other and to hear Virginia Bartow, of the University of Illinois, speak on "Historical Cooperation Among the Sciences." Matters of national business were considered at a breakfast at 8:00 A.M. on 29 March. Delegates from the 15 chapters of the organization, as well as the National Council members, attended this session. National officers, elected for 1946 are as follows: Nina E. Gray, Illinois State Normal University, Normal, president; Edith Quimby, College of Physicians and Surgeons, Columbia University, New York City, first vice-president; Pearl Claus, University of Wisconsin, Madison, second vice-president; Lela V. Barton, Boyce Thompson Institute for Plant Research, Inc., Yonkers, New York, secretary; and Beulah Armstrong, University of Illinois, Urbana, treasurer.

The fraternity will celebrate its 25th birthday in December 1946 at Boston. (*From a report by Lela V. Barton.*)

The Science Exhibition

Once again the leading supplies of scientific apparatus, equipment, supplies, and books cooperated to present their latest items for inspection by the members attending the AAAS meetings. Nearly all of the exhibitors were able to show new or improved products because of research carried on in conjunction with their activities of supplying the armed forces during the war. In addition to the usual large number of commercial exhibitors there were a limited number of scientific exhibits. The small number of the latter was due to the short time for preparation and the uncertainty of securing approval for releasing war research still covered by security regulations.

The Science Library was one of the most popular exhibits at the meetings. Books were received from nearly 50 different publishers in addition to a score or more of overseas publishing houses. The foreign items came from Canada, England, Russia, Poland, The Netherlands, France, Sweden, Belgium, and Norway.

Through the cooperation of the National Science Teachers Association and the Army Air Forces, two large exhibits on training methods and equipment from Scott Field and the Seventh Defense Command at Omaha, Nebraska, were open for the entire period of the exhibition. The U. S. Public Health Service, the Library of Congress, the Army Medical Library, the National Roster of Scientific and Specialized Personnel, and the Smithsonian Institution were other governmental agencies which provided exhibits.

The exhibition staff of the Washington office has already begun work on the exhibition to be held in conjunction with the December meeting in Boston. A local committee in charge of scientific exhibits is to be appointed, and invitations to participate will be issued shortly.

News and Notes

Capt. R. D. Bennett, technical director, Naval Ordnance Laboratory, spoke on "The Future of Science Under Government" at the meeting of the Philosophical Society of Washington on 16 February.

S. Eilenberg, of the University of Michigan, has been appointed professor of mathematics at Indiana University.

Dr. Herbert E. Longenecker has been appointed dean of the Graduate School at the University of Pittsburgh. Dr. Longenecker, who is dean of research in the natural sciences, succeeds Dr. William T. Root, who died early in 1945. A nutrition authority, he holds many national offices. He is expert consultant on fats and oils for the Office of the Quartermaster General, and a member of the steering committee of the Food and Nutrition Board, National Research Council. He has been a member of its committee on fats since 1942 and chairman since 1943.

Dr. Max E. Chilcote, of the Department of Physiological Chemistry, Loyola University School of Medicine, Chicago, has been appointed Nutrition Foundation Research Fellow in the Department of Agricultural and Biological Chemistry, Pennsylvania State College. Dr. Chilcote will work with Dr. N. B. Guerrant on methods for the estimation of vitamin A and carotene.

Maj. Rafael Rodriguez-Molina, Medical Corps, has been awarded the Army Commendation Ribbon for his service as assistant chief and chief of the Medical Service, 161st General Hospital, A.P.O. 851, U. S. Army.

Dr. Bennett Frank Buie has been appointed professor in the Geology Department at the University of South Carolina, Columbia. Dr. Buie has recently been released from the Army, where he had been serving as a major with the Corps of Engineers attached to the Persian Gulf Command.

Dr. W. A. Shurcliff, scientific and technical adviser to the New York State Department of Commerce, has been given temporary release by Governor Dewey to

serve as official historian of "Operation Crossroads," to be carried out in the Marshall Islands this spring by Vice-Admiral Blandy's Joint Task Force One. Dr. Shurcliff was chosen for this new assignment in view of his recent experience in helping edit the "Smyth Report."

Dr. Richard P. Goldthwait, formerly of Brown University and during the war in charge of special equipment investigations for the Army Air Corps at Wright Field, has been appointed associate professor of geology at the Ohio State University.

Philip S. Smith, chief Alaskan geologist of the U. S. Geological Survey, retired from government service on 31 March 1946.

Prof. Franz Knoop has been located and interviewed by a former student of mine. He was in good health at the age of 70, although he had lost 40 pounds. As of 1 April 1946, he retired from his position at the University of Tübingen, and was succeeded by Adolf Butenandt.—*Howard B. Lewis* (University of Michigan).

Dr. Julian B. Rotter, recently separated from the Army, where he was on duty in the AAF Convalescent Hospitals as a clinical psychologist with the rank of first lieutenant, has been appointed assistant professor of psychology at Ohio State University.

Dr. Arthur W. Adamson, former project leader in the research at Oak Ridge, Tennessee, has been appointed assistant professor of chemistry at the University of Southern California.

Dr. James M. Severens, formerly on the faculty of the University of Illinois, is now bacteriologist and director of research and development with the American Scientific Laboratories, Polo, Illinois.

Dr. Horace E. Wood, II, after three years of service as lieutenant and captain in the AAF, has resumed his former position as professor of biology, University of Newark, and research associate in fossil mammals, American Museum of Natural History, New York City.

Prof. David L. Arm, head of the Department of Mechanical Engineering at Iowa State College, has resigned his position to become dean of the School of Engineering at the University of Delaware.

Dr. Harold A. Abramson, assistant professor of physiology at Columbia University, recently addressed the Philadelphia Allergy Society and the staffs of the Pratt Diagnostic Hospital and the New England Medical Center, Boston. In his address, "Aerosol Therapy of the Lungs and Bronchi," Dr. Abramson outlined the general principles of aerosol therapy, described the initiation of the penicillin aerosol therapy program by the Technical Division, Office of the Chief, Chemical Warfare Service, in 1942, and amplified in detail that part of the lung therapy program which was under his direction while he was a member of the staff of the Commanding General, Technical Division, Chemical Warfare Service.

