in the Mellon Institute of Industrial Research of the University of Pittsburgh, are being given at 11:30 A. M. to 12:30 P. M. (4th period), in the fellows' room of the institute. All the discourses will be open to interested faculty members and qualified students of the university, to teachers of chemistry and chemists of the Pittsburgh district and to the membership of the institute:

1. Petroleum Refinery Technology, W. A. GRUSE

October 3. *Petroleum distillation practice*
October 10. *Chemical treatment of petroleum distillates*
October 17. *Properties and uses of petroleum products*

2. By-product Coke Technology, O. O. MALLEIS

October 31. *By-product coke-oven practice*
November 7. *Recovery of by-products from coke-oven gas*

3. Technology of Ceramic Products, S. M. PHELPS, TRACY BARTHOLOMEW, E. S. ROSS, B. A. RICE and E. J. CASSELMAN

November 14. *Raw materials and manufacture of refractories* (Mr. Phelps)
November 21. *Properties, uses and testing of refractories* (Mr. Phelps)
December 5. *Raw Materials and manufacture of Portland cement* (Mr. Bartholomew)
December 12. *Properties, uses and testing of Portland cement* (Mr. Bartholomew)
January 9. *Asbestos and magnesia products* (Mr. Ross)
January 16. *Vitreous enamels* (Mr. Rice)
January 23. *Window glass* (Mr. Casselman)

4. Manufacture of Explosives, H. L. COX

February 13. *Agricultural and mining explosives*
February 20. *Special military explosives*
February 27. *Detonators*

5. Paper Industry, MARC DARRIN

March 5. *Manufacture of paper pulp*
March 12. *Manufacture, properties and uses of paper products*

6. Leather Technology, M. C. WALSH

March 19. *Histology of skin and chemistry of tanning*
March 26. *Vegetable tannage*
April 2. *Mineral and other tannage*

7. Cereal Products, R. R. IRVIN

April 16. *Chemistry of cereals*
April 23. *Milling of cereals*
April 30. *Baking technology*

8. Fine-chemical Industry, L. H. CRETCHER

May 7. *Disinfectants and antiseptics*
May 14. *Anesthetics and hypnotics*
May 21. *Biochemical manufacturing processes*

STANDARDS FOR SCIENTIFIC AND ENGINEERING SYMBOLS AND ABBREVIATIONS

THE decision to undertake the standardization of scientific and engineering symbols and abbreviations as a national enterprise was made at a general conference called by the American engineering standards committee and held in the rooms of the American Society of Mechanical Engineers on February 13, 1923. Three organizations, the American Institute of Electrical Engineers, the Association of Edison Illuminating Companies and the American Society of Mechanical Engineers, made the original recommendations which resulted in the calling of this conference. Official representatives of national organizations attended this conference and after a full discussion they voted unanimously that this project should be undertaken, and that the American Association for the Advancement of Science, the National Research Council, the Society for Promotion of Engineering Education and the U. S. Bureau of Standards should be requested to accept joint sponsorship. Later the American Society of Mechanical Engineers, the American Institute of Electrical Engineers and the American Society of Civil Engineers were invited to become joint sponsors.

The sectional committee on scientific and engineering symbols and abbreviations now consists of thirty members representing thirty-seven national organizations. It has organized nine subcommittees to which have been assigned the following divisions of the subject: (1) symbols for mechanics, structural engineering and testing materials, (2) symbols for hydraulics, (3) symbols for heat and thermodynamics, (4) symbols for photometry and illumination, (5) aeronautical symbols, (6) mathematical symbols, (7) electrotechnical symbols including radio, (8) navigational and topographical symbols, (9) abbreviations for scientific and engineering terms. The reports of these subcommittees will be prepared and issued separately.

The proposed standard on symbols for heat and thermodynamics was prepared by subcommittee No. 3, of which Dr. Sanford A. Moss, Thomson Research Laboratory, General Electric Company, is chairman. This subcommittee was organized on April 5, 1926, by direction of the executive committee of the sectional committee on scientific and engineering symbols and abbreviations for the purpose of recommending a list of standard symbols for use in the field of heat and thermodynamics. The proposed tentative standard has received the approval of the sub-committee and is now being circulated with a request for criticism and comment. Communications may be addressed to Preston S. Miller, secretary of the sectional committee, 80th Street and East End Avenue, New York, N. Y.

