

for atomic bombs before that element had been isolated for experimental study, will review, in his paper on "How Mesons Disappear," the theoretical considerations which have been put forward to describe the breakup of heavy mesons into light mesons and the disappearance of light mesons, sometimes by disintegration into an electron and one or more neutral radiations, and sometimes by reaction with an atomic nucleus.

Dr. Wheeler will analyze the factors which determine the energy of the electrons which come off from

the decay of 200-mass mesons. He will also show how this process is related to the alternative process in which a light-weight meson delivers up its charge to an atomic nucleus. In particular, he will show how this process is connected with the possibility of disruption or fission of this nucleus.

The chairman of the symposium will be I. I. Rabi, professor of physics at Columbia University, winner of the Nobel prize for his work on the interaction of short-wave radiations and magnetic fields with atomic and molecular systems.

NEWS and Notes

Peter J. W. Debye, winner of the 1936 Nobel Prize in chemistry for his work on the dielectric properties of matter and for electron diffraction of molecules, has been named to succeed **John Gamble Kirkwood** as Todd professor of chemistry at Cornell University. Dr. Debye first went to Cornell as a Baker lecturer in 1940 and has since served as chairman of the Department of Chemistry.

F. A. Miller, assistant professor of chemistry at the University of Illinois, has been appointed a fellow in the Department of Research in Chemical Physics at Mellon Institute. Dr. Miller is a specialist in molecular spectra and structure.

Raymond R. Edwards, a candidate for the Ph.D. degree in inorganic chemistry at Massachusetts Institute of Technology, will join the staff of the Institute of Science and Technology, University of Arkansas, in September. Mr. Edwards has been appointed research associate in nuclear chemistry and assistant professor of inorganic chemistry.

Carl T. Parsons, until recently assistant entomologist in the Connecticut Agricultural Experiment Station, has been appointed assistant professor of zoology and entomologist at the University of Vermont and State Agricultural College, Burlington.

Shien-Siu Shu, Chinese scientist who is known for his work in the

fields of applied mathematics and fluid mechanics, has been appointed associate professor of mathematics and research associate in mechanics at Illinois Institute of Technology. Dr. Shu came to this country in 1944 as a research associate at Brown University, from which he received the Ph.D. in 1947. He spent last year at the Institute for Advanced Study, Princeton, and this summer is working at Massachusetts Institute of Technology.

John G. Bald, who has been with the Council for Scientific and Industrial Research, Canberra, Australia, since 1928, specializing in studies on plant viruses and diseases, has joined the staff of the Division of Plant Pathology, University of California, Los Angeles, as associate professor and associate plant pathologist in the Experiment Station. His research there will be concerned with diseases of bulbous ornamental plants as part of the program of research in floricultural pathology on the Los Angeles campus.

Robert S. Pogrund, formerly of the Department of Zoology, State College of Washington, Pullman, has joined the staff of the Department of Aviation Medicine, University of Southern California School of Medicine, as assistant professor of physiology.

Daniel Robert Miller, clinical psychologist, who for the past year has held a Social Science Research Council postdoctoral fellowship, has been appointed assistant professor of psychology and chief of the Clinical Services Division, Bureau of Psychological Services, University of Michigan, for the academic year 1948-49.

Robert Chambers, of the Marine Biological Laboratory, Woods Hole, Massachusetts, and the Department of Biology, New York University, has been elected foreign correspondent of the Académie Nationale de Médecine, Paris.

Margaret W. Robinson, research assistant for the Research Foundation for Alcoholism in Seattle, Washington, has recently been appointed executive secretary of the Foundation.

R. J. Jessen, acting director of the Iowa State College statistical laboratory, flew to Greece last month to develop survey plans to be used in a series of studies of health, social, and economic problems in Crete. The studies are under the general direction of **L. G. Allbaugh**, of the Rockefeller Foundation, which is sponsoring the work. **J. C. Dodson** and **N. V. Strand**, of the statistical laboratory staff, who preceded Dr. Jessen to Crete, will assist in the sample surveys.