Dr. Clifford S. Garner has been appointed assistant professor of chemistry at the University of California at Los Angeles where he will carry on a program of research in nuclear chemistry. Dr. Garner has been with the Los Alamos Nuclear Bomb Laboratory for the past three years.

Dr. N. Ercoli, formerly with the Research Laboratories of Hoffmann-La Roche in Nutley, New Jersey, has been appointed head of the Laboratory of Pharmacology and Chemotherapy at the Warner Institute for Therapeutic Research, New York City.

Dr. Wayne K. Wilmarth, formerly instructor in chemistry at the University of California, Berkeley, has been appointed assistant professor of chemistry at the University of Southern California.

Dr. E. D. Merrill, director of the Arnold Arboretum, Harvard University, has been appointed as a member of the Advisory Scientific Board of the Gorgas Memorial Institute of Tropical and Preventive Medicine, succeeding the late Dr. Thomas Barbour.

Dr. L. Hissink, Borromeus Clinic, Bandoeng, Java, Dutch East Indies, is confirming his investigations on a plasma substitute, Capain, which he began during the war at the Surgical Clinic of the Medical School in Groningen, Holland. He writes: "The resistance of the (Indonesian) people here is much lower than in Europe. After some bigger operations we often have to treat the postoperative shock." Since not enough blood or plasma is available, intravenous protein hydrolysates are being tried.—*H. Necheles* (Michael Reese Hospital, Chicago).

Dr. Stanley B. Williams, formerly instructor in psychology at Brown University and recently released from active duty in the Navy, has been appointed assistant professor of psychology at Johns Hopkins University.

Dr. Roger G. Barker, formerly of Stanford University, has accepted the G. Stanley Hall chair in genetic psychology at Clark University.

Dr. Waldo Shumway, professor of zoology, University of Illinois, has returned to the University after four years active duty in the Army of the United States. He served as a Colonel in the General Staff Corps and was assigned first to the Special Service

Division and later to the Planning Division of Army Service Forces. He was awarded the Legion of Merit and the Army Commendation Ribbon.

Dr. Wendell R. Garner, formerly special research associate in psychology at Harvard University, has been appointed instructor in psychology at Johns Hopkins University.

R. P. Fischer, formerly research examiner at the University of Illinois, has been appointed full professor of psychology and head of the Department of Psychology at Birmingham-Southern College, Birmingham, Alabama.

Dr. Harry Turney-High, professor of anthropology and sociology and chairman, Department of Economics and Sociology at Montana State University, has returned after more than three years active service with the Army. Dr. Turney-High served overseas for a considerable portion of the period during which he was absent and was a member of the staff of the Provost Marshal.

Dr. Russell B. Stevens has been appointed assistant professor in the Department of Biology at the University of Louisville. He was released from the Army in January after nearly four years in the Medical Department, during which time he saw service in New Guinea and the Philippines.

Dr. Paul L. Risley, formerly associate professor of zoology at the State University of Iowa, is now professor and head of the Department of Biology at the University of Oregon. Prof. H. B. Yocom, former head of the Department, is on leave of absence for the current year. Due to ill health, he has retired from full-time duties.

Dr. Albert Kenrick Fisher, former biologist of the U. S. Biological Survey and since 1931 honorary collaborator in biology of the Smithsonian Institution, celebrated his ninetieth birthday on 21 March 1946. On that evening a group of about 40 of Dr. Fisher's scientific and professional friends gave a dinner in his honor at the Cosmos Club in Washington. "Unfolding the Life of Dr. A. K." was the topic for the after-dinner program. Toastmaster for the occasion was Dr. T. S. Palmer, retired naturalist and one of Dr. Fisher's associates during a good part of his 46 years of government service. Paul H. Oehser, of the Smithsonian Institution, spoke on "Dr. A. K. as We Know Him," and Howard Zahniser, of the Wilderness Society, on "Dr. A. K. as a Naturalist." Others paid high tribute to Dr. Fisher's long and useful service as an economic ornithologist and mammalogist, to his great capacity for friendship and companionship, and to his likable and infectious personality.

Robert B. MacMullin, formerly manager of development of the Mathieson Alkali Works, Inc., announces the opening of a consulting practice in the field of chemical engineering, with temporary offices at 8249 Troy Avenue, Niagara Falls, New York. Mr. MacMullin has just returned from a six-month tour of duty in Germany as technical coordinator for the Foreign Economic Administration and the Department of Commerce.

Dr. M. J. Schiffrin has been appointed research consultant to the Medical Division of Hoffman-La Roche, Inc., after completing 45 months service with the AAF. Previously, Dr. Schiffrin was in the Department of Physiology of Northwestern University Medical School.

Dr. C. C. Speidel, professor of anatomy, University of Virginia, Charlottesville, spoke on "Living Cells in Action as Revealed by Fast-motion Cine-photo Micrography" before the Sigma Xi Chapter of North Carolina State College on 26 March.

Dr. T. G. Yuncker, professor of botany at DePauw University, has been appointed visiting research professor at the University of Illinois for the year 1946–47. He will continue studies on the taxonomy of the Piperaceae, left uncompleted by the late Prof. William Trelease.

Announcements

A School of Forestry has been authorized by the Regents of the University of California. Work in forestry has been carried on previously by a department within the College of Agriculture which has achieved wide recognition for its work. The establishment of the school allows the faculty to operate on a higher administrative level, opens the way to program expansion, and will make possible the organization of a fifth professional year of study leading to a Master's degree in the field. This is the twelfth such school in the United States to offer professional forestry training, according to officials.

Polytechnic Research and Development Company, Inc., successor to P. I. B. Products, Inc., announces the opening of complete facilities for consultation, research, and development in the field of applied physics and microwave electronics at 66 Court Street, Brooklyn 2, New York.

