phone Company; Floyd D. Rogers, Jr., manager, public relations, The Metropolitan Museum of Art; Hardinge Scholle, director, Museum of the City of New York; John Tee-Van, executive secretary, New York Zoological Society; F. E. Vilas, Consolidated Edison Company of New York.

Reference Committee

Stuart C. Dorman, manager, College Department, McGraw-Hill Book Company, chairman; Mahlon Ashford, New York Academy of Medicine; Robert S. Mathews, Bennett and Pleasant; Ross F. Nigrelli, New York Aquarium; Elliott R. Weyer, vice president, Pfizer Chemical Company.

The 116th Meeting of the AAAS, and the annual meeting for the year 1949, is also the sixth New York meeting. The previous occasions when the Association met in New York City were 1887, 1900, 1906, 1916 and 1928. It will be noted that an interval of 21 years has elapsed since the fifth New York meeting, when Henry Fairfield Osborn and Arthur A. Noyes were president and retiring president, respectively.

The organization of the meetings is much the same, a number of the exhibitors in the 1949 Annual Science Exposition were present in 1928, the roster of the participating societies retains many of the same names—and there will be a gratifying number at the sessions of 1949 that also were there 21 years ago. George B. Pegram, of Columbia, who was general chairman of local committees in 1928; Sam F. Trelease, who edited the program that year; and Donald E. Lancefield, then chairman of the special committee on local transportation, are all serving on the Local Advisory Committee this year. Edmund W. Sinnott, of the 1928 Local Committee on Exhibitions, is the 1949 retiring president of the Association, while Roger Adams, current president elect, was chairman of the AAAS Committee on Prize Awards at the fifth New York meeting. Once again, the Biologists' Smoker will be held at the American Museum of Natural History.

But there are differences. A whole generation of young scientists has reached maturity and increased the membership of the Association. This year's meeting is larger in participating organizations and includes new societies, the papers are more numerous, the attendance is greater, and there are more exhibitors. The greatest differences, however, are the advances that have been made in science itself, the technological innovations and their effects on man's thinking.

NEWS and Notes

George D. Stoddard, president of the University of Illinois, has been elected chairman of the U. S. National Commission for Unesco. Dr. Stoddard succeeds Milton S. Eisenhower, whose terms of office have reached the limit of three set by the bylaws.

Karl A. Folkers, director of organic and biochemical research for Merck and Company, Inc., will deliver the fifth annual Harrison Howe Lecture at a meeting of the Rochester Section of the American Chemical Society, November 7. Dr. Folkers will speak on "Research on Vitamin B_{12} ."

Tze-Tuan Chen, formerly professor of zoology at the State Teachers College at Bemidji, Minnesota, has joined the Department of Zoology staff of the University of Southern California. Dr. Chen will continue

his work on protozoan cytogenetics, which has been supported by a Public Health Service grant.

Alma P. Beaver, associate professor of psychology at Santa Barbara College of the University of California, will conduct a survey of educational and clinical methods in the Scandinavian countries from January to June, 1950. Dr. Beaver is on sabbatical leave from the university, and is now making a study of psychological theories and methods of therapy at the Langley Porter Clinic, San Francisco.

Clarence F. Winchester, formerly associate professor of nutrition at the University of Florida, is now physiologist at the Animal Husbandry Division, U. S. Department of Agriculture Research Center, Beltsville, Maryland. Dr. Winchester is in charge of research projects relating endocrinology to problems of nutrition.

Elizabeth A. Lockwood has been appointed as field consultant in health education by the National Foundation for Infantile Paralysis. She will advise professional groups and state representatives of the foun-

dation in the development of health education programs relating to poliomyelitis.

George Howard Parker, professor emeritus of zoology, Harvard University, has been made patron of the Bermuda Biological Station for Research by election of the station's board of trustees.

James F. Kerwin, research chemist, has been named assistant head of the Organic Chemistry Section of Smith, Kline and French Laboratories in Philadelphia.

Visitors to U. S.

