OBITUARY

EDWARD HOUGHTON KURTH

DR. EDWARD HOUGHTON KURTH, research physicist of the California Institute of Technology, was killed in February by an automobile while crossing a street in Pasadena. He was thirty-six years old.

Dr. Kurth will be remembered for his research on soft x-rays, carried out at Princeton University under Dr. Karl T. Compton and published in the *Physical Review* of December, 1921. In this research the gap was closed between the x-ray spectrum and the ultra-violet, obtaining measurable radiation with as low as 12.5 volts on the x-ray tube. This corresponded to a wave-length of 990 Å, which is well within the Lyman region of the ultra-violet, and the longest ever obtained with x-rays. He also detected and determined the wave-lengths of lines in the characteristic x-ray radiation of several metals, of carbon and of oxygen, in the region between 10 and 100 Å, a region never before penetrated either optically or electrically.

Dr. Kurth went to the California Institute in 1923 as National Research fellow to continue his research on soft x-rays. Two years later he was forced to move to the Mojave Desert, on account of ill health. In 1928 he returned to Pasadena, but, still unable to do confining research, spent the next year and a half making measurements of the intensity of the sun's ultra-violet radiation in various parts of California.

At the time of his death Dr. Kurth was engaged in directing the work on the Griffith Planetarium now building in Los Angeles, and in planning exhibits for the Science Museum in connection with it. These exhibits, about sixty in number, were to be entirely automatic, and contained many novel features which Dr. Kurth devised after visiting similar museums all over the United States and gathering information from foreign countries.

Dr. Kurth was also an inventor. He devised improvements in mercury vapor pumps and built the pumps for his own researches. In collaboration with Dr. Lewis Mott-Smith he invented and patented a radio tube which he sold to the Western Electric Company.

THOMAS BOW BRIGHTON

WE have received from the Sigma Xi Club of the University of Utah a report of the death on March 5 of Dr. Thomas Bow Brighton, professor of metallurgy at the university, at the age of forty-seven years. Dr. Brighton had been secretary of the club.

He began work as a weigher in the Highland Boy Smelter at Murray and worked up to the position of chief chemist within three years. He was also in charge of the chemical laboratories of the Utah Copper Company for one year.

He joined the faculty of the University of Utah in 1912, as instructor in chemistry. Here he served on many committees, particularly on those that demanded a friendly understanding of students and their problems. In 1930 he was made head of the department of metallurgical engineering. As a teacher, Dr. Brighton was noted for his kindliness, untiring patience and desire to stimulate the mental growth of his pupils.

His attitude toward the whole industry was characterized by the same helpful spirit; he gave advice and counsel freely on any problems that arose, and whenever he was asked. He took direct charge of many investigations in the university, particularly in the department of mining and metallurgical research, and in cooperative efforts with the U. S. Bureau of Mines.

Dr. Brighton was a member of the American Association for the Advancement of Science, the Utah Academy of Sciences, the American Chemical Society and the American Institute of Mining and Metallurgical Engineers.

A. N. MELDRUM

A CORRESPONDENT writes: "Professor A. N. Meldrum, one of the foremost authorities on the history of chemistry, was drowned in Edinburgh on March 14. Dr. Meldrum had spent the greater part of his life teaching chemistry in the Royal Institute of Science at Bombay, where he was principal and professor of organic chemistry, and he retired to Edinburgh two years ago. His books "Avogadro and Dalton" (1906) and "The Eighteenth Century Revolution in Science—the First Phase" (1930) are models of historical scholarship, and deserve to be more widely known. He was also an authority on Boyle and Mayow, and his recent papers on Lavoisier and Priestley, published in *Isis*, have illuminated many obscure phases of the problems of the discovery of oxygen. Dr. Meldrum is survived by his wife and a daughter, and was the father of Dr. N. U. Meldrum, the brilliant young physiological chemist of Cambridge, who died in June of last year."

RECENT DEATHS

DR. A. B. MACALLUM, emeritus professor of biochemistry at McGill University, died on April 5. He was seventy-six years old.

ARTHUR S. HATHAWAY, professor of mathematics at the Rose Polytechnic Institute from 1891 to 1920, died on March 11, at the age of seventy-eight years.

CHARLES WESLEY ROLFE, professor of geology at the University of Illinois from 1885 until his retirement with the title of professor emeritus in 1918, died on April 6, at the age of eighty-three years.