The Louisiana State University Chapter of the Society of Sigma Xi has just established two annual awards for students, a $50 award to the outstanding graduating senior and a $100 award to the most capable Master's candidate. The latter prize was

made possible through the generosity of Dr. Lester J. Williams.

The Swedish Board of Education has suggested that English should replace German as the primary foreign language in all secondary schools from the autumn of 1946. This change will take place successively, beginning with the lowest class.

The Board observes that Sweden's relations with the English-speaking world, in the economic as well as in the cultural field, had already strongly developed during the prewar years, while her relations with German-speaking countries showed a decline. Subsequent world events have further contributed to this trend. The interest in Russian and Spanish has likewise increased considerably in Sweden, and the number of pupils studying these languages has multiplied compared with the prewar years.—*Swedish International Press Bureau.*

The American Institute of Nutrition announces that the Mead Johnson and Company Prize for 1945 has been awarded to Dr. Irwin C. Gunsalus, associate professor of bacteriology, Cornell University, and to Dr. Esmond E. Snell, associate professor of biochemistry, University of Wisconsin, for their discoveries and investigations in the field of the B-complex vitamins with special reference to pyridoxal and pyridoxamine.

The Institute also announces the granting of the Borden Award in nutrition to Dr. Philip C. Jeans, professor of pediatrics, College of Medicine, State University of Iowa, and to Dr. Genevieve Stearns, research professor of pediatrics, College of Medicine, State University of Iowa, for their valuable contributions on the nutritive significance of milk and various components of milk in the maintenance of infant and child health.

The Belgian American Educational Foundation, 420 Lexington Avenue, New York 17, New York, has invited 22 Belgian scientists to visit the United States for short study-travel trips during the year, according to Perrin C. Galpin, president. The majority of those invited will arrive before summer. The Fonds National de la Recherche Scientifique of Brussels made the initial selection of 18 men, while 4 were invited directly by the foundation in New York.

The names, principal subjects of study, and Belgian university or other affiliation are: Gerard Baptist, agricultural economics, State Agricultural High School, Ghent; Raymond Bouillenne, botany, Liège; Jean Brachet, biology, Brussels; Raymond Breckpot, chemistry, Louvain; Frederic Bremer, neurology, Brussels; Lucien Brull, internal medicine, Liège; Gaston Dept, history, Ghent; Louis D'Or, chemistry, Liège; Corneille Heymans, physiology, Ghent; Georges Homes, industrial physics, Polytechnic School, Mons; Maurice Houyoux, architecture, Albert I Library; Jean La Barre, pharmacology, Brussels; Michel Legraye, mineralogy, Liège; Jules Lespes, administrative law, Brussels; Gustave Magnel, engineering, tests of materials, Ghent; Joseph Maisin, cancer research, Louvain; Charles Manneback, theoretical physics, Louvain; Paul Martin, surgery, Brussels; Walter Mund, physical chemistry, Louvain; Romaan Ruyssen, chemistry, Ghent; Jan Frans Vanderheijden, library science, Albert I Library; and Victor Van Straelen, paleontology, Royal Museum of Natural History.

All but five of these men have studied in the United States between the two wars. Each visitor will stay a minimum of one month in this country.

The Geology Department of the University of South Carolina has recently acquired the Colburn Mineral Collection. This collection is especially rich in rare and beautiful minerals from the southern Appalachians.

The Sixth Annual Broadcast Engineering Conference met in Columbus, Ohio, during the week of 18 March. The Conference was sponsored by Ohio State University and the University of Illinois, with the cooperation of the National Association of Broadcasters and the Institute of Radio Engineers.

Phi Sigma Society installed a new chapter, Alpha Sigma, at the University of Texas on 2 February 1946. Dr. Efrén C. del Pozo, of the National University of Mexico, and Dr. Robert R. Williams, of the University of Texas, were elected to honorary memberships.

Tests in the United States show that the new British insecticide, sometimes referred to as benzene hexachloride, is not a replacement of DDT and has at present serious shortcomings, Dr. W. H. Tisdale, director of the Du Pont Pest Control Research Laboratory, announced recently. This is the insecticide disclosed in a recent congressional hearing on the 1947 Agricultural Department supply bill. It was said to be seven times more effective against flies than DDT.

"While it shows real promise as an additional lethal weapon against many insect pests," Dr. Tisdale explained, "hexa-chloro-cyclohexane, to use its correct chemical name, will require more research work before it can contribute importantly to the welfare of man. It has a most disagreeable, pungent odor and does not possess the long-lasting toxicity in the field that makes DDT so outstanding."

Du Pont has widely tested hexa-chloro-cyclohexane and distributed samples to state and federal agencies. Experimental reports point to limited use of the in-

secticide for controlling household, storage, and livestock insects because of the odor. It is more toxic to flies and cockroaches than DDT. In agriculture, tests show it is superior to DDT against such major pests as aphids, grasshoppers, wire worms, and several cotton insects including the boll weevil. However, the Du Pont scientist pointed out, under normal weather conditions where these pests occur in this country, the insecticide is not effective for more than 2 to 4 days. Early reports also show that it is more likely to damage foliage than DDT, especially tender truck crops.

"We will continue to investigate this new product and its possibilities," Dr. Tisdale said, "including the production of a more effective and less odorous form."

Fifty high school chemistry and physics teachers, selected from 10 northeastern states, will be appointed to all-expense General Electric Science Fellowships at Union College this summer, it has been announced by Dr. Carter Davidson, president.

Forty fellowships were made available last summer in the field of physics. This year 50 fellowships will be divided between chemistry, physics, and general science teachers who qualify.

A special course of study, designed to bring the fellows information concerning latest advances in chemistry and physics, will be conducted by the faculty of Union College in cooperation with the scientific staff of the General Electric Company.

The fellowships will cover traveling expenses, living expenses, and tuition at the session which will open 7 July for a six-week term. Graduate credit will be given to qualified applicants.

