Explorations in the unchartered world of 1,4,2-oxathiazole chemistry

1,4,2-oxathiazoles are a class of heterocyclic molecules which have untapped utility in the world of organic chemistry. These thermally sensitive molecules have been treated with little more than cursory academic interest over the years since their discovery. However, recent advances in 1,4,2-oxathiazole chemistry have shown promise for these heterocycles to be exploited for a range of applications, including the polymer-supported synthesis of isothiocyanates and as programmable click linkers. This talk will give an overview of recent studies which unravel the chemistry of this interesting class of compounds and discuss their potential application in organic synthesis and beyond.

Biography

Brendan A Burkett completed his PhD studies in Chemistry from the Research School of Chemistry, the Australian National University, in 2001. Following this, he held a Postdoctoral Fellowship at the University of Southampton’s Combinatorial Centre of Excellence (2001), and then a Postgraduate Research Assistantship at the Hong Kong Polytechnic University (2002) prior to joining Victoria University of Wellington in New Zealand as a Lecturer in Organic Chemistry in 2004. In 2008, he joined the Institute of Chemical and Engineering Sciences in Singapore, a research institute under the Agency for Science, Technology and Research (A*STAR). He is currently a Team Leader in the Division of Organic Chemistry, where his research interests lie in the field of chemically controlled release of active molecules. In addition, he manages the care chemicals, products and processes research program, which oversees strategic direction for supporting growth in the Care Chemicals space in Singapore.

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