The Roughton–Forster equation for pulmonary diffusion: how it happened

Mike Hughes

National Heart and Lung Institute, Imperial College School of Medicine, Hammersmith Hospital, London, UK.

Corresponding author: Mike Hughes (mike.hughes@imperial.ac.uk)

Shareable abstract (@ERSpublications)
The Roughton–Forster equation of 1957 describes the transfer of oxygen and carbon monoxide from alveolar gas to pulmonary capillaries, as molecular diffusion across membranes and interstitium coupled to the reaction with haemoglobin in red cells https://bit.ly/380cg0D

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The transfer factor of the lung for carbon monoxide (T_{LCO}) and spirometry are our two most valued tests in functional assessment. The understanding of the physiology underpinning T_{LCO} (or D_{LCO}) owes much to Robert Forster's research, including the formulation of the Roughton–Forster equation [1], the topic of this editorial. His other research involved oxygen and CO_2 exchange, the role of carbonic anhydrase, and gas exchange in general. Robert (Bob) had a great sense of humour, and was delightful company (figure 1). He remained interested and engaged in the T_{LCO} until a few months before his death in September 2021.