vided by the local committee, was the series of excursions. Since the institute of Spallanzani was one of the first to pioneer in the field of artificial insemination, visits to many of the artificial insemination centers were well worth while.

In the Province of Como visits were made to the Chemical-Pharmaceutical Abattoir in Casatenuova, to Lake Como, and to the Villa Monastero and the Italian Institute for Hydrobiology. A rare opportunity was made possible to visit the birthplace of Lazzaro Spallanzani at Scandiano, as well as the Artificial Breeding Center of the Instituto Beggiani, cooperative milk plants, and the vineyards of Cavalli, all in the Province of Reggio Emilia. Other visits included the famous cathedral and abbey of Certosa di Pavia and the wine cellars of Santa Maria la Versa in the Province of Pavia; the Lake of Garda and the Experimental Zooprophylactic Institute of Lombardy in the Province of Brescia; and agricultural and breeding farms of the Province of Cremona.

The local committee, with Prof. Telesforo Bonadonna as Secretary-General, did a wonderful job of organizing the Congress. All of the meetings were held in the International Industrial Exhibition of Milan, which contains an excellent auditorium and lecture rooms. In the same building information, banking, postoffice, writing, and telephone facilities were provided, and light refreshments were available.

The entire program ran with clock-like precision. One could go with ease from one session to another. Good projection equipment was provided for lantern slides, opaques, and movies. Printed copies of the program with abstracts of all the papers were available. An itinerary of all the excursions was printed. For the ladies accompanying members of the Congress an excellent program was arranged.

At the closing session a permanent committee of 9 persons, each from a different country, was elected to manage the affairs of the Congress. T. Bonadonna was elected secretary of the permanent committee, and the writer was chosen as a member of the permanent committee to represent the United States. This committee will meet with the International Veterinary Congress in London in August 1949 to plan the next Congress and the establishment of an international Institute of Fertility. The Second Congress will be held in 1951. It is hoped that more scientists from the United States will attend the future Congresses.

NEWS and Notes

William L. Slate, director emeritus of the Connecticut Agricultural Experiment Station, recently accepted the post of consultant at the Agricultural Experiment Station, University of Puerto Rico, Rio Piedras. At the invitation of Arturo Roque, director of the Puerto Rico Station, Mr. Slate will spend the next year acting in an advisory capacity to the Station staff.

Frederick R. Duke, formerly associate professor of chemistry at Michigan State College, is now associate professor of chemistry and associate chemist in the Institute of Atomic Research, Iowa State College.

Gordon F. Ferris, professor of biology at Stanford University and an authority on scale insects, recently flew to China, where he will spend a year in research. Traveling under a research scholarship granted from Fulbright Bill funds, Dr. Ferris will make his headquarters at Lingnan University, located on an island near Canton. He hopes to spend much time in field research and, at the end of his sabbatical year in the Orient, will return to Stanford.

Arthur K. Saz, formerly an instructor at the New York Medical College, was recently appointed professor of bacteriology at Iowa State College.

Leland J. Haworth has been named director of the Brookhaven National Laboratory. Dr. Haworth, who had served as acting director of the Laboratory since the resignation of Philip H. Morse, originally joined the executive staff as assistant director in charge of special projects. In this capacity Dr. Haworth had supervised erection of the nuclear reactor pile and the cosmotron, the two major research tools at Brookhaven.

C. M. Yonge, Regius professor of zoology at the University of Glasgow, has been appointed visiting professor of zoology at the University of California for the first half of the year 1949. Prof. Yonge will be engaged in teaching and research in invertebrate zoology on the Berkeley campus.

Randall McGavock Robertson has been appointed acting director of the Physical Sciences Division, Office of Naval Research. Dr. Robertson, a specialist in electronics and solid state physics, is filling a vacancy created when Samuel R. Piore, the director, was granted a leave of absence to conduct research at the Massachusetts Institute of Technology.

Leverett A. Adams, who for 9 years was curator of the Museum of Natural History at the University of Illinois, recently retired. Two years ago Dr. Adams retired as professor of zoology at Illinois. **Donald F. Hoffmeister** has replaced him as curator of the Museum.

