

NEWS

and Notes

Robert S. Breed, professor of bacteriology, Division of Food Science and Technology, New York State Agricultural Experiment Station, Geneva, retired November 1 after 34 years of service.

W. A. Hamor, assistant director, Mellon Institute for Industrial Research, Pittsburgh, has been appointed editor of the American Chemical Society Monographs, succeeding the late **F. W. Willard**. The Monographs, established in 1920, comprise outstanding reports on research developments in chemical science.

W. Harry Lange, Jr., University of California, Davis, has been granted a 6-month leave of absence to accept an assignment with the Navy through the auspices of the National Research Council. He will study the giant snail and coconut beetle, *Brontispa*, in the Marianas Islands and other Asiatic areas. Dr. Lange may also visit the Philippines and the Malay Archipelago in search of natural enemies of this beetle. In addition to devising artificial means for controlling the giant snail, arrangements have been made to collect parasites in Africa which will be forwarded to the Marianas for liberation.

John R. Buhler, associate professor of oral surgery, and secretary to the faculty, Temple University School of Dentistry, has been appointed dean, Emory University School of Dentistry, effective September 1, 1948. He will succeed **Ralph R. Byrnes**, whose request for retirement at that time has recently been granted.

L. W. Le Roy, subsurface geologist, Richmond Exploration Company, Venezuela, has been appointed associate professor, Department of Geology, Colorado School of Mines, Golden, Colorado.

Jules H. Last, recently captain, U. S. Army, who received the Ph.D. and M.D. from the Universities of Chicago and Illinois, respectively, has been appointed assistant professor in the Department of

Pharmacology and Toxicology, University of Illinois.

Hyman I. Goldstein was honored on his 60th birthday, November 2, by the National Gastroenterological Association, which dedicated the 15th anniversary number of *The Review of Gastroenterology* to him in recognition of his services rendered to, and his interest in, the Association.

Percival Bailey, distinguished professor of neurology, University of Illinois School of Medicine, delivered the annual James Greenwood Lecture in Neurology at the University of Texas Medical Branch, Galveston, on "The Organization of the Cerebral Cortex." The lecture was arranged to be given in connection with the Central Neuropsychiatric Association which met in Galveston, October 17-18.

Donald Gray, associate professor of anatomy, Stanford University, has been appointed National Institute of Health Fellow and visiting associate professor of anatomy, Wayne University College of Medicine. Under a grant from the Institute he will collaborate with **Ernest Gardner** on a study of the physiology and morphology of human joints.

Visitors to U. S.

Oldrich Karel Sebek, a graduate of the Faculty of Science, Charles University, Prague, Czechoslovakia, is a member of the Seagram International Fellowship Program, observing operations and doing research work at the Louisville, Kentucky, plant of Joseph E. Seagram & Sons, Inc.

Several Australian scientists are now visiting the United States. Among them are **J. L. Pawsey**, Division of Radiophysics, Council for Scientific and Industrial Research, who arrived October 15 to visit American laboratories doing research in radiophysics, and who will remain in this country until early spring; **A. J. W. Moore**, metallurgist, Section of Tribophysics, Council for Scientific and Industrial Research; **D. Martin**, Horticulture Section of Plant Industry, Tasmania, who is studying the growth, ripening, storage, canning, and dehydration of apples; and **H. F. Holden**, research chemist, Walter and Eliza Hall Institute of Medical Research, Melbourne, who is studying physical equip-

ment which might be used in the study of viruses.

Fe del Mundo, professor of pediatrics, University of Santo Tomas, and director of the Children's Hospital, Manila, has been appointed visiting lecturer in pediatrics at the University of Texas Medical Branch, Galveston. She will spend a month in residence at the Medical Branch in teaching the care of infants and children in the tropics.

Grants and Awards

This year's Nobel Prize in Physics has gone to **Sir Edward V. Appleton**, secretary of the Department of Scientific and Industrial Research, London, a pioneer in radar. Sir Edward was cited for his contributions to knowledge of the ionosphere—that is, electrically conductive strata in the upper atmosphere of the earth. The Prize in Chemistry has been received by **Sir Robert Robinson**, president of the Royal Society and professor of chemistry at Oxford, for his research on biologically significant substances from the vegetable kingdom, especially alkaloids.

