

enabled Raoult and Pfeffer to get the credit which was properly due them. The theory of osmotic pressure was due to van't Hoff, the theory of electrolytic dissociation to Arrhenius, and the modern theory of electromotive force to Nernst; it was Ostwald who fought the battles which resulted in the acceptance of these views. Avogadro was put across by his countryman, Cannizzaro; Gibbs by Roozeboom and by Ostwald; Donnan by Jacques Loeb; and Darwin to a great extent by Huxley.

Ostwald was born in Riga in 1853. In 1872 he entered the University at Dorpat; his first paper was published in 1875 and his doctor thesis in 1878. In 1881 he was appointed professor of chemistry at the Polytechnic in Riga, and here began the publication of the first edition of his "Lehrbuch der allgemeinen Chemie." This was the first book to present physical chemistry as a well-rounded subject, though not under the name that it was to bear later on. This book was one of the reasons why Ostwald was called to Leipzig in 1887 to take over the chair of physical chemistry. In this same year, but before he had moved to Leipzig, Ostwald began the publication of the *Zeitschrift für physikalische Chemie*. The laboratory at Leipzig was at first a ramshackle place; but later a new building was erected. Whether in the old laboratory or the new one Ostwald was the inspiring leader in physical chemistry for the whole world for nearly twenty years. Finally, his mind went stale so far as chemistry was concerned, and he turned to philosophy. It was as a philosopher, not primarily as a chemist, that he came to the World's Fair at St. Louis.

At that time Ostwald was tremendously impressed by the beauty of the autumn leaves and he expressed a desire to paint so many pictures that he would be known as the discoverer of the American landscape. This never happened, nor did Ostwald go back to chemistry after he resigned in 1906. After the philosophy stage had passed Ostwald spent the rest of his life working on the theory of color, and it was a great disappointment to him that the Nobel prize in chemistry was never followed by a Nobel prize in physics for the work on color.

Ostwald's minor activities covered an enormous

ground. The volume entitled "The Energetic Imperative" contains his suggestions as to: An international organization of chemists; a universal language; an international coinage; the proper size of a printed page; universal disarmament; the setting of type; the improvement of schools; a new type of university; German script; the development of genius; the status of women, and a new calendar.

Ostwald's gift for leadership showed itself in the way his pupils regarded him. They were literally disciples, and the influence of the Leipzig school was predominant for years in the whole chemical world. Of late years there has been a change. The fashionable thing now is the question of the kinetics of the atom and the molecule. The drift is away from thermodynamics, and one hears regrets that Ostwald did not adopt the goose-step. It is probable, however, that the pendulum has swung too far away from Ostwald and that his scientific work will be rated more highly twenty years hence.

However that may be, Ostwald did a great work and was loved and followed by many people.

WILDER D. BANCROFT

## RECENT DEATHS

DR. ROLAND THAXTER, emeritus professor of cryptogamic botany at Harvard University, and honorary curator of the Farlow Herbarium, died on April 22 in his seventy-fourth year.

DR. CARL LEO MEES, physicist, president emeritus of the Rose Polytechnic Institute at Terre Haute, Indiana, died on April 20, at the age of seventy-nine years.

THE death is announced at the age of eighty years of Guillaume Bigourdan, formerly director of the Bureau International de l'Heure, Paris.

J. H. L. VOGT, the geologist and lately professor of geology in the Technical School of Trondhjem, Norway, died on January 3.

PRINCESS VLADIMIR ANDRONIKOFF, head of the Institute for Plant Cultivation at Hohenheim, near Stuttgart, died at Hohenheim on April 1 at the age of fifty-two years.

## SCIENTIFIC EVENTS

### THE INTERNATIONAL CONGRESS OF MATHEMATICIANS

THE International Congress of Mathematicians will meet at Zurich, from September 4 to 12. The mornings will be devoted to general addresses delivered by invitation, as follows: Monday: R. Fueter, "Idealtheorie und Funktionentheorie"; Tuesday: C. Carathéodory, "Über die analytischen Abbildungen durch

Funktionen mehrerer Veränderlicher"; G. Julia, "Essai sur le développement de la théorie des fonctions de variables complexes"; W. Pauli, "Mathematische Methoden der Quantenmechanik"; N. Tschebotarëw, "Die Aufgaben der modernen Galois'schen Theorie"; T. Carleman, "Sur la théorie des équations intégrales linéaires et ses applications"; Wednesday: E. Cartan, "Sur les espaces riemanniens symétriques";