# NEWS and Notes

Lise Meitner, nuclear scientist, who fied from Berlin in 1938, has become a Swedish citizen. Dr. Meitner is at present conducting research at the Physics Institute of the University of Technology at Stockholm.

Albert M. Stone, special consultant to the Research and Development Board, has been appointed technical assistant to the director of the Applied Physics Laboratory, Johns Hopkins University, Silver Spring, Maryland. Dr. Stone was formerly scientific liaison officer in the London branch of the Office of Naval Research.

Robert K. S. Lim, former surgeon-general of the Chinese Nationalist Army, has been appointed visiting research professor at the University of Illinois College of Medicine. Dr. Lim will continue his research on the gastrointestinal hormone "enterogastrone."

Willis H. McCann, clinical psychologist at State Hospital No. 2, St. Joseph, Missouri, has been appointed elinical professor of psychology at the University of Kansas City. Dr. McCann will retain his present position at the State Hospital and will teach courses in psychopathology and psychotherapy.

Bernd T. Matthias, German physicist, has been appointed an assistant professor of physics at the University of Chicago. During the winter quarter he will teach classes in elasticity and hydrodynamics. Dr. Matthias has been working on synthetic crystals at the Bell Telephone Laboratories in Murrayhill, New Jersey.

George H. T. Kimble, chairman of the Department of Geography at McGill University, Montreal, and secretary of the International Geographical Union, has been appointed director of the Council of the American Geographical Society of New York. He will assume his new duties in June, succeeding John K. Wright, who has resigned after 11 years as director.

Ralph W. Bost, Smith Professor of Chemistry and head of the Department of Chemistry, University of North Carolina, has been elected chairman of the American Chemical Society's Division of Organic Chemistry.

**Tze-Tuan Chen** was appointed associate professor of zoology at the University of Southern California, giving courses in genetics, cytology, and general zoology. He assumed his duties last September first.

M. M. Wintrobe, professor of medicine, University of Utah School of Medicine, will deliver the fourth Haryey Lecture of the current series at the New York Academy of Medicine on January 19. Dr. Wintrobe will speak on "Factors and Mechanisms in the Production of Red Corpuscles."

Horace L. Hodes, formerly associate professor of pediatrics at Johns Hopkins University and member of the staff of the Rockefeller Institute, has been named chief of pediatrics at Mount Sinai Hospital in New York City. Dr. Hodes will continue his research in infant diarrhea in the hospital's new pediatric laboratory.

George G. Brown, chairman of the Department of Chemical and Metallurgical Engineering at the University of Michigan, has been named director of the U. S. Atomic Energy Commission's Division of Engineering. Dr. Brown will join the AEC staff on a full-time basis in the spring. As director of engineering, he will be responsible for the chemical engineering phases of the AEC's reactor development program.

### Visitors to U.S.

Mary Collins, of the George Combe Psychological Laboratory, University of Edinburgh, will spend the spring semester as visiting professor in the Department of Psychology at Swarthmore College.

G. L. Hammond, of the British Ministry of Supply, London, and **M. Nagaoka**, president of the Japan Optical Company, Tokyo, recently conferred with members of the National Bureau of Standards.

Joaquin V. Luco, of the Catholic University, Santiago, Chile, has been named visiting professor in physiology at the Long Island College of Medicine. Dr. Luco succeeds Oscar Orias, who has returned to his institute at Cordoba, Argentina.

## Fellowships and Prizes

The National Foundation for Infantile Paralysis is offering postgraduate research fellowships for one to three years in the fields of virology, orthopedic surgery, pediatrics, epidemiology, and neurology. These fellowships are available to qualified candidates whose objectives are research and teaching in these fields. Eligibility requirements include U. S. citizenship, sound health, an M.D. or Ph.D. degree, two years' residency training in the specialty, and a program of study and detailed plan of investigation. Financial benefits will be arranged according to individual needs. Additional information and applications may be obtained from Professional Education Division, The National Foundation for Infantile Paralysis, 120 Broadway, New York 5.

