

spondence with variations in weather on earth, and is carrying out a series of five-year predictions of temperature and rainfall.

In the Division of Radiation and Organisms, which studies the complex interrelations between living things and solar energy, a standardized technique has been worked out for the extraction of growth substances from oat seedlings and evidence obtained of the existence of precursors to these substances and also of possible growth inhibitors.

Other studies have dealt with the lethal and stimulating effects of various wave-lengths of ultraviolet light on one-celled plants, the algae, which afford some measure of their effect on life in general.

There were 212,474 additions to the collections, including a cast of a Neanderthal child skull from Uzbekistan, Siberia; many Eskimo and other artifacts from Siberia and northern Alaska; several varieties of seals from the Antarctic; collections of birds from Vera Cruz and Indo-China; several thousand reptiles and amphibians from Mexico, and 14,000 fishes from the Phoenix and Samoan Islands.

Among the geological collections were a 347-gram flawless aquamarine crystal, a 128-carat emerald crystal from Brazil, 495 Mexican minerals and a large number of Paleozoic fossils obtained in the Rocky Mountains.

It is expected that the formal opening of the National Gallery of Arts will take place sometime in March. It is estimated that the total cost of the building and landscaping, now nearing completion, will exceed \$15,000,000. There have been 59 noteworthy additions to the Freer Gallery, a Smithsonian unit, during the year. These have included East Indian and Arabic manuscripts, Chinese, Indian and Persian paintings and Oriental metal work and sculpture.

THE ROYAL ASTRONOMICAL SOCIETY OF CANADA

THE Royal Astronomical Society of Canada has elected Dr. Frank S. Hogg, assistant professor of astronomy in the University of Toronto and a member of the staff of the David Dunlap Observatory, as president for 1941. He succeeds Dr. J. A. Pearce, acting head astronomer of the Dominion Astrophysical Observatory, Victoria, B. C., who has been president for two years.

Dr. A. Vibert Douglas, dean of women, Queen's University, Kingston, Ont., and Dr. D. S. Ainslie, associate professor of physics, University of Toronto, were elected vice-presidents.

Other officers are: E. J. A. Kennedy, *general secretary*; J. H. Horning, *general treasurer*; R. H. Combs, *recorder*; Dr. P. M. Millman, *librarian*, and R. S. Duncan, *curator*, all of Toronto.

Members of Council are: S. C. Brown, Toronto; H. Boyd Brydon, Victoria; Dr. J. W. Campbell, Edmonton; Rev. W. G. Colgrove, London, Ont.; Dean Henry F. Hall, Montreal; Dr. Ernest A. Hodgson, Dominion Observatory, Ottawa; Dr. A. E. Johns, McMaster University, Hamilton, Ont.; A. R. McCauley, Vancouver; Andrew Thomson, Canadian Meteorological Service, Toronto, and Dr. L. A. H. Warren, Winnipeg.

The address of the retiring president was presented at the annual "at-home" of the society at the University of Toronto on January 21. The subject was "The Advance of Astronomy, 1890 to 1940." The first award of the Chant Medal, established by the society in recognition of the work of Dr. C. A. Chant, now director emeritus of the Dunlap Observatory, was made to Bertram J. Topham, of Toronto, amateur astronomer.

SCIENTIFIC NOTES AND NEWS

THE Bruce Gold Medal of the Astronomical Society of the Pacific, has been awarded to Dr. Joel Stebbins, director of the Washburn Observatory, Madison, Wis. At the annual meeting of the society, held in San Francisco on January 25, Professor C. D. Shane, of the department of astronomy of the University of California at Berkeley, in his address as retiring president, gave an account of Dr. Stebbins's distinguished services to astronomy. At the same meeting Dr. A. S. King, of the Mount Wilson Observatory, was elected president of the society for the year 1941.

THE Oersted Medal of the American Association of Physics Teachers for "notable contributions to the teaching of physics" was awarded at the Philadelphia meeting to Dr. Robert A. Millikan, of the California Institute of Technology. Dr. Millikan, who was un-

able to be present, sent a message to the association entitled "Opportunities for Teachers of Physics."

IN recognition of contributions to aeronautical meteorology, which includes the development of an artificial means of dispelling fog, Henry G. Houghton, Jr., assistant professor of meteorology at the Massachusetts Institute of Technology, has been awarded the Robert M. Losey prize. The presentation was made on January 28 at the annual honors night dinner of the Institute of the Aeronautical Sciences by Commander F. W. Reichelderfer, chief of the U. S. Weather Bureau. Members of the committee of award were Commander Reichelderfer; Dr. Robert A. Millikan, chairman of the executive council of the California Institute of Technology; Dr. Karl T. Compton, president of the Massachusetts Institute of Technol-

ogy; Major James H. Doolittle, president of the Institute of the Aeronautical Sciences, and Major Lester D. Gardner, president of the Aeronautical Archives of the institute.