At the 40th annual meeting of the American Institute of Chemical Engineers on November 11 in Detroit, the A. MacLaren White Award in the Student Problem Contest was presented to **William J. Terrell**, who graduated last spring from Texas A. & M. College and is now employed at the Gulf Oil Corporation, Port Arthur, Texas. Second prize was won by **Eugene Franklin Macbell**, University of British Columbia, and third prize, by **Maurice E. Brooks**, Cooper Union of New York. At the same meeting the William H. Walker Award was presented to **Manson Benedict**, director, Process Development, Hydrocarbon Research, Inc., and **Louis C. Rubin**, manager of research, M. W. Kellogg Company, in recognition of their two papers, "Extractive and Azeotropic Distillation. I: Theoretical Aspects; II: Separation of Toluene From Paraffins by Azeotropic Distillation With Methanol," published in 1945 by the Institute. The Junior Award of the Institute, given to men under 35 for contributions to chemical engineering, went to **Harry G. Drickamer**, assistant professor of chemical engineering, University of Illinois, and **Harry H. Hummel**, formerly of Pan American Refining Corporation,

Texas City, and now studying at the University of Wisconsin, for their joint paper on "Application of Experimental Vapor-Liquid Equilibria to an Analysis of the Operation of a Commercial Unit for the Purification of Toluene From Petroleum," also published in the *Transactions* of the Institute.

Merck & Company, Inc., received the 8th biennial Award for Chemical Engineering Achievement, sponsored since 1933 by the McGraw-Hill magazine, *Chemical Engineering*, at a dinner, December 3, at the Waldorf-Astoria Hotel, New York, as a feature event in the week of the National Exposition of Chemical Industries. This award, outstanding in recognition of group effort, was given to Merck & Company for pioneering the large-scale production of streptomycin.

The President's Certificate of Merit has been presented to five scientists for their outstanding contributions to the country's war effort during World War II as members of the Navy's Operations Research Group. John L. Sullivan, Secretary of the Navy, presented the citations on October 30 to **Maurice E. Bell**, physicist, Walhonding, Ohio; **William J. Horvath**, Operations Evaluation Group, Office of the Chief of Naval Operations, and currently guest at the Electronics Research Laboratory, Massachusetts Institute of Technology; **George E. Kimball**, professor of chemistry, Columbia University; **John R. Pellam**, Department of Physics, Massachusetts Institute of Technology; and **Gerard R. Pomerat**, assistant director, Division of Natural Sciences, Rockefeller Foundation.

William C. Rose, professor of biochemistry, University of Illinois, received the 13th annual Grocery Manufacturers Association of America's scientific award at a luncheon meeting, October 14, during the Association's 39th annual convention at the Waldorf-Astoria Hotel. Prof. Rose was cited for his "numerous fundamental contributions to the science of nutrition, more particularly his studies of essential amino acids; the discovery, isolation, and chemical identification of threonine; and his leadership in nutritional biochemistry."

Boris Alexander Bakhmeteff, School of Engineering, Columbia University, and **William Allan**, dean, School of Technology, College of the City of New

York, will receive the Norman Medal, given annually by the American Society of Civil Engineers for the best technical article published in the Society's *Transactions*. The Medal, established in 1872 by George H. Norman, will be presented at the Society's annual meeting in New York, January 21. The winning article, entitled "The Mechanism of Energy Loss in Fluid Friction," appeared in Volume III of the 1946 *Transactions*.

Boyd H. Bode, professor emeritus of education, Ohio State University, was presented the William H. Kilpatrick Award on November 10 at Teachers College, Columbia University. The award is given by Teachers College in recognition of outstanding contributions in the field of the philosophy of education. Dr. Bode had been a member of the faculty of the College of Education, Ohio State, for 23 years prior to his retirement three years ago.

James Fitton Couch, research chemist, Eastern Regional Research Laboratory, U. S. Department of Agriculture, Wyndmoor, Pennsylvania, was one of five employees of the Department granted the "Distinguished Service Award" by Secretary Anderson on November 12. Dr. Couch received the award in recognition of his chemical research on farm products which led to the discovery that rutin, a constituent of tobacco, buckwheat, and other plants, is effective in reducing capillary fragility and permeability of the blood capillaries. He has been associated with the Department of Agriculture since 1917 and since 1940 has been in charge of the Tobacco Section at the Eastern Regional Research Laboratory.

Ida A. Bengtson, who recently retired as senior bacteriologist in the Division of Infectious Diseases, National Institute of Health, a position which she had held for a number of years, was awarded the medal of the United States of America Typhus Commission on November 3. Dr. Bengtson was cited for her outstanding contribution to the prevention and control of typhus fever during World War II. Surg. Gen. Thomas A. Parran presented the medal, and the citation was read by R. E. Dyer, director of the Institute.

W. Harley Barber, emeritus professor of physics, Ripon College, Ripon, Wisconsin, has been chosen to receive the Oersted Medal for 1947. This medal is

awarded annually by the American Association of Physics Teachers in recognition of notable contributions to the teaching of physics. The formal award and presentation of the medal will take place during the annual meeting of the Association on Tuesday afternoon, December 30, 1947, in the Kent Theater, University of Chicago.