Frederick C. Leonard, professor of astronomy at the University of California, Los Angeles, was in residence from August 7 to September 9 at the Institute of Meteoritics, University of New Mexico, of which he is a research associate. From August 17 to 26 he was a member of the Institute's expedition that was mainly responsible for recovery of the one-ton Furnas County, Nebraska, achondrite. This specimen, which fell on February 18 of this year, is the largest aerolite

(stony meteorite) on record and the largest meteorite of any type ever observed to fall.

Harold P. Knauss has been appointed professor of physics and head of the department at the University of Connecticut. Dr. Knauss formerly served as director of the Research and Development Division of the Mound Laboratory, operated by the Monsanto Chemical Company for the AEC.

Willard H. Bennett has been designated head of the Physical Electronics Section of the Atomic and Molecular Physics Division, National Bureau of Standards. Dr. Bennett is responsible for the recently developed radio-frequency mass spectrometer tube and assisted in the early development of a gas-filled cold-cathode rectifier. In his new position he will be actively engaged in basic research on cathode emission processes and the physical properties of negative atomic ions.

Leonora Mirone, formerly a research chemist at the Hoffmann Laboratories, Paterson, New Jersey, has recently been appointed associate professor of nutrition research at the University of Georgia.

Frederick F. Ferguson recently resigned as assistant professor of zoology at the University of Washington to return to active duty as senior assistant sanitarian in the U. S. Public Health Service. Dr. Ferguson has been assigned to Savannah, Georgia, where he will work with the Technical Development Division of the Communicable Disease Center.

John W. E. Glattfeld, associate professor, and **Hermann I. Schlesinger,** professor, in the Department of Chemistry, University of Chicago, recently retired with emeritus status. Dr. Schlesinger will continue to work at the University on hydrides of light elements, a research project for the Naval Research Laboratory and Office of Naval Research.

Charles C. Shepard, surgeon with the National Institute of Health, is presently engaged in a special training course in chemical biophysics at Uppsala University, Uppsala, Sweden, under Arne Tiselius. The National Institute of Health is planning to send other research officers to laboratories in the United States and abroad for further study and collaborative research.

Raymond H. Ewell recently joined the Stanford Research Institute staff as chairman of the Department of Chemistry and Chemical Engineering. Dr. Ewell formerly served as senior technologist in the Economic Research and Development Departments of the Shell Chemical Corporation, San Francisco, California.

Grants and Awards

The University of Texas College of Pharmacy has received a $5,250 research grant from the Lederle Laboratories, Inc. C. O. Wilson, professor of pharmaceutical chemistry, will direct the project, details of which will be announced later.

Research in chemical tests for intoxication is being undertaken by the Department of Police Administration, Michigan State College, under a recent grant of $5,000 from the National Safety Council. The grant was administered through the Committee on Tests for Intoxication of the Council. C. W. Muehlberger, chairman of the Technical Subcommittee, and Ralph F. Turner, assistant professor of police administration, will direct the project, in cooperation with the Department of Chemistry. Research will incorporate the following: (1) a comparison of chemical techniques for determining alcohol in blood, urine, breath, saliva; (2) intercomparison of results of chemical tests of blood, urine, breath, and saliva to determine the constancy factors of intercorrelation; (3) an evaluation of the factors which go to produce tolerance in the human subject.

The General Electric Education Fund has announced that applications for research grants for 1949–50 are now being accepted. Under this Fund, grants up to $1,500 annually are awarded to college graduates who wish to continue individual study and research in scientific and industrial fields. The Fund, honoring two former G-E presidents, includes the Charles A. Coffin Foundation for fellowships in electricity, physics, and physical chemistry, and the Gerard Swope Foundation, under which fellowships are awarded in the fields of industrial management, engineering, the physical sciences, and any other scientific or industrial field.

Individual fellowships up to $1,500 annually may be awarded, with a grant of $500 available for specific apparatus or other expense in connection with the research. In addition, loans up to $1,000 may also be made. The fellowships are intended for graduates needing financial assistance who have shown by the character of their work that they could advantageously undertake or continue research in this country or abroad. The fellowships are not intended for graduates who now hold, or expect to hold, any other fellowship which carries a stipend larger than the tuition of the institution where the research work is to be done. Further information about the fellowship applications, which must be filed by January 1, 1949, may be obtained by writing to the Secretary, General Electric Company Education Fund, Schenectady 5, New York.

