

American Institute of Mining and Metallurgical Engineers.—"Pulverized Fuel for Steam Purposes," Martin Frisch and Henry Kreisinger, Combustion Engineering Corporation, New York City; "Pulverized Fuel in Metallurgical Work," W. O. Renkin, Fuller-Lehigh Company, Fullerton, Pa.; "Pulverized Fuel in Marine Works," H. W. Brooks, consulting engineer, New York City.

National Electric Light Association.—"Domestic Heating by Means of Solid Fuel, Oil, Gas and Electricity," H. W. Derry, Union Gas & Electric Company, Cincinnati, Ohio; "Utilization of Electricity for Industrial Heating," W. H. Sammis, Consumers Power Company, Jackson, Mich.

American Institute of Electrical Engineers.—"Utilization of Electricity for Industrial Heating."

U. S. Bureau of Mines.—"Coal Classifications," A. C. Fieldner, Washington, D. C.

THE CURRENT PROGRAM OF THE ILLINOIS STATE GEOLOGICAL SURVEY

THE Illinois State Geological Survey is undertaking the following field and office projects during the current fiscal year beginning July 1, 1928:

The paleobotany and stratigraphy of the Pottsville formation by Dr. David White, in cooperation with U. S. Geological Survey; the paleontology and stratigraphy of the Silurian System by Professor T. E. Savage, of the University of Illinois; the physiography, stratigraphy and paleontology of the Pleistocene System of southern Illinois by Professor Paul MacClintock, late of the University of Chicago, now of Princeton University; the paleontology of the Pennsylvanian System by Dr. J. Marvin Weller, of the state survey staff; the foraminifera of the Pennsylvanian System by Professor C. O. Dunbar, of Yale University, assisted by Mr. L. G. Henbest, of the survey staff; the flora of the coal balls by Associate Professor A. C. Noé, of the University of Chicago; the writing of the new report on the fluorspar deposits of Hardin County by Professor E. S. Bastin, of the University of Chicago; the writing of a comprehensive bulletin on the Illinois Coal Field by Dr. G. H. Cady, of the state survey staff; the writing of the report on the oil and gas possibilities of northern Crawford County by Mr. G. F. Moulton, of the survey staff; the writing of the report on the oil and gas possibilities of the Hardinsville and Sumner quadrangles, by Assistant Professor D. J. Fisher, of the University of Chicago; the economic non-metallic resources of extreme southern Illinois by Mr. J. E. Lamar, of the survey staff, and Mr. C. E. Dutton, of the University of Illinois; the writing of the report on the Monmouth quadrangle and the collecting and interpretation of sub-surface data in the state by Mr. L. E. Workman, of the survey staff; the geology of state highway engineering projects and the writing of the report on the

Kankakee quadrangle by Dr. G. E. Ekblaw, of the survey staff; the geologic mapping of the Illinois portion of the Hardin and Brussels quadrangles by Mr. W. W. Rubey, loaned to the state survey by the U. S. Geological Survey, assisted by Dr. J. R. Ball, of Northwestern University; the geologic mapping of the Winchester and Griggsville quadrangles by Dr. A. H. Bell, of the survey staff; the geologic mapping of the Glasford quadrangle by Dr. A. C. Bevan, of the University of Illinois; the writing of the report on the Havana quadrangle by Dr. H. R. Wanless, of the University of Illinois; and the geologic mapping of the Elgin quadrangle by Dr. M. M. Leighton, chief of the Illinois Geological Survey, and W. E. Powers, of Northwestern University.

Geological assistants, chiefly graduate students, of some of the foregoing parties include H. B. Willman, O. E. Wagner and S. E. Ekblaw, of the University of Illinois, E. R. Fritz and K. W. Stott, of the University of Chicago, and T. A. Hendricks, of Northwestern University.

The State Board of Natural Resources and Conservation, which controls the policies and activities of the state scientific surveys, including the geological survey, recently confirmed the appointment of Curator F. C. Baker, of the museum of natural history of the University of Illinois, as consultant in Pleistocene invertebrate paleontology. Professor Baker is now engaged in a study of the fossil collections from the various interglacial loesses and water laid silts which the survey is making in its Pleistocene and quadrangle studies.

The printing program of the Illinois Survey now includes, in addition to its regular technical bulletins, an educational series of pamphlets for the educated layman and public school pupil, illustrated and written especially for their kind of interest and background.

The topographic mapping of the state under the immediate charge of Major W. H. Herron, topographic engineer in charge of the Central Division of the U. S. Geological Survey, is continuing with the financial support of \$100,000 per year shared equally by the federal and state surveys. The revised topographic mapping of Chicago and vicinity was completed last fall, and the engraved sheets are now being issued in 7½ minute units, vertical interval 5 feet, thus making a remarkable metropolitan map.

