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.