"for the greatest contribution to the Chinese Chemical Industry"; life member of the Science Society of China; bachelor of science, master of arts and doctor of philosophy; and author. Respected in China for his chemical ability and successful achievements, he has by his personality, energy and distinguished position been able to inspire and lead his fellow countrymen to greater technological accomplishment.

The council, in deciding to bestow this honor, is conscious that Occidental Nations are indebted to the ancient Chinese civilization for their first knowledge of silk, paper, printing, porcelain, gunpowder and the magnetic compass, and has selected with great care this distinguished son of China who has carried Western chemical science to his own country, thus enabling the West to repay, in part, a debt, centuries old, to the Chinese nation.

SCIENTIFIC NOTES AND NEWS

At the Chicago meeting of the American Institute of Mining and Metallurgical Engineers the William Lawrence Saunders Gold Medal was presented to George B. Harrington, president of the Chicago, Wilmington and Franklin Coal Company, for "distinguished achievement in mining." The Anthony F. Lucas Medal was presented to Charles V. Millikan, chief petroleum engineer of Amerada Petroleum Corporation, in recognition of "his contributions to engineering in the development and production of petroleum."

Dr. GILBERT E. DOAN, head of the department of metallurgical engineering of Lehigh University, and his two associates, Dr. John Frye and Robert Stout, have received the Lincoln Award of the American Welding Society in recognition of research "representing the greatest contribution to the advancement and use of welding for the year 1943."

Dr. Fred C. Koch, Frank P. Hixon distinguished service professor of biochemistry, emeritus, of the University of Chicago, was the guest of honor at a dinner on October 1, given by the Chicago Section of the American Institute of Chemists. He was presented with a scroll enumerating his many contributions to science.

The Psychological Bulletin reports that the establishment of a new loan fund at Ohio University, to be known as the "James P. Porter Loan Fund in Psychology," was announced recently by Dr. A. C. Anderson, professor of psychology, who headed a committee to formulate plans to honor Dr. Porter on his recent retirement from the teaching faculty. The money for the loan fund was contributed by former students and by members of the staff of the department. At a dinner, Dr. Porter, who joined the faculty of Ohio University as professor of psychology in 1922, was presented with a book of letters from former students. For many years he was editor of The Journal of Applied Psychology.

A SKETCH of the career of Dean Emeritus Mortimer Elwyn Cooley, of the College of Engineering of the University of Michigan, is given in the July number of the *National Engineer*. It includes an article by Dean Cooley, entitled "Reminiscences of a Pioneer Engineer and Educator." The Mortimer E. Cooley Bridge, between Cadillac and Manistee, Michigan, and the Mortimer E. Cooley Foundation of Engineering were named for Professor Cooley.

The Grocery Manufacturers of America have chosen Sir John Boyd Orr, who was largely responsible for improving the nutritive quality of the English diet in the face of wartime food shortages, as the 1943 recipient of its annual award. The presentation ceremony will be broadcast on November 4 over a two-way transatlantic hookup by the Blue Network at the war conference of the manufacturers in New York City. Surgeon General Thomas Parran, of the U. S. Public Health Service, has been invited to present the award in an address at the conference. Sir John will accept it over the air from England.

Officers of the American Society for Metals have been elected as follows: M. A. Grossmann, director of research of the Carnegie-Illinois Steel Corporation, President; Dr. Kent R. Van Horn, research metallurgist of the Aluminum Company of America, Cleveland, Vice-president, and Harry D. McKinney, vice-president and works manager of the Driver-Harris Company, Harrison, N. J., Treasurer. William H. Eisenman will continue as national secretary of the society.

Dr. Harold C. Wiggers has resigned as assistant professor of physiology at the Medical School of Western Reserve University to become associate professor of physiology in the College of Medicine of the University of Illinois in Chicago.

Dr. MAX MYER WINTROBE, formerly associate professor in the department of medicine at the Johns Hopkins University, has become professor of internal medicine and head of the department of the School of Medicine of the University of Utah.

Dr. WILLIAM I. MYERS, head of the department of agricultural economics and farm management and acting dean since the death of Carl E. Ladd on July 23, has been appointed dean of the New York State College of Agriculture, Ithaca, N. Y.

DR. JOHN LAURENCE KASK, formerly assistant director of the International Pacific Salmon Fisheries Commission, has been appointed associate curator of fishes of the California Academy of Sciences.

