out and its synthesis accomplished. Experiments have already indicated the probable structure of vitamin $K_2$. A considerable number of synthetic compounds known as naphthoquinones have also been shown to possess antihemorrhagic activity.

The utilization of vitamin K preparations and of the synthetic naphthoquinones by the medical profession has already resulted in the saving of many lives not only among those suffering from hemorrhagic disease due to obstructive jaundice but also among the newborn where the usual condition of hypoprothrombinemia may be easily prevented by prenatal administration of the antihemorrhagic compounds. In this way it is possible to decrease the incidence of intracranial hemorrhage and other frequently fatal hemorrhagic conditions in the newborn.

Dr. Doisy has made important contributions to many other biochemical problems, including the origin of endogenous uric acid; determination of the inorganic components of the blood—sodium, potassium, chloride and phosphorus; blood buffers and carbon dioxide transport; preparation of insulin of high potency and its effect on blood composition, and formation of lactic acid in the muscles of depancreatectomized animals.

Vladimir N. Ipatieff, director of chemical research of the Universal Oil Products Company, Chicago, received the Willard Gibbs award in 1940. Previous medalists include: Svante Arrhenius, of Sweden; Mme. Marie Curie, of France; Sir James Irvine, of Scotland; Richard Willstaetter, of Munich, and from the United States Theodore W. Richards, Leo H. Baekeland, Ira Remsen, Arthur A. Noyes, Willis R. Whitney, Edward W. Morley, William H. Burton, William A. Noyes, F. G. Cottrell, Julius Stieglitz, Gilbert N. Lewis, Moses Gomberg, John Jacob Abel, William D. Harkins, Claude S. Hudson, Irving Langmuir, Phoebus A. Levene, Edward C. Franklin, Harold C. Urey, Charles A. Kraus, Roger Adams, Herbert N. McCoy, Donald Dexter Van Slyke and Robert R. Williams.

## HONORARY DEGREES TO BE CONFERRED AT THE FIFTIETH ANNIVERSARY OF THE UNIVERSITY OF CHICAGO

THIRTY-TWO honorary degrees in the sciences and the humanities will be awarded at a special convocation of the University of Chicago on September 29, at the close of the four-day academic festival of the fiftieth anniversary celebration. The degrees to be conferred in the sciences follow:

Charles E. Allen, professor of botany, the University of Wisconsin, discoverer of sex chromosomes in plants.

Charles H. Best, professor and chairman of the physiology department at the University of Toronto, co-discoverer of insulin.

George D. Birkhoff, professor of mathematics at Harvard University, leading contributor to the fundamentals of dynamics.

Reginald A. Daly, professor of geology at Harvard University, authority on the origin of rocks and glaciers.

Edward A. Doisy, professor of biological chemistry at St. Louis University, noted for his identification of pure female hormone and two types of vitamin K.

Ernest W. Goodpasture, professor of pathology at Vanderbilt University, inventor of new methods of studying disease viruses.

Evarts A. Graham, professor of surgery at Washington University, St. Louis, nationally recognized for his contributions to the technique of modern surgery.

Libbie Hyman, member of the American Museum of Natural History in New York, noted for her contributions to the life processes of animals and internationally recognized as an authority on invertebrate zoology.

Herbert S. Jennings, professor emeritus of zoology at the Johns Hopkins University, authority on the behavior of simple forms of animal and plant life.

Karl S. Lashley, professor of neuropsychology at Harvard University, famous for his investigations of brain mechanisms.

Ernest O. Lawrence, professor of physics at the University of California, Nobel Laureate, inventor of the cyclotron, making possible sub-atomic chemistry.

Robert H. Lowie, professor of anthropology at the University of California, authority on the American Indian.

Robert A. Millikan, chairman of the executive council of the California Institute of Technology, Nobel Laureate, measurer of the electron and authority on cosmic rays.

Carlos A. Monge, dean and professor of medicine at the University of San Marcos, Lima, Peru, discoverer of "Monge's Disease," characteristic of the inhabitants of high altitudes.

Linus C. Pauling, professor and chairman of the department of chemistry at the California Institute of Technology, authority on forces between atoms in molecules and crystals.

Thomas M. Rivers, director of the Hospital of the Rockefeller Institute, international authority on the viruses of human and animal diseases.

Henry N. Russell, director of the Princeton Astronomical Observatory, discoverer of giant and dwarf stars and pioneer in the study of the evolution of the universe.

Florence B. Seibert, associate professor of physiological chemistry at the Henry Phipps Institute, Philadelphia, authority on the chemistry of tuberculin.

Donald D. Van Slyke, member of the Rockefeller Institute, inventor of new methods of chemical analysis used in the treatment of disease.

Oswald Veblen, professor of mathematics at Princeton University, internationally known for his contributions to geometry.

Robert R. Williams, director of chemistry at the Bell Telephone Laboratories in New York, discoverer of vitamin $B_1$.