to be given in honor of the academy by the Eastman School of Music of the University of Rochester.

On Tuesday visits to the Bausch and Lomb Optical Company and the Eastman Kodak Company will be arranged. At the subscription dinner in the evening Dr. E. O. Lawrence, of the University of California, will be awarded the Comstock Prize, which is awarded every five years "to the *bona fide* resident of North America who not less than one year nor more than six years before shall have made in the judgment of the academy the most important discovery or investigation in electricity or magnetism or radiant energy."

CELEBRATION OF THE HUNDREDTH ANNI-VERSARY OF THE BIRTH OF CHARLES FREDERICK CHANDLER

NATIONAL science organizations will join with Columbia University in a series of events from October 6 to November 4, in celebration of the hundredth anniversary of the birth of Charles Frederick Chandler, father of modern industrial chemistry and the first public health chemist of New York City. Dr. Chandler, a founder of the Columbia School of Mines in 1864 and of the American Chemical Society in 1876, was born on December 6, 1836, and died on August 25, 1925. Professor J. Enrique Zanetti, of the department of chemistry, is chairman of the Chandler Centenary Committee.

The program embraces three Chandler Memorial Lectures, in the fields of chemistry, medicine and public health; the presentation of the Chandler Medal of Columbia University to Dr. John Howard Northrop, of the Rockefeller Institute for Medical Research, and a Chandler centennial dinner at the Waldorf-Astoria. During October a collection of Chandleriana will be exhibited in the Low Memorial Library of Columbia University.

The first of the Chandler Memorial Lectures will be delivered on October 6, at a joint meeting of the university and the New York Section of the American Chemical Society, by Thomas Midgley, Jr., vice-president of the Ethyl Gasoline Corporation, whose subject will be "Man-Made Molecules." Professor Marston Taylor Bogert, of Columbia University, a former president of the American Chemical Society, will preside.

The second lecture, on October 13, will be given by Dean William de B. MacNider, of the University of North Carolina School of Medicine, who will speak on "Certain Recent Developments in Chemistry and their Bearing on Cellular Activity." Dr. William Jay Schieffelin, of New York, a former student of Professor Chandler and honorary president of the School of Pharmacy, of Columbia University, will be chairman.

Dr. Haven Emerson, director of the Institute of

Public Health in the School of Medicine, will be the third lecturer, speaking on October 20 on "New York's First Public Health Chemist." Professor Daniel D. Jackson, head of the department of chemical engineering, will preside. Dr. Emerson wos New York Commissioner of Health and president of the Board of Health from 1915 to 1917. Each memorial lecture is scheduled for 8 p. M., and will be preceded by a dinner at the Faculty Club in honor of the lecturer.

The sixteenth award of the Chandler Medal will be made on Wednesday evening, October 27, to Dr. Northrop for "fundamental discoveries concerning bacteria, the constitution of proteins, and the chemistry of digestion." Dr. Northrop will deliver the medal address on "The Chemical Nature and Mode of Formation of Pepsin, Trypsin and Bacteriophage." Dean George B. Pegram, of the Columbia Graduate Faculties, will be chairman of the ceremony, which will be held in 309 Havemeyer Hall, Professor Chandler's old lecture room.

The concluding event will be the Centennial Dinner at the Waldorf-Astoria Hotel, on November 4, at 8 P. M. The speakers will be: Dr. Nicholas Murray Butler; Dr. Willis Rodney Whitney, vice-president of General Electric Company and 1920 Chandler Medalist; and Dean Frank Clifford Whitmore, of the College of Physics and Chemistry of Pennsylvania State College, president-elect of the American Chemical Society.

RECENT DEATHS

DR. LEANDER MILLER HOSKINS, who became emeritus professor of applied mathematics at Stanford University in 1925, died on September 8 at the age of seventy-seven years. Dr. Hoskins joined the faculty of the university as assistant professor in 1892, a year after Dr. David Starr Jordan became president of the university.

DR. CHARLES BEACH ATWELL, emeritus professor of botany at Northwestern University, died on September 14 at the age of eighty-two years. Dr. Atwell, a graduate of Syracuse University, joined the faculty of Northwestern University in 1880 and retired in 1928.

DR. HENRY ROBERT MURRAY LANDIS, professor of clinical medicine at the School of Medicine of the University of Pennsylvania and director of the departments of medicine and sociology at the Henry Phipps Institute, known for his work in silicosis, died on September 14 at the age of sixty-five years.

DR. ALFRED JAMES EWART, professor of botany and plant physiology at the University of Melbourne, died on September 13. He was sixty-five years old.

