

to the party, and held "open house" to other scientists in the vicinity of Washington. The purpose of Dr. Meinesz' visit is to extend the gravity determination network now covering the land areas of the United States until it shall include the coastal waters of the Atlantic to the east and Gulf of Mexico and Caribbean waters to the south.

ON the afternoon of October 10 the president and trustees of the American Museum of Natural History threw open to view the new Rotifer Group in the Darwin Hall on the first floor of the museum. This group, the specimens for which have been formed in glass, represents a cubic half inch of pond bottom magnified one hundred diameters. It is so constructed as to represent a huge magnifying glass through which the observer gazes into a jungle of water plants peopled by hundreds of tiny animal forms. The group has been modeled in glass by Hermann O. Mueller, of the museum. The coloring of the models and background has been executed by W. H. Southwick. The features of the pond bottom, constructed in wax, were modeled by Chris E. Olsen, and the field sketches from life were prepared by Dr. George H. Child. All of the work was designed and directed by Dr. Roy Waldo Miner, curator of marine life in the museum.

THE University of California Medical School sponsored two public motion picture films at the University Hospital, in San Francisco, on October 8, exhibited by Robert J. Ruth, of E. R. Squibb and Sons. The subjects were "Sunshine from the Sea," which presents the subject of cod-liver oil. The second, "How Science Aids in Controlling Infectious Diseases," will depict methods employed in the manufacture and control of biologic products.

THE Yugoslav government, desiring to make Belgrade a center of Russian science abroad, has opened in Belgrade a "Russian Institute." Its members will be selected from among exiled Russian professors in many countries. The fourth congress of Russian professors abroad opened in Belgrade in September. There were over 150 delegates from various countries. The three former congresses were held in Prague.

THE Chile station of the Lick Observatory, maintained since 1900 in order to observe stars in the southern part of the sky, has been sold, according to a report given out by Science Service, to the Catholic University of Chile. Dr. Robert G. Aitken, associate director in charge of the observatory, explained that the abandonment of the branch observatory, which was equipped with a 37-inch reflecting telescope, did not mean that they had lost interest in the southern hemisphere, but that if adequate support were obtained at some future date another southern station might be

established. Probably this would be either in Australia or South Africa. Professor Fred J. Neubauer, who has had charge of the Chile station, will remain there until May 1, 1929, as professor extraordinary in the Catholic University. During this time he will instruct the future workers in the use of the instruments. Following that he will return to Mt. Hamilton. Thousands of photographic plates made in Chile are preserved at Lick Observatory for future study.

THE board of directors of the American Electrochemical Society has established an annual award of one hundred dollars in gold for the best paper printed in the two volumes of any year of the *Transactions* by a student or young graduate under twenty-seven years of age. The judges to pass upon the merits of the manuscript are to be the members of the publication committee, this committee being at liberty to invite the opinion of members not on the committee. The first prize of \$100 is to be awarded for the best paper presented at the spring and fall meetings in 1929. This prize is to be known as the American Electrochemical Society prize—to be available at all American or foreign technical schools and colleges, to students and young instructors—the object being "to stimulate original work and encourage participation in the proceedings of the society by scientifically and technically trained men at an age when normally modesty keeps them in the background."

THE following awards for the year 1928-29 are reported in *Nature* to have been made by the Salters' Institute of Industrial Chemistry and approved by the Court of the Company: Fellowships have been renewed to: Mr. C. G. Akhurst (Fellow, 1927-28, at the Rothamsted Experimental Station) for one year at the Imperial College of Tropical Agriculture, Trinidad; Mr. F. Witt (Fellow, 1927-28, at the Gas Institute, Karlsruhe) for one year in a German industrial fuel undertaking. Fellowships have also been awarded to: Mr. H. K. Cameron, University College, London; Mr. H. Diamond, University College, London; Mr. F. L. Gilbert, University College, Nottingham, and Cambridge; Mr. C. H. Lea, University of Liverpool; Mr. A. H. Loveless, of the Imperial College, London; Mr. H. Smith, of the Imperial College, London. Seventy grants-in-aid have also been awarded to young men and women employed in chemical works, to facilitate their further studies.

