

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-