

## Sir John Shipley Rowlinson (1926– 2018)



Sir John Shipley Rowlinson was born at Handforth, near Manchester, England, on 12 May 1926. His interest in history dates back at least to his school days when he admits that he caused chaos in the scheduling of the Higher School Certificate exam by insisting that he take modern history as well as the math, physics and chemistry parts. That interest remained throughout his technical career as a physical chemist and especially manifested itself after his retirement.

After schooling at Rossall School in Fleetwood, Rowlinson studied chemistry at Trinity College Oxford, receiving his B.A. with first class honors in 1947 and the B. Sc. in 1948. He took the D.Phil in chemical kinetics with J. D. Lambert for his work on energy transfer between gaseous molecules by the study of ultrasonic dispersion. After a post-doctoral year at the Naval Research Laboratory at the University of Wisconsin he became the ICI Research Fellow at the University of Manchester and was subsequently promoted to Lecturer in 1954 and Senior Lecturer in 1957. In 1961 Rowlinson was elected to a chair in Chemical Technology at Imperial College, London and in 1974 was made Dr. Lee's Professor of Chemistry at Oxford University. He retired in 1993 but remains a Fellow of Exeter College at Oxford

Rowlinson's distinguished career in physical chemistry is marked by more than 200 scientific papers and book chapters, primarily in the fields of capillarity and cohesion and the equations of state of dense matter. His technical books include *Liquids and Liquid Mixtures* (1959, 2nd. ed. 1969, 3rd ed. 1982), *The Perfect Gas* (1963), *The Physics of Simple Liquids* (1968, with H.N.V. Temperley and G.S. Rushbrooke), *Thermodynamics for Chemical Engineers* (1975, with K.E. Bett and G. Saville) and *Molecular Theory of Capillarity* (1982, with B. Widom, Dover reprint 2003).

An early paper on "The Legacy of van der Waals" (*Nature* 1973) showing Rowlinson's interest in history was followed by his seminal work on van der Waals, notably the translation of van der Waals's doctoral thesis, *J.D. van der Waals: On the Continuity of the Gaseous and Liquid States* (1988) and the biography *Van der Waals and Molecular Science* (1996, with A. Ya. Kipnis and B.E. Yavelov). That theme was continued in (a) "*Cohesion: A Scientific History of Intermolecular Forces* (2002), which covers the subject from Newton to the present time and which was praised by reviewers for its meticulous documentation and intimate knowledge of primary sources, and (b) "Discovering the Forces Within Matter," (in *Joseph Priestley: a Celebration of His Life and Legacy* (2007). Other diverse historical subjects that have received Rowlinson's attention are biographical memoirs of John Adair Barker (1996), Kenneth George Denbigh (2004), and John Freind (2007) as well as papers on "The Work of Thomas Andrews and James Thomson on the liquefaction of gases" (2003), "The wartime work of Hinshelwood and his colleagues" (2004), and "Dr. Thomas Carver and Lord Kelvin" (2006).

Rowlinson's interest in the history of science is also reflected in his activities with the Historical Group of the Royal Society of Chemistry and the Royal Society in London where he was for five years the Physical Secretary and a Vice president. He has been influential in supporting the teaching of the history of science at Oxford and displaying Oxford's notable instrument collection at the Museum of History of Science.

Rowlinson is a Fellow of the Royal Institute of Chemistry and the Royal Society, a Founding Fellow of the Royal Academy of Engineering, and an Honorary Foreign Member of the American Academy of Arts and Sciences. He has received the Meldola Medal (1954, Royal Institute of Chemistry), Marlow Medal and Prize (1956, Faraday Society, first recipient), Von Hofmann Prize for Chemistry (1980, Gesell. Deutscher Chemiker), the Leverhulme Medal (1993, Royal Society), and the Honorary Medal (1995, Institute of Physical Chemistry, Polish academy of Sciences). He was made a Knight Bachelor by Queen Elizabeth in 2000.

Sir John Shipley Rowlinson received the 2008 Edelstein Award for “the breadth and quality of his research publications in the history of physical chemistry and his contributions over the last three decades to the development of the history of chemistry at the University of Oxford.”

John Rowlinson died on August 15, 2018.

### **Sources**

Biographical information provided by Sir John S. Rowlinson.

Nomination documents for the 2008 Edelstein Award, American Chemical Society Division of the History of Chemistry Archives, Chemical Heritage Foundation, Philadelphia, Pennsylvania.

Photo courtesy of Sir John S. Rowlinson.