Formal announcements are being mailed to secondary school principals for transmission to teachers and to individual science teachers in New York, Pennsylvania, New Jersey, Delaware, and the New England states.

The University of British Columbia has announced that the contract has been let for a new physics building, to cost $740,000. Construction will start immediately, and it is expected that the building will be ready for occupancy in January 1947.

The Life Insurance Medical Research Fund, 60 East 42nd Street, New York City, has made grants totaling $126,000 in six university medical schools for research into the causes of cardiovascular diseases.

Recipients of the grants are: Columbia University—Dr. Joseph Victor, Department of Pathology, and Dr. Dickinson W. Richards, Jr., Department of Medicine; University of Minnesota—Dr. Maurice Visscher, Department of Physiology, and Dr. Arthur Kirschbaum, Department of Anatomy; University of Pennsylvania—Dr. H. C. Bazett, Department of Physiology; Southwestern Medical College, Dallas, Texas—Dr. Gladys Fashena, Department of Pediatrics; Washington University, St. Louis—Dr. John R. Smith, Department of Internal Medicine; and Yale University—Dr. John R. Paul, Section of Preventive Medicine.

The University of Hawaii has initiated a project of research in Micronesia to include the biological, physical, and social sciences. A party of four faculty members made a reconnaissance trip to the Marshall, Mariannas, and Caroline Islands from 14 December 1945 to 5 January 1946. The party consisted of Drs. Harold St. John, leader and botanist; John F. Embree, anthropologist; Harvey I. Fisher, zoologist; and Raymond E. Murphy, geographer. The islands visited were: Kwajalien, Ebeye, Majuro, Aur, Arno, Eniwetok, Ponape, Kusaie, Pingelap, Guam, Peleliu, Angaur, and Korror. The trip was made possible through the assistance of the U. S. Navy.

The U. S. Navy Hydrographic Office has recently established a Division of Oceanography which, according to Rear Adm. R. O. Glover, USN, Hydrographer, will provide for increased responsibilities in oceanography recently assigned by the Secretary of the Navy.

Experience during the war has shown that a considerable expansion in knowledge of the oceans is necessary to guide the development of new naval equipment and to aid in strategic and tactical planning. A great increase in fundamental oceanographic research will be required, since present basic oceanographic knowledge has been extended to the limit in its practical application during the war. In addition, new oceanographic techniques have opened many new possibilities of further fundamental investigations.

It is believed that such basic oceanographic research would be of value not only to the Navy but also to many other governmental activities interested in the oceans, their land and air borders, and the organisms living in the sea, as well as to scientific institutions and to various commercial interests. For example, the increase in air travel over water has given increased emphasis to problems of maritime meteorology and air sea rescue, requiring a knowledge of ocean currents. The extension of United States responsibility to regions of the western Pacific has greatly added to the national interest in geophysical and other problems of those areas, of which oceanographic problems are an integral part. Development of new fisheries and conservation of existing fisheries resources may in the future depend more and more on better oceanographic knowledge.

By expanding its oceanographic work, the Hydrographic Office will be continuing its tradition of service to the mariner and will afford other agencies a facility

for coordination of oceanographic observations and research. The Hydrographer intends to maintain a central oceanographic library, central files of oceanographic data (to be published in a special bulletin), and a bibliographic service, and to provide charts and manuals utilizing the results of the most recent research. In carrying out this work, the Hydrographic Office will not only make use of the services of its own personnel in the newly established Division of Oceanography, but also will give financial support to oceanographic institutions to permit them to expand their facilities for basic research of interest to the Navy and other governmental agencies. In addition to publications of immediate practical use to mariners, the Hydrographer proposes to publish a series of technical studies which will be of interest to those working in applied oceanography as well as to personnel at research institutions both in the United States and abroad.

To insure an organization most useful to the Government and the maritime interests of the Nation, an Advisory Committee, consisting of representatives of interested activities in the Navy and other government agencies, is being formed to advise the Hydrographer concerning oceanographic problems of special interest to the agencies represented, to assist in coordinating governmental research in oceanography, and to give continuing endorsement to the program. Cooperation of this sort should prove to be a most economical means of furthering the oceanographic interests of the country.

A new tanning compound for sole leather, developed synthetically by chemists, is believed by them to be superior to the natural product formerly obtained from chestnut trees. It is an important development because the natural chestnut material is no longer available domestically, most American chestnuts having been killed by a blight.

This synthetic tannin was developed by chemists of the Monsanto Chemical Company, which claims that it imparts to sole leather a fine, smooth grain as well as desirable qualities of tightness, firmness, pliability, and excellent resistance to abrasion, water, and wear.

The chemical composition of the new tannin is not announced. It is, however, made from domestic raw material, and was developed by examining the complicated molecular structure of natural tannin extracts, and then creating a new product through chemical synthesis. In the development, chemists of the Monsanto Company and the University of Cincinnati leather research laboratory cooperated—*Science Service.*

The National Social Science Honor Society, Pi Gamma Mu, now affiliated (29 March 1946) with the AAAS, gave a luncheon 29 March 1946 at the Claridge Hotel, St. Louis, for the presiding officers and participants in the several sessions of Section K on the "Impact of Technology on Society." Dr. Leroy Allen, national executive secretary of Pi Gamma Mu and professor of religion in Southwestern College, presided, and the national president, Dr. S. Howard Patterson, professor of economics in the University of Pennsylvania, presented his vice-presidential address to Section K on "The Present Challenge to Social Scientists." Dr. John Donaldson, national first vice-president and professor of political economy in the George Washington University, gave an address of welcome. About 40 guests were in attendance.