THE Desert Museum at Palm Springs, Calif., which was closed for the summer on May 15, was opened on October 16. The curator, Sam Hinton, having been appointed head of the department of hematology in the Medical Hospital (Torney Hospital) at Palm Springs, Professor and Mrs. T. D. A. Cockerell have taken charge of the museum.

VERNON E. BROCK, biologist with the Department of Research of the Fish Commission of Oregon, has been given leave for the duration of the war to become assistant to the administrator of fishery production and fishery analyst in the Office of the Coordinator of Fisheries. His headquarters are in San Francisco, where he is engaged in the administration of the California sardine fishery.

C. Max Hull, for the past eight years a research chemist with the Standard Oil Company of Indiana, has been appointed research associate in the Research Foundation, Ohio State University.

Dr. Charles F. McKhann has resigned as professor of pediatrics and communicable diseases at the Medical School of the University of Michigan and as professor of maternal and child health in the School of Public Health, to become assistant to the president of Parke, Davis and Company. He will devote his time entirely to the scientific activities of the company.

WILLIAM S. RICHARDSON has been named head of the newly established chemicals division of the B. F. Goodrich Company at Akron, Ohio.

The American Philosophical Society has made a research grant of \$1,000 to Dr. Herbert C. Brown to further his studies of steric strains as a factor in the stability of addition compounds. Dr. Brown recently joined the faculty of the College of Liberal Arts at Wayne University as assistant professor of chemistry. He is now coordinator and consultant for an Army research project being carried out by the University of Chicago and the Ethyl Corporation.

Dr. Howard C. Naffziger, professor of surgery in the Medical School of the University of California, has returned to San Francisco after making a survey of military medicine in England, Scotland, Sicily, North Africa and the Near East.

CAPTAIN WINCHELL M. CRAIG, U. S. Naval Reserve, chief surgeon at the Naval Hospital, Bethesda, Md., will deliver the W. J. and C. H. Mayo Memorial Lecture at the Medical School of Dartmouth College on

November 5. The title of his address will be "Warriors against Disease."

Dr. C. H. Mathewson, chairman of the department of metallurgy of Yale University, gave the Campbell Memorial Lecture of the American Society for Metals, following the annual meeting.

The Thomas William Salmon Lectures will be given on November 5, 12 and 19 at the New York Academy of Medicine by Dr. Abraham Arden Brill, lecturer on psychoanalysis at Columbia University. His subject will be "The Psychotherapeutic Contribution to Psychiatry."

The American Association of Physics Teachers will hold its thirteenth annual meeting jointly with the American Physical Society at Columbia University from January 13 to 15, 1944. Headquarters will be at the Hotel Pennsylvania. The third Richtmyer Memorial Lecture will be delivered at this meeting and the presentation of the Oersted Medal will be made. There will be joint sessions with the American Physical Society, invited and contributed papers, exhibits of newly developed instructional equipment and the annual business meeting. Professor R. C. Gibbs, of Cornell University, is chairman of the program committee. Members who desire to contribute papers (10 minutes) or exhibits to the program are asked to send titles and abstracts not later than November 20.

AUTHORITIES on public health from six Latin American universities are visiting the United States under the auspices of the Office of the Coordinator of Inter-American Affairs and the Pan-American Sanitary Bureau in Washington, D. C. After a tour of schools of public health, members of the deputation will conclude their visit to the United States with presentation of a report on South American public health schools at the annual meeting of the Association of Schools of Public Health to be held at the University of Michigan on November 7. At the same time a plan for the interchange of students, offering the facilities of their universities for the study of tropical diseases, will be presented. Dr. Oscar Vargas, San Jose, Costa Rica, representing the Pan-American Sanitary Bureau, is acting as leader of the group. The other members include: Alberto Zwanck, professor of hygiene at the University of Buenos Aires; A. H. dePaulo-Souza, professor of public health at the University of São Paulo, Brazil; Carlos Enrique Paz-Soldan, professor of hygiene at the University of San Marcos, Lima, Peru; Federico J. Salveraglio, professor of hygiene at the Medical School, Montevideo, Uruguay; Mario Prado, vice-director of the Institute of Bacteriology, Santiago, Chile; and Hernan Romero, professor of preventive medicine and public health at the University of Chile, Santiago.