The American Society for the Study of Sterility is offering an annual award of \$1,000 known as the Ortho Award, for an essay on the result of clinical or laboratory research pertinent to the field of sterility. Competition is open to those in clinical practice as well as to those whose work is restricted to research in basic fields or to fulltime teaching. The prize essay will appear on the program of the forthcoming meeting of the society, which is to be held in San Francisco on June 24 and 25. Full particulars may be obtained from Dr. Walter W. Williams, Secretary, 20 Magnolia Terrace, Springfield, Massachusetts. Essays must be in his hands by April 1.

# Grants and Awards

The Académie des Sciences of the Institut de France has awarded the 1949 Binoux Prize in the History and Philosophy of the Sciences to J. M. D. Olmsted, professor of physiology, University of California, for his biographies of the three French physiologists, Claude Bernard, François Magendie, and Charles-Edouard Brown-Séquard.

The A. Cressy Morrison Prize of \$200 was awarded this month by the New York Academy of Sciences to Harold R. Hagan of the Biology Department, College of the City of New York. Dr. Hagan won the award for his monograph "Embryology of the Viviparous Insects."

Robert Cushman Murphy, Lamont Curator of Birds, American Museum of Natural History, has been awarded the Raimondi Medal of the Geographical Society of Lima, in recognition of his pioneer ecological investigations in the coastal waters of Peru. Dr. Murphy's medal is for the year 1946 and constitutes his second honor from Peru. In January, 1925, he received the degree of *Doctor honoris causa* from the University of San Marcos.

The 1950 Albert Victor Bleininger Award, conferred by the Pittsburgh Section of the American Ceramic Society for "distinguished achievement in the field of ceramics," will be presented to Stuart M. Phelps, senior fellow, Mellon Institute, and director of research and tests, American Refractories Institute.

The 1949 Pittsburgh Award of the American Chemical Society's Pittsburgh Section has been presented to H. V. Churchill, chief analytical chemist of the Aluminum Company of America.

### Colleges and Universities

The Massachusetts Institute of Technology recently announced receipt of industrial grants-in-aid totaling \$800,000, including \$250,000 from the United Fruit Company of Boston, \$50,000 from an unnamed Massachusetts corporation, \$250,000 from the Cities Service Research and Development Company of New York, and \$250,000 from the Standard Oil Company of California. A collection of several thousand scientific and medical books was presented this month to **Hebrew University**, Jerusalem, by the U. S. government. The books, valued at \$25,000, are the first installment of a \$250,000 collection to be given to the university as a perpetual loan from this country.

A Department of Biophysics has been established in the University of Pittsburgh's Division of Research in the Natural Sciences. The new department was made possible by a \$45,000 grant-in-aid from the Sarah Mellon Scaife Foundation to the university for the purpose of expanding and stabilizing its biophysics program over a three-year period.

Columbia University's Department of Civil Engineering has received a \$7,000 grant from the Research Corporation for a research program dealing with the fundamental aspects of mechanical behavior and properties of engineering materials. The investigation will be under the direction of Alfred M. Freudenthal, who has planned and directed research in the fatigue of metals in cooperation with the Office of Naval Research. William J. Krefeld, director of the school's Civil Engineering Research Laboratories, will coordinate the research program with other projects now being carried out in the department.

Cornell University Medical College and the Cornell University-New York Hospital School of Nursing will begin an experimental program in February to determine the possible reciprocal advantages of joint studies between the social sciences and medical and nursing education. The project is being carried on in cooperation with the Russell Sage Foundation and is expected to continue for a period of about two years. Leo W. Simmons, associate professor in the Department of Sociology, Yale University, has been granted leave of absence to direct the work.