Howard N. Eavenson, president, Bituminous Coal Research, Inc., Pittsburgh, received the Percy Nicholls award, which is conferred "for notable scientific or industrial achievement in the field of solid fuels," October 20, at the banquet of the 10th national fuels conference of the American Society of Mechanical Engineers and the American Institute of Mining and Metallurgical Engineers, Cincinnati, Ohio.

Eugene Gifford Grace, chairman of the Board, Bethlehem Steel Corporation, will be awarded the Charles F. Rand Gold Medal for "distinguished achievement in mining administration," at the annual meeting of the American Institute of Mining and Metallurgical Engineers to be held in New York in February, according to an announcement made by Clyde Williams, president of the Institute, at a dinner of the Metals Divisions in Chicago, October 21.

At the last annual meeting of the ACFAS (French-Canadian Association for the Advancement of Science) the LePariseau medal was awarded to **Jacques Rousseau**, director of the Montreal Botanical Garden. This medal is granted once a year to one scientist of French-Canada for the whole of his scientific publications.

Ludwik Anigstein, professor of preventive medicine, University of Texas Medical Branch, Galveston, has recently received a grant of \$2,500 from the Lederle Laboratories for the support of special studies on rickettsial diseases.

Milton G. Levine and **Robert E. Hoyt**, of the Institute of Experimental Medicine, College of Medical Evangelists, Los Angeles, have been granted \$500 by the Committee on Research of the American Medical Association to continue their studies on commercial Rh antisera.

Lewis F. Hatch, University of Texas, has recently received a \$3,100 grant-in-aid

from the Research Corporation of New York, a continuation of a grant received last year for basic research on the influence of geometrical isomers on the chemical activity of allylic chlorides. **Stuart Nesbitt** and **Harold Alexander** will work on the syntheses of new allylic chlorides and study their reactions. It is expected that further insight into the manner by which the arrangement of atoms influences certain chemical reactions will be obtained.

Fellowships

Five **Lalor Foundation** fellowships were awarded at the Woods Hole Marine Biological Laboratory in the summer of 1947. The holders of these fellowships and the subjects of investigations were as follows: **Jean Brachet** (senior fellow), University of Pennsylvania and University of Brussels, "Quantitative studies on nucleic acid synthesis in sea urchin eggs and cytochemical studies on nucleic acid distribution in developing eggs"; **Irving M. Klotz**, Northwestern University, "Study of the structural and environmental factors which influence the binding of small molecules by proteins"; **Benjamin Libet**, University of Chicago, "Localization and properties of adenosinetriphosphatase in the giant nerve fiber of the squid"; **Arnold Lazarow**, Western Reserve University, "Studies on the induction and nature of diabetes in the toad fish"; and **Claude A. Villet, Jr.**, Harvard Medical School, "Extraction and study of nucleoproteins and nucleic acids of invertebrate tissues." Similar fellowships will be available in 1948 (see *Science*, November 7, p. 442).

The **University of Illinois Graduate College** has announced the availability of four research fellowships to be awarded for one year in the fields of medicine, dentistry, and pharmacy at the stipend of \$1,800 per year. Candidates must have completed a training of not less than 8 years beyond high school graduation, and must indicate the field of research in which they are interested and submit transcripts of their scholastic credits, together with the names of three former science teachers as references. Appointments will be announced January 1, 1948, or shortly thereafter. The fellowship year begins July 1, 1948, and in some cases, September 1, 1948. Formal application blanks may be secured from the Secretary of the Committee on Graduate Work in Medicine,

Dentistry, and Pharmacy, 1853 W. Polk Street, Chicago 12, Illinois.

Colleges and Universities

A **Department of Biochemistry and Nutrition** was established this fall in the College of Liberal Arts and Sciences, University of Southern California. The new Department is headed by **H. J. Deuel, Jr.** Staff members are **John W. Mehl**, professor; **Richard J. Winzler**, associate professor; **Margaret G. Morehouse**, **Bradley T. Scheer**, and **Walter Marx**, assistant professors; and **Donald T. Visser**, instructor. The staff is jointly responsible for biochemistry in the University's School of Medicine.

Expansion of **Oklahoma Baptist University's Geology Department**, with addition of three junior-level courses during the school year 1948-49, has been announced. Courses in hydrology, introductory invertebrate paleontology, and sedimentation are to be added to the courses in physical geology, historical geology, mineralogy, and structural geology now being taught. According to President **John W. Raley**, completion of departmental quarters in one wing of the new science building and large additions to the fossil and mineral collections have made the expansion possible.