THE Rittenhouse Astronomical Society of Philadelphia has announced the award of the Annie J. Cannon Prize to Mrs. Julie Vintner Hansen, of the Royal Observatory of Copenhagen.

DR. ARCHIBALD MACLEISH, librarian of Congress, has been appointed honorary chancellor of Union College for 1941. The honorary chancellor spends brief periods in residence on the campus, holding informal discussions with faculty and students, and is the principal speaker at the graduation exercises. Dr. MacLeish will deliver the one hundred and forty-sixth annual Union College commencement address on Monday, June 9.

THE Mathematical Association of America held meetings at Louisiana State University on January 1 and 2, in conjunction with the meetings of the American Mathematical Society and the National Council of Teachers of Mathematics. Papers were given in a joint session with the National Council by Dr. Virginia Modesitt, Professor H. M. Cox and Professor D. R. Curtiss. At a session on Thursday papers were presented by Professors A. W. Tucker, G. A. Hedlund and Deane Montgomery. Professor R. W. Brink, of the University of Minnesota, was elected president for 1941 and 1942; Professor R. E. Langer, of the University of Wisconsin, was elected first vice-president, and Professor B. H. Brown, of Dartmouth College, second vice-president. Regional governors were chosen at the time of the meeting to represent seven of the fourteen regions into which the United States and Canada are divided.

AT its business meeting in Philadelphia on December 27, the American Physical Society elected as its president for 1941, Dr. George B. Pegram, professor of physics and dean of the graduate faculties at Columbia University. Professor Pegram was also re-elected treasurer of the society. Dr. George D. Stewart, professor of physics at the State University of Iowa, was elected vice-president. As secretary of the society, Dr. Karl K. Darrow, of the Bell Telephone Laboratories, New York, was chosen. The office of the secretary will remain at the Pupin Physics Laboratories, Columbia University.

OFFICERS of the American Society of Zoologists were elected at the Philadelphia meeting as follows: *President*, Dr. R. E. Coker, chairman of the Division of Natural Sciences of the Senior College of the University of North Carolina; *Vice-president*, Dr. J. P. Visscher, head of the department of biology at Western Reserve University; *Member of the executive*

committee, Dr. Wesley R. Coe, professor of biology at Yale University.

OFFICERS of the Botanical Society of America have been elected as follows: *President*, Dr. John T. Buchholz, head of the department of botany at the University of Illinois; *Vice-president*, Dr. Sam F. Trelease, Torrey professor of botany at Columbia University; *Secretary*, Dr. Paul R. Burkholder, professor of botany at the University of Missouri; and *Treasurer*, Dr. Paul Weatherwax, professor of botany at Indiana University.

PROFESSOR W. B. HERMS, head of the division of entomology and parasitology of the University of California, was elected at the Philadelphia meeting president of the Entomological Society of America.

THE annual meeting of the Council of the Union of American Biological Societies was held on December 30 in connection with the meeting of the American Association for the Advancement of Science at Philadelphia. The following officers were elected for 1941: *President*, Dr. A. J. Carlson, professor of physiology at the University of Chicago; *Secretary*, Dr. Frank A. Brown, Jr., professor of zoology at Northwestern University; *Treasurer* (for three years), Dr. D. H. Wenrich, professor of zoology at the University of Pennsylvania; and *Members of the Executive Committee*, Dr. B. M. Duggar, professor of plant physiology and economic botany at the University of Wisconsin; Lieutenant Colonel A. Parker Hitchens, George S. Pepper professor of public health and preventive medicine at the University of Pennsylvania, and Dr. George W. Hunter, III, professor of biology at Wesleyan University.

DR. FREDERICK C. LEONARD, chairman of the department of astronomy at the University of California at Los Angeles, will serve as visiting professor of astronomy at the summer session of the University of British Columbia at Vancouver, from July 7 to August 22. Dr. Daniel Buchanan, dean of the Faculty of Arts and Science and head of the department of mathematics at the University of British Columbia, will be visiting professor of astronomy and mathematics at the summer session of the University of California at Los Angeles, from June 30 to August 8. A similar exchange was made by them in 1937 and in 1939.