The American Forestry Association's conservation award was presented to Senator Arthur Capper of Kansas on October 9, during the Association's 67th annual meeting in Chattanooga. In announcing the award, S. L. Frost, executive director, pointed out that Senator Capper's many years of work for sound conservation policies and practices included the early development of farm-youth activities, which were the forerunner of the 4-H Clubs now so popular among farm youth throughout the country.

The 1949 John Fritz Medal for scientific achievement has been awarded to Charles Metcalf Allen, professor of hydraulic engineering at Worcester Polytechnic Institute and director of the Alden Hydraulic Laboratory, Worcester, Massachusetts. Prof. Allen was cited "for exceptional achievement in hydraulic engineering" and as "the founder of a notable hydraulic laboratory, prominent teacher, consultant, inventor, and author." This medal, which was established in 1902, is awarded by a board composed of four representatives from each of the four national engineering founder societies, the ASCE, the AIMME, the ASME, and the AIEE.

The American Academy of Arts and Sciences recently awarded its Rumford Premium for outstanding scientific contributions in the field of heat and light to E. Newton Harvey, biology professor at Princeton University and vice-president of the Marine Biological Laboratory at Woods Hole, Massachusetts. Dr. Harvey was honored for his lifelong investigations of the nature of bioluminescence—the power of living organisms to develop heatless light.

The Rumford Premium, according to Harlow Shapley, director of the Harvard College Observatory and chairman of the Academy's Rumford Fund Committee, was established by $5,000 and a letter from Count Rumford in 1796, from London, to John Adams, then president of the American Academy of Arts and Sciences. This sum has now grown to nearly $100,000.

Paul R. Cannon, chairman of the Department of Pathology, University of Chicago, was awarded the Ward Burdick Gold Medal of the American Society of Clinical Pathologists at the recent meeting of the Society. Dr. Cannon, who was honored for his outstanding contributions to the field of pathology, has also been selected to receive the Gold Medal award of the Philadelphia Pathological Society.

Colleges and Universities

The E. J. Longyear Company Fellowship in Metalliferous Economic Geology has been renewed for the current academic year in the Department of Geology, University of Minnesota. The Fellowship has been awarded to Kwang-Chi Tu, who is conducting experiments on hydrothermal alteration at high temperatures and high pressures, under the supervision of J. W. Gruner.

The first of a series of lectures on "Development of the Sciences" was given on October 12 at Yale University by Henry Margenau, professor of natural philosophy and physics, on "What Is Motion?" In the 8 lectures (3 on the physical sciences and 5 on the biological sciences) to be given during the current college year under the auspices of the *Yale Scientific Magazine,* an undergraduate publication, faculty members will attempt to provide liberal arts students with an insight into the development of the scientific method from an historical point of view. The remaining lectures, one of which will be given each month through May, will be by Werner Bergmann, professor of chemistry; Ernest C. Pollard, associate professor of physics; Talbot H. Waterman, assistant professor of zoology; John S. Nicholas, Sterling professor of biology; John F. Fulton, Sterling professor of physiology; Joseph S. Fruton, associate professor of physiological chemistry; and Edmund W. Sinnott, director of the Sheffield Scientific School.

Industrial Laboratories

Edwin J. Fellows, associate professor of pharmacology at Temple University School of Medicine, has recently been appointed head of the newly formed Pharmacology Section within the Research Division of the Smith, Kline & French Laboratories, Philadelphia. During the coming year Dr. Fellows will, however, continue to give lectures at Temple.

Westinghouse Electric Corporation recently organized an Atomic Power Division which will concentrate solely on the harnessing of nuclear energy for the production of useful power. According to Gwilym A. Price, president, the new Division "will be available to undertake atomic energy projects for the U. S. Government as well as to carry on independent studies. It will conduct research, development, engineering, and any necessary associated construction." Charles H. Weaver, a former district industrial manager of the Company, will serve as manager.

