

CBC SEMINAR ANNOUNCEMENT



Professor R. E. Mulvey
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Alkali Metal Mediation in Synergistic Synthesis and Homogeneous Catalysis

Alkali metals have played a seminal role in the development of synthetic chemistry for nearly a century most often in the form of lithium alkyl or lithium amide reagents. If these are classified as first generation metallating agents, we are currently in the midst of an emerging second generation where partnering the alkali metal with a second metal such as magnesium or zinc can create bimetallic cooperativities that lead to reactivities and selectivities outside the scope of the unimetallic systems. Showcasing some of our recent advances in this area, this presentation will demonstrate examples where the two metal partners work together to effect novel metallations of aromatic substrates. The extension of this bimetallic cooperativity theme from stoichiometric systems to the catalytic regime will also be included, focusing on examples in hydroelementation catalysis.

1. V. A. Pollard, S. A. Orr, R. McLellan, A. R. Kennedy, E. Hevia and R. E. Mulvey, *Chemical Communications*, **2018**, 54, 1233.
2. V. A. Pollard, M. Ángeles Fuentes, A. R. Kennedy, R. McLellan and R. E. Mulvey, *Angewandte Chemie-International Edition*, **2018**, 57, 10651.
3. L. E. Lemmerz, R. McLellan, N. R. Judge, A. R. Kennedy, S. A. Orr, M. Uzelac, E. Hevia, S. D. Robertson, J. Okuda and R. E. Mulvey, *Chemistry-a European Journal*, **2018**, 24, 9940.
4. R. McLellan, M. Uzelac, A. R. Kennedy, E. Hevia and R. E. Mulvey, *Angewandte Chemie-International Edition*, **2017**, 56, 9566.
5. R. McLellan, A. R. Kennedy, S. A. Orr, S. D. Robertson and R. E. Mulvey, *Angewandte Chemie-International Edition*, **2017**, 56, 1036.

Date:	18th January 2019 (Friday)
Time:	11.00 am to 12.30 pm
Venue:	SPMS Research & Graduate Studies Office Conference Room
Host:	Assistant Professor Felipe Garcia