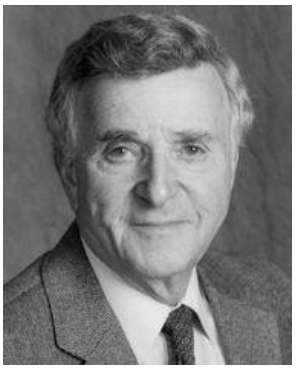
Michael F. Lappert FRS

1928-2014



Professor Michael Franz Lappert has died at the age of 85. He was active until the end of his life, regularly attending colloquia. He was a member of a walking group and regularly played tennis. During a game on campus on 27 March 2014 he fell and hit his head. He was taken to hospital but died on the 28th. Mike married Lorna in 1980, and she survives him; they had no children.

Mike and his brother arrived in London in 1939 on the last *Kindertransport* to leave Prague; all his family, except for one cousin and an aunt were murdered at Auschwitz. The brothers were raised in London by their aunt who was also a refugee from the Nazis.

He obtained a first degree and a PhD in 1951 in Chemistry at what was Northern Polytechnic. He was appointed to the staff at the Polytechnic and became a senior lecturer in 1957; his main researches were in the field of organoboron chemistry in which he was a pioneer.

His next appointment was at the Manchester College of Science and Technology (later (UMIST). It was here that he developed a passion for walking and sport. He had a love for the Lake District and eventually bought the cottage in which John Dalton was born and spent the early part of his life. He also cultivated his interests in theatre and in opera. After three years he joined the School of Chemistry and Molecular Sciences at the University of Sussex as Reader in 1964 and was

promoted to Professor in 1969. He made major contributions to the revival of UK inorganic chemistry after 1950 and Sussex became a world-class research centre for organometallic chemistry. His pioneering research covered almost every element in the periodic table and many organometallic compounds (involving a metal joined to an organic fragment), which are of enormous importance in catalysis, and the synthesis of drugs, plastics and new materials. He was noted for his use of NMR in the less common nuclei. The fame of his research group was such that it attracted students from all over the world.

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Mike was elected a Fellow of the Royal Society (FRS) in 1979 and was President of the Dalton Division of the Royal Society of Chemistry from 1989-91. He received the prestigious Kipping Award of the American Chemical Society in 1976 and numerous other international honours and named lectureships. The University of Munich made him an honorary doctorate in 1989, and in 2008 he received the Alfred Stock Memorial Prize of the German Chemical Society. His most recent award in 2013 was an honorary degree from the University of Murcia.

Professor Lappert published over 800 papers on a huge range of subjects and his pioneering research covered almost every element in the periodic table and many organometallic compounds. He was the first to show how to increase the stability of often transient species, by imaginative choice of the organic fragment, thereby facilitating deeper understanding of the underlying chemistry. His research was in the area of coordination and organometallic chemistry, including studies on low coordination number and metal-amido complexes. He is also known for his work on novel lipophilic organometallic compounds of many of the elements, involving synthesis, structure determination and reactivity.

His earlier work was on boron chemistry including the discovery of $[BC_{14}]$-, BN-cyclobutadiene analogues, BC_{13} as a reagent , restricted rotation about B-N bonds and also BN polymers.

He used NMR spectroscopy extensively for the characterisation of organometallic compounds, especially the use of the more unusual nuclei (see for example Avent, A.G., Edelman, M.A., Lappert, M.F., Lawless, G.A. The first high resolution direct NMR observation of an f-block element. *J. Am. Chem. Soc.,* 111, 3423-3425 (1989), and Hitchcock, P.B., Lappert, M.F., Lawless, G.A., Royo, B. Synthesis and structure of crystalline $[K\{Sn(CH_2Bu^t)_3\}(\eta\text{-}C_6H_5Me)_3]$; and the first NMR spectral observation of $^{119}Sn–^{39}K$ coupling. *Chem. Comm*., 554-555 (1993)).

People who knew him described him as a polymath and he had a wide knowledge of art, literature, theatre, opera, politics and sport. He was kind and generous with his time and advice, especially with younger colleagues and his students, many of whom went on to distinguished careers in universities or industry.

Compiled from various sources including the University of Sussex, and The Royal Society web sites, plus helpful information form Jeff Leigh.