Industrial Laboratories

The 94 years of history behind the **Bausch & Lomb Optical Company** at Rochester, New York, are interesting ones. On November 3, 1853, the business that is now the world's leading producer of scientific optical instruments was founded on \$60 loaned to **John J. Bausch** by his friend and associate, **Capt. Henry Lomb**. Eight years later, the two young men installed the first power lens-grinding machine in this country. During the Civil War, **Lomb** mailed his Army pay to his partner to keep the struggling company on its feet. In 1868 the firm began to grow and moved to larger quarters at River and Water Streets, Rochester; it moved again 6 years later to the company's present site, then with a staff of 96 men and women. The firm was now under the direction of **Edward Bausch**, oldest son of the founder. During the next few years, photographic lenses, bifocal lenses, binocular microscopes, and iris diaphragm shutters were designed, and during the Spanish-American War,

the firm produced the Navy's first gun-fire control instruments used by **Dewey** at Manila. Several years later, **William Bausch**, brother of **Edward**, became interested in the making of optical glass, and in 1915 turned out the first pure melt produced in America, making **Bausch & Lomb** the sole source of supply in this country during World War I. During the recent war, **Bausch & Lomb's** bubble sextants, rangefinders, periscopes, radar optics, mobile optical units, aerial mapping equipment, and dive-bomber sights were used extensively.

F. M. Hildebrandt has been appointed director of laboratories, U. S. Industrial Chemicals, Inc., and in this capacity will have general supervision of all research activities of the Company in the Baltimore area, including fermentation research, entomological research, and application research. Dr. **Hildebrandt** has been associated with **USI** since 1924.

Harold Blumberg, formerly with **Winthrop-Sterling Research Institute**, has become associated with **Endo Products Inc.** as head of the pharmacology laboratory.

The **Sun Oil Company** will soon consolidate its wide-spread scientific activities into a proposed Science Center at Newtown Square, Pennsylvania, at which most of the research and experimental work now being done at the Company's **Marcus Hook Refinery** and at its laboratories at **Norwood, Pennsylvania**, will eventually be carried on. When completed, the proposed Science Center will be equipped with the most modern standard facilities for petrochemical and physical research work. This reorganization of the Company's scientific activities will not affect the geophysical laboratories under the **Production Department** in **Dallas and Beaumont, Texas**, or the **Automotive Laboratory** and certain technical service groups at **Marcus Hook and Toledo Refineries**. A Physical Laboratory is already under construction at **Newtown Square**. This new, independent Research Department will be directed by **John R. Bates**, formerly assistant to the vice-president in charge of manufacturing. **J. Bennett Hill**, manager, Development Division, Manufacturing Department, **John M. Pearson**, director, Physical Research and Development, Production Department, and **Stewart S. Kurtz, Jr.**, manager, Experimental Division, Manu-

facturing Department, have been appointed assistant directors.

Meetings

The American Society of Agricultural Engineers will hold its annual winter meeting at the Stevens Hotel, Chicago, December 15-17. The meeting will feature programs of the Society's four technical divisions: Power and Machinery, Rural Electric, Farm Structures, and Soil and Water. The Rural Electric Division will consider farm wiring, use of electrical equipment to increase productive efficiency, and uses of radiation in agriculture. The Farm Structures Division will emphasize grain storage and livestock feeding with particular emphasis on the influence of design on sanitation, labor efficiency, and other economy factors. On the Power and Machinery program, flexible power transmission, power take-off drives, self-propelled field machines, and new farm machines will be discussed. The Soil and Water program will consider new developments and problems in upstream flood control, drainage, hydrology, and terracing.

The Society was organized in 1907 at the University of Wisconsin "to promote the science and art of engineering in agriculture; to encourage original research; to foster agricultural engineering education; to advance the standards of agricultural engineers among themselves and with allied technologists; to encourage the professional improvement of its members; and to broaden the usefulness of agricultural engineering." The Society now has more than 2,000 members, most of whom are agricultural engineers employed in public service, research, teaching, and agricultural extension work in state, federal, and private agencies.

The December midyear meeting of the American Pharmaceutical Manufacturers' Association will be held at the Waldorf-Astoria Hotel, New York, December 15-17. On Tuesday, the 9th annual scientific award will be presented to the American Medical Association in recognition of its fundamental contributions to public health in the field of medical research. A few of the speakers to be heard are the following: Monday morning, H. R. Horner, president, Canadian Pharmaceutical Manufacturers' Association; Fred J. Stock, president, Drug, Chemical and Allied Trades Section, New York Board of Trade, and vice-president,

Charles Pfizer & Company, Inc.; E. Fullerton Cook, chairman, Committee on the *U. S. Pharmacopoeia*; and Justin Powers, chairman, Committee on the National Formulary; Monday afternoon, Morris Fishbein, editor, *Journal of the American Medical Association*; and R. L. Sensenich, president-elect, American Medical Association; Tuesday morning, Austin Smith, secretary, Council on Pharmacy and Chemistry, American Medical Association; Banquet, Tuesday evening, Edward L. Bortz, president, American Medical Association; Wednesday afternoon, J. Mark Hiebert, executive vice-president, Sterling Drug Company; William Douglas McAdams, president, Wm. Douglas McAdams Agency, New York; and Kenneth F. Valentine, president, Pitman-Moore Company, Indianapolis. Additional speakers at all sessions are to be announced.

