NEWS and Notes

C. Lovatt Evans will retire this summer from his position as Jodrell Professor of Physiology, University College, London, which he has held since 1926. His publications include a series of *Recent Advances in Physiology* and a textbook on human physiology. Since the death of E. H. Starling Dr. Evans has edited Starling's *Principles of Physiology*, now in its tenth edition.

N. Ercoli, director of biological research at the Warner Institute for Therapeutic Research, New York City, will assume the direction of the Istituto Sieroterapico Milanese, Milan, Italy, in September.

E. S. Moore, head of the Department of Geological Sciences, University of Toronto, retired June 30 with the title professor emeritus, after 27 years on the staff.

Donald Woernley, physicist with the American Optical Company, has joined the staff of the Roswell Park Memorial Institute, Buffalo, New York, where he will conduct research in cancer biophysics.

Milton V. Veldee, chief of the Public Health Service's laboratory of biologics control, will retire after nearly 30 years of service with the agency. Dr. Veldee will be succeeded by his assistant, **William G. Workman,** who has been with the National Institutes of Health for the past 18 years.

G. M. Watkins, mycologist at the U. S. Naval Ordnance Laboratory, has been appointed professor of plant pathology in the Department of Plant Physiology and Pathology at Texas Agricultural and Mechanical College.

J. Eldred Hedrick, senior technologist of the Shell Chemical Corporation, has been appointed a professor of chemical engineering at Cornell University, effective this month.

Ismael Vélez, professor of botany at the Polytechnic Institute of Puerto Rico, will conduct research during 1949–50 on the herbaceous vegetation of the Caribbean Archipelago under a Guggenheim fellowship. During the year, Dr. Vélez will visit the herbaria of Washington, D. C., New York, and Chicago.

Grants and Awards

The National Institutes of Health Division of Research Grants and Fellowships is being reorganized. A new section on arthritis and rheumatism has been established and another on morphology and genetics; the sections on antibiotics, tuberculosis, and syphilis have been merged into a single section on experimental therapeutics; the panel on malaria has been abolished and its functions will be taken over by the tropical medicine section; the bacteriology section will now be known as the section on microbiology and immunology, and the sanitation study section as environmental health. The study section on gerontology has been discontinued because so few applications for grants were received, and the radiobiology section is no longer necessary since most radiobiology applications now go to the Atomic Energy Commission. The sections, whose members meet periodically to consider applications for research grants-in-aid, have been reduced in number from 20 to 17. *August 1* is the deadline for applications to be considered at September–October meetings of the sections; *December 1* for January–February meetings, and *April 1* for the May–June meetings.

The American Academy of Arts and Sciences announces that income from its Permanent Science Fund will be disbursed as grants-in-aid in support of research projects, which may be in any field of science.

Requests for further information about conditions governing the grants should be addressed to Hudson Hoagland, Chairman, Permanent Science Fund Committee, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, Massachusetts. Applications will be considered on *March 1* and *October 1* of each year.

The Research Corporation has announced the recent distribution of grants-in-aid for scientific research amounting to $235,000 for the initiation and continuation of 64 research projects administered by colleges, universities, and scientific institutions in the U. S. This brings the year's total of grants to $650,000, for a range of projects including cosmic ray research, construction of a mass spectrometer, studies of the structure if proteins, total synthesis of morphine, photochemical reactions, electrodeposition of metals, and various studies of metal alloys.

Colleges and Universities

Purdue University's new Department of Biological Sciences, which replaces the former Department of Biology, includes three major divisions: bacteriology, botany, and zoology and animal husbandry. John S. Karling, formerly of Columbia University, is head of the department and P. A. Tetrault, A. T. Guard, and C. J. Goodnight, respectively, are chairmen of the divisions. M. X. Zarrow, of Harvard University, and Dorothy M. Powelson, of the University of Maine, have been appointed professors of endocrinology and bacteriology, respectively, effective July 1st. A fourth division of biophysics is being organized jointly with the Department of Physics and will be under the direction of Lorin J. Mullins of Johns Hopkins University, who has been appointed professor of biophysics.

The Institute of Science and Technology of the University of Arkansas will conduct research on a contract basis for the Atomic Energy Commission on the chemical effects of nuclear transformations. The contract consideration for the first year is $25,000. Under the contract, an effort will be made to utilize hot atom exchange reactions in the preparation of tracer compounds, particularly those useful in medical and biological research. The project will also include a study of the chemical effects of beta decay processes. Raymond R. Edwards,

associate chemist in charge of nuclear studies in the institute, will head the project and will be assisted by Paul L. Day and John R. Totter of the School of Medicine's Department of Biochemistry.