Grants and Awards

The Research Unit on Utilization of Animal Fats at the Eastern Regional Research Laboratory, USDA, has received a departmental citation for its work "which resulted in better quality synthetic rubber and substantially increased rubber production without further expansion of plant facilities and which made possible the utilization of low-grade animal fats for making improved emulsifiers needed in the manufacture of GR-S synthetic rubber." Members of the unit include **Waldo C. Ault**, **B. A. Brice**, **M. J. Copley**, **E. T. Roe**, **B. B. Schaeffer**, and **Margaret L. Swain**.

The award of the scroll for superior service and the silver medal was made by W. A. Minor, assistant to the Secretary of Agriculture, and Louis B. Howard, chief of the Bureau of Agricultural and Industrial Chemistry, to P. A. Wells, director of the Laboratory, who represented the unit.

The Inter-American Institute of Agricultural Sciences, Turrialba, Costa Rica, has received from the King Ranch, Kingsville, Texas, grants of \$20,000 for the construction and equipment of a psychroenergetic laboratory for use in studies on heat tolerance of various classes and breeds of livestock and \$13,000 for the construction of a horse unit and the purchase of breeding animals to be used in an experimental horse-breeding project. The ranch is also making available for this program 6 quarter horse mares and a stallion. For use in a breeding program devoted to tropical cattle, the ranch is providing 50 head of Santa Gertrudis cattle, a breed of beef cattle evolved on the King Ranch from the Brahman-Shorthorn cross.

The Alvarenga Prize for this year has been awarded by the College of Physicians of Philadelphia to Melvin H. Knisely, formerly of the University of Chicago (see *Science*, July 30, p. 101), in recognition of his studies on "sludged blood." This prize was established by the will of Pedro Francisco da Costa Alvarenga, of Lisbon, Portugal, an associate fellow of the College, "to be awarded annually by the College of Physicians on each anniversary of the death of the testator, July 14, 1883." The award is usually made for outstanding work, and the recipient is invited to deliver an Alvarenga Lecture before the College.

Colleges and Universities

The eastern universities have just announced the unanimous selection of new presidents. On next January 1 Detlev W. Bronk, widely known physiologist and biophysicist, who has been director of the Eldridge Reeves Johnson Foundation for Medical Physics at the University of Pennsylvania since 1929, will take over his duties as president of The Johns Hopkins Uni-

versity in Baltimore. In this post he succeeds Isaiah Bowman, famous geographer, who has headed Hopkins since 1935 and who had asked that he be allowed to retire. Dr. Bronk, who served in an advisory capacity to many government agencies and military groups during the past war, is at present chairman of the National Research Council.

The University of Pennsylvania has named to its presidency Harold E. Stassen, former Governor of Minnesota and one of the leading candidates for the Republican Presidential nomination at the recent Philadelphia convention. Mr. Stassen succeeds George W. McClelland, who, although retiring, will assume the chairmanship of the University.

Cornell University has announced that the following retiring members of its faculty have been made professors emeriti: Walter B. Carver (mathematics), Axel F. Gustafson (soil technology), Edward S. Guthrie (dairy industry), George H. Sabine (philosophy), Herbert H. Scofield (civil engineering), O. D. von Engeln (geology), Edmund L. Worthen (soil technology), Harold J. Conn (bacteriology), N. Chandler Foot (surgical pathology), and James A. Harrar (clinical obstetrics and gynecology).

A new solvent extraction tower has recently been installed at the New York University College of Engineering for use in special research work sponsored by the M. W. Kellogg Company. The studies will be concerned with operating characteristics of all types of countercurrent extraction devices with regard to flow capacities and extraction efficiencies. The installation will be sufficiently large to yield results of industrial significance.

