

## RECENT DEATHS

DR. MILTON J. GREENMAN, since 1905 director of the Wistar Institute of Anatomy, Philadelphia, died on April 7 at the age of seventy years.

DR. FREDERICK C. LANGENBERG, metallurgist, vice-president in charge of research of the United States Pipe and Foundry Company, died suddenly on April 4. He was forty-seven years old.

CHARLES H. HAUPT, of the Standard Oil Development Company, died on April 10 at the age of sixty-seven years. Mr. Haupt was formerly an assistant professor in civil engineering at the University of Pennsylvania under Professor Lewis M. Haupt, his uncle, who died a month ago.

DR. ALLAN FULSON ODELL, chemical director of the E. I. du Pont de Nemours plant at Arlington, N. J., died on April 10. He was fifty years old. From 1909 to 1913 Dr. Odell was an assistant professor in chemistry at the Louisiana State University, leaving the university to become a research chemist for Charles Pfizer and Company.

PROFESSOR DR. HEINRICH BECHHOLD, director of the Institute for Research in Colloid Chemistry at Frankfurt-a-M., died on February 18. He was the author of "Colloids in Biology and Medicine," a book which was translated by Dr. J. G. M. Bullowa.

A CORRESPONDENT writes: "Dr. Katharine Jeannette Bush, the first woman to be granted the doctor's degree in zoology at Yale University, died at Hartford, Conn., on January 19, following an incapacitating illness of

nearly ten years. She had just passed her eighty-first birthday. Her professional career began in 1881, as assistant to the late Professor A. E. Verrill in studies on the marine invertebrates collected by the U. S. Fish Commission off the Atlantic Coast and in the Gulf Stream. She was later associated with the U. S. National Museum and with the Peabody Museum of Yale. Her publications consisted of systematic papers on the classification of annelids and mollusks, with descriptions of many new species. She is survived by one sister, the wife of Professor Wesley R. Coe, of Yale University."

*Nature* records the death of Professor J. H. F. Douvillé, formerly professor of paleontology in the National School of Mines, Paris; of Sir Albert Kitson, director of the Geological Survey of the Gold Coast in 1913-30, on March 8, aged sixty-nine years; of Professor C. J. Lewis, emeritus professor of public health in the University of Birmingham, on February 6; of Professor F. P. F. Ransom, formerly professor of pharmacology in the University of London, on February 22, aged eighty-seven years; of Sir James Currie, chairman of the governing body of the Imperial College of Tropical Agriculture, Trinidad, and director of the Empire Cotton Growing Corporation, on March 17, aged sixty-eight years, and of Professor J. A. Gilruth, formerly professor of veterinary pathology in the University of Melbourne, lately chief of the Division of Animal Health of the Commonwealth Council for Scientific and Industrial Research, on March 4, aged sixty-six years.

## SCIENTIFIC EVENTS

## BROADCASTS OF THE 1937 ECLIPSE

THE National Geographic Society-U. S. Navy Expedition to observe the total eclipse of June 8 from one of the Phoenix Islands will be broadcast over the coast-to-coast networks of the National Broadcasting Company. Professor S. A. Mitchell, director of the Leander McCormick Observatory of the University of Virginia, will be the leader. He will be assisted by Captain J. F. Hellweg, superintendent of the U. S. Naval Observatory, who will have charge of the Navy's participation; Dr. P. A. McNally, director of the Georgetown College Observatory; Professor F. K. Richtmyer, Cornell University; Dr. Irvine C. Gardner, National Bureau of Standards; Dr. Theodore Dunham, Jr., Mt. Wilson Observatory; John E. Willis, U. S. Naval Observatory; Charles Bittinger, Washington; Charles G. Thompson, New York; R. H. Stewart, National Geographic Society; George Hicks and Engineers Brown and Adams, of the National Broadcasting Company.

The schedule of broadcasts, three of which have already been given, follows:

March 30: George W. Hutchison, secretary, National Geographic Society, "Announcing the Eclipse Expedition."

April 10: "Science Prepares for an Eclipse." Admiral William D. Leahy, chief of Naval Operations; Dr. Lyman J. Briggs, chairman, Research Committee, National Geographic Society; and the Rev. Paul A. McNally, director, Georgetown College Observatory.

April 15: "Radio and the Eclipse." Announcer George Hicks opened the program, followed by Dr. Theodore Dunham, of Mt. Wilson Observatory, N.B.C. Engineers Brown and Adams and R. H. Stewart, National Geographic Society photographer.

April 28: "Scientists and Sailors Follow the Sun." Dr. John O. LaGorce, vice-president of the National Geographic Society, from Washington, Captain J. F. Hellweg, from Honolulu, and Dr. S. A. Mitchell, on board *S.S. Mariposa*, Los Angeles, a few hours prior to the sailing of the main scientific group.

