argon at about the same time and sealed it into Plücker tubes and examined its spectrum. In 1896, he constructed platinum target x-ray tubes to be used by Lucian Ira Blake in his lectures on x-rays; he was ever ready to help a colleague. Franklin enjoyed giving lectures, particularly, when they required difficult demonstrations. He never failed, for example, to prepare nitroglycerine in his lectures on organic chemistry and he delighted in showing what it would do. His lectures on liquid ammonia were something in the way of a work of art; he carried out most difficult reactions in sealed tubes which he carried about with him on his trips. He had the rare ability to present a subject interestingly as well as logically.

If there was one quality of Franklin's that stood out above all others, it was his power of making friends; where others made acquaintances, he made friends. He valued these friendships, and nothing gave him more pleasure than to take a trip through the country to meet again his friends of old or to make new ones.

Franklin was anything but a recluse; he loved social intercourse and gloried in the activities of life. His love of nature was second only to his love of science. Mountain climbing was his favorite recreation and there are few of the higher peaks of the Rockies and the Sierras that Franklin did not climb. In his later years, when climbing mountains was out of the question, his automobile became his out-of-doors friend and companion.

In Franklin were combined many rare qualities that endeared him to his friends; he could be frank without giving offense and he could criticize without provoking rancor, his fair-mindedness was as obvious as his lack of guile and he was generous to a fault. His friends will miss his ready smile and treasure the memories of their happy associations with him.

Vale!

CHARLES A. KRAUS

RECENT DEATHS AND MEMORIALS

DR. EDWARD S. ROBINSON, professor of psychology at Yale University, died on February 24 as the result of injuries received when struck by a bicycle. He was forty-four years old.

DR. RICHARD HOOPE CUNNINGHAM, neurologist and chief of clinic in the neurological department of the Vanderbilt Clinic of Columbia University, died on February 24 at the age of sixty-one years. PROFESSOR E. S. ERB, for twenty-eight years a member of the department of agricultural chemistry at the Pennsylvania State College, died from a heart attack on February 19 at the age of fifty-nine years.

FREDERIC HEDGE KENNARD, associate in ornithology at the Museum of Comparative Zoology of Harvard University, died on February 24. He was in his seventy-second year.

RICHARD C. RADDATZ, since 1924 general assistant in the department of preparation of the American Museum of Natural History, an expert in mounting animals in habitat groups, died on February 21 in Nairobi, British East Africa. He was about fifty years old. Mr. Raddatz sailed from New York early in January with Mr. and Mrs. Philip M. Plant to collect specimens of wart hogs and ostriches for the Carl Akeley animal groups in the museum.

CRANDALL Z. ROSECRANS, assistant director and chief of the metallurgical division of the Leeds and Northrup Company, Philadelphia, died suddenly on January 7 at the age of forty years.

Nature reports the death of Professor Michael Lenhossék, emeritus professor of anatomy in the University of Budapest and president of the Hungarian Academy of Sciences, an authority on the histology of the nervous system, on January 26, aged seventy-three years, and of Dr. F. Sowerby Macaulay, known for his mathematical work, on February 9, aged seventy-four years.

THE following minute was drawn up by the Wistar Institute of Anatomy and Biology, Philadelphia, on the death of Effingham Buckley Morris: "From a long and active life in law, in finance and in the promotion of science Effingham B. Morris on January 22, 1937, passed forever from scores of devoted friends and admirers in all walks of life. To his associates in financial circles he was known for his integrity and vision in the management of affairs of magnitude; to those who knew him as a promoter of scientific knowledge he was admired for his resourceful efforts in building the institutions he administered; to those whose privilege it was to know him intimately he engendered a love and respect without limit. Members of the staff and employees of The Wistar Institute mourn the loss of a real friend; a member of the board of managers since 1915 and president of The Wistar Institute since 1922."

SCIENTIFIC EVENTS

THE COLUMBIA UNIVERSITY SCHOOL OF MEDICINE

GIFTS received by the Columbia University School of Medicine will enable it to advance its program of graduate medical education by enlarging its laboratory facilities at a cost of \$500,000. Eight floors will be added to the west wing of the building of the School of Medicine at the Medical Center. The new construction is designed to house the graduate laboratories of the departments of anatomy, pathology, biological chemistry, physiology and bacteriology.