Immediately after the luncheon, at 2:30 P.M. in an adjoining room at the Hotel Claridge, this year's Pi Gamma Mu Lecture on "Science and Religion" was presented by Dr. Edwin McNeill Poteat, president of the Colgate-Rochester Divinity School. Dr. Patterson presided. (*From a report by Leroy Allen.*)

Six new members have been appointed to the faculty of the Technological Institute of Northwestern University, according to Ovid W. Eshbach, dean of the Institute. Capt. George G. Lamb, recently discharged from the Navy where he coordinated research on aviation fuels, was appointed professor of chemical engineering. Miklos Hetenyi, formerly in charge of the photoelasticity laboratory of the Westinghouse Electric Company, was appointed professor of theoretical and applied mechanics. George Sommerman, who formerly conducted radio research for the Navy under the OSRD, and Alexander Wing, Jr., formerly on the staffs of the pre-radar school and the radio research laboratory at Harvard University, were appointed associate professors of electrical engineering. Robert R. Buss, also of the Harvard radio laboratory, and Lt. John Lyon, recently discharged from the Navy, were appointed assistant professors of electrical engineering.

Five of 16 planned research projects have now been completed by the Hormel Institute in cooperation with the University of Minnesota. These are: "Survey of Literature and Experimental Studies on the Nutritive Value of Soybeans"; "The Nature and Identity of the Natural Preservatives in Animal Fats and the Development of an Analytical Method for Their Measurement"; "Secondary Antioxidants"; "Studies of the Stability of Dehydrated Meats," a war project; and an investigation concerning the use of sulfonamide in treatment of surface wounds, under the sponsorship of Sharpe and Dohme, Inc. Copies of the research projects and a list of papers published or pending may be obtained by writing to The Hormel Institute, Austin, Minnesota.

The Institute was founded in 1942 by agreement between the University of Minnesota and the Hormel Foundation. The Board, made up of five men selected by the University, consists of: Theodore C. Blegen, dean of the Graduate School, University of Minnesota; C. H. Bailey, dean and director, Department of Agriculture, University of Minnesota; R. P. Crane, Board of Trustees, Hormel Foundation; F. C. Mann, professor of experimental surgery, Mayo Foundation; and Walter M. Lauer, professor of organic chemistry, University of Minnesota. The executive director, who supervises all operations of the Institute, is Dr. H. O. Halvorson, professor of bacteriology, University of Minnesota. He is assisted by Dr. Walter O. Lundberg, associate professor of physiological chemistry. All members of the staff from the University retain their faculty status.

At present 5 laboratories are in operation, but the Institute hopes to expand this to 8 or 10 and to increase the range of research as soon as possible.

The Institute for Research in Child Psychology has been reorganized as the Institute for Research in Clinical and Child Psychology. At present, the Advisory Council consists of the following members: Gardner Murphy, chairman; Philip Curoe, Oskar Diethelm, W. H. Gantt, Clark L. Hull, Arthur T. Jersild, Wolfgang Köhler, William S. Langford, H. S. Liddell, Jules Masserman, Dorothea McCarthy, Emil Oberholzer, Frank J. O'Brien, James M. O'Gorman, and Bernard S. Wortis.

Officers elected at the annual meeting are: Livingston Welch, director; Louis Long, treasurer; and Bernard F. Riess, secretary.

A new Department of Biochemistry at Harvard has been established in the Faculty of Arts and Sciences. It will be composed of three subdepartments, Biological Chemistry and Physical Chemistry at the Harvard Medical School in Boston, and a new subdepartment of Biochemistry in Cambridge.

Heretofore, research and graduate instruction in biochemistry have been centered chiefly in the Medical School, primarily because the development of this science in this country has been largely due to its long-recognized importance in the medical curriculum. More recently, an increasing interest in biochemical problems and methods has been displayed by those laboring in the closely allied fields of physics, chemistry, and biology.

The establishment of the new subdepartment in Cambridge will now provide additional facilities for research and instruction in biochemistry in close proximity to the Departments of Biology and Chemistry. It will be staffed by a number of new appointments, and it is expected that certain members of the Departments of Biology and Chemistry, whose interests lie closest to the area of biochemistry, will become part-time members of the new subdepartment. A closer integration of the biochemical interests and needs of all students and faculty members should thus be achieved.

The ever-widening applications of biochemistry, not only to medicine but to agriculture, public health, and to the pharmaceutical, chemical, and food industries, have created a great need for well-trained biochemists to carry on research and teaching in these fields.

Dr. L. J. Havas, formerly of the University of Brussels, Belgium, and at present in Budapest, Hungary, has written to L. Marton, of Stanford University, that he is attempting to write a book on colchicine and its effects and would be grateful to receive all publications on this subject. He appeals to fellow workers in this same field to send him publications on colchicine and related subjects (polyploidizing agents, animal and plant hormones, carcinogenic substances, etc.). He also requests most recent publications on the methods of culture of penicillium and the extraction methods of penicillin. His present address is: Hungarian Agricultural University, Horticultural Faculty, Institute of Special Fruit Growing, Nagyboldogasszony utja 45, Budapest XI, Hungary.

Louisiana State University has announced the establishment of two industrial fellowships in zoology under the direction of Dr. George H. Mickey, associate professor of zoology. The purpose of the research is to study the effects of petroleum refinery wastes upon native fishes of Louisiana streams. A total of $10,550.88 for a three-year period was contributed by six oil companies: Cities Service Refinery, Standard Oil Company, Shell Oil Company, Pan-American Petroleum Corporation, Continental Oil Company, and Chalmette Petroleum Corporation.

The Institute of Statistics, University of North Carolina, announces a statistical summer session to be given at Raleigh from 17 June to 26 July. The science of statistics experienced an exceptionally rapid development during the war. The summer session staff has been chosen for its ability to present the new methods and concepts authoritatively and effectively. Lectures will include descriptions of many recently discovered applications of statistics, as well as both simple and more complex examples of the better known techniques.

The instructional staff consists of: Dr. C. I. Bliss, biometrician, Connecticut Agricultural Experiment Station, and lecturer in biometry at Yale University; Prof. W. G. Cochran, associate director, Institute of

Statistics; Prof. Gertrude Cox, director, Institute of Statistics; Dr. R. A. Fisher, Department of Genetics, University of Cambridge; Prof. G. W. Snedecor, director, Statistical Laboratory, Iowa State College; and Dr. J. Wolfowitz, associate professor, Institute of Statistics.