A CONFERENCE on geodesy, aeronautical charts and topographic maps in which twenty-five distinguished visitors from Latin America and Canada took part, was held recently in Washington. The conference was sponsored by the American Geographical Society at the suggestion of the Committee on Cartography of the Pan-American Institute of Geography and History, of which Pedro C. Sanchez is director. Dr. Andre C. Simonpietri is the secretary of the Commission on Cartography. Headquarters are in Mexico City. The purpose of the committee is to promulgate uniform standards and technical methods which can be adopted by all the countries involved; to improve education and training in the science of map making through the exchange of professors and technical personnel. Reports are being compiled in each country to indicate the status of mapping, complete with index charts showing geodetic control, completed and under way. Biographical data are being assembled on those engaged in cartographic work in each country and a glossary of scientific terms used in mapping is being prepared in English, Spanish and Portuguese. Following the conference in Washington the delegates inspected the production of aerial mapping equipment by the Bausch and Lomb Optical Company.

As reported by Science Service, cultural leaders in the Western Hemisphere recently met in Washington in wartime session to consider how best to promote scientific and scholarly cooperation. The Inter-American Committee on Intellectual Cooperation, under the chairmanship of Dr. Miguel Azorio de Almeida, Brazilian physiologist, is a Western Hemisphere regrouping of the national committees on intellectual cooperation that were organized under the League of Nations a decade ago. Conferences were held in the buildings of the Pan American Union and the Carnegie Endowment for International Peace, with those organizations and the Division of Cultural

Relations of the State Department cooperating in the Dr. Waldo G. Leland, director of the program. American Council of Learned Societies, recently named chairman of the American Committee on Intellectual Cooperation, has been instrumental in arranging the conference. The American delegate to the meeting is Dr. James T. Shotwell, of Columbia University, now honorary chairman of the American committee. Other delegates are Dr. Victor Lascano, of Argentina, Dr. Julian Nogueira, of Uruguay, Dr. Alfonso Reyes, of Mexico, Dr. Cosme de la Torriente y Peraza, of Cuba, and Dr. Oscar Vera, of Chile. Dr. Herminio Rodriguez is secretary of the committee. Technical experts present included Dr. Robert Valeur, of New York, Dr. Mariano Brull, of Cuba, and Dr. Antonio Castro Leal, of Mexico.

THE Earl E. May Seed Company has made a gift of \$75,000 to Iowa State College, to be spent over a period of five years, for a study of the basic problems relating to the growth and development of the corn of Mexico and Central and South America, and the contribution the corn of those areas may be able to make to the United States.

It is reported in *Chemical and Engineering News* that a National Security Award has been established by the Office of Civilian Defense to give recognition to outstanding achievements of certain essential facilities in protecting the safety of employees, plants and production schedules from air raids, fire, sabotage and accident. A Board of Review has been formed to pass final judgment on records of plants nominated for the award.

A UNITED PRESS dispatch reports that the Swedish Government has decided against the awarding of Nobel prizes for peace, literature, physics, chemistry or medicine in 1943.

DISCUSSION

SYNAPSIS AND SYNGAMY AS STIMULATING PROCESSES OF PLANT DEVELOPMENT¹

The structural features of sexual reproduction in higher plants have been worked out and described with great precision, yet very little is known of the physiological aspects of this very important phase of their life. This despite the fact that most of the economic plants are grown for their seeds and fruit—organs and tissues associated directly or indirectly with reproduction. Even a cursory observation of

¹ Contribution from the Department of Horticulture, Missouri Agricultural Experiment Station Journal Series No. 909. many species, especially the annuals, should convince one that sexual reproduction has a very marked effect on growth and development, certain important aspects of which are now being recognized and studied.

In a series of experiments, chiefly with horticultural plants, the effects of developing flowers and fruit on vegetative growth have been amply demonstrated by the senior author,² which leaves little doubt about the conspicuous physiological control that these organs exert on metabolism. The influence, characterized by

² A. E. Murneek, Plant Physiol., 1: 3-56, 1926; 7: 79-90, 1932. Mo. Agr. Exp. Sta. Res. Bul., 106, 1927. Proc. Am. Soc. Hort. Sci., 21: 274-276, 1924; 40: 201-204, 1942. Growth, 3: 295-315, 1939.