

(1) Soil genesis, classification and erosion; (2) Plant genetics; (3) Plant physiology; (4) Instrumentation (second semester).

Under the auspices of the school, probably eleven undergraduate courses, carrying credit in most cases, will be conducted. These courses are:

(1) Principles and practices in agricultural cooperation; (2) Elementary statistical methods; (3) Advanced statistical methods; (4) Prices and price relationships; (5) Review of mathematics; (6) History of American agriculture; (7) Poultry husbandry (second semester); (8) Scientific French; (9) Intermediate scientific German; (10) Commercial Spanish; (11) Advanced Russian.

The course in soil genetics, classification and erosion, which will run through one semester, probably will begin on December 17 in order to give field men who come into Washington for the winter opportunity to take the course, and also one or two other courses may for the same reason start some time in December.

In connection with the school it frequently is possible for adequately prepared students to arrange to do special work on definite problems under supervision in the department's research laboratories. Such work and the credit to be granted should be arranged through the deans of accredited graduate schools. A limited number of such problems probably will be available this year.

The tuition is \$25 for two semesters of 30 hours each, or \$15 for one semester.

In a recently published statement regarding opportunities for education in Washington, the United States Civil Service Commission said the following:

In addition to the courses given by the universities and schools of special class, both the Bureau of Standards and the Department of Agriculture give a number of valuable courses in technical and professional lines which, as in the case of the school classes, are arranged at hours so that government employees may attend them. Graduate work in these departmental courses is accepted by a number of the standard universities as credit toward a higher degree.

### THE CONFERENCE ON BITUMINOUS COAL

TWELVE major topics for discussion at the Second International Conference on Bituminous Coal, to be held under the auspices of the Carnegie Institute of Technology, Pittsburgh, Pa., from November 19 to 24, are tentatively announced by Dr. Thomas S. Baker, president of the institution and chairman of the congress. About one hundred engineers and scientific men representing fifteen nations have already tentatively accepted invitations to speak or to send papers, and the number of speakers and delegates is growing daily. About sixty per cent. of the papers will be

delivered by representatives of countries other than the United States.

Although the Second International Conference will be similar in purpose to the first congress held in 1926, preliminary plans for this year's meeting show that its scope will be considerably enlarged and the program will be more important and more international in character. The discussion of fixed nitrogen is one of the topics which will receive close attention. The liquefaction of coal, which was one of the principal subjects of discussion at the first meeting, will again occupy a prominent place in the deliberations. Low temperature distillation will be treated by representatives of at least a half dozen countries. High temperature distillation, power from coal, coal tars and oils, complete gasification of coal, origin of coal, coal washing, pulverized coal, catalysts and the general aspects of the bituminous coal industry are other topics that will be considered.

The subjects and speakers include:

*The Economics of the Coal Industry:* Lord Melchett, Dr. Friedrich Bergius, Professor Dr. Franz Fischer, Germany; André Kling and E. Audibert, France; Engineer Guardabassi, Italy; will deal with the subject of the liquefaction of coal.

*Low Temperature Distillation:* George E. K. Blythe, Dr. C. H. Lander, Harald Nielsen, Dr. E. W. Smith, England; Dr. A. Herz, Joseph Plassmann, Professor F. P. Kerschbaum, Germany; Henri Lafond, Professor Paul Lebeau, Antonie Vonk, A. Leante, France; Professor Dr. Granigg, Austria; Professor Yosikiyo Oshima, Japan; Professor Samuel W. Parr, Professor Alfred H. White and F. C. Greene, United States.

*High Temperature Distillation:* Jean Bing, France; Professor Ernest Terres, Germany; Edgar C. Evans, England.

*Power from Coal:* Dr. J. E. Noeggerath, Germany; C. Simon, France; A. T. Stuart, Canada; W. B. Chapman and Professor A. G. Christie, United States.

*Coal Tars and Oils:* Henri Winckler, France; Dr. L. Edeleanu and Professor Dr. Fritz Frank, Germany, and Gustaf Egloff, United States.

*Gasification of Coal:* Dr. Karl Bunte and Dr. Alfred Pott, Germany; Paul Weiss, France.

*Origin of Coal:* Professor George L. Stadnikoff, Russia; Dr. Chozo Iwasaki, Japan; Dr. Reinhardt Thiessen and Professor E. C. Jeffrey, United States.

*Fixed Nitrogen:* A representative of L'Air Liquide Société, France; Rudolf Battig, Germany; Professor Harry A. Curtis, Louis C. Jones and Charles J. Brand, United States.

