

reporting stations and vessels which serve as outposts to detect and report the approach of a hurricane, is prepared to plot the position of these storms on the weather map long before they approach the coast and to give ample warning of the time of their arrival and their intensity.

As a further aid in insuring that the public will receive ample warning in the rare chance that a severe hurricane occurs this year, the bureau now has available a larger number of stations to make upper air soundings than ever before and is extending its dissemination of hurricane information and warnings by the installation of direct wire teletype connections at the larger population centers and is putting into effect special broadcast arrangements for weather warnings. Upper air observations are an important aid in calculating the direction and speed of movement of hurricanes from day to day.

#### THE MASTER OF SCIENCE DEGREE IN ENGINEERING OF COLUMBIA UNIVERSITY

COLUMBIA UNIVERSITY has established a new master of science degree in engineering to enable candidates to obtain a broad background without specializing in one department. The degree was established chiefly for practicing engineers in the metropolitan district whose background and technical interests cross departmental lines. Before the introduction of the new general curriculum, it was necessary for graduate students to specialize in either chemical, civil, electrical, industrial or mechanical engineering.

Professor Joseph W. Barker, dean of the School of Engineering, announces that thirty-seven practicing engineers will supplement the instruction given by members of the faculty in fifty-seven courses, which will be given in the Extension Division of the university during the 1939-1940 academic year.

A course in physics, on "The Theory of Heat Conduction," has been added to the engineering curriculum, under the direction of Dr. Melvin Avrami, as part of a plan calling for an increase in scientific subjects dealt with from an engineering viewpoint. Other courses in heat transfer will be given under the direction of Professors C. E. Lucke and C. F. Kayan, of the department of mechanical engineering.

Four courses of an advanced nature have been designed particularly for engineers engaged in industrial activities who do not wish to work towards a degree. A sequence of three courses in electrical engineering has been arranged for students who have had a limited amount of training and who wish to obtain a background in the field. The application of chemical principles in the major chemical industries and the design of chemical equipment will be studied in two courses. Nine other courses will be given in the department of chemical engineering, two of which

deal with the chemistry of textile processing. The department of civil engineering has planned fourteen courses, and the department of electrical engineering twelve courses covering every major sphere of electrical engineering.

The department of mechanical engineering will sponsor two courses in air conditioning, and will offer work in fluid dynamics, lubrication and power analysis. "Nomographic Charts and Empirical Equations" will be taught in a special course arranged for engineering students. Studies in engineering and architectural drafting will also be conducted.

Classes in the Extension Division will be held in the late afternoon, evening and on Saturday mornings in order that practicing engineers may enroll.

#### EDITORS OF THE PUBLICATIONS OF THE AMERICAN CHEMICAL SOCIETY

At the Boston meeting of the American Chemical Society Professor A. B. Lamb, of Harvard University, was reelected editor of the *Journal* of the American Chemical Society with associate editors as follows: Dr. C. S. Hudson, of the National Institute of Health, Washington, D. C.; Professor Lee Irvin Smith, of the University of Minnesota; Dr. Edward Mack, Jr., of Battelle Memorial Institute, Columbus, Ohio; Dr. R. H. F. Manake, of the National Research Council, Ottawa, Ontario, Canada; Professor Frederick G. Keyes, of the Massachusetts Institute of Technology.

Professor E. J. Crane, of the Ohio State University, was reelected editor of *Chemical Abstracts*. Dr. Harrison E. Howe, of Washington, D. C., was reelected editor of *Industrial and Engineering Chemistry*. Professor N. H. Furman, of Princeton University, and Professor I. M. Kolthoff, of the University of Minnesota, were reelected to the advisory board of the analytical edition of *Industrial and Engineering Chemistry*.

Professor W. Albert Noyes, Jr., of the University of Rochester, N. Y., was reelected editor of *Chemical Reviews*. Professors Robert C. Elderfield, of Columbia University, and E. R. Gilliland, of the Massachusetts Institute of Technology, were elected associate editors.

Professor Farrington Daniels, of the University of Wisconsin, and Professor Herbert Freundlich, of the University of Minnesota, were elected associate editors of the *Journal of Physical Chemistry*. Professor William T. Read, of Rutgers University; Dr. Charles A. Thomas, of Monsanto Chemical Company, Dayton, Ohio, and Dr. Bruce K. Brown, of the Standard Oil Company of Indiana, Chicago, were elected associate editors of the *Technologic Monographs*.

#### RECENT DEATHS

PROFESSOR EMERITUS HENRY C. COWLES, for many years a member of the department of botany of the