Smith College announces receipt of a grant from the National Cancer Institute of the U. S. Public Health Service in support of the studies being carried on by the Smith College Genetics Experiment Station on ovular tumors, which prevent wide species crosses. The Genetics Experiment Station, established in 1942, has given M.A. degrees to seven graduate students and Ph.D. degrees to three. Through grants from other foundations it has been carrying on research and graduate instruction in plant cytogenetics, methods of embryo culture, and other controls of evolution and life processes in plants, with special reference to horticultural practice. The scientific staff consists of Albert F. Blakeslee, director, Sophie Satin, assistant director, Amos G. Avery, associate geneticist, and Jacob Rappaport, plant physiologist.

Young women with a bachelor degree who desire to work in the Genetics Experiment Station toward an advanced degree should apply to the Director, Smith College, Northampton, Massachusetts. For the coming academic year there are available one full-time assistantship at $2,000 and two part-time graduate assistantships at $1,000, plus tuition. Opportunities are available for apprentice training in plant breeding with academic credit during the summer.

The **California Institute of Technology** is planning construction of a new earthquake-resistant, concrete-reinforced engineering laboratory, at a total cost of approximately $625,000 when equipped. All of the civil engineering section will be moved to the new building, which will also house laboratories for such projects as powder metallurgy, X-ray metallography, spectrographic analysis, metals preparations, and use of radioactive isotopes in the study of materials. There will be a thermodynamics laboratory, one for strength and materials research, another for earthquake studies and for vibration investigations, and space for offices and classrooms.

Meetings and Elections

Science Abstracting. Over 1,850,000 scientific articles are published each year throughout the world. Only one-third of them are abstracted and thus made available in convenient form for a wide audience of scientists. These are abstracted, on the average, three times; the rest are not abstracted at all. The International Conference on Science Abstracting was convened by the Department of Natural Sciences of Unesco to examine this situation and consider what could be done to improve it.

Under the able chairmanship of Alexander King, of Great Britain, and with the efficient organizational technique of J. B. Reid, Unesco's Program Specialist for Scientific Literature, the conference met in Paris June 20–25. There were present 62 voting delegates from 28 countries and 24 international scientific organizations, together with 85 observers, making a total of 147 representatives from 29 countries.

The resolutions adopted in the final plenary session of the conference include many items of considerable significance to the advance of science in coming years. As would be expected, it was recommended that Unesco continue its efforts to promote the free interchange of scientific literature among the different countries, inasmuch as the complete coverage by abstracts of all new scientific information depends on that freedom. To facilitate the use of foreign literature in each country, it was recommended that adequate bilingual or polyglot dictionaries should be provided for all fields of science and technology, taking into account the national variations in usage and, if possible, making use of illustrations.

The secretariat of Unesco was urged to promote, in collaboration with the international scientific unions or other appropriate bodies, the standardization of scientific terminology and the publication at appropriate intervals of lists of new terms, with translations in various languages. Especially, in view of the urgent need for detailed evalution of the various systems proposed for chemical notation, the conference voted that the International Union of Chemistry and other organizations concerned with that problem be notified of the importance attached to it by the conference. The members were thinking not only of the primary use of symbols and words in recording data but also of their applications to the indexing of abstracts. Throughout many a discussion, one would recognize the general eagerness for more comprehensive standardization of terminology and publication procedures.

Several good suggestions were directed at the editors of scientific journals. It was agreed that each issue of such journals should include synopses of all its original articles. These should be in English or French, if not also in other languages, and the editor should accept responsibility for their adequacy, whether or not prepared by the author. The *Guide for the preparation of synopses,* prepared by the Abstracting Services Consultative Committee and issued by the Royal Society, Burlington House, London, was suggested as a basis for a standard guide that should be prepared for the use of authors and editors. Further, it was recommended that if a paper is not the publication of an original work, editorial symbols should be used to indicate whether it is a review, a discussion or criticism of previously published work, or a technological application of basis data. Most important of all, there was a strong expression of hope that synopses would be made freely available for republication by abstracting services in spite of copyright provisions of original journals.

Attention was directed toward the desirability of the establishment of regional bibliographical centers with facilities that would be used in locating periodicals, books, theses and laboratory reports obtainable within the region. The hope was also expressed that such centers be equipped for the production and distribution of photocopies, either full scale or microfilm. Scientists and scientific publishing bodies may find it desirable to set up, in cooperation with national or

regional committees, subject committees on an international level to coordinate abstracting in such major fields of pure and applied science as physics, chemistry, mathematics, engineering, and agriculture. Unesco was therefore asked to invite appropriate international organizations, such as the several international scientific unions, to facilitate the formation of these subject committees and their liaison with each other.