Eight courses in statistics will be given, including beginning courses in experimental statistics, intermediate and advanced courses in design of experiments, statistical basis of biological assay, sequential analysis, mathematical statistics, and advanced experimental statistics. Further information may be obtained from the Director, Institute of Statistics, North Carolina State College, Raleigh, North Carolina.

The tenth anniversary of the death of Ivan Pavlov, the Russian physiologist who developed the theory of conditioned reflexes, has been celebrated in Moscow by a joint session of the USSR Academy of Sciences, the Academy of Medical Sciences, and the All-Union and Moscow Societies of Physiologists, Biochemists, and Pharmacologists.—*Science Service.*

A Sanitary Engineering and Public Health Research Council of Texas was temporarily organized during the summer of 1945 by representatives of the universities and colleges of Texas interested in research pertaining to sanitary engineering and public health. The objectives of the organization are: to promote research, to facilitate the transfer of information in these fields, and to secure funds for research.

On 7 January 1946, a meeting of the Council was held at the University of Texas, Austin. During this meeting a permanent organization was effected and a program was presented. Annual meetings were planned, with the work of the Council to be carried on by committees for the coming year. Committees appointed included: Committee on Research Resources, with Dean O. V. Adams, of the Texas Technological College, as chairman; Committee on Ways, Means, and Endowments, with Mr. V. M. Ehlers, of the State Health Department, Austin, as chairman; and Committee on Public Information, with Mr. E. E. McAdams, of the Texas League of Municipalities, Austin, as chairman.

Officers of the Council for the coming year are: Dean W. R. Woolrich, of the University of Texas, chairman; Dean O. V. Adams, vice-chairman; Mr. E. E. McAdams, secretary; Dr. J. K. G. Silvey, of North Texas State Teachers College, and Mr. V. M. Ehlers, members of the Executive Committee.

Papers on recent research, presented at the January meeting, dealt with purification of water, algae control, typhus fever control, and a fly-control program. Research projects that might be sponsored by the Council were outlined.

Dr. Stanislas Konopka, director of the Department of Science and Publications of the Ministry of Health in Warsaw, has reported to *Science* on the present status of equipment for medical teaching and research in Poland. His report covers the situation as of the latter part of November 1945 and was forwarded by Dr. Leon Dmochowski, of the Imperial Cancer Research Fund, London.

The war twice fought on Polish territory and the occupation of Poland during the years 1939–1945 brought destruction to every field of cultural and economic life. The cultural losses must be placed first in importance because in the majority of cases the losses are irretrievable, considering the losses of museum collections, archives and libraries. According to provisional estimates, as far as Polish medicine is concerned, Poland has been deprived of 70 per cent of the equipment of scientific institutes, laboratories, clinics and hospitals; in Warsaw the buildings too have been destroyed. Eighty per cent of the medical libraries and museum collections in Warsaw have been destroyed or burnt.

Before the war the main source from which Polish doctors derived their professional and scientific knowledge were the university libraries and the special medical libraries. To the greatest Polish libraries belonged the library of the Warsaw Medical Association, founded in 1820, which contained 67,000 books and medical papers, among them valuable prints from the sixteenth to eighteenth centuries. The second, although much larger library, founded in 1921, was the library of the Military Medical Training Centre. This library was a most active one; it comprised 115,000 volumes, was lending books all over Poland, and possessed a department of bibliography sending on request bibliography from every field of medicine and was publishing Polish medical bibliography. The annual turnover was fifty to sixty thousand books. Besides these two libraries there existed many smaller ones, such as the library of the Chirurgical Society, Gynaecological Society, the Society of Hygiene, etc., and libraries of university clinics and institutes. Of all these libraries only the ruins remain today. In Cracow and in one or two other provincial centres the libraries have been partially saved. In Warsaw, however, only the libraries of the Ophthalmic, Paediatric and Gynaecological clinics have been, to some extent, preserved. Altogether Warsaw lost irretrievably, mainly through fire, twenty-one medical libraries comprising over 550,000 volumes. There is no trace left of the rich museum of the history of medicine. It possessed over 16,000 items, such as old medical instruments, medals, paintings and valuable collections of old medical documents, manuscripts and prints.

During the fighting in Warsaw all the publishing firms and their stocks were lost. This loss is all the more painful, as Warsaw was the main publishing centre of medical and scientific books. Only a few private libraries belonging to medical men remain.

This great dearth of Polish medical books has been increased through the German order published in 1939

forbidding the publication of any Polish books or papers, including all medical books. The Germans, as is well known, also closed all universities.

The Polish medical men and scientists appeal to their colleagues abroad for help in the re-equipment of libraries with books and periodicals. To facilitate and coordinate the help given medical committees for scientific help for Poland have been set up in New York, Moscow, Paris, Stockholm and Zurich. In London the work is centered in the Polish Medical Association.

Plans for major expansion of the University of Rochester's Department of Physics, including additions to the physics building at the River Campus, equipment, and teaching and research staff, were announced recently by President Alan Valentine.

The undertaking will constitute the largest single addition to teaching and research facilities at the University since the College for Men was moved to its new campus in 1930. It is one of the first steps in the 10-year program of postwar expansion, particularly in the College of Arts and Science, made public by President Valentine last fall. Strengthening of the liberal arts and social science fields, chemistry, and engineering departments, with additional buildings to accommodate enlarged personnel and equipment, is included in the long-range program.

The announcement follows closely on the return to the University of Dr. Lee A. DuBridge, professor of physics and chairman of the department, after more than five years leave of absence to serve as director of the NDRC Radiation Laboratory at Massachusetts Institute of Technology.

A nonrecurrent expenditure of $550,000 has been appropriated by the University for an addition to the Bausch and Lomb Building at the River Campus, which houses the Physics Department, and for new equipment. The proportion of the sum to be used for those purposes will be determined after recommendations by Dr. DuBridge. Construction will begin as soon as materials can be obtained.

