

Counter-Ion Mediated Approaches To Controlling Axial Chirality

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<u>Abstract</u>

Counter-ions affect both the reactivity and selectivity of anionic reactions. In this lecture I will describe my group's work on counter-ion-directed cyclization and mechanism and demonstrate how lessons learned in this area can be applied in the development of new enantioselective methods, with a particular focus on controlling axial chirality. Extension of this chemistry to complexity-generating reactions will also be outlined.



<u>CV</u>

Martin Smith is Professor of Organic Chemistry at the University of Oxford, and the Old Members' Helen Martin Fellow at University College, Oxford. He is also co-director of the CDT in Synthesis for Biology & Medicine. He came up to the University of Oxford from Middlesbrough for his undergraduate studies, then worked with Professor George W. J. Fleet on the chemistry of carbohydrate amino acids, gaining his DPhil in 1999/2000. He then moved to Pembroke College, University of Cambridge as the Drapers Company Research Fellow, to work with Professor Steven V. Ley CBE FRS. In 2003 he began his tenure as a Royal Society University Research Fellow in the Department of Chemistry, University of Cambridge. The group moved to the University of Oxford in October 2008. The group has published significant work in the areas of enantioselective catalysis, supramolecular chemistry and total synthesis.

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