DR. ROGER B. FRIEND, state entomologist of Connecticut and chief of the department of entomology at the Connecticut Experiment Station, has been appointed assistant director of the State Station and will serve as acting director of the State and Storrs Stations during the leave of absence of Director W. L. Slate.

ARVAL L. ERIKSON has been appointed assistant to the director of the station and assistant agricultural economist at the New Hampshire Experiment Station

and assistant professor of agricultural economics at the University of New Hampshire.

ACCORDING to *The British Medical Journal*, Dr. R. A. O'Brien, who joined the staff of the Wellcome Physiological Research Laboratories at Beckenham in 1910 and became director in 1914, retired at the end of 1940. Dr. J. W. Trevan, who became head of the pharmacological section in 1920, has been appointed to succeed him.

Nature reports that M. Henri Bergson, the philosopher, has refused to be exempted from the clauses of the new statute relating to Jews in France. The exemption was offered him for "exceptional services rendered to literature, science and art." He must therefore resign his chair at the Collège de France.

THE address of the retiring president of the Washington Academy of Sciences was given on January 16 by Dr. Eugene C. Crittenden, assistant director of the National Bureau of Standards. It was entitled "Progress in the Measurement of Light."

DR. R. E. GIBSON, physical chemist in the Geophysical Laboratory of the Carnegie Institution, delivered the address of the retiring president of the Philosophical Society of Washington on January 18. He spoke on "The Physical Reflections in a Chemical Mirror."

DR. JAMES B. HERRICK, professor emeritus of medicine at Rush Medical College, Chicago, will deliver the fifth Christian Fenger Lecture of the Institute of Medicine of Chicago and the Chicago Pathological Society at a joint meeting on Monday evening, February 10, at eight o'clock. His subject is "Christian Fenger as I Knew Him, 1885-1902—A Study in Personality."

DR. W. H. TALIAFERRO, dean of the biological sciences at the University of Chicago, spoke at the Iowa State College on January 15 on "The Biological Basis of Immunity in Infection with the Larger Animal Parasites" and "Biological Basis of Immunity in Malaria." The latter lecture was given under the auspices of Sigma Xi.

PROFESSOR MARSTON T. BOGERT, of Columbia University, on January 17 gave a lecture on "Chemistry in Our Federal Preparedness Program" before the American Institute of Chemists.

DR. A. H. REGINALD BULLER, emeritus professor of botany at the University of Manitoba, recently delivered under the auspices of the Graduate School of the U. S. Department of Agriculture an illustrated lecture entitled "Hyphal Fusions and Protoplasmic Streaming in the Fungi." The lecture was a summary of Dr. Buller's research on the subject.

DR. WILLIAM B. CASTLE, professor of medicine at

Harvard Medical School, delivered the Edward Gamaliel Janeway Lecture at Mount Sinai Hospital, New York, on January 24. His subject was "Hemolytic Anemias."

DR. FRANCIS PEYTON ROUS, of the Rockefeller Institute for Medical Research, will deliver the tenth annual George Chase Christian Lecture at the University of Minnesota Medical School, Minneapolis, on February 5. He will speak on "Present Knowledge of Carcinogenesis."

A LAITY Lecture of the New York Academy of Medicine was given on January 23 by Professor Henry E. Sigerist, director of the Institute of History of Medicine of the Johns Hopkins University. He spoke on "Paracelsus in the Light of Four Hundred Years." In connection with this occasion, there was given at the academy an exhibit consisting of a portrait of Paracelsus made by his contemporary, Hirschvogel; a portrait of Leonico, the teacher of Paracelsus, and portraits of Paracelsus's most illustrious patients, the printer, Froben, and the great scholar, Erasmus. A collection of early publications of works of Paracelsus illustrating his pioneering contributions in the fields of industrial medicine, chemotherapy, surgery, etc., was also exhibited. In addition, there was on view, a collection of modern works dealing with Paracelsus.

THE eight one-week Research Conferences on Chemistry, held each summer at Gibson Island, Maryland, under the auspices of the American Association for the Advancement of Science and under the direction of Dr. Neil E. Gordon, chairman of the department of chemistry at Central College, Mo., have been arranged for the coming summer as follows: June 16, Frontiers in Petroleum Chemistry, chairman, C. R. Wagner; June 23, Catalysis, chairman, E. C. Williams; July 7, Organic High Molecular Weight Compounds, chairman, S. S. Kistler; July 14, Textile Fibers, chairman, Milton Harris; July 21, Vitamins, chairman, C. G. King; July 28, Applications of X-Ray and Electron Diffraction, chairman, Maurice Huggins; August 4, Corrosion, chairman, R. M. Burns; August 11, Photosynthesis, honorary chairman, Charles F. Kettering; chairman, O. L. Inman.