The National Academy of Peiping recently celebrated its 19th anniversary in Peiping. S. H. Li, the associate director, presided over the ceremony, and P. C. Hsu, director of the Institute of History, and C. T. Yen, director of the Physics Institute, lectured on the occasion.

The 428th meeting of the American Mathematical Society was held at Hunter College, New York City, Saturday, October 25, with an attendance of over 200, including 185 members of the Society. C. B. Allendoerfer, Haverford College, addressed the group on "Global Theorems in Riemannian Geometry." Forty-five research papers were presented, 14 in person, and 31 by title.

Third Conference on Iroquois Research

Anthropologists of Canada and the northeastern states met for the third year at Red House, New York, October 24-26, 1947, to report and discuss researches undertaken since the previous conference. The group is again grateful to the Hon. Charles E. Congdon, chairman, Allegany State Park Commission, for making available the Administration Building on Red House Lake, and to M. H. Deardorff, of Warren, Pennsylvania, who shared with Mr. Congdon details of planning the conference. Central location in the wilderness away from cities and nearness to Seneca Indians make Red House the ideal meeting place for such a conference.

Substantial accomplishment in Iroquoian studies was manifest in reports and discussion at the several sessions. Hilton M. Hill, himself an Iroquois and retired clerk of the Six Nations Agency, Brantford, offered a provocative paper on Acculturation in Mohawk Language, which he had prepared with Martha Huot. Mrs. Huot mentioned her studies of character structure among Iroquois women.

The second day was devoted principally to archaeology. In discussing the approaches to the study of the historic archaeology of Huronia, T. F. McIlwraith, assisted by Margaret M. Thomson, related the program and summarized important results achieved in collaboration between the Royal Ontario Museum of Archaeology and the Jesuit Order.

The afternoon session preserved the high level of the morning. James B. Griffin conducted an inquiry into old theories and new light on the origin and differentiation of Iroquoian culture as revealed by archaeology, to which Richard S. MacNeish made the principal contribution by describing a study during 1947 of seriation in pottery taken from historic, protohistoric, and prehistoric Iroquois town sites. Reports on parallel field work in historic sites of Munsie and Lenape Delaware subtribes came from W. A. Ritchie and John Witthoft.

To remind the group of living Iroquois culture, Albert Jones, of the Coldspring Longhouse, brought about 20 members of the Seneca community, including Chauncey Johnny John, to perform social dances in honor of F. G. Speck, who prefaced the numbers with significant program notes.

At an executive session on the future of the Conference, held Sunday morning with W. N. Fenton presiding, sentiment was unanimous for continuing the yearly conferences, for preserving the record, and for meeting at the same place another year. It was decided to leave the formulation of an over-all plan for research in the area to a committee appointed by the chairman to report at the 1948 session.

Those present included: Guthe, New York State Museum; Leechman, National Museum of Canada; McIlwraith and M. Thomson, Toronto; Speck, Carpenter, Stern, and Anthony Wallace, Pennsylvania; de Laguna, Bryn Mawr; Dodge, Peabody Museum, Salem; Ritchie, Knoll, and Chase, Rochester; M. Huot, Columbia; Noon, Wilson College, Chambers-

burg, Pennsylvania; MacNeish, Chicago; Griffin, Jones, Spaulding, Coe, Howard, and Witthoft, Michigan; Hassrick, Congress of American Indians, Washington; and Fenton, Smithsonian Institution. (WILLIAM N. FENTON, *Smithsonian Institution, Washington, D. C.*)

Elections

The American Institute of Chemical Engineers, at its 40th annual meeting held November 9–12 in Detroit, elected Albert B. Newman, professor of chemical engineering, and formerly dean of engineering, City College of New York, president; F. J. Curtis, vice-president, Monsanto Chemical Company, vice-president; Stephen L. Tyler, Garden City, Long Island, executive secretary; and C. R. DeLong, consulting chemical engineer of New York City, treasurer. New directors include M. C. Molstad, head, Department of Chemical Engineering, University of Pennsylvania; John J. Healy, Jr., Merrimac Division, Monsanto Chemical Company, Everett, Massachusetts; William T. Nichols, technical assistant to the executive vice-president, Westvaco Chlorine Products Corporation, New York; and William I. Burt, vice-president, B. F. Goodrich Chemical Company, Cleveland, Ohio.

The Organic Division, American Chemical Society, has recently elected Paul D. Bartlett, professor of chemistry, Harvard University, as chairman to succeed Arthur C. Cope. Ralph W. Bost, University of North Carolina, was re-elected secretary; and Ralph L. Shriner, Iowa State College, and William G. Young, University of California, and Dr. Cope were named to the Executive Committee.

