neering Society. It will have approximately 45,000 square feet of floor space and has been carefully planned to provide facilities for scientific, professional and social activities of the society, and its affiliated societies. The university wing, of about 40,000 square feet floor space, will be devoted to classrooms for approximately 1,000 students and offices for the Extension Service and the Institute of Public and Social Administration of the university. It will house seminar rooms, special lecture rooms equipped for scientific demonstrations and a studio and control room to be used in radio broadcasting classes. The library will be housed in a second floor room over the entrance of the Memorial Auditorium. The new headquarters for the Extension Service will bring together in one central place the extensive educational program in Detroit of the university. The Extension Service offers between fifty and fifty-five courses each semester and enrolls approximately 2,500 each year in its extension courses. This work is now directed from offices on East Ferry Street, while the classes are held in various buildings all the way from the Statler Hotel to Northern High School.

PALEONTOLOGICAL EXPEDITION OF THE NATIONAL GEOGRAPHIC SOCIETY AND THE SOUTH DAKOTA STATE SCHOOL OF MINES

Remains of protoceras, titanothere and other New World types of rhinoceros—will be sought in the West next summer by a joint paleontological expedition of the National Geographic Society and the South Dakota School of Mines. According to the announcement of the plans of the expedition made by Dr. Gilbert Grosvenor, president of the society, the field work will be carried on in the Badlands of western South Dakota, an eroded region which lies between the Cheyenne and the White Rivers, southeast of Rapid City. Dr. Joseph P. Connolly, president of the School of Mines, will be in charge of research. He will be assisted by James D. Bump, curator of the museum of the school.

It is estimated that the animals whose bones the expedition hopes to find lived in the Badlands area, then a grass-covered region of rolling plains, about thirty million years ago. Through changes not entirely clear to geologists, large quantities of eroded materials and volcanic ash from an unknown source were deposited on the old grassy plains, covering skeletons of some of the creatures that inhabited them.

Erosion during the last ten thousand years or more, while creating the deeply carved terrain of the Badlands, has exposed some of the buried bones and has disclosed the region to be a rich treasure house for science. Specimens of many types of vertebrate animals have been "mined" there during the last three

quarters of a century. But among these only a few complete skeletons of titanothere, protoceras and rhinoceros have been recovered. The chief aim of the expedition will be to bridge this gap in scientific knowledge, but it is expected that the bones of other animals will be collected also.

The protoceras as reconstructed was remotely related to deer and antelope. The male, about the height of a sheep, had six horns or knobs on his head, one pair of them far down on his slender muzzle. Other unusual features were a pair of long slender tusks, rare among cud-chewing animals, front feet with four toes, and hind feet with only two. No member of the protoceras family has been discovered outside of North America.

The titanothere was a sort of elephantine rhinoceros, the largest being as much as nine feet high at the shoulder. Buried in the same beds of rock were much smaller rhinoceros-like creatures whose skeletons also will be sought by the expedition. Both these types of animals had relatives in the Old World.

The South Dakota Badlands were relatively inaccessible until a decade ago. Within the past few years some of the most scenic and picturesque portions of the eroded area have been set aside by the United States Government as the Badlands National Monument. Through this reservation excellent automobile roads have been built and over them scores of thousands of tourists pass each summer. During the year 1939 visitors numbered 205,100, the greatest number to visit any National Monument west of the Mississippi River.

THE INSTITUTE OF FOOD TECHNOLOGISTS

The first meeting of the Institute of Food Technologists will be held from June 17 to 19 at the Morrison Hotel, Chicago.

The program will consist of four three-hour sessions devoted to symposia on Food Engineering and on the Influence of Processing on Vitamin Content of Food supplemented by papers on food preservation, composition of foods, methods of analysis of foods and packaging of foods. The third day is to be given over to visiting of plants of the food manufacturing industry in Chicago. The chairman of the Program Committee is Dr. D. K. Tressler, New York State Agricultural Experiment Station, Geneva, N. Y. Plans for the meeting are being worked out by the newly organized Chicago Association of Food Technologists, of which Dr. E. H. Harvey, of Wilson and Company, is chairman of the Local Committee on Arrangements.

The institute was organized in Cambridge, Mass., last July at the close of the second conference on Food Technology, held under the auspices of the Massachusetts Institute of Technology. Its officers are:

President, Dr. S. C. Prescott, dean of science, Massachusetts Institute of Technology; Vice-president, Dr. Roy C. Newton, chief chemist of the Swift Company, Chicago; Secretary-treasurer, Dr. G. J. Hucker, New York State Agricultural Experiment Station, Geneva.