Meetings and Elections

The American Philosophical Society's autumn general meeting is being held at the old Custom House, 420 Chestnut Street, Philadelphia, on November 4–5. The Thursday morning session, over which Edwin G. Conklin will preside, will include papers by Frederick Seitz, Carnegie Institute of Technology; Marston Morse, Institute for Advanced Study; W. F. Albright, Johns Hopkins University; and F. H. H. Roberts, Jr., Smithsonian Institution. Papers in this session will be devoted to the fields of physics, mathematics, and archaeology. St. George L. Sioussat will be chairman of the afternoon session, which will deal with subjects in the fields of history and literature. Papers will be presented by Merle Curti, University of Wisconsin; Bernadotte E. Schmitt, University of Chicago; Marius Barbeau, National Museum of Canada; W. N. Fenton, Smithsonian Institution; and Kemp Malone, Johns Hopkins University. H. L. Mencken will be the speaker on Thursday evening. His topic will be "How Presidents Are Chosen." On Friday morning Ross G. Harrison will preside. Papers in the social sciences will be given by Stith Thompson, Indiana University; Owen Lattimore, Johns Hopkins University; Robert Cushman Murphy, American Museum of Natural History; Mortimer Taube, Library of Congress; and Samuel W. Boggs, Department of State. An executive session will be held on Friday afternoon at 2:00 o'clock.

A Symposium on the Pathogenesis and Pathology of Viral Infections will be held Tuesday evening and Wednesday afternoon and evening, December 14 and 15, at the New York Academy of Medicine, 2 East 103rd Street, New York City, under the auspices of the Academy's Section on Microbiology. The meetings will be open to all who are interested in this field. John G. Kidd will be chairman, and the speakers will include Richard E. Shope, G. J. Buddingh, Gilbert Dalldorf, Thomas F. Anderson, C. E. van Rooyen, Ralph W. G. Wyckoff, T. F. McNair Scott, John M. Pearce, J. E. Ash, Thomas P. Magill, John G. Kidd, R. D. Lillie, Abner Wolf, and Howard A. Howe.

The National Council of Teachers of Mathematics will hold its 9th Christmas Conference at Ohio State University, Columbus, on Wednesday and Thursday, December 29 and 30. To meet the needs of teachers whose interests vary from the elementary grade to the college level, 6 sectional

meetings will be held in addition to the general sessions. Headquarters for the National Council will be in Baker Hall on the University campus. Reservations for rooms and meals should be mailed to Mr. Oscar Schaaf, Room 120, Arps Hall, Ohio State University, Columbus, Ohio, not later than December 15.

The American Society of Mechanical Engineers will hold its 69th annual meeting in New York, November 28–December 3, with headquarters at the Hotel Pennsylvania. More than 6,000 engineers are expected at the 72 comprehensive technical sessions which will cover gas turbines, supersonic flight and rocketry, recent developments in rubber, plastics, and textiles, safety boiler codes and pressure vessels, new metals techniques, and the science of prosthesis. A number of foreign experts will participate in the management and applied mechanics sessions of the meeing. Keynote of this meeting will be "Opportunity for and Responsibility to the Young Graduate Engineer."

An affiliate organization, the American Rocket Society, will hold its annual dinner Thursday, December 2, with Hugh L. Dryden, director of aeronautical research for the National Advisory Committee for Aeronautics, as speaker. The rocket group will confer for the first time three awards set up during the past year, to be given annually for outstanding contributions to rocket development.

The 25th annual Plant Science Seminar was held August 2–5 in Washington State, the program theme being plant physiology and its application to pharmacognosy and related plant sciences. Lectures, demonstrations, and cooperative laboratory exercises at the University of Washington College of Pharmacy were followed by botanizing trips and round-table discussions at Mount Rainier Park. Representatives of the teaching staffs of colleges of pharmacy, of pharmaceutical manufacturing companies, and of research laboratories were in attendance. Officers elected for the 1948–49 term included: J. Allen Reese, University of Kansas School of Pharmecy, chairman; Heber W. Youngken, Jr., University of Washington College of Pharmacy, 1st vice-chairman; J. Hampton Hoch, Medical College of South Carolina School of Pharmacy, 2nd vice-chairman; Edward P. Claus, University of Pittsburgh School of Pharmacy, secretary.

More than 100 geologists from 20 colleges and schools attended the 40th annual field meeting of the New England Intercollegiate Geologists at the University of Vermont, Burlington, on October 9–10.

