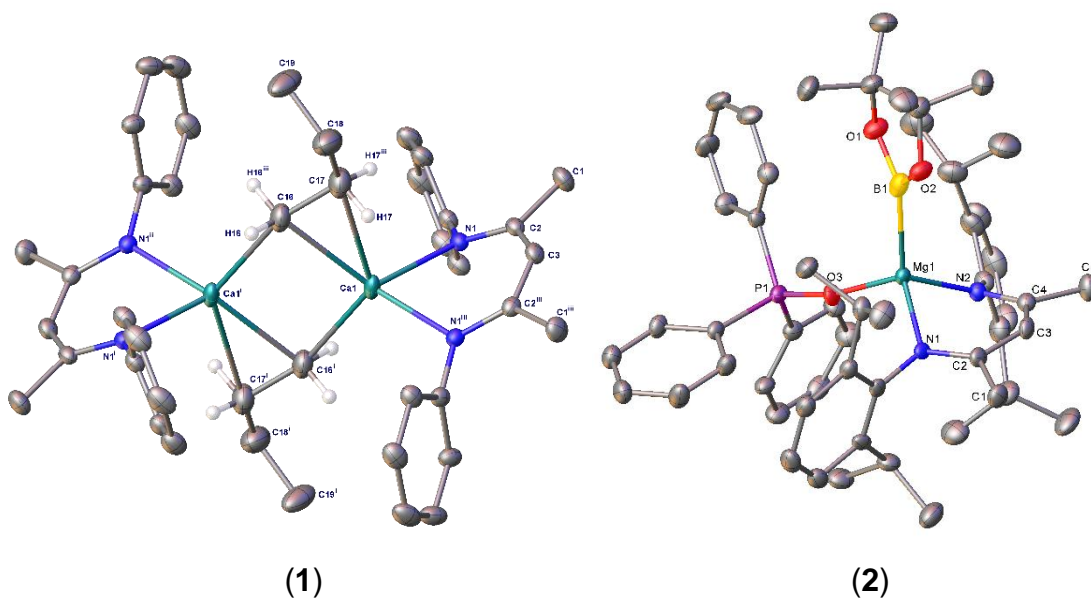


Synthesis and Reactivity of Alkaline Earth Tetrel and Triel Derivatives

Michael S. Hill

Department of Chemistry, University of Bath
Claverton Down, Bath, BA2 7AY, UK
msh27@Bath.ac.uk

The chemistry of the alkaline earth elements, particularly as catalytic reagents, has advanced significantly during the last 15 years.¹ Central to some of the most striking observations has been the development of new routes to highly nucleophilic calcium hydrides and alkyls (e.g. **1**).^{2,3} This presentation will summarise this chemistry and will describe our most recent efforts to extrapolate toward the development of analogous group 2-centred systems comprising anions based on silicon, tin, boron and aluminium (e.g **2**).



1 M. S. Hill, D. J. Liptrot, C. Weetman, *Chem. Soc. Rev.*, **2016**, 45, 972-988.

2 A. S. S. Wilson, M. S. Hill, M. F. Mahon, C. Dinoi, L. Maron, *Science*, **2017**, 358, 1168-1171.

3 A. S. S. Wilson, C. Dinoi, M. S. Hill, M. F. Mahon L. Maron, *Angew. Chem. Int. Ed.*, **2018**, 57, 15500-15504.