Pandit Jawaharlal Nehru, Indian prime minister, and his sister, ambassador to the U. S., conferred in Boston last week with James B. Conant and Harlow Shapley, of Harvard University, about a new Schmidt-type telescope for the Allahabad University Observatory in north India, and a sun-observing coronagraph for Mt. Kodaikanal Solar Observatory in southern India. A. C. Banerji, of Allahabad, and A. K. Das, of Mt. Kodaikanal, will visit Harvard later to work out the details of the project.

Sven Hellerstrom, professor and chief of the Dermatologic and Venereal Disease Clinic of the University of Stockholm, lectured last week at the New York University-Bellevue Medical Center.

Felisberto Pinto Monteiro, of Rio de Janeiro, is in this country for research in the field of fish and wildlife. Mr. Pinto has received a three months' grant-in-aid from the U. S. Department of State.

Recent visitors at the National Bureau of Standards included: D. J. Badkas, assistant professor, Indian Institute of Science, Bangalore, India; D. H. Black, director, Telecommunications Research and Development, Ministry of Supply, England; E. Heymann, associate professor of physical chemistry, University of Melbourne, Australia; L. E. Howlett, associate director, Division of Physics, National Research Council, Ottawa, Canada; J. S. McPetrie, superintendent of research, Signals Research and Development Establishment, England; C. Pot, general director, Electro-Smit Dynamoworks, Slikkerveer, Holland; H. N. Ramachandra Rao, assistant professor, Department of Power Engineering and Electrical Technology, Indian Institute of Science, Bangalore; Yves Rocard, chef du Service des Recherches, Direction Centrale des Constructions et Armes Navales, Paris, France; T. Edward Allibone, director, Associated Electrical Industries, Ltd., Research Laboratories, Aldermaston, Berkshire, England; Lucien Biguet, director, Department of Chemical Products, S. A. Coframet, Paris; Luis Bramao, chief, Department of Soils, Portugal; A. J. Dale, director of research, Johnson Brothers, Ltd., Stoke-on-Trent, England; and M. A. Malik, electrical engineer, Public Works Department, Lahore, Pakistan.

Grants and Awards

The Board of Foreign Scholarships of the State Department has announced the teaching and research awards made for this academic year under the terms of the Fulbright Act. Among the American exchange scholars are: Bernard Freeman Mann, resident in pathology, New

England Deaconess Hospital, Boston, selected as visiting lecturer in pathology at University of the Philippines; Fred Eggan, professor and chairman of the Department of Anthropology, University of Chicago, for anthropological research in the Philippines; Pauline Fertsch, assistant professor of psychology, University of Texas, visiting lecturer in psychology at the University of the Philippines; Ruth M. Leverton, director of human nutrition and food research, Department of Home Economics, University of Nebraska, to teach nutrition at the Philippine Women's University; JesseThompson, chief resident surgeon, Massachusetts Memorial Hospital, Boston, for research in medicine at Nuffield Medical Research Institute, Oxford University; Robert L. Driver, interne, Hospital of the University of Pennsylvania, for research in neuropharmacology and neurophysiology, University of Edinburgh, Scotland; Randolph W. Chapman, professor of petrography, Johns Hopkins University, visiting lecturer in geology, St. Andrews University, Scotland; Elmer B. Tolsted, Jr., assistant professor of mathematics, Pomona College, visiting lecturer in mathematics at University College of the Southwest, Exeter, England; Roger W. Russell, associate professor of psychology and resident fellow in neurophysiology at University of Pittsburgh and Western State Psychiatric Institute, for research in animal psychology at the Institute of Psychiatry, University of London; Elwood C. Zimmerman, associate entomologist, experiment station of the Hawaiian Sugar Planters Association, for research on insects of Hawaii at the British Museum of Natural History; Darragh E. Nagle, instructor in physics, Massachusetts Institute of Technology, for research in nuclear physics, Cambridge University; David E. Schneider, teaching fellow, Department of Social Relations, Harvard University, lecturer in anthropology, London School of Economics; Sewell Wright, professor of zoology, University of Chicago, visiting lecturer in statistical genetics, University of Edinburgh; Josef F. Bunnett, assistant-professor of chemistry, Reed College, Portland, Oregon, for re-

