NEWS and Notes

ACS at San Francisco. More than 3,500 chemists and chemical engineers participated in the **115th national meeting of the American Chemical Society** held in San Francisco March 28–April 1. Advances in fields ranging from the biochemical approach to genetics to the application of chemical engineering techniques in the control of air pollution were reported in 670 papers at sessions of 17 professional divisions of the Society.

The need for more teamwork among scientists of all disciplines in dealing with the increasingly complex problems encountered on the research frontiers today was emphasized by Arne Tiselius of Sweden, 1948 Nobel Prize winner in chemistry, at a general assembly of the Society. Professor Tiselius described "Some Trends of Development in Present Day Biochemistry."

Selection of Arthur B. Lamb, of Harvard University, for the past 30 years editor of the *Journal of the American chemical Society*, to receive this year's Priestley Medal was announced at the general session. Professor Lamb, who was cited for outstanding services to chemistry, will retire from his editorial post at the end of this year.

Names of the winners of eight other awards administered by the Society also were announced by Linus Pauling of the California Institute of Technology, president of the Society. They are: Garvan Medal—Agnes Fay Morgan, chairman of the Department of Home Economics, University of California, Berkeley; American Chemical Society Award in Pure Chemistry (financed by Alpha Chi Sigma)—Richard T. Arnold, University of Minnesota; Borden Award in the Chemistry of Milk—George R. Greenbank, U. S. Department of Agriculture, Bureau of Dairy Industry; Eli Lilly and Company Award in Biological Chemistry—Irving M. Klotz, Northwestern University; Paul-Lewis Laboratories Award in Enzyme Chemistry—Henry A. Lardy, University of Minnesota; Fisher Award in Analytical Chemistry—G. E. F. Lundell, retired chief of the Chemistry Division, National Bureau of Standards; Fritzsche Award in Essential Oils—John L. Simonsen, Imperial Institute, South Kensington, London, England; and Precision Scientific Company Award in Petroleum Chemistry—B. H. Sage, California Institute of Technology. All the awards will be presented at the Society's fall meeting in Atlantic City, New Jersey.

Two symposia sponsored by the Division of Biological Chemistry were among the outstanding sessions on the San Francisco program. At a meeting on viruses, Albert P. Krueger and associates, of the University of California, reported that bacteriophage, the mysterious germ-killer produced by bacteria themselves, has for the first time been made artificially in the absence of living cells. At the symposium on the relation of genetics to biochemistry, Daniel Mazia, University of Missouri, reported evidence indicating that the innumerable variations of physique and character distinguishing each man from all others may result from immeasurably small differences in a single body chemical—desoxyribonucleic acid, a component of genes and chromosomes.

The first practical synthesis of an antibiotic drug was reported at the meeting. Chemists of Parke, Davis and Company told the Medicinal Division of finding methods of making artificial chloromycetin. Discovery of an unidentified substance which may be responsible for high blood pressure in human beings was announced by Henry A. Schroeder of the Washington University School of Medicine.

Development of air pollution standards for Los Angeles, which may prove applicable to industrial cities everywhere, was announced by Louis A. McCabe, head of the Los Angeles Air Pollution Control District. Several new insecticides were described, among them a material known only as Compound 497—said to be many times as effective as DDT against roaches and houseflies. At the same session, devoted to "Economic Poisons," warnings were sounded against the potential health hazards presented by the powerful new pest-killers.

The purity of water used for irrigation purposes, new findings concerning the path of carbon in photosynthesis, and the application of microanalytical methods to petroleum chemistry were among the other subjects discussed at the meeting.

WALTER MURPHY

W. C. Davison, dean of the Duke University School of Medicine, has been appointed a consultant to the U. S. Army Surgeon General, and will serve his first month's duty in Tokyo. Returning from Japan, he will stop in Shanghai for a week to conduct clinics in pediatrics for the American Bureau for Medical Aid to China.

Francis W. Reichelderfer, chief of the U. S. Weather Bureau, has been named vice president of the American Geophysical Union of the National Research Council, to fill the unexpired term of Harald U. Sverdrup, who has returned to Norway. The term expires June 30, 1950.

Floyd Firestone, consulting physicist and editor of the *Journal of the acoustical Society*, has been named program director of underwater acoustics research for the Office of Naval Research.

Roland McKee, Division of Forage Crops and Diseases, U. S. Department of Agriculture, has retired after more than 43 years with the Department.

James C. Spence, professor of Child Health, University of Durham, England, will deliver the Cutter Lecture on Preventive Medicine at the Harvard Medical School May 11. His topic will be "The Role of Parents in Child Health."

J. Gilman Reid has been appointed chief of the Engineering Electronics Laboratory of the National Bureau of Standards, where he has been a staff member since 1937. He will direct research on electronic instrumentation, miniaturization, printed circuit processes and

techniques, electronic circuit components, and electronic standards. Other recent appointments are **C. H. Townes,** and **P. Kusch,** both professors of physics at Columbia University, who will be consultants to the Microwave Standards Laboratory.

