

AUSTRALIAN JOURNAL OF
CHEMISTRY
AN INTERNATIONAL JOURNAL FOR CHEMICAL SCIENCE

Volume 63 Number 5 2010

CONTENTS

RESEARCH FRONT: Heterocyclic Chemistry at the Southern Highlands Conference

Guest Editors: Roger Read and David StC. Black

Foreword

Highlights of the 2009 New South Wales Southern Highlands Conference on Heterocyclic Chemistry
R. W. Read 725

Review

N,S-Heterocyclic Carbene Complexes
S. W. Chien, S. K. Yen, T. S. A. Hor 727

Full Papers

Total Synthesis of the Galbulimima Alkaloid (\pm)-GB 13

M. M. W. McLachlan, P. D. O'Connor, K. A. Fairweather, A. C. Willis, L. N. Mander 742

Acid-Catalyzed Reactions of 3-Substituted-4,6-dimethoxyindoles with Ketones
K. Wood, D. StC. Black, N. Kumar 761

Structure and Activity of the Leaf-Specific Cyclotide vhl-2

N. L. Daly, B. Chen, P. Nguyencong, D. J. Craik 771

Doubly Pyridazine-bridged Dicobalt(II) and Dinickel(II) Side-by-side Complexes of Variously Substituted Conjugated Bis-bidentate Ligands

J. R. Price, Y. Lan, B. Moubaraki, K. S. Murray, S. Brooker 779

N,N-Dialkyl-*N'*-Chlorosulfonyl Chloroformamidines in Heterocyclic Synthesis. Part IX. Novel Triazolo-Fused Thiatriazoles and Pyrazolo-Fused Oxathiazines

C. M. Forsyth, C. L. Francis, S. Jahangiri, A. J. Liepa, M. V. Perkins, A. P. Young 785

A New Class of Hydroxy-Substituted Squaraine Rotaxane

N. Fu, J. J. Gassensmith, B. D. Smith 792

Synthesis of Cyclogossine B Using a Traceless Pseudoproline Turn-Inducer

M. S. Y. Wong, K. A. Jolliffe 797

Efficient Alkylation Methods for the Synthesis of Hybrid Fluorocarbon–Hydrocarbon Tetrazoles as Potential Fluorinated Surfactants

Y. Huang, R. W. Read, X. Wang 802

Synthesis and Biological Evaluation of a New Family of Constrained Azabicyclic Homocholine Analogues

J. I. Halliday, M. Chebib, M. D. McLeod 808

Synthesis and Phytotoxicity of Structural Analogues of Thaxtomin Natural Products

P. P. Molesworth, M. G. Gardiner, R. C. Jones, J. A. Smith, R. S. Tegg, C. Wilson 813

REGULAR PAPERS

Full Papers

Synthesis of *N*-Propargyl Iminosugar Scaffolds for Compound Library Generation using Click Chemistry

B. L. Wilkinson, L. F. Bornaghi, M. Lopez, P. C. Healy, S.-A. Poulsen, T. A. Houston 821

Carbon-Supported Nickel Nanoparticles from a Wood Sample of the Tree *Sebertia acuminata* Pierre ex. Baillon

M. Lerch, T. Ressler, F. Krumeich, J.-P. Cosson, E. Hnawia, A. Grohmann 830

Tuning Second-Order Non-linear (NLO) Optical Response of Organoimido-Substituted Hexamolybdates through Halogens: Quantum Design of Novel Organic-Inorganic Hybrid NLO Materials

M. R. S. A. Janjua, Z.-M. Su, W. Guan, C.-G. Liu, L.-K. Yan, P. Song, G. Maheen 836

Communication

Speciation of Chlorometallate Ionic Liquids Based on Gallium(III) and Indium(III)

C. Hardacre, R. W. Murphy, K. R. Seddon, G. Srinivasan, M. Swadźba-Kwaśny 845

Focus

The Road to Greener Applied Organic Synthesis: Performing Organic Reactions in Micelle-Based and Host-Guest Aqueous Nanoreactors

G. Stayber 849

Microencapsulated Palladium Catalysts: Pd EnCatTM

J. C. Barros 850