search in theoretical organic chemistry, University College, London; Ernest Sachs, Jr., senior fellow in neurosurgery, Yale University, research in lobotomy, National Hospital, University of London; Clyde Stormont, assistant professor of genetics, University of Wisconsin, for research in dairy science at the Animal Research Station, Wallaceville, New Zealand; Basil E. Montgomery, associate professor of entomology, Purdue University, Lafayette, Indiana, for research in the ecology of the bumble bee in relation to the fertilization of red clover, University of New Zealand, Aukland; William R. Vance, assistant professor of natural science, Chico State College, Chico, California, visiting professor of public health, University of Rangoon, Burma; C. Donnell Turner, chairman, Department of Biology, Utica College of Syracuse University, visiting professor of biology, University of Rangoon; Roy G. Bose, professor of psychology, City College, Santa Monica, California, visiting lecturer in child guidance, Philippine Normal School, Manila; William J. Emerson, medical investigator, Massachusetts General Hospital, Boston, for research on medicine, University of Paris; Edgar Bright Wilson, Jr., professor of chemistry, Harvard University, for research in chemistry, Queens College, Oxford University; John Richard King, postdoctoral student at Harvard University, visiting professor in agriculture, State Training College for Teachers, Rangoon; Kerro Knox, research fellow, Brookhaven National Laboratory, for research in chemistry in the Department of Physical Chemistry, Cambridge University; Edward M. Corson, senior physicist, Armour Research Foundation, Illinois Institute of Technology, Chicago, for research in physics, Edinburgh University; John W. Swensson, formerly physicist at University of California Radiation Laboratory, for research in physics, University of Liège, Belgium; Harry H. Turney-High, professor and head of the Department of Anthropology and Sociology, University of South Carolina, Columbia, for research in sociology at University of Liège; Peter Van de Kamp,

professor of astronomy, Swarthmore College, director of Sproul Observatory, visiting lecturer in astronomy, Institut d'Astrophysique, Paris; Horace M. Miner, associate professor of anthropology and sociology, University of Michigan, for research in sociology, University of Algiers, Algeria; Nathan James Smith, research fellow in hematology, Children's Hospital, Boston, for research in medicine, University of Paris; Guy W. Adriance, head of the Department of Horticulture, Agricultural and Mining College of Texas, College Station, Texas, for research in horticulture, Italy; and Howard W. Etzel, research physicist, Carnegie Institute of Technology, Pittsburgh, for research in physics at the Laboratoire de Physique, University of Paris.

The J. Lawrence Smith Medal of the National Academy of Sciences has been awarded to Fred Lawrence Whipple, chairman of the Department of Astronomy of the Harvard Observatory. Dr. Whipple received the award in recognition of his research in the field of the motions and nature of meteoric particles in the earth's atmosphere, and especially for his derivation of the variations of air temperature with altitude, based on his studies of meteors.

Fellowship

Approximately 600 U.S. Government awards for foreign study are available from the Department of State for graduate study or research during the academic year 1950-51. The countries with which this educational exchange program is now in effect are Belgium and Luxembourg, Burma, France, Greece, Iran, Italy, Netherlands, New Zealand, Norway, the Philippines, and the United Kingdom. Closing date of these competitions is December 1. The awards, made available through the Fulbright Act, provide tuition, transportation, and maintenance for one academic year. Candidates for student awards must be American citizens, and must have a college degree or its equivalent, as well as a knowledge of the language of the country in which they intend to study. They should apply to the Institute of International Education, 2 West 45th Street, New York City 19. Candidates at the postdoctorate level, or those not having a doctorate but of recognized professional standing, who propose to teach or carry out an independent program of research abroad, should apply to the Conference Board of Associated Research Councils, 2101 Constitution Avenue, Washington 25, D. C.