The International Association of Milk and Food Sanitarians, Inc., is the new name adopted by the erstwhile International Association of Milk Sanitarians, Inc., founded in 1911. The newly elected officers are as follows: president, W. D. Tiedeman; first vice-president, A. W. Fuchs; second vice-president, M. R. Fisher; third vice-president, K. G. Weckel; secretary-treasurer, J. H. Shrader. The objectives under the enlarged scope comprise milk and general dairy products sanitation and quality, as heretofore, and, in addition, general food sanitation in its production, processing, and distribution, and in restaurant operation from the standpoint of cleanliness, safety, and

quality of food and equipment; in short, in food sanitation—its healthfulness, its organoleptic quality, its attractiveness, its cleanliness, and its public health safety.

NRC News

National Research Fellowships in the Natural Sciences are available for the year 1948–49, according to an announcement from the Fellowship Office. This program, financed by grants from the Rockefeller Foundation and administered by the National Research Council for the past 28 years, is designed to permit young men and women with research ability to spend additional time in uninterrupted study. The program includes the physical and mathematical sciences, geology and geography, biological and agricultural sciences, anthropology, and psychology. Candidates must have completed the requirements for the Ph.D. Stipends are at the rate of \$2,500 per year, plus travel to the place of study, but larger stipends may be granted to Fellows with dependents. Appointments are for one year, but reappointment for an additional year may be made in some cases. Applications for study abroad have been granted in cases where the additional advantages make it desirable. Further information may be obtained from the National Research Council Fellowship Office, 2101 Constitution Avenue, N. W., Washington 25, D. C.

Deaths

W. P. Bradley, 85, research chemist, died September 14 at his summer home in Southampton, Long Island, after an illness of several weeks. Dr. Bradley was professor of chemistry at Wesleyan University, Middletown, Connecticut, from 1893 to 1914.

Max Huhner, 74, urologist who devised the Huhner Test for sterility, and chief of the Clinic, Genito-Urinary Department, Mount Sinai Hospital Dispensary, died October 4 of a heart ailment at his home in New York City.

K. H. Bouman, 73, formerly professor, Amsterdam University, and a well-known Dutch neurologist and psychiatrist, died November 8.

Sidney Isaac Schwab, 75, professor emeritus of clinical neurology, Washington University, and at one time president of the American Neurological Association,

died at Phillips House, Boston, November 12, after a brief illness.

Robert F. Chambers, 60, chairman, Department of Chemistry, since 1929, and Newport Rogers professor of chemistry, Brown University, died November 17 in the Jane Brown Hospital, Providence, Rhode Island.

Edwin Diller Starbuck, 81, formerly professor of psychology, University of Southern California, and director, Institute of Character Research, died November 18 at Rio Del Mar, California.

Carlton H. Maryott, 66, professor of biochemistry at the University of Georgia School of Medicine since 1914, died November 19 in Augusta, Georgia.

Curtis Field Burnam, 70, radiologist and a member of the surgical faculty, Johns Hopkins University, died November 29 after an illness of several months.

International congresses on experimental cytology were organized, prior to the recent war, by the International Society for Experimental Cytology. At the International Cytological Congress, held in Stockholm last July under the auspices of a truncated committee of the International Society, the old society was dissolved, and a new one, the Society for Cell Biology, was founded. The new Society, a member of the International Union of Biological Sciences, will be responsible for future international cytological congresses.

At Stockholm the following officers and committee were elected: president: J. Runnström (Sweden); vice-presidents: E. Fauré-Fremiet (France), E. Newton Harvey (U.S.A.), and G. Levi (Italy); secretary-treasurer: J. F. Danielli (Great Britain); Committee: T. Caspersson (Sweden), Honor B. Fell (Great Britain), A. Frey-Wyssling (Switzerland), G. C. Heringa (Holland), H. Okkels (Denmark), and Paul Weiss (U.S.A.). Many of these officers and committee members held office in the old International Society for Experimental Cytology, of which Prof. Okkels was secretary.

Election to membership in the Society for Cell Biology will normally be based on original contributions to knowledge in experimental cytology, experimental histology, and related fields. One hundred

Foundation Members, chosen mainly from those present at the Stockholm Congress, but including a few of those who had given distinguished assistance to the old Society, were invited to participate in the formation of the new Society. Applications for membership in the Society will be welcomed. They may be addressed to Dr. J. F. Danielli, Royal Cancer Hospital, London S.W.3, England, or to any officer or committee member of the Society. Applications should normally be accompanied by a list of references to original contributions to knowledge.

