Needless correspondence can be avoided by careful compliance with this request. All communications should be addressed to the Social Science Research Council, 726 Jackson Place NW, Washington 6, D.C.

The National Foundation for Infantile Paralysis has announced that 151 students have been awarded scholarships to complete their study in physical therapy. These are in addition to 11 who received scholarship awards previously made in 1955.

The total number of physical therapy scholarships awarded by the National Foundation since 1942 is now 2365, for which almost \$3 million has been appropriated to date. The present scholarship students are residents of 34 states, the District of Columbia, and the Territory of Hawaii; they are studying in 25 schools of physical therapy.

In the Laboratories

A new section on animal care has been organized at Lakeside Laboratories, Inc., pharmaceutical firm in Milwaukee, Wis. Chief of the new section, which has been set up within the pharmacology division, is Ellsworth E. Thebert, veterinarian who recently joined Lakeside. He heads a staff of seven men.

• The Southwest Research Institute, San Antonio, Tex., has announced the creation of a new electrical engineering department that will assume responsibility for certain research areas formerly included within the organization's physics department. Chairman of the new department will be William A. Mussen, supervisor of research and development in geophysics, electronic subminiaturization, ordnance instrumentation, and industrial process equipment design.

• The Shell Chemical Corporation recently held a dedication ceremony for its new allyl chloride and chlorohydrins plant at Norco, La. The new plant makes Shell the country's largest supplier of glycerine. Two years ago the concern was making about one-fifth of the United States' output, it is now making more than one-third.

Further expansion of the plant is planned. The first addition, construction