The membership of the institute includes chemists. bacteriologists, process engineers and others similarly trained or experienced in the manufacture, preservation and handling of food. Graduation from a college or a university with majors in at least two such sciences as chemistry, physics, biology, micro-biology and engineering in relation to food handling and processing is regarded as a desirable prerequisite for membership, but those having experience of at least three years in some type of technological work will be accepted, also distinguished students of food technology, whether or not they have had technical training, are eligible. Those who are active in special limited aspects of food technology and those scientifically trained for a career in the food industry are eligible for affiliate membership.

RECENT DEATHS

Dr. Ferdinand Ellerman, who since 1905 had been associated with the Mount Wilson Observatory of the Carnegie Institution of Washington, from 1913 until his retirement in 1937 as astronomer, died in his seventy-first year on March 20.

Dr. WILLIAM GIBSON SPILLER, emeritus professor of neurology at the School of Medicine of the University

of Pennsylvania, died on March 19 in his seventy-seventh year.

Dr. Thomas Drysdale Buchanan, professor of anesthesia and director of the department of the New York Post-Graduate Medical School, Columbia University, died on March 21 at the age of sixty-four years.

SIR PATRICK PLAYFAIR LAIDLAW, deputy director of the British National Institute for Medical Research and head of its department of experimental pathology, died on March 20 at the age of fifty-eight years.

EDOUARD BRANLY, professor of physics in the Institut Catholique, Paris, died on March 24 at the age of ninety-five years. He was the discoverer of the principle of the coherer, one of the first successful devices used as a detector of wireless signals.

THE death at the age of seventy-six years is reported in *Nature* of J. H. Michell, professor of mathematics from 1923 to 1928 at the University of Melbourne, since 1938 honorary research professor of mathematics; and of E. Soler, emeritus professor of theoretical geodesy at the University of Padua, a vice-president of the International Association of Geodesy.

Dr. MICHAL SIEDLECKI, professor of zoology, has died in the Sachsenhausen concentration camp. He was one of the hundred and sixty-four professors of Cracow University who were arrested and sent there at the beginning of November, 1939.

SCIENTIFIC NOTES AND NEWS

The seventy-seventh annual meeting of the National Academy of Sciences will be held on April 22, 23 and 24, in Washington, under the presidency of Dr. Frank B. Jewett. The committee on arrangements is composed of Drs. Vannevar Bush, F. G. Cottrell, Frank B. Jewett, G. L. Streeter, Charles Thom, T. Wayland Vaughan and F. E. Wright, chairman.

THE annual general meeting of the American Philosophical Society will be held on April 18, 19 and 20, beginning at 10 a.m., on Thursday under the presidency of Roland S. Morris.

THE Catherine Wolfe Bruce Gold Medal of the Astronomical Society of the Pacific was presented to Dr. Frederick H. Seares, assistant director of Mount Wilson Observatory, at a meeting of the society on March 18. Dr. C. Donald Shane, professor of astrophysics in the University of California and president of the society, made the presentation.

THE prize of \$1,000 in biological chemistry of the Eli Lilly and Company for 1940 has been awarded by the American Chemical Society to Dr. Eric Glendinning Ball, an associate of the Johns Hopkins

School of Medicine, for chemical studies of certain biological substances, including the hormone adrenalin and vitamins B₂ and C. Dean Samuel Colville Lind, of the University of Minnesota, president of the society, will present the prize to Dr. Ball, a former Guggenheim fellow, at the opening session of the ninety-ninth meeting of the society in Cincinnati on April 8. Dr. Ball will present the paper for which the award was made, entitled "The Nature of the Enzyme, Xanthine Oxidase," as part of a Symposium on Vitamins and Nutrition to be held on April 10.

At the recent Founders Day Convocation celebrating the sixtieth anniversary of the founding of the Case School of Applied Science at Cleveland, the doctorate of science was conferred on Dr. Philip M. Morse, professor of physics at the Massachusetts Institute of Technology. Wilbert J. Austin, president of the engineering and construction company bearing his name, was awarded the doctorate of engineering. Both Dr. Morse and Mr. Austin are graduates of the Case School.

A DINNER was given on March 2 in honor of Dr. A.