In keeping with the well-known objectives of Unesco, the conference consistently aimed toward coordination and cooperation between the numerous bodies now concerned with science abstracting, and the extension of their activities within the broad domain of science and technology. But most significantly, its findings and recommendations were also directed toward a much more complete geographical coverage in order that the results of research and development might be far more widely distributed and shared than at present. There seems little doubt but that the holding of this conference marks a long step forward toward that objective.

KIRTLEY F. MATHER

The Central States Section of the Botanical Society of America, which is holding its summer meeting jointly with the Northeastern Section in Ann Arbor, Michigan, has scheduled an important business meeting in Rackham Amphitheatre, University of Michigan, at 2:00 p.m., August 20th. This is the first meeting of the newly organized Central States Section and all members are urged to attend.

The American Institute of Electrical Engineers will hold its Pacific General Meeting in San Francisco August 23–26, with headquarters at the Fairmont Hotel. The meeting will be opened at 10:00 a.m., August 23 by George C. Tenney, chairman, followed by a general session with W. C. Mullendore as speaker. Reprints of technical papers may be obtained by writing to the AIEE Order Department, 33 West 39th Street, New York City 18. The uniform price per paper is 30 cents to members and 60 cents to nonmembers. Advance registration may be made through R. O. Brosemer, Chairman, Hotel Committee, 447 Sutter Street, San Francisco 8, California.

The American Chemical Society will hold its 116th national meeting in Atlantic City, New Jersey, September 18–23. Ten thousand chemists and chemical engineers are expected to take part. Titanium, the flame-proofing of textiles, the development of new and safer insecticides, and recent discoveries concerning the nutritional value of vitamin B-12 are among the subjects to be discussed. E. J. Cohn, of Harvard University, will preside at a biological division meeting on protein interactions. J. G. Reinhold, of the Philadelphia General Hospital, will be chairman of a symposium on clinical biochemistry. The Cellulose Division will cooperate with the National Research Council in a symposium on the degradation of cellulose, dealing with research which has produced a bandage for internal use which can be absorbed by the body.

Security clearance of scientists for secret work on atomic energy will receive special consideration. A symposium on security clearance will be held under the auspices of the society's Division of Industrial and Engineering Chemistry, with Wayne W. Hilty, head of the Committee on Professional Relations and Status, as chairman. Spokesmen for the Atomic Energy Commission, the National Military Establishment, private industry, and individual scientists who have had personal experience with existing security regulations will participate.

A colloquium on the mechanism of carbon combustion will be held in Nancy, France, September 27–30, under the sponsorship of Centre National de la Recherche Scientifique. Lother Meyer, of the University of Chicago's Institute of Metals, has been invited to participate. There will be eight participants from England, one from Belgium, and three from France.

A Southeast Asia and Pacific phytosanitary convention was agreed upon at an international conference held April 26–28 in Singapore, on invitation of the British Commissioner General. Some 13 nations or territories of the region were represented, as well as the Food and Agriculture Organization and the South Pacific Commission.

The agreement, which will now be submitted for ratification by all governments of the region, proposes uniform plant quarantine laws and regulations for controlling traffic in living plants and plant products to prevent introduction and spread of new insect pests and dangerous plant diseases. Increasing air travel and commerce have accentuated the danger of introduction of South American leaf blight of rubber and diseases and pests of other crops into Southeast Asia, as well as the introduction of the swollen shoot virus of cacao and related plants from Africa. The agreement is patterned after a similar one, formulated in 1948 in London, to include all of Africa south of the Sahara.

At the 47th annual meeting of the **American Neurological Association** held in Atlantic City, the following officers were elected for the year 1949–50: president, Henry W. Woltman; first vice president, Johannes M. Nielsen; second vice president, E. Jefferson Browder; secretary-treasurer, H. Houston Merritt; and assistant secretary, Charles Rupp.

The Michigan Academy of Science, Arts and Letters at its 53rd annual convention elected the following officers for the ensuing year: president, Paul S. Welch, University of Michigan; vice president, E. C. Beck, Central Michigan College of Education; secretary, Frederick H. Test, University of Michigan; treasurer, James L. Wilson, University of Michigan; and editor, Frederick K. Sparrow, University of Michigan.

On recommendaton of the society's Committee for Promotion of Research, the research grant from the AAAS was divided among the following persons: A. M. Chickering, Albion College, for a continuation of his studies of Panamanian spiders; Dale J. Hagenah, Detroit, to aid in preparation of a bibliography of Michigan botany; William Hovanitz, Wayne University, to aid the analysis of populations in Colias butter-

flies; Volney H. Jones, University of Michigan, for help in field investigations among the Huasteca Indians of Mexico.

