

The new laboratory is specially designed and equipped for investigations into the physical nature of very small particles, particularly protein molecules, but it is hoped also to extend its use to the study of the less well-defined entities such as viruses, phages and antibody complexes.

The ground floor is largely taken up by two ultracentrifuges and their auxiliary machinery. Both machines, which were made in the workshops of the University of Upsala to the design of Professor Svedberg, have optical arrangements which make it possible to observe and photograph the contents of the rotating cell.

The smaller of the two machines is called the equilibrium centrifuge and is used for the determination of absolute particle size or weight. It runs at speeds up to 18,000 r.p.m. and usually for several days and nights continuously. The particles have then ceased moving, and a state of sedimentation equilibrium is set up, which allows of the calculation of absolute size from the final photograph.

The larger machine generates much greater centrifugal forces, up to half a million times gravity, and serves to throw down even the smaller protein molecules completely in a few hours. It is used to measure the sedimentation velocity constant of pure proteins and of the components of a mixture. In the case of native protein mixtures, such as blood serum, it is possible to centrifuge these without previous chemical treatment and to determine from the photographs the concentrations in which the component proteins are present.

On the upper floor a roomy laboratory is provided for general chemical and physical investigations. A smaller room which is maintained at a constant temperature is intended for measurements of pH, conductivity, refractive index and cataphoresis constants. For measurements of the latter an optical system is set up, similar to those on the centrifuges, and this enables photographs to be taken of charged particles migrating in the electric field at a rate which is proportional to their charge. Two modernly equipped dark rooms are provided, and in another room examination of plates is carried out and calculations made incidental to the various techniques in use.

#### GIFTS AND BEQUESTS TO MUSEUMS

It is stated in *Museum News* that recent gifts and bequests to museums from individuals amount to more than \$464,350. In addition, the Carnegie Corporation of New York appropriated \$350,000 for the Carnegie Institute at Pittsburgh, and the Rockefeller Foundation and General Education Board appropriated \$2,000,000 for the Oriental Institute.

With the payment on June 6 of a bequest of \$10,000

from the estate of Walter B. Scaife, the Carnegie Institute, Pittsburgh, collected the \$200,000 which was the condition of an added gift of \$200,000 on July 1, 1936, from the Carnegie Corporation of New York for the endowment funds of the institute. A fund of \$150,000 started by Willis F. McCook for purchases of works of art was exceeded before July 1 and drew a matching sum also from the Carnegie Corporation.

The Oriental Institute, University of Chicago, has received from the Rockefeller Foundation and the General Education Board an unrestricted appropriation of \$2,000,000. This is in addition to a grant of \$1,354,722, the unexpended balance of a ten-year appropriation in 1928 to finance expeditions to the Near East.

By the will of Miss Virginia Palmer, of New London, Conn., the Lyman Allyn Museum receives \$200,000.

By the will of Zenas M. Crane, the Berkshire Museum, Pittsfield, Mass., receives \$200,000 and his collection of paintings and art objects. Provision is made in a codicil for completion of the museum addition started by the testator and his sister, Mrs. Samuel Gilbert Colt.

By the will of Joseph S. Stevens, of Jericho, N. Y., the Charleston Museum, Charleston, S. C., receives \$25,000. The sum became available as the museum's share of the purchase price of Mr. Stevens's 1,600-acre plantation, Myrtle Grove, on the Combahee River, S. C.

By the will of Mrs. Roxana Atwater Wentworth Bowen, the Chicago Historical Society receives \$15,000.

By the will of William Kennon Jewett, the Metropolitan Museum of Art receives \$5,000.

By the will of Emma Toedteberg, the Long Island Historical Society receives \$5,000.

By the will of Nora D. Woodman, the New York Historical Society, the National Academy of Design and the New York Public Library receive \$5,000 each.

The William Rockhill Nelson Gallery of Art at Kansas City has received an anonymous gift of \$2,000 for the library.

The Chandler Chemical Museum, Columbia University, has received a gift of \$1,500 from the Chemical Foundation.

By the will of Harry de Berkeley Parsons, the New York Zoological Society receives \$750.

By the will of the late Mrs. Emily C. J. Folger, the residue of her estate is left to the trustees of Amherst College for use of the Folger Shakespeare Library at Washington.

By the will of William Louis Abbott, the Smithsonian Institution receives one fifth of the residuary

estate and its choice of his papers and books. The estate was valued for probate at \$535,000.