Ralph E. Fadum, professor of soil mechanics at Purdue University, has been named head of the Department of Civil Engineering, at North Carolina State College of Agriculture and Engineering. He will succeed C. L. Mann, who retired last fall after more than 50 years on the faculty. Dr. Fadum will take over his new duties July 1.

W. H. Twenhofel, editor of the *Journal of Sedimentary Petrology,* has been elected honorary member of the Society of Economic Paleontologists and Mineralogists.

A. L. Patterson, assistant professor of physics at Byrn Mawr, has been appointed senior member in charge of the Physics Department of the Institute for Cancer Research, Philadelphia, effective September 1.

Paul F. Sharp, former director of research, Golden State Company of California, has been appointed director of the California Agricultural Experiment Station at Berkeley. He will succeed **C. B. Hutchison** who continues as professor of agriculture, dean of the College of Agriculture, and vice president of the University of California.

Morris Schaeffer, assistant professor of pediatrics at Western Reserve University School of Medicine, and director of the Cleveland City Hospital Contagious Department, has been appointed director of the Virus and Rickettsial Research and Epidemiology Branch of the Communicable Disease Center, U. S. Public Health Service, effective June 30.

Frank A. Hartman, research professor of physiology, Ohio State University, has returned after spending three months at the Barro Colorado Island Laboratory in the Panama Canal Zone, and in western Panama, collecting and studying adrenals of birds and other vertebrates.

A. C. Smith, Smithsonian Institution botanist, has been appointed a vice president of the taxonomy section of the Seventh International Botanical Congress, to be held in Stockholm next year, and Roy E. Clausen, Berkeley geneticist, will be a vice president of the section on genetics.

B. N. Uppal, former principal of the College of Agriculture, Poona, India, has been appointed director of agriculture for Bombay Province.

Visitors to U. S.

John R. E. Bradfield, Fellow of Trinity College, Cambridge University, England, recently spent two weeks studying autoradiographic techniques with George A. Boyd in the Atomic Energy Project Laboratories at the University of Rochester School of Medicine.

Raj Chandra Bose, former head of the graduate department of statistics, University of Calcutta, India, has arrived in this country to accept appointment as professor of mathematical statistics at the University of North Carolina.

Necmettin Polvin, professor of neurology at the University of Istanbul, is spending several months in the Tissue Culture Laboratory of the University of Texas Medical Branch, Galveston, in association with C. M. Pomerat, director. They are developing new methods for the growth of brain tissue in artificial media.

Grants and Awards

The University of North Carolina has received a $4,500 **Frederick Gardner Cottrell** grant from the Research Corporation of New York City for fundamental research in the structure of polymers derived from pyrones. The project will be under the direction of Richard H. Wiley, professor of chemistry.

Winners of the **Frank B. Jewett Fellowships for 1949–1950** named by the American Telephone and Telegraph Company are: Harish-Chandra, mathematician, Institute for Advanced Study; James A. Jenkins, mathematician, Harvard University; Robert Karplus, physicist, Institute for Advanced Study; Joaquin Mazdak Luttinger, physicist, Physikalisches Institut, Zurich, Switzerland; David Emerson Mann, chemist, University of Minnesota; and Harvey Winston, chemist, Columbia University. The awards grant $3,000 to the recipient and $1,500 to the institution at which he chooses to do his research. Drs. Luttinger, Karplus, and Jenkins were among the award winners last year.

The Rockefeller Foundation has recently granted $29,000 to the University of California for research on the comparative biochemistry of marine organisms, particularly animal biochromes, to be conducted under the direction of Denis L. Fox, professor of marine biochemistry, at the Scripps Institution of Oceanography. The money is to be used during a four-year period, beginning July 1, 1949, and is a renewal of a similar grant for the biennial period 1947–49.

Lawrence Tyler Post, head of the Washington University Medical School Department of Ophthalmology, has been awarded the **Leslie Dana Medal** by the St. Louis Society for the Blind, in recognition of his work with blindness.

Fellowships

Cornell University has established 16 undergraduate scholarships for students from abroad. Five will be awarded in agriculture, four each in veterinary medicine and industrial and labor relations, and three in home economics.

The New York State mental health authority has allocated funds for 10 $1,600 fellowships in social work. They will be granted, upon recommendation of the advisory mental health council, to students who have completed their first year in graduate school and who wish to specialize for their second year in psychiatric social work, in preparation for community mental hygiene or child guidance clinic work. Inquiries may be addressed to Miss Hester B. Crutcher, director of psychiatric social work, New York State Depart-

ment of Mental Hygiene, Governor Alfred E. Smith State Office Building, Albany, New York.

