

Technology; Malcolm F. Judkins, University of Washington; Walter O. Krebs, Yale University; W. E. Marshall, Georgia Institute of Technology; Egbert Shetter, Ohio University; James A. Younkins, Penn State College, and Adam H. Hartswick, Penn State College. In addition, C. F. Christopher, research engineer; Frank Morris, analyst, and A. D. Meyer, assistant research engineer, will assist in making special studies in the program of research.

The following studies are planned:

Coal Mining. 1. Relation of particle size and temperature rate of burning; characteristics of flames of powdered coke and coal; 2. The composition of the oils and heavy tar from the distillation of coal at low temperatures; 3. Forms of sulphur in the Pittsburgh Coal Bed; 4. The chemical constitution of regenerated ulmins; 5. Effect of fusian and related inerts on the properties of Pittsburgh Coal with particular reference to coking properties; 6. Chemistry of decay in relation to peat and coal formation.

Metallurgy. A study of the cause and control of abnormality in case carburized steel; 2. Formation and identification of inclusions; 3. Distribution ratio of iron oxide between slag and metal; 4. Method of determining inclusions; 5. Viscosity of open hearth slags, and three studies in plant work relating to the physical chemistry of steel making.

Four of the studies will be financed by the Carnegie Institute of Technology, six by twenty-nine contributing companies representing the metallurgical industries, one by the International Combustion Engineering Corporation, one by the National Coal Association and two by the Pittsburgh Coal Company.

THE FRANKLIN MEMORIAL IN PHILADELPHIA

ANNOUNCEMENT was made on June 22 that a memorial to Benjamin Franklin will be created in Philadelphia on the Parkway at a cost of \$7,000,000 for construction and endowment. This has resulted from a merging of effort by the Franklin Institute of the State of Pennsylvania and the Benjamin Franklin Memorial, Inc.—the latter sponsored by the Poor Richard Club.

The tentative plans call for a monumental building a square in length. Its dominating feature, architecturally, will be a domed structure of the type of the Pantheon in Rome, containing a memorial chamber, in which it is planned to install a statue of Franklin.

Close by this memorial chamber will be housed a museum showing the status of the graphic arts in Franklin's time, and illustrating the development of printing, engraving and paper-making.

The rest of the structure will be devoted to the scientific and technological museum, which the Frank-

lin Institute has been planning, with a library with a capacity for 250,000 volumes, in the field of physical and mathematical sciences—the institute already has 120,000 volumes—two auditoriums and committee rooms and offices for the Franklin Institute.

Already \$3,000,000 is available for the undertaking, including funds of the Franklin Institute and some subscriptions. The executive committee of the Benjamin Franklin Memorial, Inc., expects to raise an additional \$4,000,000. It is planned that about \$4,000,000 shall be spent on construction and \$3,000,000 be devoted to endowment. A five-acre site on the Parkway will be provided by the city, which has the advantage that users of the scientific library, which is to be a feature of the memorial, would find themselves only a stone's throw away from two other important libraries—the library of the Academy of Natural Sciences, especially rich in the biological and geological sciences, and the Free Library.

APPOINTMENTS AT THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH

THE Board of Scientific Directors of The Rockefeller Institute for Medical Research announces the following appointments and promotions:

NEW APPOINTMENTS:

Associates

Dr. Robert R. Hannon.
Dr. Fritz Lange.
Dr. Henry R. Muller.
Dr. Cornelius P. Rhodes.

Assistants

Dr. Robert B. Corey.
Dr. Martin H. Dawson.
Dr. Malcolm Dole.
Mr. Elmer E. Fleck.
Dr. Thomas Francis, Jr.
Dr. Donald C. Hoffman.
Dr. Christopher Johnston.
Dr. Currier McEwen.
Dr. Norman S. Moore.
Dr. James F. Pearey.
Dr. Albert L. Raymond.
Dr. F. Duran Reynals.
Dr. Alexander Bothen.
Dr. Charles A. Slanetz.
Miss Evelyn B. Tilden.

PROMOTIONS:

Associate to Associate Member

Dr. Louis A. Mikeska.

Assistant to Associate

Dr. Edwin L. Gustus.
Dr. Charles H. Hitchcock.
Mr. Thomas P. Hughes.
Dr. William S. Tillett.
Dr. Perrin H. Long.

Fellow to Assistant

Mr. Philip R. Averell.