THE forty-third annual meeting of the American Ceramic Society will be held at Baltimore from March 30 to April 5. Headquarters will be at the Lord Baltimore Hotel.

THE Council on Dental Education of the American Dental Association will hold a congress on dental education and licensure on February 15 in Chicago. This congress will bring together for the first time dental teachers and dental examiners in a survey of common problems.

THE three hundred seventy-sixth meeting of the American Mathematical Society will be held at Columbia University on Friday afternoon and Saturday, February 21 and 22. Friday afternoon will be devoted to a symposium on applied mathematics. Brief addresses will be given by Dr. W. A. Shewhart, of the Bell Telephone Laboratories, on methods of mathematical statistics in industrial production control, and by Professor J. J. Stoker, of New York University, on the mathematical problems connected with the bending and buckling of elastic plates. Each address will be followed by a discussion led by mathematicians active in the fields involved. On Saturday there will be sectional sessions both morning and afternoon. At a general session on Saturday afternoon, Professor H. F. Bohnenblust, of Princeton University, will give an address entitled "Partially Ordered Linear Spaces."

APPLICATIONS to the Committee for Research in Problems of Sex, National Research Council, for financial aid during the fiscal year beginning July 1, in support of work on fundamental problems of sex and reproduction, should be received before April 1. They may be addressed to the chairman, Dr. Robert M. Yerkes, Yale School of Medicine, New Haven, Conn. Although hormonal investigations continue to command the interest and support of the committee, preference, in accordance with current policy, will ordinarily be given to proposals for the investigation of neurological, psycho-biological and behavioral problems.

IN connection with its defense work the War Department is in need of technical editors to perform various writing duties, and prepare for publication technical manuscripts and reports. The work will be confined largely to the fields of engineering, chemistry and physics. The salaries are \$2,600 a year for assistant technical editor, and \$3,200 a year for associate technical editor. To fill these positions the U. S. Civil Service Commission has announced an open competitive examination, and will accept applications not later than February 20 and February 24. Also in connection with the National Defense program, an examination will be held to fill the position of chemist-petrographer. The salary is \$3,200 a year. Application should be made not later than March 3. Difficulty is being experienced in filling positions in such branches of technology as explosives, fuels, plastics, rubber, minerals and textiles. These will be filled in several grades with salaries ranging from \$2,000 to \$5,000 a year. For the grade of junior technologist in any specialized branch, applicants will be required to take a written general test. For the other grades, competitors will be rated upon their education and experience. Applications for the position of junior technologist must be filed at the Commission's Washington office not later than February 20. For the other technologist positions, applications will be rated as received until December 31, 1941. Further information and application forms may be obtained from the Secretary of the Board of U. S. Civil Service Examiners.

DISCUSSION

A FURTHER COMMENT ON STABILITY IN NOMENCLATURE

WE owe to A. C. Smith¹ a very informative discussion of Wheeler's proposal that new series of beginning dates in botanical nomenclature be started from the publication of certain "uniform monographs executed with strict regard for the rules of botanical nomenclature and the type concept." It is my belief that Smith's observations fully dispose of Wheeler's proposal, showing its glaring defects and inconsistencies. Some additional notes may be desirable, nevertheless, as neither of the parties involved in the discussion seems to have taken into open account what is probably the fundamental fallacy of Wheeler's proposal.

Any form of organized knowledge, taxonomy not excluded, is by its nature progressive, or should at least strive to be progressive. Thus the *names* which a form of organized knowledge uses at any given stage of its evolution and development merely cloak certain

concepts that are then current. It is manifest that changes in *concepts* can not take place without changes in *names*. Somebody may hope that his *names* for the classification of the family in which he specializes are definite and certain—which may or may not be the case, as many are the controversies that arise over points in which involved issues are left to the common sense of the debaters—but he has not the slightest means of being certain that the generic and the specific names which he uses in the classification of this or that family will last when new concepts of classification must be adopted in view of new approaches to the problems of systematic. It casts a peculiar light upon the assumption of a purely nomenclatural branch of taxonomy that this branch should strive to the utmost to preserve *names* without giving heed to the possibilities of changes of *concepts*.

It may be objected, of course, that the hoped for monographs will merely remain as a basis for nomenclature, it being free to everybody to alter the rank of the units proposed therein to suit his convenience.

¹ A. C. Smith, SCIENCE, 91: 572, 1940.