A postdoctoral research and training program in client-centered therapy has recently been announced by the Counseling Center and the Psychology Department at the University of Chicago. This program, which is designed for a limited number of qualified persons from the fields of clinical psychology, student counseling, psychiatry, or psychosomatic medicine, will run continuously after October 1 under the direction of Carl R. Rogers,

professor of psychology. As outlined, the program offers an opportunity to participate in staff and research seminars and in other courses being offered, to study recorded cases, to learn about and participate in the various research projects in psychotherapy now being carried on and to initiate other research in this field, and, under supervision, to carry therapeutic cases and record some of the interviews for study.

The University is waiving all tuition fees for those enrolled in the program who have a Ph.D. based in part on a psychological dissertation or who have a M.D. and are interested in psychiatry or psychosomatic medicine. Other expenses must be paid by the individual, although, if accepted, he may apply for a fellowship from an agency, foundation, or a research council. A limited number of paid positions at the Counseling Center may also be available.

The announcement notes the desirability of persons spending 12 months in the program. The age limit is 40. Further details may be obtained from Dr. Rogers, who is executive secretary of the Counseling Center at the University of Chicago, Chicago 37, Illinois.

Meetings and Elections

Final plans for the **Symposium on Steroid Hormones**, to be held at the University of Wisconsin September 6 through 8, have been announced by Edgar S. Gordon, chairman of the Symposium Committee and associate professor of medicine at the Medical School of the University of Wisconsin. This symposium is a part of the Centennial Celebration of the Wisconsin State University, and the final program is exceedingly comprehensive. It includes the chemistry, metabolism, and biological effects of the steroid hormones, and the clinical applications of these substances will be discussed in detail. Scientists from many of the representative universities and medical schools throughout this country are included in this program. The University of Edinburgh is represented by G. F. Marrian, and Canada is represented by Harry Guttridge and Eleanor Venning, of McGill University.

The meetings of this symposium will be open to the general public and physicians, chemists, and scientists from other fields are invited to participate. No registration fee is to be charged.

Facilities for the accommodation of those who are going to attend the symposium are available in Elizabeth Waters Hall on the Wisconsin campus overlooking Lake Mendota. Board and room are available at \$16.25 for the three-day period. This meeting is presented under the direction of the University of Wisconsin and the National Research Council Committee on Growth, acting for the American Cancer Society. The Wisconsin Medical School, McArdle Memorial Laboratory for Cancer Research, and the Department of Biochemistry of the University have organized the program.

The Australian and New Zealand Association for the Advancement of Science will meet in Hobart, Tasmania, January 12-19, 1949.

The Institute of Food Technologists, a professional organization of food scientists with a national membership in excess of 2,200 and with 14 regional sections distributed over the United States, held its national meeting in Philadelphia June 6-10. H. C. Diehl, director and secretary of the Refrigeration Research Foundation, Berkeley, California, was elected president of the Institute.

The International Scientific Film Association, constituted last year in Paris by delegates from 22 countries who had been invited to the inaugural congress by the Scientific Film Associations of Great Britain and France, will convene for the second time October 4-11, in London. This year's congress is being convened by Great Britain's Film Association with the help of the British Film Institute, and invitations have been sent to countries throughout the world. A feature of the 8-day program will be a Festival of Scientific Films, during which many contributions from the participating countries will be shown to members of the general public.

The primary aim of the Association is "to raise the standard and to promote the use of the scientific film and related material throughout the world

in order to achieve the widest possible understanding and appreciation of scientific method and outlook, especially in relation to social progress."

Further details about the Association and the forthcoming congress may be secured from the Scientific Film Association, 34 Soho Square, London W. 1.

The Canadian Mathematical Congress, organized in 1945, will hold a second national congress and seminar in 1949 at the University of British Columbia. Membership in the Congress is open to any full-time member of the mathematical teaching staff of a Canadian university, to those who were members of the 1945 Congress or the seminar held in 1947, or to any other person sponsored by a Congress member upon application, payment of the membership fee (\$2.00 a year), and acceptance by the Executive Committee. Applications should be sent to: Secretary, Canadian Mathematical Congress, Engineering Building, McGill University, Montreal, Canada.