Colleges and Universities

University of Michigan scientists have recently obtained samples of the earth's atmosphere at a height well over 40 miles by the use of V-2 and Aerobee rockets. The research is being done by the Department of Aeronautical Engineering as a part of the U.S. Army Signal Corps program of investigation of meteorological phenomena at high altitudes. The project, which is under the direction of Leslie M. Jones, of the university's Engineering Research Institute, is particularly concerned at present with the concentration of helium at the earth's surface and in the upper atmosphere. Preliminary analysis of the samples indicates that the atmosphere up to 230,000 feet has the same relative proportions of gases as at ground level. The gas analysis was done by F. A. Paneth of Durham University, England, who has been investigating the concentration of helium in the atmosphere on a world-wide basis. Results of this research will eventually be used in studies of rocket design and weather.

The University of Wisconsin opened its new Enzyme Institute on November 1, under the direction of David E. Green. The Atomic Energy Commission and the U. S. Chemical Corporation will collaborate with the institute in certain phases of research, and have allocated \$30,000 and \$20,000, respectively, to the project. The university's Alumni Research Foundation built the \$350,000 laboratory and staff salaries are paid by the university.

Meetings and Elections

The Fifth General Assembly of the International Council of Scientific Unions was held in Copenhagen, September 14-16, at the Royal Danish Academy. In welcoming the delegates, the president of the academy spoke of the great value of close cooperation among scientists of different nations and of the need in days of rapidly increasing control of the forces of nature to override the limits imposed by national boundaries.

The main business of the meeting was to consider a revision of the statutes to meet the change of conditions since they were drawn up in The two chief alterations 1931. agreed upon were the formation of a bureau within the executive board, and a classification of the unions into two groups, general and specialized. Of the existing unions the following were classed as general: astronomy, geodesy and geophysics, chemistry, physics, and biology. The remaining unions-radio sciences, geography, crystallography, mechanics, and history of scienceswere classed as specialized. No new unions were accepted as adhering organizations but the bureau was instructed to appoint a policy committee to examine and report upon the principles which should govern the admission of new unions. Some anxiety was shown regarding a resolution adopted by the Executive Board of Unesco recommending that grants-in-aid should be made principally to new projects, but it was decided at the General Conference of Unesco, which followed almost immediately after the General Assembly of ICSU, to continue the grants-in-aid which had given most useful and valuable help to Unesco and its unions.

The following were elected as the bureau for the next three years: president, A. von Muralt, Switzerland; vice presidents, E. Borel, France, and H. Solberg, Norway; members, D. J. N. Mukherjee, India, and E. Herbays, Belgium; immediate past president, John A. Fleming, U. S.; general secretary, F. J. M. Stratton, Great Britain.

F. J. M. STRATTON

The National Malaria Society will meet conjointly with the American Society of Tropical Medicine

and the American Academy of Tropical Medicine at the Hotel Peabody, Memphis, Tennessee, November 6–9. The National Malaria Society has scheduled three scientific sessions, including a joint meeting with the American Society of Tropical Medicine.

A symposium on dynamic properties of polymeric materials, sponsored by the Institute of Polymer Research, will be held November 19 at the Polytechnic Institute of Brooklyn. W. J. Hamburger, H. M. Morgan, and M. M. Platt, of Fabric Research Laboratories, Boston, will speak on "Mechanics of Ballistic Performance of Textile Materials"; A. V. Tobolsky, of Princeton University, on "Relations Between Dynamic and Static Properties of Polymers"; G. M. Kavanaugh and A. G. H. Dietz, of Massachusetts Institute of Technology, on "Ultrasonic Determination of Mechanical Properties of Synthetic Resin Adhesives''; and T. W. George, of the Naval Research Laboratory, Washington, D. C., on "Dynamic Localization of Plastic Flow."