The American Museum of Natural History is sending a major expedition into Central Africa in order to explore and record photographically the only remaining "unspoiled" native region of Africa. The expedition will be led by **James L. Clark**, chairman, Department of Preparation and Installation at the Museum, who is a veteran of 25 major Museum expeditions, four of which were other African safaris. Dr. Clark has already left for Africa to complete preparations prior to the arrival of the remainder of the group, which will include **Neal A. Weber**, associate professor of zoology, Swarthmore College; **Brayton Wilbur**, president, San Francisco Chamber of Commerce, who is sponsoring the expedition; **Capt. Vivian Ward** of Nairobi; **Muri Deusing**, curator of Education, Public Museum, Milwaukee, Wisconsin; and 35 or more natives who will be specially trained for the work. The expedition, which will penetrate the remote southwestern Sudan and the adjoining area of southeastern French Equatorial Africa, will also study the almost extinct white Rhino, which, next to the elephant, is the largest of all land mammals and has rarely been photographed. The field research on insect life, to be under the direction of Dr. Weber, will perhaps be the major contribution of the expedition. Dr. Clark also expects that many new species of snakes, lizards, fish, and small mammals and birds will be uncovered.

Increased appropriations for the research program and activities of the Illinois State Geological Survey, a division of the State Department of Registration and Education and one of three scientific surveys that come under the purview of the State Board of Natural Resources and Conservation, have recently been approved by the General

Assembly of Illinois and Gov. Dwight H. Green. The current biennial budget for geological and geochemical research amounts to \$1,106,590, an increase of about \$160,000 over that of the preceding biennium. In addition, the Legislature made a total appropriation of \$127,550 for topographic mapping and \$1,764,623 for additions to the Natural Resources Building that jointly houses the Geological Survey and the Natural History Survey.

According to **M. M. Leighton**, chief, the Survey has for the past 16 years maintained a thoroughgoing research program on the geology and mineral resources of Illinois. The chief purposes have been to meet more adequately the needs of the State's manufacturing industries, mineral industries, and construction industry; to solve groundwater supply problems; and to aid transportation development, the educational system, the citizens, and the administrative departments of the State. The scope of the Survey's program extends from studies of the geology and mineral deposits in the field through laboratory studies of mineral utilization to the economics of the flow of minerals within their natural market areas. Laboratory research includes projects of both a fundamental and an applied nature and some experimental work on pilot plant scale.

The topographic mapping of the State is carried on by the U. S. Geological Survey in cooperation with the State Geological Survey, on a matching dollar-for-dollar basis.

In addition to these activities and its widespread service to the industries of the State, the Survey maintains an Educational Extension Division which provides teaching material to the public schools on the geology and mineral resources of Illinois and popular illustrated lectures to organizations.

Detailed plans have been completed and contract awards made for two new wings to the present Natural Resources Building which will double the space available to both the Geological and Natural History Surveys.

The AF School of Aviation Medicine, Randolph Field, Texas, is establishing an aeromedical historical museum as a public service. Although aviation medicine is a comparatively new specialty, having been established in 1917, the methods and equipment it has employed

both in the laboratory and in the aircraft have shown remarkable progress. Although it is feared that many of the articles of early equipment and items of historical interest may already have been destroyed or lost, it is hoped that those still remaining can be preserved. Anyone having suitable material which he would be willing to loan or donate to this museum is requested to communicate with the Commandant, School of Aviation Medicine, Randolph Field, Texas. All material loaned or donated will be credited to the donors. Early manuscripts and documents, experimental laboratory devices, aircraft oxygen equipment, parachutes, flying clothing, and all other similar items are desired.

A new monthly engineering and scientific journal world wide in scope will appear in January under the co-sponsorship of the American Society of Mechanical Engineers, the Engineering Foundation, Illinois Institute of Technology, and other organizations. Each issue of the new journal, to be called *Applied Mechanics Reviews*, will contain about 200 signed reviews, including bibliographies, of current literature in the field. **L. H. Donnell**, research professor of mechanics at Illinois Tech, has been appointed editor-in-chief, and **S. P. Timoshenko**, professor emeritus of Stanford University, a widely recognized authority on applied mechanics studies, will be editorial adviser. Offices of the publication will be located at the Engineering Societies Building, 29 West 39th Street, New York City.

The Photographic Society of America again this year held a Technical Exhibit as part of the Exhibition of Photography which was hung in the Oklahoma City Art Center in connection with its annual convention. Because of the general interest of this third exhibit two Traveling Print Shows of about 35 prints each have been selected as representative of the newer uses of photography in science and industry. These shows will be available to PSA groups, camera clubs, technical societies, engineering societies, and other scientific organizations for public hangings from December of this year through November 1948. Requests stating where the prints would be hung, the available hanging facilities, and any preference for dates should be made to Earl R. Clark, 184 Malden Street, Rochester 13, New York.

The land life of the Palau Islands in the western Pacific will be studied by an expedition headed by **Henry S. Dybas**, assistant curator of Insects, Chicago Natural History Museum. The expedition, which left October 15, is a cooperative project of the Chicago Museum and the Pacific Science Board. The Palau Islands are a part of the large Micronesian region which was formerly under Japanese control, and which the Museum has already helped to survey through a recent expedition conducted by **Alexander Spoehr**, curator of Oceanic Ethnology.