The Congress has announced that, beginning in January 1949, it will publish a new quarterly journal, *Canadian Journal of Mathematics*, the editor-in-chief of which will be H. S. M. Coxeter, of the University of Toronto. The price will be \$6.00 per volume of four numbers (\$3.00 for members of the Mathematical Association of America). The managing editor, G. de B. Robinson, University of Toronto, will receive subscriptions.

The National Science Teachers Association, meeting in Cleveland, Ohio, July 3-5, considered two surveys of teaching conditions, inspected the facilities for teaching science at all grade levels in the Cleveland area, and adopted strong resolutions concerning the interest of industry in science teaching, a National Science Foundation, Federal aid to education, and the training of scientists inducted for military service. Morris Meister, principal of the High School of Science, New York City, presided. Arthur O. Baker, supervisor of sciences, Cleveland Public Schools, was chairman of the local committee.

"Science Teaching in the State of New York," a study by Paul F. Brandwein, of Forest Hills High School,

and a committee, presented a clear, over-all picture of the varied conditions in the state's high schools. Recommendations were made for improving the teachers' opportunities for effective instruction, especially in the small schools.

"The Work Week of the Science Teacher" was a report on nation-wide conditions, prepared from data collected by Earl R. Glenn, of the New Jersey State Teachers College, Montclair, New Jersey, and Harold E. Wise, of the University of Nebraska, Lincoln. It described typical and also extremes of teaching loads, class size, laboratory facilities and aid, school duties, and outside work demanded by conditions of the teaching job. Many recommendations were made, based on teachers' appraisals of the favorable and unfavorable aspects of their work.

Both "Science Teaching in the State of New York" and "The Work Week of the Science Teacher" are scheduled for publication this fall.

A tour of school gardens and nature museums of Cleveland was planned by Paul R. Young, supervisor of school gardens. A program featuring the teaching of conservation and of elementary science in the grades was planned by Miss Anna Burgess, supervising principal of the Cleveland Schools.

Among the resolutions adopted by the Association was one commending the activities of the Advisory Council on Industry-Science Teaching Relations, organized at the AAAS meeting in Chicago last December. This Council is now working out plans for increased and improved supplies of educational materials, prepared by industrial experts, for effective use by science teachers. The chairman and chief consultant for this Council are Morris Meister and G. Edward Pendray, of New York City.

Another resolution recognized the injurious effects of a previous policy of inducting scientists and science students into military service without regard to their talents or training. The resolutions urged "that our national strength be conserved and our national security increased through provisions by military authorities for an effective program of training, at the university level, of existing and potential scientists and science teach-

ers who may be inducted under the military draft legislation recently passed by Congress."

Other resolutions supported "the establishment of a National Science Foundation, with special attention to scholarships and fellowships that will train the skilled personnel required in scientific research," and renewed "our recommendations for Federal appropriations that will equalize the opportunities for effective instruction in science in the high schools of our Nation, with special attention to the discovery and development of scientific talent in youth of every state."

Officers for 1948-49, elected by balloting of the membership, were confirmed. They are: president, Norman R. D. Jones, biology teacher in Southwest High School, St. Louis, Missouri; president-elect, Nathan A. Neal, editorial staff, Harper & Brothers, New York City; retiring president, Morris Meister; general vice-president, Ralph W. Lefler, Department of Physics, Purdue University; secretary, Hanor A. Webb, Department of Science Education, George Peabody College for Teachers, Nashville, Tennessee; treasurer, Elbert C. Weaver, Phillips Academy, Andover, Massachusetts; eastern vice-president, Walter S. Lapp, Northeast High School, Philadelphia; north central vice-president, Emil L. Massey, supervisor of sciences, Detroit; southern vice-president, Greta Oppe, Ball High School, Galveston; western vice-president, W. Bayard Buckham, Oakland High School, Oakland, California; directors-at-large, Glenn Blough, U. S. Office of Education, Washington, D. C.; Robert H. Carleton, Michigan State College, Lansing; Leo J. Fitzpatrick, Brockton High School, Brockton, Massachusetts; Dwight E. Solberger, State Teachers College, Indiana, Pennsylvania.