May 6: "The Eclipse Expedition Weighs Anchor." Entire program from deck of *U.S.S. Avocet* at Honolulu. Dr. Gilbert Grosvenor, president of the National Geographic Society; Governor Poindexter, of Hawaii; Admiral Orin G. Murfin, commandant, Navy Yard, Pearl Harbor, and Dr. S. A. Mitchell. Appropriate Hawaiian music as background.

May 10: "At Sea with the Eclipse Expedition." Mid-ocean auditions from the *U.S.S. Avocet*. Members of the expedition personnel and ship's crew—preparations for "Crossing the Line."

May 16: "The Eclipse Expedition Arrives in the South Seas and Chooses Its Island." The broadcast will be direct from the island and will include general description of the landing of the expedition.

May 22: "The Eclipse Expedition at Home in the South Seas." Academic discussion by the scientific personnel and general discussion and interesting sidelights by the non-scientific personnel.

May 25: "News from Home" and "Entertainment for the Eclipse Exiles." The program opens in New York with music (seven minutes) and press radio news (five minutes). It then shifts to Washington, where eight minutes will be devoted to messages to the expedition from the National Geographic Society and to personal messages to individuals. The program will then return to New York for ten minutes of music and variety.

May 30: "The Eclipse Expedition Celebrates Decoration Day in the South Seas." Reporting news items from the expedition, interesting observations and personal messages from individual members.

June 1: Duplicate of Broadcast of May 25.

June 7: "Dress Rehearsal for the Eclipse." Roll call and a quick report from each member as to his final preparations.

June 8: Preliminary to the main program (which will follow several hours later) primarily for the purpose of establishing contact channels for the principal broadcast. Announcer George Hicks will make a general commentary, discuss the weather, etc.

June 8: "Description of the Total Eclipse of the Sun from the Area of Totality in the South Seas." Announcer George Hicks and members of the scientific staff.

June 8: "What the Eclipse Expedition Saw." Ten minutes devoted to a brief report to the National Geographic Society by Dr. S. A. Mitchell and his scientific staff, following which the program shifts to Washington, where National Geographic Society officials reply for five minutes.

#### APPOINTMENTS AND PROMOTIONS AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PROMOTIONS and new appointments have been made at the Massachusetts Institute of Technology as follows:

Members of the faculty promoted to the rank of full professor are: Professors Ralph D. Bennett and Edward L. Bowles, department of electrical engineering; Karl D. Fernstrom, department of business and engi-

neering administration; Philip Franklin, department of mathematics; Murray P. Horwood, department of biology and public health; George Seatchard, department of chemistry, and Edward R. Schwarz, department of mechanical engineering.

Promoted from assistant professorships to associate professor are: Edward S. Taylor and Arthur L. Townsend, department of mechanical engineering; Raymond D. Douglass, department of mathematics; Bernard E. Proctor, department of biology and public health; John B. Wilbur, department of civil and sanitary engineering; Murray F. Gardner, Richard H. Frazier and Parry H. Moon, department of electrical engineering, and John Wulff, Wayne B. Nottingham and Nathaniel H. Frank, department of physics.

Members of the staff promoted to the rank of assistant professor are: Herbert C. Moore and Charles W. MacGregor, department of mechanical engineering; Ernest N. Gelotte, department of architecture; Robert S. Harris, department of biology and public health; Ronald H. Robnett, department of business and engineering administration; George G. Marvin and Edmund L. Gamble, department of chemistry; Arthur C. Ruge, department of civil and sanitary engineering; William M. Hall, department of electrical engineering; Paul C. Eaton, department of English; Robert H. Cameron, department of mathematics, and Morris Cohen, department of mining and metallurgy.

Promoted to the rank of instructor are: Archibald Williams, business and engineering administration; George A. Akin, chemical engineering; Edward R. Livernash, department of economics and social science; Henry E. Kiley, Leopold R. Michel, Blake Mills and Roger L. Putney, department of mechanical engineering, and Reinhardt Schuhmann, Jr., department of mining and metallurgy.

New appointments include: H. W. Fairburn as assistant professor of geology; Niels H. Larsen, instructor in architecture; Robert V. Lukes, instructor in chemical engineering; Alberto F. Thompson, Jr., instructor in chemistry, and James G. Baker, assistant director of the School of Chemical Engineering Practice.

#### GRANTS AWARDED BY THE AMERICAN PHILOSOPHICAL SOCIETY

THE committee on research of the American Philosophical Society, at meetings held on December 11 and February 12, made grants as follows:

Davenport Hooker, University of Pittsburgh, for functional and morphological studies of human prenatal development .....	\$ 500
Ralph A. Beebe, Amherst College, for the direct measurement of heats of adsorption at low temperatures and the measurement of rates of adsorption under accurately controlled pressures of gas .....	1,000