In addition, the physics budget will be double the department's prewar outlay to permit additions to teaching and research staff, over which Dr. DuBridge also will have supervision.

The Signal Corps Engineering Laboratories have recently organized a Micro Optical Section in the Components and Materials Branch of the Squier Signal Laboratory at Fort Monmouth, New Jersey. The section has been equipped with electron microscope, photographic and direct reading and recording X-ray diffraction apparatus, photographic and direct viewing X-ray radiograph and fluoroscope, grating spectrograph, recording spectrophotometer, interferometer, chemical and petrographic microscopes, apparatus for photomicrography, and other associated equipment for studying the physicochemical properties of Signal Corps materials and components. Major Glenn N. Howatt was officer in charge during the installation of the section, and Dr. V. F. Payne has been civilian chief from its beginning.

Major Howatt went to the Signal Corps from the General Ceramics and Steatite Corporation and has now returned to his former position as chief ceramist. Dr. Payne went to the Signal Corps four years ago from his former position as head of the Chemistry Department of Transylvania College. Dr. B. C. Bradshaw, formerly at Rockefeller Institute, is in charge of electron microscopy and radiology; Dr. Alexander P. de Bretteville, Jr., from the Laboratory of Insulation Research, Massachusetts Institute of Technology, joined the staff to assume charge of the work in X-ray diffraction; Dr. Milton Green, formerly with the Bureau of Standards, is in charge of spectroscopy; Mr. S. Benedict Levin, formerly with the Bureau of Mines, is in charge of optical microscopy; and Miss Pearl Anderson, from Transylvania College, is technical editor.

A grant of $1,200 in support of the research work of Dr. Abraham White has been made to the Mendel Fund of the Department of Physiological Chemistry, Yale University School of Medicine, by the Medical Research Division, Sharp and Dohme.

Farrington Daniels, editorial adviser in chemistry for *Science,* has been honored by having the first nuclear pile for the production of power named after him. Major Gen. L. R. Groves announced 13 April 1946 that the Daniels Pile will be constructed at Oak Ridge, Tennessee. A meeting was held 11 April in New York City to formulate plans for organization; representatives of the Manhattan Engineer District, Army Air Forces, U. S. Navy, Monsanto Chemical Company, General Electric, and Westinghouse were present. Charles Allen Thomas, vice-president and technical director of Monsanto, will be in charge of the project, which is expected to be in operation by early 1947. The design, construction, and operation with auxiliary equipment will cost in the neighborhood of $2,500,000. The plant is regarded as a pilot plant for the production of useful power, and Gen. Groves was careful to state that a considerable amount of work needs to be done "before fissionable material can be brought within the range of economic usability."

A David Anderson-Berry Silver-gilt Medal, together with a sum of money amounting to about 100 pounds, will be awarded in 1947 by the Royal Society

of Edinburgh to the person, who, in the opinion of the Council, has recently produced the best work on the therapeutical effect of X-rays on human diseases. Applications for this prize are invited. They may be based on both published and unpublished work and should be accompanied by copies of relevant papers. Applications must be in the hands of the General Secretary, Royal Society of Edinburgh, 22 George Street, Edinburgh 2, by 1 December 1946.

Meetings

The North Carolina Academy of Science will hold its annual meeting on 3–4 May 1946 at the North Carolina State College of Agriculture and Engineering of the University of North Carolina, Raleigh. This will be the first meeting since 1943.

Dr. A. V. Hill, foreign secretary of the Royal Society and recent recipient of the Companion of Honour Award, will represent England at a science and engineering Forum honoring the centennial of the birth of George Westinghouse, according to Gwilym A. Price, president of the Westinghouse Electric Corporation. The Forum will be held in Pittsburgh on 16–18 May.

The opening session, on "Science and Civilization," to be presided over by Dr. Robert E. Koherty, president of the Carnegie Institute of Technology, will include Dr. Isaiah Bowman, president of Johns Hopkins University, and George W. Merck, president of Merck and Company and special consultant to the War Department.

Four aspects of "The Future of Atomic Energy" will be discussed the initial day of the Forum in a group headed by Dr. Karl T. Compton, president of Massachusetts Institute of Technology. The group will delve into the biological, chemical, explosive, and power possibilities of this new form of energy.

A Nobel Prize winner from Columbia University, Dr. I. I. Rabi, will act as chairman at a dinner that evening at which Dr. Vannevar Bush, president of Carnegie Institution, Washington, and director of OSRD, will speak on "Planning in Science."

The following morning will be given over to "Biological Sciences," headed by Dr. Hugh S. Taylor, dean of the Graduate School, Princeton University. Among the participants will be Dr. Selman A. Waksman, professor of microbiology at Rutgers University. Dr. Frank B. Jewett, president of the National Academy of Sciences, will address a luncheon session on "Horizons in Communications."

The Louisiana Academy of Sciences will hold its annual meetings this year on Friday and Saturday, 3 and 4 May, at Centenary College in Shreveport, Louisiana.

Section K is sponsoring, jointly with the Academy of World Economics, Pi Gamma Mu—the National Social Science Honor Society, and the Army Industrial College, a series of meetings to be held in the auditorium of the National Archives, Washington, D. C., 2 and 3 May 1946. The general subject is "Population and Manpower." The three sessions will be: *Thursday,* 2:00 P.M.—"Trends of Population in the United States"; *Friday,* 9:30 A.M.—"Trends of Population in Foreign Areas"; *Friday,* 2:00 P.M.—"Women in War and Industry."

Dr. Benjamin H. Williams, assistant director of research, Army Industrial College, is chairman of the Program Committee composed of representatives of the cooperating organizations.

Elections

Dr. E. G. Butler, chairman of the Department of Biology, Princeton University, was elected president of the Board of Trustees of *Biological Abstracts* at the annual board meeting held in New York on 2 February 1946. Dr. Butler will succeed Dr. A. F. Blakeslee, of Smith College.