Dr. Rene J. Dubos.

RESIGNATIONS:

Dr. Jacob J. Bronfenbrenner has accepted appointment as professor and head of the department of bacteriology and immunology at Washington University Medical School.

Dr. E. V. Cowdry has accepted appointment as professor of cytology in the department of anatomy of Washington University Medical School.

Dr. Fred W. Stewart has accepted appointment as assistant pathologist at the Memorial Hospital, and associate in pathology at Cornell University Medical School, New York City.

Dr. Clifford L. Derick has accepted appointment as assistant professor of medicine at the Harvard Medical School and physician to the Peter Bent Brigham Hospital.

SCIENTIFIC NOTES AND NEWS

MATTHEW W. STIRLING, of Berkeley, California, ethnologist and explorer, has been appointed chief of the U. S. Bureau of American Ethnology under the Smithsonian Institution, to succeed Dr. J. Walter Fewkes, who retired from active administrative duties last January.

SIR ERNEST RUTHERFORD, Cambridge, and M. Jean Perrin, professor of physical chemistry at the Sorbonne, have been elected associates of the Royal Academy of Belgium.

DR. HENRI DESLANDRES, director of the observatory of Paris and Meudon, has had conferred upon him an honorary doctorate of mathematics and physics by the University of Leyden.

THE degree of doctor of science has been awarded by the University of Cambridge to F. J. W. Whipple, superintendent of the Kew Observatory and assistant director of the Meteorological Office, England.

DR. JOHN R. MOHLER, chief of the U. S. Bureau of Animal Industry, received the honorary degree of doctor of science on June 2 from the University of Maryland.

At the commencement of the University of Pittsburgh the degree of Sc.D. was conferred upon B. Preston Clark, of Boston, in recognition of his work upon the *Sphingidae* of the world. On the same occasion, Dr. W. J. Holland, in recognition of his approaching eightieth birthday and the fact that for forty years he has been a trustee of the university, during ten of which he was its chancellor, was given the honorary degree of L.H.D.

THE honorary degree of doctor of science has been conferred by the University of Pennsylvania upon Dr. James M. Anders, professor of medicine in the uni-

versity graduate school of medicine; and on Dr. Milton J. Greenman, director of the Wistar Institute of Anatomy and Biology.

AMONG those receiving honorary degrees from the University of Washington on June 18 were Dr. Fay Cooper Cole, professor of anthropology at the University of Chicago, and Dr. and Mrs. George Diek, of the McCormick Institute of Infectious Diseases, Chicago.

THE honorary degree of doctor of science was conferred upon Samuel Robinson Williams, professor of physics at Amherst College, at the commencement exercises of Grinnell College on June 5.

At commencement on June 11 De Pauw University conferred the honorary degree of doctor of science upon two brothers, Professor O. M. Stewart, head of the department of physics at the University of Missouri, and Professor G. W. Stewart, head of the department of physics at the University of Iowa.

THE honorary degree of doctor of science was conferred upon Dr. Reinhardt Thiessen, research chemist and microscopist of the U. S. Bureau of Mines at Pittsburgh, at the annual commencement exercises of Lawrence College, Appleton, Wis., on June 11.

AMONG those receiving honorary degrees at the 160th annual commencement exercises at Brown University on June 18 were George H. Sherwood, curator of the American Museum of Natural History, and Dr. Harvey N. Davis, president-elect of Stevens Institute of Technology.

DR. EDWARD B. MATHEWS, professor of geology at the Johns Hopkins University, received the honorary degree of doctor of science from Colgate University on June 19.

E. A. REEVES, map curator and instructor in practical astronomy and surveying to the Royal Geographical Society, has been awarded the society's Victoria medal. The medal is given occasionally for purely scientific attainments, the last award being in 1927, to Sir Charles Close.

WE learn from *Nature* that the council of the Royal Society of Edinburgh has awarded the Keith prize for the period 1925-27 to be divided equally between Professor T. J. Jehu and R. M. Craig for the joint series of papers which have recently appeared in the publications of the society on the geology of the Outer Hebrides, and the Neill prize (1925-27) to Professor Arthur Robinson, professor of anatomy in the University of Edinburgh, for his contributions to comparative anatomy and embryology. The Bruce prize for the period 1926-28 has been awarded to Professor Dr. H. U. Sverdrup, of the Geophysical Institute,