#### Meetings and Elections

A Symposium on Dental Caries Control was presented before the recent meeting of the Association of Military Surgeons of the United States in Washington, D. C. on November 11. All aspects of tooth decay prevention were evaluated by the participants from the standpoint of their special fields of research. Rear Admiral C. V. Rault, chief of the-Navy Dental Corps, presided. Thefirst speaker, Frank J. Orland of the-University of Chicago, stressed that the evidence that certain bacteria, particularly those capable of producing large quantities of lactic acid in a short time, are associated with the carious process is only circumstantial or indirect. Furthermore, direct evidence bearing on this point is needed for final proof of the etiological reationship of bacteria, such as lactobacilli, to dental caries. When the causative agents of dental. caries are eventually established, only then, can antibacterial substances be used with greater specificity, and therefore effectiveness, in the prevention of tooth decay.

The next participant, Joseph F. Volker, University of Alabama, emphasized the dietary reduction of refined carbohydrates as a caries control measure. Some evidence has been accumulated to show that, among hamsters, the diet of the mother is an influencing factor upon the caries susceptibility of the molar teeth of offspring. Whether this finding has a bearing on human beings is problematical. Francis A. Arnold, Jr., of the U.S. Public Health Service, discussed the historical aspects of the findings that a low concentration of fluoride in the water intake of growing individuals can reduce the incidence of Topically applied dental caries. sodium fluoride has also been shown to be effective in animals and man, if properly applied. The Public Health Service study of the caries incidence in Grand Rapids, where one part per million of sodium fluoride has been added to the communal water supply, has not yet advanced far enough to indicate any definite trend as to caries reduction in the children examined, Arnold pointed out.

As final speaker, Basil G. Bibby, of the Eastman Dental Dispensary, stated that almost no acceptable studies had ever been made showing that brushing of teeth had any correlation with the reduction of dental decay. He mentioned the innumerable therapeutic dentifrices tried, but stressed only those containing penicillin as having some promise of success in curtailing tooth decay on the basis of studies in animals and groups of children. Discussion of these four presentations followed.

F. J. ORLAND

Geological Field Conference on the Mississippi River Valley. An invitational field conference on the Tate Cenozoic geology and geological history of the Mississippi River Valley was held June 12-25, under the auspices of the state geologists of the states concerned-Arkansas, H. B. Foxhall; Illinois, M. M. Leighton; Iowa, H. G. Hershey; Kentucky, D. J. Jones; Louisiana, L. W. Hough; Mississippi, W. C. Morse; Missouri, E. L. Clark; Tennessee, H. B. Burwell. The leaders were: for Iowa, A. C. Trowbridge and H. G. Hershey, for Illinois to Mississippi, M. M. Leighton and H. B. Willman, and for Louisiana, G. E. Murray and Leo Hough. The purpose of the conference was to enable geologists and pedologists to review together the field phenomena, beginning in southeastern Iowa and extending to south-central Louisiana.

The contrast in features of the upper and lower segments of the Mississippi River Valley has always been of outstanding interest in North American geology, but it has been recognized that despite this contrast their development has been harmoniously interrelated. Recent interpretations of the Lower Valley, however, are quite different from and incongruous with the prevailing concepts of the Upper Valley. The conference contributed substantially to a more harmonious interpretation of the valley as a whole and focused attention on problems to be further investigated.

The more important subjects given consideration were: the preglacial, high level chert gravels beneath the glacial drift in the Upper Valley and their relation to similar gravels south of the drift border; the driftsheets laid down by the various continental glaciers and the evidences of their relative ages; the succession of the loess formations and the evidences of their relative ages and origin; the valley-train terraces, especially those of Wisconsin age, and their relation to the alluvial fill of the Lower Mississippi; the evidences of the alternating character of the glacial melt waters, aggradational to torrential, and the causes therefor; and Pleistocene changes in drainage.

A total of 45 persons, most of them specialists and representing universities and state and federal surveys, participated in the conference. Geologists and pedologists found common ground in the problems considered-particularly in the alteration of sediments by weathering and soil-making processes and in the recognition of their primary origin. The significance of profiles of weathering in the determination of relative ages of the sediments impressed everyone during the course of the conference as being a matter of major importance. Failure heretofore to recognize such phenomena and their significance accounts for some of the differences in interpreta tion of the geological history of the valley.