The next meeting of the National Science Teachers Association, which is an affiliate of the AAAS, will be held in Washington, D. C., December 27-30, 1948. (H. A. WEBB, *Secretary*.)

NRC News

The Atomic Energy Commission Postdoctoral Fellowship Board in the Medical Sciences will hold its next meeting in late September. For consideration at this meeting, applica-

tions must be sent to the Board's office in the NRC before September 1. Inquiries should be addressed to the Division of Medical Sciences, National Research Council, 2101 Constitution Avenue, N.W., Washington 25, D. C.

Deaths

A Kronstein, 81, research chemist and pioneer in the development of polystyrene, died in George Washington University Hospital, Washington, D. C., on June 13.

Harry E. Burton, who retired June 30 after nearly 40 years of service at the U. S. Naval Observatory, died July 19. His position from 1929 until his retirement was principal astronomer as head of the Equatorial Division.

George L. Streeter, 75, former director of the Department of Embryology, Carnegie Institution, died in Gloversville, New York, July 27, following a heart attack. Dr. Streeter had also served as head of the Anatomy Department at the University of Michigan and as associate editor of the *American Journal of Anatomy*.

Robert O. Moody, 83, emeritus professor of anatomy at the University of California Medical School, died in Berkeley on July 28.

Establishment in Australia of a new scientific journal has recently been announced. The new journal, to be known as the *Australian Journal of Scientific Research*, will be the responsibility of the Council for Scientific and Industrial Research in collaboration with the Australian National Research Council. It will serve as a medium for the publication of research papers of outstanding merit and its pages will be open to research workers, irrespective of country or the organization to which they are attached. N. S. Noble, editor of the new journal, will be assisted by an Editorial Board consisting of W. J. Dakin, Department of Zoology, University of Sydney; E. J. Hartung, Department of Chemistry, University of Melbourne; L. H. Martin, Department of Physics, University of Melbourne; and J. G. Wood, Department of Botany, University of Adelaide. The Journal will be issued

in two series (A, Physical Sciences; B, Biological Sciences), each of which will appear quarterly and at a cost of 30/-d per year.

A Department of Scientific Research, recently created by the Government of India, became effective on June 1 of this year. The new Department, which will be in charge of the Prime Minister of India and will have S. S. Bhatnagar, director of scientific and industrial research, as secretary and principal executive officer, will take over the work of the Board of Research on Atomic Energy and the Council of Scientific and Industrial Research. According to the announcement, the Council, although attached to the new Department, will retain its unofficial character and function as before. Also included in the list of projects with which the new Department will deal are *ad hoc* scientific research in universities and research institutions, scholarships for research in applied fields, advice to government departments, and whatever other duties may eventually be transferred to it. In coordinating the scientific activities of the other Ministries it will have the assistance of a special committee of eminent scientists.

Make Plans for—

Round Table Conference on Lignin, August 12-14, Appleton, Wisconsin.

American Veterinary Medical Association, August 16-19, Palace Hotel, San Francisco, California.

International Society of Hematology, biannual meeting, August 23-26, Hotel Statler, Buffalo, New York.

New England Association of Chemistry Teachers, annual Summer Conference, August 23-28, University of Maine, Orono.

American Institute of Electrical Engineers, August 24-27, Spokane, Washington.

American Chemical Society, 114th meeting: eastern session, August 30-September 4, Washington, D. C.; mid-west session, September 6-10, St. Louis, Missouri; western session, September 13-17, Portland, Oregon.