DR. JAY FRANK SCHAMBERG, professor of dermatology and syphilology at the Graduate School of Medicine of the University of Pennsylvania, died on March 30, at the age of sixty-three years.

DR. CHARLES WENDELL TOWNSEND, formerly specialist in obstetrics and children's diseases in Boston, known for his work in ornithology, died on April 3 in his seventy-fifth year.

DR. FRANCIS GARNER MILLER, dean of the School of Forestry of the University of Idaho since 1917, died on March 8, at the age of sixty-three years.

SYDNEY HOWARD VINES, emeritus professor of botany at the University of Oxford, died on April 5 at the age of eighty-four years. Professor Vines was Sherardian professor of botany and fellow of Magdalen College from 1888 to 1919.

SCIENTIFIC EVENTS

THE ROTHAMSTED EXPERIMENTAL STATION

A LETTER to the London *Times* for March 19 calls attention to the fact that the work of the Rothamsted Experimental Station at Harpenden is threatened by the encroachment of the builder. The letter is signed by Devonshire, chairman of the Society for the Extension of the Rothamsted Experiments; F. Gowland Hopkins, president of the Royal Society; Stradbroke, president of the Royal Agricultural Society; Stanley O. Ratcliff, president of the National Farmers' Union; Clinton, chairman of the Lawes Agricultural Trust Committee; A. D. Hall, scientific adviser to the Ministry of Agriculture; E. J. Russell, director of the Rothamsted Experimental Station.

The station was founded in 1843 by John Bennet Lawes, the squire of Rothamsted, with whom was associated Joseph Henry Gilbert, chemist, and for many years it was carried on at the expense of the founder. Before he died he set up a trust to continue the work, endowed it with £100,000 and the use for 100 years of the experimental plots that had even then become classical.

The letter is quoted in part below:

> It is the special feature of these field experiments that they have been carried on without essential change ever since they were started some 80 to 90 years ago. From the outset various measurements and records have been systematically taken and the work was so well planned that the mass of data now accumulated forms a veritable treasure-house for the agricultural experimenter because it is found to provide material for the elucidation of all sorts of agricultural problems far removed from those in the minds of the founders.
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> Much of the farm has been "zoned" for houses: it now has a prospective building value. The several agreements under which the land has hitherto been held from the estate no longer afford any certainty of continuity; and the only possible way of averting the impending danger is for the Lawes Agricultural Trust itself to acquire the estate, including the Manor House. A purchase price of £30,000 has been agreed between Sir Edwin Savill, acting for the trust, and the Public Trustee, acting for the estate, but the offer is open for a short time only. The trust has no accumulated reserves, its whole income going on the maintenance of the work. The Development Fund for the present is not available. Meanwhile the time is short and the urgency great. We venture therefore to appeal through you to some generous donor or donors to come forward and save these famous and invaluable field experiments and thus allow the workers to continue their investigations in peace and security.

FIRST INTERNATIONAL CONGRESS OF ELECTRO-RADIO-BIOLOGY

FOR the purpose of instituting among physicists, chemists, biologists, naturalists and physicians a close and profitable collaboration which is indispensable for the advance of radio-biology considered not as a branch of radiology or of biology but as a separate science, the International Society of Radio-Biology is now organizing the first International Congress of Electro-Radio-Biology. The congress will bring together for the first time those whose studies are concerned with matters having a direct or indirect relation with the subject. The congress will take place in Venice in September under the presidency of H. E. Count Volpi di Misurata, Minister of State.

An Italian correspondent writes: All subjects concerning oscillatory and corpuscular phenomena in relation to biology will be under review, including supersonics, electric waves, light of different wave-lengths, radium, penetrating radiation and its probable influence on organic matter and living organisms, photodynamic action, long-distance action of metals, Gurwitsch rays, luminescence, radiation of radio-active salts in organic combinations; electric states of the atmosphere; spectrography; influences of radiation on heredity, etc. These subjects will be treated by specialists.

Following lectures by leading investigators there will be discussions of a more strictly radio-biological nature.

The following scientific men are expected to be present:

Emil Abderhalden (Halle, A. S.); Belak (Budapest); Brunetti Rita (Cagliari); Arthur H. Compton (Chi-