The conference was probably one of the most comprehensive field conferences ever held. A similar trip in the Missouri Valley area is contemplated by the geologists of that area within a year or so.

[The authors have in preparation a paper dealing with the late Cenozoic geology of southern Illinois.]

> M. M. LEIGHTON AND H. B. WILLMAN

A conference on the Use of Tracers in Organic Reaction Mechanism Studies will be held at Brookhaven National Laboratory January 19–20. Speakers and their topics are as follows: Thursday— B. M. Tolbert, University of California, Reaction Mechanism Studies Using Carbon 14: I. The Decomposition of Acetyl Peroxide in Acetic Acid (with A. Fry and M. Calvin), II. The Preparation of Demerol by Reductive Methylation and the Role of Formaldehyde and Formic Acid in this Reaction (with W. Tarpey, H. Hauptmann, and H. Rapoport); Knut A. Krieger, University of Pennsylvania, Mechanism of Acetylene Oxidation over Silver Nitrate; Aksel A. Bothner-By, Brookhaven National Laboratory, Studies using C<sup>13</sup> of Natural Abundance (with J. Bigeleisen and L. Friedman); O. Kenton Neville, Oak Ridge National Laboratory, C14 Tracer Studies in the Rearrangement of  $\alpha$ -Diketones: III. The Rearrangement of Unsymmetrical Benzils; Robert B. Loftfield, Harvard University, Mechanism of Faworski Reaction; Friday-William H. Hamill, University of Notre Dame, Primary Processes Involving Radiobromine at the Carbon-Carbon Double Bond; Russell R. Williams, Jr., University of Notre Dame, The Detection and Identification of Free Radicals by Use of Radiohalogens; John D. Roberts, Massachusetts Institute of Technology, Rearrangements of Carbon Atoms in Alkyl Derivatives; Elliot R. Alexander, University of Illinois, Mechanism of Catalytic Hydrogenalysis; and Martin Gibbs, Brookhaven, The Mechanism of the Alkaline Degradation of Glucose. Information concerning housing and transportation may be obtained from Mrs. M. Kuper, Director's Office, Brookhaven National Laboratory, Upton, New York.

A conference on polluted irrigation waters, sponsored jointly by the Environmental Health Study Section of the National Institutes of Health, the El Paso Health Department, and the Texas State Health Department, will be held January 27 in El Paso. The program will be devoted to discussions of general problems of irrigation waters in several western and southwestern states; current research in the incidence and behavior of pathogenic organisms in irrigation waters, vegetable washings, and soils; and epidemiological aspects of sewage-polluted irrigation waters; in addition, papers will be presented on the utilizaton of waste water, impounding and use of water of the Rio Grande, machines for vegetable washing, present standards for irrigation water, and use of sewage sludges for soil improvement. Copies of the program may be obtained from Mr. Irving Gerring, Executive Secretary, Environmental Health Study Section, Division of Research Grants and Fellowships, National Institutes of Health, Bethesda 14, Maryland.

The Twelfth Annual Midwest Power Conference, sponsored by the Illinois Institute of Technology with the cooperation of 18 midwestern universities and professional societies, will be held April 5–7 at the Sherman Hotel, Chicago. The theme of the conference will be ''Economy in Power.''

The following officers were elected at the fifth session of the International Union for Scientific Study of Population, held at Geneva August 27–September 2: president, L. Hersch, Switzerland; vice presidents, D. V. Glass, United Kingdom, L. Livi, Italy, A. J. Lotka, U. S., K. B. Madhava, India, G. Mortara, Brazil, A. Sauvy, France, S. Szulc, Poland; and secretary general and treasurer, G. Mauco, France. They will serve until the next meeting of the assembly.

Charles Allen Thomas, executive vice president of the Monsanto Chemical Company, St. Louis, has been elected chairman of the Board of Directors of the American Chemical Society, to take office January 1. Dr. Thomas succeeds Roger Adams, chairman of the Chemistry Department of the University of Illinois and president elect of the AAAS, who has served three consecutive terms as director, the maximum term permitted by the society's constitution.

