

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";

L. Bieberbach, "Operationsbereiche von Funktionen"; M. Morse, "The calculus of variations in the large"; E. Noether, "Hyperkomplexe Systeme in ihren Beziehungen zur kommutativen Algebra und zur Zahlentheorie"; H. Bohr, "Fastperiodische Funktionen einer komplexen Veränderlichen"; Friday: F. Severi, "La théorie générale des fonctions analytiques de plusieurs variables et la géométrie algébrique"; R. Nevanlinna, "Über die Riemannsche Fläche einer analytischen Funktion"; R. Wavre, "L'aspect analytique du problème des figures planétaires"; J. W. Alexander, "Some problems in topology"; F. Riesz, "Sur l'existence de la dérivée des fonctions d'une variable réelle et des fonctions d'intervalle"; Saturday: G. H. Hardy, "Recent work in additive theory of numbers"; G. Valiron, "Le théorème de Borel-Julia dans la théorie des fonctions méromorphes"; W. Sierpinski, "Sur les ensembles de points qu'on sait définir effectivement"; S. Bernstein, "Sur les liaisons entre quantités aléatoires"; K. Menger, "Neuere Methoden und Probleme der Geometrie"; Monday: J. Stenzel, "Anschauung und Denken in der klassischen Theorie der griechischen Mathematik." Sectional meetings will be held in the afternoons, for the presentation of short papers. Those wishing to present such papers should send short abstracts (not more than 400 words) to the Secretary of the Congress, not later than June 15; these abstracts will be printed before the meeting and distributed there. Abstracts received after that date can not appear in the proceedings unless they are delivered before the end of the congress.

Excursions and entertainments have been arranged. All communications concerning the congress should be addressed to the International Congress of Mathematicians, Ecole Polytechnique Fédérale, salle 20 d, Zurich.

ZOOLOGICAL SESSIONS AT THE SUMMER MEETING OF THE ASSOCIATION

SECTION F will hold sessions during the summer meeting of the Association on Tuesday, Wednesday and Thursday, June 21 to 23, at Syracuse, New York. It is planned to emphasize out-of-door zoology by field excursions and informal discussions of ecological and natural history relations. Probably excursions will be made on each of the three days, either for the entire day or shorter half-day trips to representative regions of Central New York. These excursions are expected to be joint sessions of zoologists, ecologists and botanists; leaders will be persons well acquainted with the regions visited. If there are members of the section who do not desire to participate in the out-of-door sessions, provisions may be made for the reading of papers in other fields. Those who desire to present papers should send titles to the secretary

promptly. All papers will be limited to 15 minutes each and titles must be accompanied by abstracts of about 250 words giving the substance of the paper. If sufficient papers are presented they will be grouped into appropriate fields. In sending titles the field should be indicative of the group in which the paper should be read, also whether lantern or charts are to be used, and whether microscopes are needed for demonstration. All titles and abstracts must be in the hands of the secretary not later than May 20 if they are to appear in the program.

GEO. T. HARGITT,
Secretary, Section F

DUKE UNIVERSITY,
DURHAM, NORTH CAROLINA

AWARD OF THE OSBORNE MEDAL TO DR. C. H. BAILEY

DR. CLYDE H. BAILEY, professor of agricultural biochemistry in the University of Minnesota and cereal chemist in charge of the section of cereal chemistry in the Division of Agricultural Biochemistry in the Minnesota Agricultural Experiment Station, has been awarded the Thomas Burr Osborne Gold Medal of the American Association of Cereal Chemists "for distinguished contributions in cereal chemistry." The formal presentation of the medal will be made at the annual meeting of the association which will be held from May 23 to 26 at Detroit.

This medal was established in 1926 by the American Association of Cereal Chemists who desired "to honor those scientists who have contributed signally to the advancement of our knowledge in this field of specialization—the award to be made only at such times as were justified by unusually meritorious contributions." The first award was made in 1928 to Thomas Burr Osborne, after whom the medal was named, for his classic studies in the field of plant proteins in general and the proteins of the cereals in particular. Dr. Bailey will be the second recipient of the Osborne medal.

Dr. C. H. Bailey was born in Minneapolis in 1887. He received his B.S. degree from North Dakota State College, the M.S. degree from the University of Minnesota, and the University of Maryland granted him the Ph.D. degree, his thesis being entitled "The Respiration of Shelled Corn." From 1907–1911 he was scientific assistant in the Bureau of Plant Industry, U. S. Department of Agriculture, where again his field of work was cereal chemistry. Since 1911, except for minor interruptions, he has been continuously associated with the Division of Agricultural Biochemistry at the University of Minnesota.

Dr. Bailey was an active member and officer of the American Society of Milling and Baking Technology,