Charles G. Doll, head of the Department of Geology, University of Vermont, and host to the assembled geologists, was assisted in conducting the various trips by geologists who are well known for their work in the area. Marland P. Billings, Harvard University, and Al H. Chidester, USGS, conducted an economic geology trip to the Waterbury talc mine and the Roxbury Verde Antique quarries. At the mine the relationships between the talc-bearing rock, the serpentine, and the schistose country rock were studied on the surface and in the mine workings. At the Roxbury locality the genetic relationships of the schists, greenstones, and ultrabasics were observed. Donald H. Chapman, University of New Hampshire, conducted the glacial trip, on which much evidence indicating the presence of former glacial Lake Vermont was presented. Shoreline features of the glacial lake phases were studied. On the Hard Rock trip, conducted by Wallace Cady, USGS, and Charles G. Doll, University of Vermont, the Champlain overthrust and the Lower Cambrian formations were studied, the sequence of the formations being followed across the Hinesburg synclinorium eastward from Burlington toward the Green Mt. front.

Informal gatherings were held in the Department of Geology rooms at the University on Friday and Saturday nights. Following the regular meeting on Saturday night, at which time the 1949 field trip was awarded to Dr. Robert Nichols, Tufts College, refreshments were served. Mrs. Charles Doll and Mrs. Daniel T. O'Connell, CCNY, were hostesses.—LLOYD W. FISHER, *Permanent Secretary, Bates College.*

Deaths

Johan Hjort, 79, Norwegian marine biologist, died October 8 in Oslo, Norway. As Director of Fisheries of Norway from 1900 to 1916, Prof. Hjort made major contributions to the fishing industry. As a result of his painstaking explorations on the high seas, marine biologists are able to foretell with much accuracy the fishing prospects for important ocean areas.

J. H. M. Wedderburn, 66, professor emeritus of mathematics at Princeton University, died early in October at his Princeton, New Jersey, home on October 9. From 1911 through his retirement from Princeton in 1945, Dr. Wedderburn had also acted as an editor for the *Annals of Mathematics.*

Mitchell Carroll, 63, head of the Department of Biology, Franklin and Marshall College, since 1920, died October 13 in New England Deaconess Hospital, Boston.

One of the largest and most spectacular exhibits on atomic energy ever shown in the United States will be presented in the Museum of the Franklin Institute, Philadelphia, from November through January 1949. The exhibit, which will explain atomic energy on a nontechnical level, is sponsored by the Brookhaven National Laboratory, under the auspices of the AEC.

Civilian scientists trained and experienced in several scientific and technological fields will be tendered reserve commissions in the Army if they apply and qualify under provisions outlined in Department of the Army Circular No. 210, dated July 14, 1948.

The scientific fields in which the Army has critical need for additional officers include chemistry and chemical engineering, mathematics and statistics, physics, psychology, entomology, forestry, geology, geophysics, and meteorology. Applications will also be received from civilian technologists trained or experienced in such fields as civil, mechanical, electrical, chemical, industrial, mining, metallurgical, and petroleum and natural gas engineering.

Reserve commissions are also available to qualified scientists in 8 medical

allied sciences: bacteriology, biochemistry, parasitology, serology, entomology, nutrition, toxicology, and industrial hygiene.

The commissions range from those of 2nd Lieutenant up to and including Colonel, depending upon the qualifications and experience the individual possesses in his scientific specialty. Applicants must be at least 21 years of age and not exceed 55 years. All must be citizens of the United States. No previous military experience is required.

Application forms and Circular No. 210 may be obtained from local Reserve Unit Headquarters or Organized Reserve Unit Instructors, or by writing to Army Headquarters at New York, Baltimore, Atlanta, Chicago, San Francisco, or Fort Sam Houston, San Antonio, Texas. Information may also be obtained from the Adjutant General, Department of the Army, Washington 25, D. C.

A "Scientists' Committee on Loyalty Problems," which will provide information and legal advice to individual scientists faced with clearance problems, has been established at 14 Battle Road, Princeton, New Jersey, by the Federation of American Scientists. The Committee does not intend to "defend" scientists being investigated but will seek to obtain full and fair hearings by government agencies and Congressional committees as well as fair treatment in the press. Through study of clearance procedures and criteria for judging loyalty the Committee hopes to contribute toward establishment of a sound national policy. A file on clearance procedures and related matters will be maintained, and information will be made available on issues underlying security and clearance problems.