#### Deaths

William Alexandre Perlzweig, professor of biochemistry and chairman of the department at Duke University, died of cancer on December 10. Dr. Perlzweig, who was 58 at the time of his death, had made extensive studies of the metabolism of the vitamins of the B complex. He was a special adviser to Hebrew University Hadassah Medical School, Jerusalem. Arthur Parker Hitchens, 72, Commissioner of Health in Wilmington, Delaware from 1945 to 1948, and former George S. Pepper Professor of Preventive Medicine at the University of Pennsylvania, died at his home in Philadelphia on December 10. As a member of the Research Board of the U. S. Medical Department in Manila, 1924–25, Dr. Hitchens participated in the organization of the School of Public Health and Preventive Medicine at the University of the Philippines.

Samuel R. Haythorn, pathologist and director of the William H. Singer Research Laboratory at Allegheny General Hospital in Pittsburgh, died on December 6 at the age of 69. Dr. Haythorn, who was formerly head of the Department of Pathology and Bacteriology at the University of Pittsburgh, was known for his research in tuberculosis, silicosis, and cancer.

A health protection clinic, where anyone over 18 years of age may receive free tests for detecting disease or disability in early stages, will be opened in Boston on January 3. It is the first of five such clinics, located in pivotal areas throughout the state, to be sponsored by the Massachusetts Medical Society with the cooperation of the Massachusetts Department of Public Health and voluntary agencies. Claire F. Ryder, epidemiologist with the State Health Department, has been appointed administrator. The cost of the clinic for a six-month period is estimated at \$30,000, of which the U.S. Public Health Service will supply \$15,000 for clinic personnel and the Massachusetts Department of Public Health will provide \$12,000. The balance will come from voluntary agencies, of which the American Cancer Society will donate \$1,250.

Radioisotopes may now be obtained under the Canadian export program. The Isotopes Division of the U. S. Atomic Energy Commission has been named the coordinating agency for the import of Canadian radioisotopes, as it is for the domestic distribution and export of U. S.produced isotopes. Applications may be made to the division, P. O. Box E, Oak Ridge, Tennessee.

### Recently Received—

- Recent Developments in Hawaiian Land Utilization. E. O. Kraemer. Paper No. 51. University of Hawaii, Honolulu, T. H.
- How to Collect and Preserve Insects. H. H. Ross. Circ. 39, Illinois State Natural History Survey, Urbana, Illinois.
- Preserving Birds for Study. Emmet R. Blake. Fieldiana: Technique No. 7. Chicago Natural History Museum.
- Effects of Oil Mixed with Carbonized Sand on Aquatic Animals. Special Scientific Report: Fisheries No. 1. Fish and Wildlife Service, U. S. Department of Interior, Washington 25, D. C.
- National Academy of Sciences Biographical Memoirs, Vol. XXV. National Academy of Sciences, Washington, D. C.
- Recommended Nutrient Allowances for Horses. No. VI, 'Recommended Nutrient Allowances for Domestic Animals. Committee on Animal Nutrition, National Research Council, 2101 Constitution Avenue, Washington 25, D. C.
- Short Periodic Solar Variations and the Temperatures of Washington and New York. C. G. Abbot. Smithsonian Miscellaneous Collections, Vol. 111, No. 13, Publ. 3990. Smithsonian Institution, Washington, D. C.
- The Quest for Stellar Parallax. Dorrit Hoffleit. Harvard reprint 321. Harvard Observatory, Cambridge, Massachusetts.
- The Standard Cepheid Light Curve. Harlow Shapley. Harvard Reprint 29, Series II. Harvard Observatory, Cambridge, Massachusetts.
- The Birefringent Filter. John W. Evans. Harvard reprint 30. Harvard Observatory, Cambridge, Massachusetts.
- The Black Rock Forest Twenty-Year Progress Report, 1928-48. Bull. No. 14. Henry H. Tryon and Raymond F. Finn. Cornwallon-the-Hudson, New York.