A CORRESPONDENT writes: Lloyd G. Hornby, fire control planning specialist of the Forest Service, U. S. Department of Agriculture, died from over-exertion at a forest fire in a mountainous section of the Clearwater National Forest in Idaho on August 21. He had won his way to rank of staff officer by thorough analyses of fire records and by originating fire control planning methods over a period of years in the field and at the Northern Rocky Mountain Forest Experiment Station. His report, "Fire Control Planning in the Northern Rocky Mountain Region," in 1936, engendered widespread interest. He was appointed to the position of fire control planning specialist for the Forest Service as a whole in March, 1937. Hornby was born in Iowa fifty-one years ago, reared on a California ranch and received his degree as civil engineer at the University of Michigan. In 1915 he received his master's degree in forestry. He rose literally from the ranks, was an indefatigable worker and a man of clear and original thinking. At the time of his death he had made great progress on the assignment to perfect the technique for fighting forest fires by bringing the newest scientific developments into forest fire control and by coordinating the results of fire-fighting experience gained by foresters in the past thirty years.

SCIENTIFIC NOTES AND NEWS

DR. ROBERT GRANT AITKEN, director emeritus of the Lick Observatory, was elected president of the American Astronomical Society at the recent meeting at Williams College. He succeeds Dr. Henry Norris Russell, of Princeton University. Dr. Frank E. Ross, of the Yerkes Observatory, was elected vice-president; Dr. John C. Duncan, of Wellesley College, secretary, and Dr. F. C. Jordan, of the Allegheny Observatory, treasurer, were reelected. Leon Campbell, of Harvard Observatory, Dr. E. F. Carpenter, of the Steward Observatory, and Dr. A. H. Joy, of the Mount Wilson Observatory, were elected members of the council. Dr. W. D. MacMillan, of the University of Chicago, was chosen to represent the society on the National Research Council.

DR. HERMANN HOLTHUSEN, of Hamburg, has been elected president of the sixth meeting of the International Congress of Radiology, to be held in Berlin in 1940. He succeeds Dr. Arthur C. Christie, of Washington, formerly professor of clinical radiology in the Medical School of Georgetown University, who presided over the meeting held in Chicago from September 13 to 17.

DR. HOWARD P. DOUB, of the Henry Ford Hospital at Detroit, was inducted at the Chicago meeting as president of the Radiological Society of North America, to succeed Dr. John D. Camp, of the Mayo Clinic, Rochester, Minn.

AT the recent meeting at Chicago of the American Roentgen Ray Society its gold medal was awarded to Dr. Aubrey O. Hampton and Dr. J. Maurice Robinson, of Boston. A silver medal was presented to Dr. Robert B. Taft, of Charleston, S. C., and a bronze medal was shared by Dr. Warfield T. Longcope, Dr. John W. Pierson and Dr. Charles D. Smith, all of Baltimore. At the session on September 13 Dr. Hans R. Schinz presented the honorary degree of doctor of laws of the University of Zurich to Dr. William D. Coolidge, director of the laboratories of the General Electric Company, in recognition of thirty years of research and development of x-ray tubes and particularly for recent work on high-voltage x-ray tubes for the treatment of cancer and other diseases.

DR. KARL F. MEVER, chairman of the department of bacteriology and director of the Hooper Foundation for Medical Research at the University of California, was awarded the honorary degree of doctor of medicine by the medical faculty of the University of Zurich on the occasion of the celebration of International Medical Week in Switzerland. It was conferred in recognition of his work and public service in the field of communicable diseases transmissible from animal to man.

DR. ALBERT R. MANN was the guest of honor at the annual farm dinner of Jerome D. Barnum, publisher of the Post-Standard, Syracuse, N.Y. Three hundred guests, including leaders of forty-five agricultural organizations, state departments and educational institutions, joined in the tribute. Dr. Mann was for fifteen years dean of the New York State College of Agriculture and became provost of Cornell University in 1931. He resigned last June to become vice-president and director for southern education of the General Education Board. Speakers at the dinner included Governor Herbert H. Lehman; Dr. Liberty Hyde Bailey, of Ithaca, formerly dean and director of the State College of Agriculture; Louis J. Taber, of Columbus, Ohio, master of the National Grange; Dr. Harlan H. Horner, of Albany, assistant commissioner of education, and Jared Van Wagenen, Jr., formerly president of the New York State Agricultural Society. The speakers were introduced by Edward S. Foster, secretary of the New York State Farm Bureau Federation and of the State Agricultural Conference Board.

THE Johns Hopkins University School of Engineering has announced additional courses in civil, chemical and gas engineering. New appointments to the faculties are as follows: Dr. Abel Wolman, professor of sanitary engineering; Dr. P. H. Emmett, professor of chemical and gas engineering; Dr. C. F. Bonilla and