New York University, in cooperation with the Atomic Energy Commission, will hold a three-day conference on industrial and safety problems of nuclear technology, January 10–12. Speakers include Gordon Dean, AEC commissioner, W. E. Kelley, manager of the New York Operations Office of AEC, G. K. Green, chief of the Accelerator Project at Brookhaven National Laboratory, Serge A. Korff, professor of physics at New York University, and G. Failla, professor of radiology, Columbia University.

The 18th International Physiological Congress will be held at Copenhagen August 15-18, 1950. Preliminary programs and registration forms will be sent out at the end of this year and will be obtainable, after January 1, from local societies of physiology, biochemistry, and pharmacology, or from the bureau of the congress, Zoofysiologisk Laboratorium, 32 Juliane Mariesvej, Copenhagen O.

The annual meeting of the Scandinavian Pharmacological Society

will take place in Copenhagen, August 19-20, 1950. Members of pharmacological societies outside Scandinavia will be invited to attend this meeting.

Deaths

Charles F. Briscoe, 80, formerly head of the Department of Bacteriology at Mississippi State College, died on October 9. Dr. Briscoe was well known for his research on tuberculosis of farm animals and the response of soybeans to artificial inoculation.

Carl E. Seashore, 83, psychologist and dean emeritus of the Graduate School, University of Iowa, died October 16 in Lewiston, Idaho. Dr. Seashore, a native of Sweden, devised intelligence tests that were used by the U. S. Army during the first and second world wars. He was also known for his experimental work in the analysis and development of musical sound.

Raymond B. Wilcox, 60, pathologist at the U. S. Department of Agriculture station at Pemberton, New Jersey, died October 22 of a heart attack. Dr. Wilcox did research in diseases of small fruits and virus diseases of plants.

A National Foundation for Eye Research was recently formed in Washington, D. C., to encourage public support for research aimed at discovering the causes of ocular diseases leading to blindness, and developing more efficacious remedies. The activities of the foundation will be limited entirely to supporting and establishing research centers for ophthalmology, leaving other aid to the blind to existing agencies. George Swartz has been selected as national chairman. Allocation of research funds will be made upon the advice of a scientific advisory board consisting of V. Everett Kinsey, chairman, Francis Heed Adler, Edwin B. Dunphy, Jonas Friedenwald, and Alan C. Woods. Several more members will be added to the board as the need for expansion arises.

The Registry of Rare Chemicals, 35 West 33rd Street, Chicago 16, has

submitted the following list of wanted chemicals: usneol, divaricatic acid, atranorin, shikimic acid, obtusatic acid, physodic acid, 1,2,4-trimethyl-3-hydroxyphenazine, berberine, 2,6-dinitro-4-hydroxylaminotoluene, senecioic acid, 2-4-diamino-6-methylpyrimidine, 2,3-dimercaptopropyl ethyl ether, butyl fluoride, azomethane, decafluorocyclopentane, carnegine, 2,3-dimercaptobutane, isobutyl peroxide, 4-amino-8-nitroquinoline, 2-methyl-8-hydroxyquinoline, apigenin, apiin, and canadine.

Bibliography of Books and Published Reports on Gas Turbines, Jet Propulsion, and Rocket Power Plants, Circular 482, by Ernest F. Fiock, has been published by the National Bureau of Standards and is now available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. at 20 cents per copy.

Make Plans for—

Gulf and Caribbean Fisheries Institute, second annual meeting, November 15–18, Robert Richter Hotel, Miami Beach, Florida.

American Institute of Chemical Engineers, New York Section, November 17, Hotel Statler, New York City.

American Society for Pharmacology and Experimental Therapeutics, first interim meeting, November 17-19, Indiana University Medical Center, Indianapolis.

American Physical Society, 295th meeting, November 25–26, University of Chicago.

Central Association of Science and Mathematics Teachers, November 25-26, Edgewater Beach Hotel, Chicago.

National Council of Geography Teachers, 35th annual meeting, November 25-26, Hotel Cleveland, Cleveland.

American Mathematical Society, November 25-26, Illinois Institute of Technology, Chicago; November 26, California Institute of Technology, Pasadena.