1904 to 1918, and as research associate from 1918 to the time of his death.

In his passing away science has lost an enthusiastic and prolific contributor, New York, one of her most prominent and distinguished citizens, and a considerable part of America's men of science, a generous and devoted friend. HERBERT P. WHITLOCK

AMERICAN MUSEUM OF NATURAL HISTORY

RECENT DEATHS

DR. MICHAEL OSNATO, director of the department of neurology of the New York Post-Graduate Medical School, died on June 15.

DR. HERMANN VON W. SCHULTE, dean of the Creighton University Medical College since 1917, died on July 15, at the age of fifty-six years.

THE death on July 10, at the age of seventy years, is announced of Sir Richard Threlfall, consulting engineer, formerly professor of physics at the University of Sydney, Australia.

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A CORRESPONDENT writes: "Miss Adelaide Ames, research assistant in the Harvard Observatory, was drowned in a canoe accident in Squam Lake, New Hampshire, June 26. Her scientific work, thus suddenly ended at the age of thirty-one, had already gained for her a wide recognition. She was a member of the Commission on Clusters and Nebulae of the International Astronomical Union and was Secretary of the Local Committee for the entertainment of the Union in Cambridge in September. For several years Miss Ames had carried on investigations in the field of extra-galactic nebulae; her principal publications deal with the Coma-Virgo cloud of galaxies. Her most important work has been in connection with a photometric survey of all extra-galactic objects to the thirteenth magnitude-a census of the inner parts of the Metagalaxy to a distance of five to ten million light years. This survey was completed in June and will be published during the next month in collaboration with Dr. Shapley."

SCIENTIFIC EVENTS

THE TEACHING LOAD IN THE LABORA-TORY SCIENCES

A COMMITTEE of the Virginia Academy of Science, with Professor Wm. A. Kepner as chairman, has under consideration Standard 7 of the Association of Colleges and Secondary Schools of the Southern States. This standard reads "Teaching schedules exceeding sixteen hours per week per instructor shall be interpreted as endangering educational efficiency. In general, two laboratory hours will be counted as equivalent to one recitation hour."

This committee regards with grave concern violations of the first provision of this standard and commends attention of the association to the desirability of giving consideration to cases of excessive teaching loads.

The committee is equally concerned with excessive loads apparently permitted under the second provision of Standard 7. As early as 1927, the Virginia Academy of Science adopted a resolution directing the attention of the Association of Colleges and Secondary Schools of the Southern States and of the administrators to the inequity that this standard's application had caused.

Further notice of this situation was taken by the academy at its recent meeting. It adopted the following recommendation of its committee.

The committee recommends that the Virginia Academy of Science direct the attention of the Association of Colleges and Secondary Schools of the Southern States to the fact that its Standard 7 imposes a serious handicap upon the teachers of science by its method of evaluating the teaching load of laboratory instructors and that in this manner its standard endangers educational efficiency and hinders the development of research in southern institutions.

This move on the part of the academy is based upon the conviction that experience does not sustain the inference that an hour's teaching in the laboratory requires less total time, energy or quality of effort than one hour of instruction by lecture. Indeed, when it is taken into account that collection of material and construction of equipment and the care of materials and apparatus are usually a part of the burden of laboratory instructors, it must be recognized frankly that an hour spent in the laboratory represents quite as great a load as does an hour of lecture-room effort.

The committee was instructed to inform the Association of Colleges and Secondary Schools of the Southern States, the National Research Council and the American Association of University Professors concerning the academy's action. It was further instructed to present an account of the academy's attitude towards Standard 7 to the editor of SCIENCE with a request for publication as an invitation to other individuals and organizations interested to join in the effort to remove this handicap under which instruction in the sciences is being conducted.

THE DENVER MEETING OF THE AMERICAN CHEMICAL SOCIETY

THE eighty-fourth meeting of the American Chemical Society will be held in Denver, Colorado, from August 22 to 26. According to the preliminary program, the president's address will be delivered on the evening of August 24 by Dr. L. V. Redman, on "Some Economic Aspects of Research." The address will be followed by the presentation of the American Chemical Society Award in Pure Chemistry to Dr. Oscar K. Rice, and the Priestley Medal to Dr. Charles L. Parsons. Dr. Rice will make an address on "The Theory of Unimolecular Gas Reactions."