In order that the activities may be more effective and in accord with the views of American scientists, a panel of sponsors and consultants on major policy questions is being set up. The Committee welcomes information on individual clearance cases and also suggestions and criticisms. A fund-raising campaign is being conducted to obtain contributions from scientists and the general public.

Those serving on the Committee include: W. A. Higinbotham, Brookhaven National Laboratory, chairman; A. S. Wightman, Princeton University, secretary; D. R. Hamilton, Princeton University, treasurer; D. Bohm, R. Britten, and R. R. Bush, all of Princeton University; Albert Einstein, Institute for Advanced Study; L. P. Eisenhart, dean emeritus of the Gradute School, Princeton University; S. A. Goudsmit, chief of the "Alsos" war mission, now at Brookhaven National Laboratory; M. S. Livingston, Massachusetts Institute of Technology; Stuart Mudd, University of Pennsylvania School of Medicine; H. D. Smyth, Princeton University; Lyman Spitzer, Jr., director of the Princeton Observatory; Oswald Veblen, Institute for Advanced Study; and Irving Wolff, RCA Laboratories, Princeton.

A national bureau for the international exchange of books and periodicals between libraries and scientific and educational institutions of the United States and other countries opened at the Library of Congress on September 1. The new organization, called the United States Book Exchange, is a successor to the American Book Center for War Devastated Libraries, Inc. Printed materials of a scientific or literary character will be handled first. Inquiries should be addressed to the U. S. Book Exchange, Library of Congress, Washington, D. C.

Make Plans for—

Symposium on "Yeasts in Feeding," November 8–10, Hotel Pfister, Milwaukee, Wisconsin.

American Public Health Association, 76th annual meeting, November 8–12, Boston, Massachusetts.

National Academy of Sciences, autumn meeting, November 15–17, University of California, Berkeley.

American Oil Chemists' Society, fall meeting, November 15–17, Pennsylvania Hotel, New York City.

6th Annual Pittsburgh Conference on X-Ray and Electron Diffraction, November 19–20, Carnegie Institute of Technology.

American Physical Society, 288th meeting, November 26–27, University of Chicago.

American Mathematical Society, November 26–27, Chicago, Illinois.

Recently Received:

Annual report of the All-India Institute of Hygiene and Public Health, Calcutta, 1944–45. Calcutta: Government of India Press, 1947.

Annual engineering undergraduate award and scholarship program for 1948–49. Copies obtainable from the James F. Lincoln Arc Welding Foundation, Cleveland, Ohio.

Guide to Russian scientific periodical literature. (Vol. 1, No. 5.) Upton, N. Y.: Brookhaven National Laboratory, August 23, 1948.

UNESCO: what it is; what it does; what you can do to help. (Department of State Publ. 3225.) Washington, D. C.: U. S. Government Printing Office, 1948. $2.50 per 100. (Pamphlet.)

Chronicle of the World Health Organization. Published monthly by the WHO Interim Commission, 350 Fifth Avenue, New York 1, New York. Single copies, $.20; yearly subscription, $2.00.

Illinois Institute of Technology: annual report of the president for the year ended August 31, 1948.

The Nutrition Foundation, Inc.: report of scientific director, June 30, 1948.

What's new for the laboratory (No. 6). Bloomfield, N. J.: Scientific Glass Apparatus Co., October 1948. (Pamphlet.)

Annual report of the Chicago Natural History Museum, 1947. Chicago: Museum Press, 1948. $1.00.

Esso Research Center, a description of the work being carried on by the Standard Oil Development Company. Copies obtainable from Standard Oil Company (New Jersey), Room 1626, 30 Rockefeller Plaza, New York 20.

Checklist of Chicago area amphibians and reptiles, by R. A. Edgren, Jr., and W. T. Stille; The northern limit of the range of *Laemanctus serratus*, by James A. Peters; Rapid fat production by ground squirrels preceding hibernation, by Otis Wade; A specimen of the white-tailed jack rabbit, *Lepus townsendii*, from Illinois, by D. F. Hoffmeister and L. G. Grebner. Natural History Miscellanea Nos. 26, 27, 28, 29, published by the Chicago Academy of Sciences, 2001 N. Clark Street, Chicago 14.