Colleges and Universities

The University of Utrecht, Holland, is planning a series of scientific films, intended to cover the entire field of science. The first films will be on medicine. The Ministry of Education and the various faculties will contribute to production costs, and a grant has been made for the purpose by the Rockefeller Foundation.

The College of Medicine, University of Vermont, and the Vermont Association for the Crippled are jointly sponsoring a course in the diagnosis and treatment of convulsive disorders. Lectures, designed to meet the needs of the general practitioner, will be held in Burlington, Vermont, April 18–23. W. G. Lennox, of the Neurological Institute of the Children's Medical Center, Boston, will give two lectures on epilepsy.

Summer Programs

The Biological Laboratory, Cold Spring Harbor, Long Island, New York, is offering, for the fifth successive year, a summer course on bacteriophages, June 27–July 16. The course will be given by Mark H. Adams, New York University, and is designed to acquaint research workers with techniques used in work with bacterial viruses, and with recent results of such work. Further information may be had by writing the Laboratory.

Smith College School for Social Work announces its summer program of graduate seminars for experienced social workers, to be held July 11–21. Students are required to elect at least two, but may enroll for three of the following courses: advanced casework, supervisory methods in social casework, ego psychology, the psychosomatic concept, educational methods in teaching casework, and casework writing and interpretation. Each seminar is limited to 30 students, and applications should be made by *May 15*. For additional information write: Florence R. Day, director, Smith College School for Social Work, College Hall 8, Northampton, Massachusetts.

The University of Chicago will hold a workshop for research workers and teachers interested in problems of adjustment to old age, August 8–27, under the direction of Ernest W. Burgess, chairman of the Department of Sociology, and Robert J. Havighurst, of the Committee on Human Development. The University will also be host to an Institute on the Study of Old Age, August 8–12.

Meetings and Elections

Six Messenger Lectures on acoustics are being given at Cornell University, April 11–21, by Harvey Fletcher, director of physical research of the Bell Telephone Laboratories.

The Fourteenth Cold Spring Symposium on Quantitative Biology will be held June 8–16. The topic is "Amino Acids and Proteins," with emphasis on the biological aspects of the problem. Program participants will include: K. Linderstrom-Lang, from Denmark; C. Fromageot and J. Roche, from France; D. Crowfoot, J. F. Danielli, F. Sanger, and R. L. M. Synge, from Great Britain; and K. O. Pedersen, from Sweden. Attendance is restricted by space limitations to about 100. For program and information, write to the Biological Laboratory, Cold Spring Harbor, New York.

The Naval Ordnance Laboratory aeroballistics facilities at White Oak, Maryland—supersonic and hypersonic wind tunnels, and transonic and pressurized ballistics ranges—will be formally dedicated June 27. There will be five half-day technical sessions June 27–29 on general aerodynamics, ordnance aeroballistics (restricted), theoretical supersonic and transonic aerodynamics, and experimental supersonic aerodynamics at which foreign and U. S. scientists have been invited to present papers. The Fluid Dynamics Division of the American Physical Society will meet June 30 and July 1 at the Naval Ordnance Laboratory and will sponsor symposia on turbulence, shock-wave phenomena, and aerothermodynamics. Those interested in attending the dedication and technical sessions June 27–29 should write to R. J. Seeger, U. S. Naval Ordnance Laboratory, White Oak, Silver Spring 19, Maryland.

The Virginia Academy of Science will hold its 27th annual meeting at the Hotel John Marshall in Richmond, May 5–7. Final winners in the Virginia Science Talent Search will be selected, together with all winners in the Science Clubs Contests. Their names will be announced at the dinner of the Junior Academy of Science on Thursday evening by James W. Cole, Jr., of the University of Virginia, and Boyd Harshbarger, of the Virginia Polytechnic Institute, president-elect of the Academy. The dinner speaker will be Major T. F. Walkowicz, of the United States Air Force. Following his address, a sound motion picture entitled "Atomic Physics" will be shown under the auspices of the Atomic Energy Commission and the Oak Ridge Institute of Nuclear Studies.

The annual business meeting of the Junior Academy will be held at 2:00 P.M. on May 5. C. M. Kincaid, of the Virginia Polytechnic Institute, will speak on "Genetics, an Expanding Science," and Gordon Silas, of Roanoke College, will present a paper on "The Anatomy of Human Behavior."

The first meeting of the senior division of the Academy will be held Thursday evening at 8:30 o'clock. At this general conference, reports of 16 committees will be made. These reports will be published later in the 1948–1949 *Proceedings* of the organization.