#### UNIVERSITY AND EDUCATIONAL NOTES

THE new physics building of the University of Washington, Seattle, erected at a cost of \$464,000, will be occupied for the first time this fall. It has

seven small research laboratories, a large general laboratory and several special laboratories, including rooms for music and sound, photography, optics, illumination, electrical measurements and heat and temperature measurements. One room will house a physics library. One of the two large lecture rooms seats two hundred and eighty students and the other eighty. There are twelve smaller recitation rooms.

A NEW chemistry laboratory for Purdue University will be started in the spring. It is planned that when completed this building shall be one of the largest and best-equipped laboratories in the country.

DR. K. LARK-HOROVITZ, of the University of Vienna and more recently of Stanford University, has been appointed professor of physics at Purdue University. He will have supervision of the advanced work in physics and will pay special attention to the development of research.

DR. J. J. WILLAMAN, of the division of agricultural biochemistry, University of Minnesota, has been promoted to a professorship. Mr. Charles F. Rogers, formerly assistant professor of botany of the Colorado Agricultural College, has joined the staff with the rank of instructor.

DR. ANNA R. WHITING has been appointed professor and head of the department of biology at the Pennsylvania College for Women, Pittsburgh, Pa.

DR. FREDERICK E. EMERY, instructor in physiology at the University of Wisconsin, has been appointed associate in physiology at the University of Buffalo.

DR. HELEN BOURQUIN, formerly professor of physiology at the University of South Dakota, has been appointed assistant professor of pharmacology at the University of Michigan.

## DISCUSSION AND CORRESPONDENCE

### A PROPOSED CHANGE OF ELECTROCHEMICAL NOMENCLATURE

WHEN Faraday<sup>1</sup> in 1833 proposed the new terms *cathode*, *anode*, *cation* and *anion*, the nature of electricity and particularly the manner of electrical conduction in solutions were not clearly understood. Since he had no other basis for naming the electrodes, he called that one towards the east the *anode* and that one towards the west the *cathode*.

This nomenclature to-day would appear quite ridiculous if long usage had not accustomed the names to our ears. Indeed, as illuminating and de-

scriptive terms they are useless and a beginner remembers only with difficulty whether the anode is the positive electrode or not. To overcome this difficulty, to place the electrode names on a more logical basis and to simplify electrochemical nomenclature, I should like to propose that the terms anode and cathode be rejected and that in their places an abbreviation of the terms positive electrode and negative electrode, namely, *pos-ode* or *posode* and *neg-ode* or *negode*, be substituted. None would have difficulty in telling at once that the *posode* was the positive electrode and that the *negode* was the negative electrode.

Furthermore, in 1833 the idea that like and unlike, or positive and negative, attract each other was also not well understood, so Faraday decided to call those bodies which pass to the anode the anions, and those which pass to the cathode the cations. At the present time, however, the fact that positive particles are attracted by the negative electrode is so very well known that Faraday's terminology for the ions is unnecessary. Hence, just as positive electrode was contracted to *posode*, positive ion can be contracted to *pos-ion* or *posion*, and, similarly, negative ion can be contracted to *neg-ion* or *negion*. A glance at either of these two simplified names will enable any one to tell at once which is the positive and which is the negative ion.

A further advantage of this new system of nomenclature is seen in X-ray tube phenomena. The negative "particles" or electrons which stream from the negative electrode are called cathode rays. To one unfamiliar with this terminology the question immediately arises whether cathode rays like cations travel to the cathode or whether cathode rays have the same electrical sign as the cathode. This obvious inconsistency in chemical usage no longer exists if cathode rays are called *negode* rays; then, just as *negions* are negative ions, so *negode* rays must be negative rays.

The only other difficulty in adopting this new system is an etymological one. Unfortunately, positive and negative are not of Greek origin, as are *ode* and *ion*, but this trouble is insignificant compared to the advantages to be gained.

MALCOLM DOLE

ROCKEFELLER INSTITUTE  
FOR MEDICAL RESEARCH

### AN ANALYTICAL DIRECTORY OF MUSEUMS

WITH the tremendous growth of museum collections of all kinds within recent years there is a constantly increasing demand for information regarding both museums and their contents. The profession is continually seeking statistics on the administrative and financial phases of its activities, and the general public

<sup>1</sup> *Philosophical Transactions* 123, 48 (1833).