Professor L. R. G. Treloar, O.B.E. An appreciation by his colleagues



Professor L. R. G. Treloar, who died on 18 March 1985, played a major role in the development of rubber elasticity and related subjects, and helped to establish the subject of polymer science in this country.

Leslie Treloar read physics at University College, Reading and, on graduating in 1927, joined the General Electric Company, gaining his PhD from the University of London in 1938. He then joined Geoffrey Gee in the newly-formed British Rubber Producers Research Association. During the period 1938-1949, apart from two years war service, he was involved in many aspects of polymer science, including solution thermodynamics, experimental stress-strain behaviour of rubbers and theoretical aspects of the statistics of paraffin and polyisoprene chains, leading to his most notable contribution, the elasticity of networks.

Following periods at the Royal Institution, British Rayon Research Association and the Shirley Institute, he was appointed in 1963 as Reader and later Professor in the Department of Polymer and Fibre Science, UMIST. now the Department of Polymer Science Technology.

He was instrumental in building the first undergraduate and postgraduate degree courses in polymer science and technology and rapidly built his research school, further enhancing his already established international reputation as a polymer physicist. His lectures will be remembered by a whole generation of students for their lucid style of presentation, their clarity of scientific thought and high degree of entertainment. To those privileged to hear him lecture, his inimitable demonstrations were renowned and immensely enjoyed.

He was highly respected by his research students and

colleagues, with whom he was always willing to discuss problems and give the benefit of his experience.

During his career he was honoured many times for his valuable contributions to polymer physics. In addition to the Colwyn Medal of the Institution of the Rubber Institute (1962) he received the O.B.E. (1965), the Swinburne Gold Medal of the Plastics Institute (1970), the Griffiths Medal of the Materials Science Club, the Gold Medal of the British Society of Rheology, and the Warner Memorial Medal of the Textile Institute (1972).

His most noted and enduring contribution to polymer science was his book 'The Physics of Rubber Elasticity' (Clarendon Press, Oxford, 1958). This book, a classic in its field, was the first text to draw together in an integrated fashion the various aspects of a hitherto diverse subject. It was written with a clarity of style and simplicity of presentation unique to Leslie Treloar.

All of us who were privileged to know Leslie will mourn his passing, but his books and numerous papers will mean that his work lives on and serves to sustain the memory of a very dear colleague.

The following 12 papers, drawn together by colleagues in the Department of Polymer Science and Technology. have been kindly presented by some of the world's leading polymer scientists. These papers, specially published in this issue of *Polymer*, are dedicated to the memory of Professor L. R. G. Treloar.

> J. P. Berry J. L. Stanford (Department of Polymer Science and Technology, UMIST) January 1987