Addresses of the secretaries of the divisions which will hold meetings are as follows:

Agricultural and Food Chemistry: John H. Nair, Research Laboratory, the Borden Company, Syracuse, New York.

Biological Chemistry: J. B. Brown, Department of Physical Chemistry, the Ohio State University.

Cellulose Chemistry: John L. Parsons, Hammermill Paper Company, Erie, Pennsylvania.

Chemical Education: R. A. Baker, 17 Lexington Ave., New York.

Colloid Chemistry: E. J. Miller, East Lansing, Michigan.

Gas and Fuel Chemistry: O. O. Malleis, 5557 Woodmont St., Pittsburgh, Pennsylvania.

History of Chemistry: Tenney L. Davis, the Massachusetts Institute of Technology.

Industrial and Engineering Chemistry: Erle M. Billings, Eastman Kodak Company, Rochester, New York.

Medicinal Chemistry: H. C. Hamilton, Parke, Davis and Company.

Organic Chemistry: A. J. Hill, Yale University.

Paint and Varnish Chemistry: Robert J. Moore, Bakelite Corporation, Bloomfield, New Jersey.

Petroleum Chemistry: F. L. Koethen, Niagara Falls, New York.

Physical and Inorganic Chemistry: D. H. Andrews, the Johns Hopkins University.

Rubber Chemistry: H. E. Simmons, Municipal University of Akron.

Sugar Chemistry: E. W. Rice, National Sugar Refining Company of New Jersey, 129 Front St., New York.

Water, Sewage and Sanitation Chemistry: E. J. Theriault, U. S. Public Health Service, Cincinnati, Ohio.

There will be the usual excursions, entertainments and dinners.

ECONOMIES IMPOSED ON THE U.S. GEO-LOGICAL SURVEY

IN response to a request from the editor of SCI-ENCE, Dr. W. C. Mendenhall, director of the U. S. Geological Survey, has sent the following statement in regard to the effect of the economy bill on scientific workers in the Geological Survey:

The Legislative Branch Appropriation Act for the fiscal year ending June 30, 1933 (Public—No. 212—72nd Congress), includes as Part II the provisions of what

was frequently referred to as the "economy bill." These provisions, taken in relation to the appropriations made for the Geological Survey, will affect the survey and its workers in ways that will not be fully known until certain interpretations, regulations and decisions are announced by the president and other federal officers and agencies.

In general, the effects may be summarized as follows: All the scientific workers (and practically all others) of the survey will this year automatically lose one month's pay by furlough; will perhaps be furloughed for additional periods of duration yet unknown (and some may be dismissed); will permanently have annual leave with pay reduced to 15 days and will receive none this year; will receive no salary promotions this year and will hereafter receive smaller subsistence allowances when traveling. Moreover, of its employees past retirement age, three geologists have been separated, one has been retained and the case of one (the chief geologist) is still pending. The survey, with greatly reduced funds, will operate with a smaller staff and will curtail its field work and other projects.

In more detail, the effects of the several provisions (as now known or possible) may be outlined as follows:

(1) During the present fiscal year every employee receiving more than \$1,000 per annum will be furloughed without pay for the equivalent of one calendar month. The parts of appropriations unexpended by reason of this furlough may not be expended by the survey but will be impounded and returned to the treasury.

(2) All rights to annual leave of absence with pay are suspended during this fiscal year. (Sick leave is not disturbed.)

(3) No "administrative promotions" in salary may be made during the year. (Advancement of an employee from a lower grade to fill a vacancy in a higher grade, if permitted, does not constitute such a promotion, and the salary prescribed for the higher grade may then be paid.)

(4) No vacancy may be filled during the year (except "absolutely essential positions," with the president's approval, and temporary, emergency, seasonal or cooperative positions); the parts of appropriations unexpended by reason of such vacancies may not be expended by the survey but will be impounded and returned to the treasury unless the president waives such impounding because, "in his judgment, such action is necessary and in the public interest."

(5) During the year all persons having reached or reaching retirement age will be separated from the service (even though serving on an "extension"), unless specifically exempted by the president because required by the public interest. Under this provision nine employees of the survey were retired at the close of June 30; these include three geologists—Edward O. Ulrich, Marius R. Campbell and Frank C. Schrader. David White, formerly chief geologist, was exempted by execu-