In discussing the plans of the school Dean Willard C. Rappleye said in part:

After full consideration of the great importance to the medical profession, the hospitals and the public of establishing graduate medical education at a high university level, the trustees of the university in 1932 created a higher degree to identify the individual who obtains that recognition as qualified by a university grade of training in one of the specialized fields of clinical medicine. A single level of graduate medical education is recognized for this purpose. Only residents appointed in one of the affiliated hospitals are eligible for registration for the degree of Doctor of Medical Science (Med.Sc.D.).

The new laboratories will provide the facilities for the necessary advanced work in the medical sciences. This work may be taken previous to the residency or be carried during the hospital period, if that can be arranged.

Affiliations with approximately twenty leading hospitals of the metropolitan area make available ample facilities for advanced clinical training and secure the participation in the program of a number of the outstanding clinicians of the vicinity.

The program conforms to the standards adopted in 1934 by the Council on Medical Education and Hospitals of the American Medical Association, and the Advisory Board for Medical Specialties, the latter representing the American Hospital Association, the Association of American Medical Colleges, the Federation of State Medical Boards of the United States, the National Board of Medical Examiners and the twelve national boards of specialists dealing with graduate medical education and certification.

Seven requirements for the advanced degree of doctor of medical science were listed by Dr. Rappleye. These are: graduation from a medical school approved by the university; completion of an internship of not less than one year in a hospital approved by the university; a three year period of study after the internship in the university or in approved hospitals and laboratories; intensive training in one or more of the basic medical sciences related to the special field of study selected; active experience during the three year period of not less than eighteen months in the hospital, clinics and diagnostic laboratories of the specialty selected; written, oral and practical examinations in the specialty elected and in related fields, and "an acceptable dissertation on an investigation conducted in or closely related to the specialty elected."

THE ELECTRONICS INSTITUTE AT THE UNIVERSITY OF MICHIGAN

AN Electronics Institute, consisting of a special lecture and conference program in electronics, will be held in Ann Arbor, as a part of the 1937 Summer Session of the University of Michigan, with the cooperation of members of the technical staffs of the General Electric Company, the Westinghouse Electric and Manufacturing Company and the Bell Telephone Laboratories.

The lectures will be given by Dr. Saul Dushman and Dr. Lewi Tonks, of the General Electric Research Laboratories; Dr. H. E. Mendenhall and Dr. F. B. Llewellyn, of the Bell Telephone Laboratories; Dr. Joseph Slepian and Dr. R. C. Mason, of the Westinghouse Research Laboratories; Professor Leonard B. Loeb, of the University of California, and Professor W. G. Dow, of the University of Michigan.

The program will consist of two independent fourweeks lecture sequences, dealing respectively with highvacuum (June 28 to July 24) and gaseous-conduction electronic principles (July 26 to Aug. 20). In parallel problem laboratory and conference courses the lecture material will be worked into illustrative engineering problems, and teaching methods will be demonstrated and discussed. Opportunities for informal conferences will be provided. Courses in various cognate branches of electrical engineering, physics and mathematics will be included in the program.

The primary objective of the institute is to provide an opportunity for teachers and prospective teachers of electronics, engineers and physicists engaged in electronic development work in industry, and graduate students interested in electronics to broaden and unify their grasp of fundamental principles. It is believed that this opportunity for association between teachers and leaders in electronic research and development in industrial laboratories will help to clarify methods and policies in the teaching of the subject in engineering schools.

A special bulletin describing the details of the program is being prepared and can be obtained from Professor W. G. Dow, Electrical Engineering Department of the University of Michigan.

THE WISCONSIN ALUMNI RESEARCH FOUNDATION

THE University of Wisconsin Alumni Research Foundation, which was established in 1925, has appropriated the sum of \$163,000 to the research funds of the university for the coming year for the support of both old and new research projects which are carried on under the direction of faculty members. All the projects, about eighty in number, are selected and approved by the University Research Committee, and the foundation which provides the funds has no voice in the selection or in the policies to be followed in carrying out the research work. This year's grant represents an increase of \$20,500. It brings the total amount given by the foundation to research in the natural sciences during the last nine years to \$83,033.

Of the total amount appropriated for the coming year, \$100,000 is allotted to special grants-in-aid to stimulate university research. These are used to purchase equipment and supplies and to help to support