

OBITUARY NOTICE.

MILLICENT KING.

1900—1952.

MILLICENT KING was born on September 12th, 1900, in Dursley, Gloucestershire. She was a scholar at Redland High School, Bristol, and changed her course of study from arts to science to meet the need for scientists created by the First World War. She graduated with First Class Honours in Chemistry at Bristol University and obtained a Ph.D. degree in 1922 under Professor McBain. Her work with McBain consisted in investigations into the detergent action of soaps and a study of the surface conductivity of glass surfaces in solutions of potassium chloride. When McBain went to Stanford University in 1926, she became Secretary and Librarian to the Chemistry Department at Bristol with the title of Research Assistant.

Until 1939, she carried out a series of accurate measurements on the specific heats and heats of crystallisation of a number of homologous series, including hydrocarbons, fatty acids, methyl and ethyl esters, and amides. She also measured the heats liberated in the conversion of α - into β -forms in some series. The work was of importance in relation to the causes of the alternation in melting points of homologous series, and it was established that where there was alternation in the melting point there was also alternation in the heat of crystallisation. The effect was shown to lie in the different mode of orientation of the terminal group in the odd and the even series. The work was carried out at the same time as a parallel investigation by Dr. Piper, Dr. Malkin, and others on the X-ray spacings of homologous series, and contributed towards the elucidation of some doubtful points concerning their structure. Her results made it possible to calculate the convergence temperature for the melting points of long-chain compounds, and to derive a theory for their melting points.

Her experimental work ceased at the beginning of the Second World War, when her duties as Librarian and Secretary took up all her time. Her unselfish and untiring work as Secretary contributed greatly to the war effort and to the growth of the Chemistry Department since. In the Chemical Library she befriended many generations of students reading for their degrees.

She was a driver of an ambulance during the air raids of the last war.

She died on December 17th, 1952.

W. E. GARNER.