#### ELECTION OF OFFICERS OF THE NEW YORK ACADEMY OF MEDICINE

At a meeting of the New York Academy of Medicine on November 7, Dr. James Alexander Miller, professor of clinical medicine at the College of Physicians and Surgeons, Columbia University, an authority on internal medicine and tuberculosis, was nominated to succeed Dr. Eugene H. Pool as president of the academy. Dr. Miller was for nine years president of the New York Tuberculosis and Health Association, and last year was president of the American College of Physicians. He will serve a two-year term.

Other officers nominated were: Dr. Arthur F. Chace, vice-president, for a term of three years, and Dr. Lewis F. Frissell, recording secretary, for a similar period; Dr. Walter L. Miles and Dr. Eugene H. Pool were elected trustees. New members of the committee on admissions are Drs. Isidore Friesner, Thomas T. Mackie, Harold R. Mixsell and Irving S. Wright.

Upon recommendation from the committee on fellowships, six honorary members were elected to honorary fellowships. They are: Dr. Maude E. Abbott, curator of the Medical Museum at McGill University in Montreal; Dr. Walter B. Cannon, professor of physiology at Harvard University; Dr. Jean Darier, dermatologist and honorary physician at the Hospital St. Louis in Paris; Lord Herbert of Ashford, Baronet of Shaston, physician in ordinary to King Edward VIII; Dr. Ernest L. Kennaway, director of the research institute of the Cancer Hospital in London, and Dr. Hans H. Meyer, emeritus professor of pharmacology at the University of Vienna.

The meeting closed with an address by Dr. William Mather Lewis, president of Lafayette College, who spoke on the educational background of professional men.

#### NOMINEES FOR PRESIDENT-ELECT OF THE AMERICAN CHEMICAL SOCIETY

THE nominations for the office of president-elect of the American Chemical Society made by the local sections have been submitted to the members of the society. The four names receiving the largest vote will then be put upon the final ballot which goes to members of the council, and the election there is final. These nominations as given in *Industrial and Engineering Chemistry* are as follows:

Eugene C. Bingham, since 1916 professor of chemistry at Lafayette College.

W. D. Harkins, professor of chemistry at the University of Chicago.

Arthur W. Hixson, professor of chemical engineering at Columbia University.

B. S. Hopkins, professor of chemistry at the University of Illinois.

Charles A. Kraus, professor and director of chemical research at Brown University.

James W. Lawrie, research chemist of the A. O. Smith Corporation.

Albert P. Mathews, Andrew Carnegie professor of biochemistry and head of the department in the College of Medicine of the University of Cincinnati.

E. Emmet Reid, professor of organic chemistry at the Johns Hopkins University.

Hugh S. Taylor, David B. Jones professor of physical chemistry and head of the department at Princeton University.

James G. Vail, chemical director of the Philadelphia Quartz Company and, since 1924, vice-president of the American Doucil Company.

Frank C. Whitmore, dean of the School of Chemistry and Physics of the Pennsylvania State College.

The following have been nominated to serve as councilors-at-large.

E. K. Bolton, chemical director, E. I. du Pont de Nemours and Company, Inc.

R. A. Dutcher, professor, Pennsylvania State College.

W. L. Evans, professor, Ohio State University.

Per K. Frolich, chief chemist, Standard Oil Development Company.

B. S. Hopkins, professor, chemical laboratory, University of Illinois.

F. A. Lidbury, president, Oldbury Electro-Chemical Company.

Edward Mack, Jr., head, department of chemistry, University of North Carolina.

C. E. K. Mees, vice-president and director of research, Eastman Kodak Company.

R. E. Rose, director of technical laboratory, E. I. du Pont de Nemours and Company, Inc.

Alexander Silverman, professor in the department of chemistry of the University of Pittsburgh.

C. M. A. Stine, vice-president and member of the executive committee, E. I. du Pont de Nemours and Company, Inc.

J. W. Watson, professor and head of the department of chemistry of the Virginia Polytechnic Institute.

#### RECENT DEATHS AND MEMORIALS

JAMES A. HALL, professor of mechanical engineering at Brown University, died on October 29 at the age of forty-eight years.

DR. OSKAR KLOTZ, professor of pathology and bacteriology at the University of Toronto, died on November 3. Dr. Klotz was professor at the University of Pittsburgh from 1910 to 1920. He was fifty-eight years old.

DR. THOMAS MARTIN LOWRY, since 1920 professor of physical chemistry at the University of Cambridge, died on November 3 at the age of sixty-two years.