DR. SMITH'S COLLECTION OF CHEMICAL MEMORABILIA AT THE UNIVERSITY OF PENNSYLVANIA

As already recorded in SCIENCE, the valuable collection of chemical memorabilia assembled by Dr. Edgar Fahs Smith, who was provost of the University

of Pennsylvania for ten years, has been presented to the university by his widow, Mrs. Margie A. Smith, and will be preserved in its present setting in the Harrison chemical laboratory.

The university is making special arrangements to safeguard the collection. It will continue to be accessible to visitors and students, many of whom during Dr. Smith's lifetime had frequent recourse to it for research work.

The collection comprises three main divisions. The first contains about 500 autographed letters and manuscripts of eminent chemists of all nationalities; the second is made up of approximately 1,000 portrait prints and engravings of prominent chemists from the days of the alchemists to the present, and the third consists of nearly 1,000 books on alchemy and chemistry.

In addition, there are a number of chemical preparations and a variety of apparatus which Dr. Smith had accumulated during his career as teacher and research worker, and an unusually rare collection of books and manuscripts relating to the history of the University of Pennsylvania and the lives of outstanding alumni and members of the faculty.

Of Dr. Smith's books on alchemy and chemistry the majority are in their original bindings and many are printed in Latin, German and old French.

Letters from eminent chemists of all nations from the earliest times down to those of Pasteur and Mme. Curie are among the autographed manuscripts. Notable among these is one addressed by Joseph Priestley in 1792 to the members of the National Assembly of France, declining "nomination to the National Convention."

In 1898, when Dr. Smith was elected vice-provost of the university, he became intensely interested in its early history and his zeal in collecting material bearing on that subject soon resulted in his accumulation of a variety of rare items, many of which can not be duplicated elsewhere.

When the Harrison chemical laboratory was erected at the university in 1894, Dr. Smith selected two rooms for his offices and these he continued to occupy until his death, making them the depository for his collections.

SCIENTIFIC NOTES AND NEWS

PROFESSOR GILBERT MURRAY (England) has been elected president of the League of Nations International Committee on Intellectual Cooperation, in succession to the late Professor Lorentz. Mme. Curie (France) and M. Destrée (Belgium) have been elected vice-chairmen.

PROFESSOR C. W. STILES, of the U. S. Public Health Service, has been elected honorary fellow of the Royal Society of Tropical Medicine and Hygiene.

WILHELM N. SUKSDORF, of Bingen, Washington, was awarded an honorary degree of master of science in botany by the State College of Washington at its thirty-second commencement. It was the first honorary degree awarded by the institution in eleven years.

ALFRED V. DE FOREST, research engineer for the American Chain Company, was recently awarded the Dudley national medal by the National Society for Testing Materials in recognition of his achievement in perfecting a non-destructive test for materials.

SIR D. MORVSON, professor of geology and mineralogy at the University of Adelaide, was awarded the gold Nachtigall medal by the Society of Geography of Berlin, on the occasion of its one hundredth anniversary. The society also awarded a gold medal to the Society of Geography of Paris.

L. BLARINGHEM, professor at the Sorbonne, has been elected a member of the Paris Academy of Sciences in the section of botany, to take the place of the late Professor Guignard.

DR. NAGEOTTE, of the College of France, Paris, has been awarded the Monaco prize of 100,000 francs by the French Academy of Sciences.

ACCORDING to *Nature*, the Russian Academy of Sciences has appointed a committee to arrange for the celebration of the completion of forty years of scientific research by one of its members, Professor P. Sushkin, the eminent zoologist. There will be a special meeting of the academy in October, and it is hoped to publish a jubilee volume of papers.

DR. HANS THIERFELDER, professor of physiological chemistry at Tübingen, has recently celebrated his seventieth birthday.

DR. THOMAS B. OSBORNE, for forty-two years chief in protein research at the Connecticut Agricultural Experiment Station, New Haven, has retired from active direction of the work of the laboratory, assuming the title of advisory biochemist. Dr. Hubert B. Vickery, for several years associated with Dr. Osborne, has been appointed biochemist in charge.

THE retirement of Dr. Robert F. Ruttan, director of the department of chemistry in the medical school of McGill University and dean of the faculty of graduate studies, has been announced.

THE American Society of Plant Physiologists has elected the following officers for 1928-29: *President*, Dr. E. J. Kraus, of the University of Chicago; *vice-*