

## Editorial

## Lever65 — A celebration of contributions and service to inorganic chemistry

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I am delighted to have this opportunity to preface this special issue of CCR in honor of Professor A.B.P. (Barry) Lever on the occasion of his 65th birthday. I feel that I have known Barry since I was a graduate student<sup>1</sup> based on his treatise ‘Inorganic Electronic Spectroscopy’ (1st edition 1968, 2nd edition 1984, Russian 2nd edition 1987) which played a key role in my evolution into the field of Physical-Inorganic Chemistry. Indeed, most inorganic chemists consider this to be the ‘Bible’ of inorganic electronic spectroscopy, responsible for teaching the field to many generations of young inorganic chemists throughout the world. It is owned by essentially every physical-inorganic research group and is a much-cited reference in the primary literature as well as a pedagogical resource. In recent years, I have been privileged to join with Barry in editing and contributing to the two-volume series on ‘Inorganic Electronic Structure and Spectroscopy’, which hopefully will also have a significant impact on present and future generations of physical-inorganic chemists.

Barry Lever has performed seminal research in Physical-Inorganic Chemistry and Inorganic Electronic Spectroscopy. He has made many major contributions to our understanding of the excited states of inorganic molecules, to the ligand field theory, which describes the electronic structure of transition metal complexes, and to the correlation of excited state properties with ground state redox chemistry. He has also been a pioneer and leader in the study of the magnetism, spectroscopy, synthesis and electrochemical properties of the phthalocyanines and their interactions with O<sub>2</sub> leading to new sensors and fuel cells. Over the last decade, Barry has also made major contributions to our understanding of the redox potentials of transition metal complexes in general through the development of his insightful Ligand Electrochemical Parameter Theory which predicts potentials based on the

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<sup>1</sup> We actually met when Barry was on sabbatical at Caltech in 1976, where I had been a postdoc.

nature of the ligands, the  $E_L(L)$  or ‘Lever’ parameters. Importantly, this method provides fundamental insight into how specific metal–ligand bonding interactions influence the electron density on the metal ion just as the Dq spectrochemical series does in electronic spectroscopy.

Barry is the founding (1966) and continuing Editor of CCR, the major international scientific review journal in Inorganic Chemistry. He has edited and co-edited 13 monographs and published 256 papers. His service to the field of Inorganic Chemistry in Canada, North America and internationally, is exemplary. He has played a major role in the organization of numerous conferences (including the Inorganic Discussion Weekends in Canada, the Biennial Inorganic Chemistry Symposium of North America, and the 1972 International Conference on Coordination Chemistry) and has been a leader in the Inorganic Division of the Canadian Institute of Chemistry, on the International Advisory Committee of the ICCC and the Canadian National Executive of IUPAC.

Barry Lever was born in the United Kingdom, educated at the Imperial College of Science and Technology in London (as an Organic Chemist! under John Elvidge) and was a postdoctoral fellow at the University College of London (with Sir Ron Nyholm and Lord Jack Lewis). He received the ALCAN award from the CIC in 1981, was a Japanese Society for the Promotion of Science Fellow in 1983, received the Herzberg Award for Spectroscopy in 1996, had a dedicated issue of Applied Organometallic Chemistry for his contributions to phthalocyanine chemistry, became a Distinguished Research Professor at York University in 1997, received a Killam Research Fellowship from the Canadian Council of the Arts in 2000, just received the Linstead Award in phthalocyanine chemistry and now has this issue of CCR dedicated to his research and service to the field of Inorganic Chemistry. These are invited papers from many major researchers in the field: previous students, collaborators, and the many friends Barry has made over his 40-plus years in Inorganic Chemistry.

Our best wishes to Elaine, Nicholas, Timothy and Barry on this special occasion and for the future.

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