*Coal Washing:* A. France, Belgium; Professor Dr. Glinz, Germany; Dr. R. Lessing, England; F. R. Wadleigh, Dr. F. W. Sperr, James B. Morrow and Byron Bird, United States.

*Pulverized Coal:* Dr. I. P. Goossens, Rudolph Pawlikowski and Dr. P. Rosin, Germany; C. J. Jefferson, United States.

*Catalysts:* Professor A. Mailhe, France; Professor Hugh S. Taylor, United States.

*Rubber from Coal:* Professor Fritz Hoffmann, Germany.

Addresses not yet classified under these headings will be given, it is expected, by F. S. Sinnatt, England; Raymond Berr, France; P. E. Raaschou, Denmark; John Hays Hammond, Howard N. Eavenson, E. E. Slosson, Arthur D. Little, A. C. Fieldner and Dr. H. C. Parmelee, United States.

## SCIENTIFIC NOTES AND NEWS

DR. ARTHUR D. LITTLE, president of Arthur D. Little, Inc., and of the Petroleum Chemical Corporation, was elected president of the Society of Chemical Industry at the recent New York meeting. The meeting of the society in 1929 will be in Manchester, England.

The government of France has conferred upon Dr. L. O. Howard, of the Bureau of Entomology, the rank of officier de la Légion d'Honneur, as a promotion from the rank of chevalier of the legion. Dr. Howard has recently received honors from Hungary, having been made honorary member of the Hungarian Royal Society of Natural Sciences and of the Entomological Society of Hungary.

DR. CLEMENS PIQUET, specialist in the diseases of children, was on August 29 nominated for the presidency of Austria, to succeed President Michael Hainisch, whose term expires at the end of November. Dr. Richard Wettstein, professor of systematic botany in the University of Vienna, was the only other candidate.

THE British National Institute of Agricultural Botany has awarded the Snell memorial medal for 1927 to Professor Paul A. Murphy. The medal is given annually to mark eminent work in the sphere of potato husbandry.

DR. K. K. CHEN, associate in pharmacology of the Johns Hopkins University, has been awarded a prize of \$2,000 Mex. for his researches on ephedrine and other Chinese drugs by the China Foundation for the Promotion of Education and Culture.<sup>1</sup> During the recent Congress of the International Anesthesia Research Society in Madison and Minneapolis, Dr. Chen's name, together with that of Professor Walter J. Meek, was listed in the Scroll of Recognition for their "laboratory studies leading to the clinical use of ephedrine in occidental medicine, surgery and anesthesia."

<sup>1</sup> For the organization of this foundation, see E. V. Cowdry, *SCIENCE*, 1927, LXV, 150.

DR. CLIFFORD S. LEONARD has resigned as assistant director in the department of pharmacology and toxicology in the Yale School of Medicine, to become director of the Burroughs Wellcome Experimental Research Laboratories, Tuckahoe, New York, now in process of organization. Pure and applied research on medical and pharmaceutical lines will be conducted.

DR. J. S. DE LURY, professor of geology in the University of Saskatchewan, has resigned his position there to return to Winnipeg in the dual capacity of commissioner of mines for the Province of Manitoba and head of the department of geology in the University of Manitoba.

AFTER a year in Germany working under Professor J. Franck and later under Professor A. Sommerfeld, Dr. A. C. G. Mitchell has become a fellow at the Barthol Research Foundation of the Franklin Institute.

DR. PAUL R. RIDER, associate professor of mathematics in Washington University, has been given a year's leave of absence to enable him to accept a Sterling Research Fellowship in mathematics at Yale University.

ANDREY A. POTTER, dean of engineering of Purdue University, and Arthur N. Johnson, dean of engineering of the University of Maryland, have been designated as members of the land-grant college survey staff of the U. S. Bureau of Education.

PROFESSOR NELSON C. BROWN, of the College of Forestry of Syracuse University, has been named a member of the New York State Reforestation Commission. Investigation of the possibilities of reforestation of New York State and the preparation of a survey of the location, value and area of all land available for reforestation constitute the purpose of the commission.

DR. A. E. KENNELLY, professor of electrical engineering at Harvard University, and Professor F. L. Stevens, professor of plant pathology in the University of Illinois, represented the American Association at the recent Glasgow meeting of the British Association for the Advancement of Science. Mr. Watson Davis represented Science Service.

DR. FRANKLIN H. MARTIN, president-elect of the American College of Surgeons, has returned to Chicago from a visit to the Canal Zone in the interest of the Gorgas Memorial Institute, for which at the last session of the Congress an annual appropriation of \$50,000 for the next five years was made.

DR. W. D. MATTHEW, chairman of the department of paleontology of the University of California, has