At the same meeting Dr. Luther H. Evans, Librarian of Congress, and Dr. J. J. Willaman, Eastern Regional Research Laboratory, U. S. Department of Agriculture, Philadelphia, were elected members of the Board of Trustees.

Other officers of the board elected were: Dr. E. W. Sinnott, Yale University, vice-president; Dr. D. H. Wenrich, University of Pennsylvania, treasurer; Dr. Robert Gaunt, New York University, secretary. Drs. Butler, Sinnott, and C. N. Frey, of the Standard Brands Laboratories, New York, were elected to the Executive Committee of *Biological Abstracts.*

The editorial and business offices of *Biological Abstracts,* now located in the building of the Department of Zoology at the University of Pennsylvania, will be moved during the next summer to a separate building provided by the University of Pennsylvania to permit necessary expansion.

The American Mathematical Society elected the following officers, at a meeting in November 1945, for terms of two years each: L. R. Ford and Saunders MacLane, vice-presidents; W. L. Ayres, R. H. Bruck, and A. C. Schaeffer, associate secretaries. The following were elected members of editorial committees for terms of three years each: Deane Montgomery, *Bulletin*; A. A. Albert, *Transactions*; J. F. Ritt, *Colloquium Publications*; O. E. Neugebauer, *Mathematical Reviews*; A. W. Tucker, *Mathematical Surveys*; L. M. Graves, *American Journal of Mathematics.* New members-at-large of the Council for three-year terms are: R. P. Boas, R. H. Cameron, R. V. Churchill, Churchill

Eisenhart, and A. P. Morse. Prof. M. H. Stone was appointed as a member of the Editorial Committee of *Mathematical Reviews* to fill the unexpired term of J. D. Tamarkin.

The Council voted to hold the summer meeting of the Society at Cornell University, at a date to be decided later.

Recent Deaths

Prof. Amadeus William Grabau died in Peiping on 20 March, according to the Geological Society of America. Prof. Grabau had resided in China since 1920. His last visit to the United States was in 1933, when he was an invited delegate to the Sixteenth International Geological Congress, held in Washington.

Dr. Henry S. Emerson, 38, assistant professor of biology at Amherst College, died suddenly on 8 March.

German Agricultural and Biological Chemists

Dr. Karl Freudenberg, director of the Institute of Chemistry at the University of Heidelberg, was at the University, but his institute was not open. For the past several years he has been working on the chemistry of the lignins. Dr. Richard Kuhn, director of the Kaiser Wilhelm Medical Research Institute at Heidelberg, was working actively with the approval of the American Military Government. Dr. Heinrich Wieland, director of the Institute of Chemistry at the University of Munich, was under house arrest in Starnberg, 15 or 20 miles out of Munich. His home was occupied by the officer in charge of the local American Military Government. Reasons for his house arrest were not clear, but so far as I could learn, he was not under arrest for political reasons.

Dr. Franz Knoop, head of the Institute of Physiological Chemistry at the University of Tubingen, was still active and in charge of his institute, although most of his colleagues were gone. He has been editor of Hoppe-Seyler's *Zeitschrift fur Physiol. Chem.* for many years. The last publications of the journal were issued in late 1944, but he was unable to give me the exact month when publication was suspended, owing to the fact that the French had "liberated" all of his recent volumes, including the unbound volumes of 1944.

Dr. A. Butenandt, of the Kaiser Wilhelm Institute of Biochemistry at Berlin-Dahlem, was working, with several assistants, in Dr. Knoop's laboratory at Tubingen in the French zone. His home in Berlin had been destroyed and his laboratory damaged. However, his colleague, Dr. Hillmans, remained at Berlin-Dahlem and was conducting studies with rats on potential sources of vegetable proteins for human use when I visited him in Berlin.

Prof. Kurt Maiwald, Institute of Plant Nutrition, Prof. Werner Wohlbier, Institute of Animal Nutrition and Agricultural Chemistry, and Prof. George Lakon and others were still working actively on their regular research projects at the Agricultural High School at Hohenheim, near Stuttgart. Some buildings at Hohenheim were destroyed, and most of their microscopes and research instruments had been removed by the French.

Dr. Paul Koenig, director of the State Tobacco Research Station at Forchheim, near Karlsruhe, was endeavoring to carry on his most important research projects without help. Here also all of the laboratory equipment of value had been taken away. His valuable collection of books on tobacco, however, was not lost.

Prof. W. Stepp, director of the Institute of Internal Medicine at the University of Munich, was under house arrest and was being investigated by the American Military Government. His institute and clinic were badly damaged. A new edition of *Die Vitamine und ihre klinische Anwendung,* published with Kuhnau and Schroeder, was published in 1944.

Prof. K. J. Demeter and most of his staff, of the Dairy Research Institute at Weihenstephan, were under arrest for party activities. However, the old Agricultural High School and Experiment Station at Weihenstephan is still staffed by a number of former staff members who are still working on their old projects. Some of these are as follows: Dr. Fritz Reindel (Chemical Institute), Walter Fromel (soils), and W. Schropp (plant nutrition). The school was occupied by about 300 American soldiers who were studying chemistry and agriculture under the general supervision of Maj. Bartley P. Cardon, former biochemist from the University of California. He was using some of the German professors in seminars and special lectures for advanced students.

Dr. Paul Rosbaud, formerly with Julius Springer Publishing House, informed me that Dr. Otto Warburg, head of the Institute of Cell Physiology at Berlin-Dahlem, was in the American zone at the time of my visit but I did not see him. Dr. Rosbaud was under the impression that Dr. Warburg might return to the Russian zone of occupation and continue his research work under Russian supervision, since all of his valuable instruments and equipment had been moved into the Russian zone. His Berlin-Dahlem Institute, which was undamaged, is occupied by the American Military Government.

These facts were obtained by a personal visit late in 1945.—*R. Adams Dutcher* (Pennsylvania State College).