The Commission on Influenza, Army Epidemiological Board, Office of the Surgeon General, U. S. Army, recognizing the potential importance in the epidemiology of influenza of antigenic differences among strains of influenza virus, has for several years maintained under its auspices a Center for the study of strains of influenza virus under the supervision of Thomas P. Magill at the Cornell University Medical College, 1300 York Avenue, New York City.

Because the problem is one of importance in the recurrence of epidemics and in the preparation of vaccines, the objectives of the Influenza Virus Strain Study Center include a search for strains of broad immunizing potency and also for strains which differ sharply from the ones currently included in influenza virus vaccines. In addition to those purposes the Center serves as a store for potent antisera to be distributed, in limited quantities for diagnostic purposes, to U. S. Army laboratories and Influenza Commission field units; it serves also as a store for the preservation of strains of virus.

Whether a large number of stable strains of influenza virus exist, or whether the influenza virus is a relatively unstable agent whose antigenic characteristics may readily change, has not been established; however, the rather sudden manner of appearance of strains which differ sharply in antigenic characteristics from standard strains suggests that the latter alternative may be the correct one. Regardless of which alternative is correct, the fact that such strains do appear suddenly makes it imperative that a vaccination program include a careful watch for the appearance of significant variants. Obviously, the more widespread the watch, the greater the chances of success.

The Commission on Influenza, there-

fore, is endeavoring to broaden the watch for significant variants by increasing the interest in the accurate laboratory diagnosis of influenza. For that reason, the Strain Study Center offers a diagnostic service by which laboratories not equipped for the work may obtain rapid identification and serological classification of strains which they have isolated. It is requested that even those laboratories which are prepared to identify the broad groups of the strains of the viruses of influenza A and B submit such strains to the Center for further study as soon as possible after isolation.

The first self-sustained chain-reacting pile was achieved five years ago this week. On Tuesday the University of Chicago honored several of the scientists who had witnessed the experiment under the direction of Enrico Fermi which took place December 2, 1942, on the University's Stagg Field.

The ceremonies were opened with a luncheon held by the Citizen's Board of the University, Henry F. Tenney, chairman of the Board, presiding. Among the speakers were Sumner Pike, vice-chairman of the AEC; Enrico Fermi; Charles H. Swift, of the University's Institute of Nuclear Studies, designer of the pile; Walter H. Zinn, director of the Argonne National Laboratory of the AEC; Farrington Daniels, of the University of Wisconsin, chairman of the Board of Governors, Argonne National Laboratory; and Robert M. Hutchins, chancellor of the University.

Later in the afternoon the group witnessed the dedication of a bronze plaque marking the site of the experiment on Stagg Field. The ceremonies included the unveiling of the plaque by Dr. Daniels and remarks by William W. Waymack, of the AEC, and Drs. Fermi, Zinn, and Hutchins.

The National Bureau of Standards has compiled a *Directory of Commercial and College Laboratories*, now available from the Government Printing Office as NBS Miscellaneous Publication M187. The *Directory* lists all testing and research laboratories, together with an indication of the type of commodities tested. The Bureau makes tests and carries out investigations for other government organizations, but does not make tests for private individuals if other laboratories can do the work with the required accu-

racy. Since inquiries regarding such service are often received, this classified list was assembled to inform interested persons of the location of other testing facilities and to aid purchasers not equipped to make their own acceptance tests. The geographical and alphabetical listing includes 220 commercial laboratories with 80 branches or offices and 189 college laboratories used for research and testing. The *Directory* is available only from the Superintendent of Documents, Washington 25, D. C., at \$.30 per copy.

A fossil skull of the dinosaur, *Torosaurus latus* Marsh, has recently been placed on exhibit in the Hall of Earth History, Academy of Natural Sciences of Philadelphia. A restoration model of the animal is being shown with the skull, which was studied and described by Edwin H. Colbert, associate curator of Geology and Paleontology in the Academy. The skull was collected near Camp Crook, South Dakota, in 1944 by Ralph Pemberton and E. Curzon Poulteney, members of the Academy.

Make Plans for—

Psychoanalytic Association, December 15–17, New York City.

Paleontological Society, December 28–31, Ottawa, Canada.

American Anthropological Association, December 28–31, University of New Mexico, Albuquerque.

American Astronomical Society, December 28–31, Ohio State University, Columbus.

Association of American Geographers, December 29–31, Charlottesville, Virginia.

Archaeological Institute of America, December 29–31, New Haven, Connecticut.

Geological Society of America, December 29–31, Chateau Laurier, Ottawa, Canada.

American Association for the Advancement of Science, 114th Meeting, December 26–31, Chicago, Illinois.