Section meetings of the Academy will begin at 9:00 A.M. on Friday, May 6. Approximately 250 papers will be presented in the branches of science represented by the following Sections: agricultural sciences, astronomy, mathematics and physics, bacteriology, biology, engineer-

ing, education, chemistry, geology, medical sciences, psychology, statistics, and science teaching methods. Virginia winners of honorable mentions in the National Science Talent Search and winners in the state search will present their essays in appropriate Sections. An attendance of approximately 800 is expected for these sessions. The Section on engineering, which has not met since before the war, will be reactivated at this meeting. The program of a new Section for science teachers will be presented on May 6 and 7. Collegiate members of the Academy will hold a special session at 3 o'clock on Friday afternoon.

During the three days of the meeting about 30 educational and commercial exhibits will be shown in the lobby and Virginia Room of the Hotel John Marshall. The U. S. Air Force will offer the second showing of its communications exhibit, which will come directly from the Grand Central Palace in New York City. The Oak Ridge Institute for Nuclear Studies will have an exhibit on radioactive substances. A number of exhibits also will be shown by individual high school students and by science clubs. Sound motion pictures having to do with the history of Virginia and various scientific subjects will be presented at several of the exhibit booths.

Tours of industrial plants and points of historical interest will be conducted on Friday afternoon. At 4: 00 o'clock, the annual tea of the Academy will be held at the Valentine Museum. The Governor of Virginia will be present to welcome the scientists of the state. The Academy dinner will be served at 7: 00 P.M. in the roof garden of the John Marshall. The highlights of this dinner meeting will be the presentation of the J. Shelton Horsley Research Award to a Virginia scientist for a highly meritorious paper reporting original scientific research, and an address by Howard A. Meyerhoff, administrative secretary of the American Association for the Advancement of Science. Officers of the Academy for 1949–1950 will be installed by Sidney S. Negus, Academy president.

Meetings of Sections will continue until noon on Saturday. Field trips will be conducted by geologists and botanists in the afternoon. On Saturday evening, all in attendance at the meeting are invited by those in charge of the Virginia Industrial Exposition to be guests at a preview at the Atlantic Rural Exposition grounds, arranged for members of the Academy.

The National Registry of Rare Chemicals, 35 West 33rd Street, Chicago 16, Illinois, has submitted the following list of wanted chemicals: cumic acid, 5-pentadecylresorcinol, perylene, propadiene, 1,3,5-hexatriene, myosmine, thymotic acid, thujyl alcohol, 1,2-hexadiene, 3-semicarbazidobenzamide, 2,5-thiophanedicarboxylic acid, sodium chlorosmate, sinigrin, hemopyrrole, fumigatin, 2,3-dihydroxynaphthalene, cis-9-dodecenoic acid, 2,4,5-trinitrotoluene, pyrographitic acid, and phthionic acid.

The Scientific Monthly, in cooperation with the Smithsonian Institution, will sponsor for the third year the **International Photography-in-Science Salon,** a competition to encourage and extend the use of photography as a basic research tool. Entries will be received by the editor of *The Scientific Monthly,* 1515 Massachusetts Ave., N.W., Washington 5, D. C., from August 24 to September 14, 1949.

First, second, and third awards and five honorable mentions will be given for the scientific photographs judged to be the best in the black-and-white and color sections of the Salon. Specialists in science and photography who will serve as the judging committee will consider the initiative, originality, and results obtained more than the composition and pictorial quality. All photographs must be taken for scientific purposes.

The prints selected for awards and display will be shown at the U. S. National Museum during October 1949 and at the New York meeting of the AAAS in December. They will then go on tour of scientific centers here and abroad.

Earlier prize winners have been William F. Meggers, chief of the Spectroscopy Section, National Bureau of Standards, for "Natural and Artificial Mercury, 5461 A"; Thomas C. Poulter and Walter K. Lawton, of the Southwest Research Institute, for "Photographic Study of the Explosive Charge used in the Poulter Method of Seismic Exploration"; and Edwin R. Willis, of the Philadelphia Quartermaster Depot, for a photograph taken in an investigation of the olfactory responses of female mosquitos.

The origin of corn, which has puzzled botanists for four centuries, is a step nearer solution because of a discovery in central New Mexico of cobs and pieces of corn more than 4,000 years old. The discovery was made last summer by Herbert Dick and C. Earle Smith, on a Peabody Museum expedition searching for traces of early American man in the Upper Gila River area. Over 700 cobs were found in a layer of accumulated refuse in Bat Cave, in New Mexico. By carefully removing the debris, which consisted of ashes, animal bones, and other refuse in six strata, each about a foot thick, it was possible to study the specimens. Writing in *The Journal of Heredity,* Paul C. Mangelsdorf, director of the Botanical Museum at Harvard, and Mr. Smith report that "the primitive corn found by the expedition, although probably not itself wild corn, is [possibly] not far removed in its characteristics from the long sought for wild corn." The discovery also shows that primitive corn was both a pop and a pod corn, and was not, as many botanists have supposed, derived from teosinte, a Central and South American grass closely related to corn.