

## SynthCon3

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In April 2015, the third instalment of the biennial SynthCon meeting, SynthCon3,<sup>[1]</sup> was held at Fergusson's Winery in the Yarra Valley. The original meeting was set up in 2011 to showcase the latest developments in synthetic organic chemistry research conducted in university and industrial locations throughout Australia. This year the network was successfully extended to early career researchers from New Zealand (Dr Bill Hawkins, University of Otago; Dr Jonathan Sperry, University of Auckland; and Dr Thomas Fallon, Massey University). The central motivation was a desire to address the challenges faced by individuals performing research within institutions isolated from others working in closely related fields. It was therefore the goal of this meeting to facilitate the exchange of ideas, thus fostering cutting-edge organic chemistry research in Australasia. The meeting has grown in size since its inception – this year there were 53 delegates (48 speakers) from 21 institutions: the three New Zealand universities mentioned above, the Australian National University, Bionomics, CSIRO, Curtin University, Deakin University, Flinders University, Monash University, Queensland University of Technology, University of Adelaide, University of Melbourne, University of New England, University of New South Wales, University of Queensland, University of Sydney, University of Tasmania, University of Western Australia, University of Western Sydney, and University of Wollongong (Fig. 1). In keeping with the objectives of the meeting, most speakers presented unpublished results.

This Research Front presents a taste of the chemistry from SynthCon3, with research papers examining the iridium-catalysed borylation of indoles,<sup>[2]</sup> carborane-containing inhibitors of IDO1,<sup>[3]</sup> the synthesis of harmonine by a Z-selective cross-metathesis route,<sup>[4]</sup> a review of allyl sulfides as reactive

substrates for olefin metathesis,<sup>[5]</sup> exploration of the catalytic reactivity of nickel phosphine–phosphite complexes,<sup>[6]</sup> studies towards the synthesis of microspinosamide<sup>[7]</sup> and the roseophilins,<sup>[8]</sup> the synthesis of anithiactin A<sup>[9]</sup> and atropisomeric dibenzo[1,3]diazepines,<sup>[10]</sup> observation of an unexpected isomerisation process during fragment-based screening of HIV integrase,<sup>[11]</sup> the study of steric and electronic effects in the synthesis and hydrolysis of imides,<sup>[12]</sup> studies of photoswitchable carbohydrate fluorosurfactants,<sup>[13]</sup> the rapid microwave-assisted synthesis of *N*-aryl tetrahydroisoquinolines,<sup>[14]</sup> and the development of thiol-reactive drug analogues to probe receptor binding.<sup>[15]</sup> Finally, two highlight articles describe recent applications of rhodium(II) azavinyl carbenes<sup>[16]</sup> and Brønsted acid-mediated radical processes<sup>[17]</sup> in organic synthesis. We hope that you enjoy the breadth and quality of organic chemistry research presented in the Research Front.

We would also like to thank those who have financially supported this meeting: Davies Collison Cave, CSIRO, *Australian Journal of Chemistry*, and the RACI Victorian Branch Organic Group, which have generously sponsored all three SynthCon meetings, and Pharmaxis, John Morris Scientific, and Agilent, which also sponsored SynthCon3. Thanks also go to Associate Professor David Lupton and Dr Brendan Wilkinson, who provided invaluable support for the organisation of this meeting, our trusty bus driver Simon Lee, Mountain Goat Brewery for sponsoring a structured beer tasting on the first night, and Ph.D. students (Quillon Simpson and Adam Ametovski) from the Lupton group for helping to set up the venue and for acting as bar staff.

SynthCon4 will be held in 2017 and the Yarra Valley will again be the venue. Associate Professor Craig Hutton will be the



Richard J. Payne graduated from the University of Canterbury, New Zealand, in 2002. In 2003, he was awarded a Gates Scholarship to undertake his Ph.D. at the Department of Chemistry, University of Cambridge, under the supervision of Professor Chris Abell. After completing his Ph.D., Richard moved to The Scripps Research Institute under the auspices of a Lindemann Postdoctoral Fellowship where he worked in the laboratory of Professor Chi-Huey Wong. In 2008, he moved to the University of Sydney as a lecturer in organic chemistry and chemical biology within the School of Chemistry, where he is currently Professor of Organic Chemistry and Chemical Biology. Richard's research focusses on utilising the tools of synthetic organic chemistry to address problems of biochemical and medicinal significance.



Craig A. Hutton obtained his B.Sc. (Hons) and Ph.D. degrees from the University of Adelaide before appointments at the University of California, Berkeley, the University of Melbourne, and the University of Sydney. He returned to Melbourne University in 2003 where he is now Associate Professor and Reader. His research interests lie in novel synthetic methods for the preparation of complex, post-translationally modified peptides, focussing on tyrosine cross-linked peptides and new amide ligation strategies.



Fig. 1. Participants at SynthCon3 (photos by Associate Professor Mike Perkins).

next chair and will be in contact closer to the date. We anticipate that SynthCon will continue to attract support from those who have attended previously, but will also provide a mechanism for early career researchers in the community to present their research or ideas and concepts. Ultimately, we hope that the meeting will continue to stimulate new research frontiers and underpin a desire for excellence within the synthetic organic chemistry community in Australia.

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