Mathematical and aeronautical symbols, developed

under the direction of the same sectional committee, were released to the technical press for review on July 20, 1927.

MEETING OF THE AMERICAN MUSEUM OF NATURAL HISTORY

A BOARD meeting of the trustees of the American Museum of Natural History was held on November 13. The business meeting was preceded by a luncheon given to the trustees by President Henry Fairfield Osborn at one o'clock. Besides reporting upon the general progress of the museum in its direct relation to exhibition and educational activities, the chairmen of the several departmental committees, headed by various members of the board, reported upon the several divisions coming under their particular charge. This division of individual trustee responsibility is a new phase in the museum program, and the chairmen of the several committees are selected by reason of personal interest in the furtherance of the respective departments, *i.e.*, Dr. J. Hamilton Rice has assumed responsibility for the development of the halls of geology and geography; George F. Baker, Jr., that of mineralogy and the Morgan hall of gems; Childs Frick, the department of vertebrate paleontology; Clarence L. Hay, the department of Mexican archeology; Junius S. Morgan, Jr., the Asiatic hall and Asiatic collections; Daniel E. Pomeroy, the African hall and African collections; Kermit Roosevelt is assigned to look after an extensive exhibition covering the mammals of the world; Dr. Leonard C. Sanford similarly takes care of the birds of the world; George T. Bowdoin, oceanic collections and the hall of ocean life. The preparation of this particular section is proceeding rapidly and will form one of the most important parts of the museum's exhibitions. Cleveland E. Dodge devotes his interest to a correct exposition of fishes, while Madison Grant has been assigned to the department of comparative anatomy; Ogden L. Mills, who for a long time has manifested a deep interest in the expansion of literature pertaining to natural history, is assigned to the library and printing; Felix M. Warburg, who is prominent and well-known throughout the state in educational circles, is in charge of education, and George D. Pratt, who was formerly conservation commissioner of the State of New York, has been assigned to conservation.

The trustees of the museum recently requested President Osborn to become curator-in-chief of the division of mineralogy, geology, geography and astronomy, and also assume the post of curator-in-chief of geology and paleontology, both of which he has accepted. The trustees, by resolution, expressed their thanks to President Osborn for his generous action in contributing to the permanent endowment fund of the museum the sum of $5,000 recently presented to him on his seventieth birthday, which, in accordance with his wishes, they have set aside to the endowment fund to be known as the Osborn paleontological research fund, the principal of which is to be invested and the income used only for the advancement of research.

The present amount of endowment in hand is $12,156,549, together with $2,004,500 contingent bequests, making a present and prospective endowment of $14,167,049. To keep pace with the educational demands upon the museum, there is urgent need for the receipt of $5,832,951, which would be sufficient to raise the total permanent endowment to $20,000,000. Because of the lack of these funds, the preparation of new halls and the installation of new specimens is restricted. The interest on the endowment fund is used solely for scientific research, scientific exhibition and popular education, not for either maintenance or building.

SCIENTIFIC NOTES AND NEWS

DR. H. E. IVES, of the Bell Telephone Laboratories, New York, and S. L. Kneass, mechanical engineer of Philadelphia, were presented with the John Scott medals and premiums of the Franklin Institute at a meeting on November 16.

KING ALBERT of Belgium has conferred a special agricultural decoration of the first class upon Dr. C. J. Galpin, in charge of the division of rural life and farm population, U. S. Bureau of Agricultural Economics; Asher Hobson, collaborator of that bureau and permanent delegate of the United States to the International Institute of Agriculture at Rome, and Miss Grace F. Frysinger, of the extension service.

PROFESSOR EMIL ABDERHALDEN, of Halle, and Professor Max Nonne, of Hamburg, have been nominated honorary members of the Royal Academy of Medicine at Rome.

DR. SAMUEL AVERY, for nearly twenty years chancellor of the University of Nebraska, recently retired with the title of chancellor emeritus and professor of research in chemistry. Dr. Avery will have a laboratory in the chemistry building, where he will devote himself to writing and research.

SIR ARCHIBALD GARROD has tendered his resignation of the office of Regius professor of medicine at Oxford University, as from December 31 next. Sir Archibald succeeded Sir William Osler in 1920.

DR. S. W. PARR, professor of chemistry at the University of Illinois, has been nominated for president by the executive committee of the Chicago section of the American Chemical Society.