The 68th Congress of the Association Francaise pour l'Advancement des Sciences was held at Clermont-Ferrand, Auvergne, France, July 15–21. The inaugural exercises were held in the Municipal Theatre at 10 a.m. Friday July 15 with the mayor of Clermont welcoming the members and guests. At 2:30 the same day the presidents and secretaries of the 26 sections of the association announced the titles of the papers which had been submitted for inclusion in the programs of the separate groups and the sequence of presentation. The section meetings were arranged to avoid conflicts with general papers presented before the congress as a whole. The unusual geological formation of the local area quite naturally afforded an opportunity for a very strong program in this discipline. In addition, there were a number of excursions and field trips of special interest. The total registration was over 350. Malcolm H. Soule, University of Michigan bacteriologist, who was the delegate of the AAAS, was given a medal at the closing session on Thursday, July 21. The 69th congress of the association will be held in Toulouse in late September, 1950.

Deaths

Aristide Fanti, 81, scientific librarian of the National Bureau of Standards from 1910 to 1938, died April 5 in Cheverly, Maryland, after a brief illness. Dr. Fanti contributed largely to the development of an international auxiliary language known as Interlingua.

O. F. Cook, 81, retired botanist of the U. S. Department of Agriculture, died April 23 at his home at Lanham, Maryland. Dr. Cook developed the single-stalk method of cotton culture which is used universally in the U. S. cotton belt.

Otis Freeman Curtis, 61, professor of botany at Cornell University and a member of the Cornell faculty since 1915, died July 4 while vacationing at Chatham, Massachusetts. Dr. Curtis was at one time president of the American Society of Plant Physiologists and was author of several plant physiology textbooks.

William Gerry Morgan, 81, professor of diseases of the digestive tract at Georgetown University since 1904 and its school of medicine from 1931 to 1935, died July 7 of a heart attack in Washington, D. C. Dr. Morgan was a former president of the American Medical Association and a master of the American College of Physicians.

Edward B. Stephenson, 67, superintendent of the Mechanics Division of the Naval Research Laboratory, died of a heart attack May 6 in San Francisco. Dr. Stephenson received a Navy award in 1931 for developing the use of American quartz crystals in underwater sound-detecting devices.

Cosmic ray activity at 20-mile altitudes will be studied next month by an expedition sponsored by the National Geographic Society, Washington, D. C., and the Bartol Research Foundation of the Franklin Institute, Swarthmore, Pennsylvania. The study will be made at the Canadian outpost settlement of Churchill on the shore of Hudson Bay. The program is a continuation of cosmic ray research instituted by the two sponsors and supported by the Air Force and Office of Naval Research. Canada's National Defense Board is cooperating in the undertaking. Martin A. Pomerantz, of the Bartol Foundation, will head the expedition, which leaves August 1. He hopes to develop evidence as to whether the sun is surrounded by a constant magnetic field similar to that of the earth.

Processing of quartz crystals to eliminate deterioration by age has been developed by the Army Signal Corps and is expected to benefit all types of communication, especially radio broadcasting, television, radar, Loran, and guided missile control. Blank crystals are placed on a conveyor belt and drawn through an electrically heated oven for two or three hours, reaching a temperature of 900° F, and then subjected to controlled cooling for 24 hours. The new process is credited to Arthur C. Pritchard, Maurice A. A. Druesne, and David G. McCaa, of the Frequency Control Branch of the Signal Corps Engineering Laboratories at Fort Monmouth, New Jersey.

The Philadelphia General Hospital announces the establishment of a nutrition clinic which, with its research laboratory, will study various nutritional problems among the patients in the hospital and Philadelphia school children. The laboratory is supported by grants-in-aid from Swift and Company and the National Live Stock and Meat Board for studies on the relation of diet to immunity, with particular reference to the effect of meat supplementation to antibody formation. Michael G. Wohl, associate professor of medicine, Temple University School of Medicine, will be chief of this clinic and Katherine Langwell, professor of nutrition at Drexel Institute, will act as nutritionist.

Unified Screw Thread Standards, Circular 479, recently published by the National Bureau of Standards, is now available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C., at 30 cents a copy. The booklet contains the proceedings of the meeting which resulted in the unification of American, British, and Canadian standard systems of screw threads, (see *Science*, April 1, 1949, p. 346), and includes detailed illustrations, tables, and numerical data. Remittances from foreign countries must be in U. S. exchange and must include one-third the publication price to cover mailing costs.

Make Plans for—

American Mathematical Society, August 30–September 2, 55th summer meeting in conjunction with summer meetings of **Econometric Society, Institute of Mathematical Statistics,** and **Mathematical Association of America,** University of Colorado, Boulder.

American Institute of Chemical Engineers, regional meeting, September 6–8, Montreal, Canada.