
AUSTRALIAN JOURNAL OF
CHEMISTRY
AN INTERNATIONAL JOURNAL FOR CHEMICAL SCIENCE

Volume 64 Number 4 2011

CONTENTS

Special issue: A dedication to Professor Athelstan L. J. Beckwith

Guest editor: Peter J. Duggan

Foreword

Foreword to Professor Athelstan L. J. Beckwith Special Issue

P. J. Duggan 355

Reviews

Athelstan L. J. Beckwith and the Flowering of Hex-5-enyl Radical Cyclization Chemistry.

The Adelaide Years

A. K. Serelis 358

Cyclohexane-1,3-dione Oxime Ether Grass-Specific Herbicides and the Discovery of Butoxydim

K. G. Watson 367

Profluorescent Nitroxides as Sensitive Probes of Oxidative Change and Free Radical Reactions

J. P. Blinco, K. E. Fairfull-Smith, B. J. Morrow, S. E. Bottle 373

Full Papers

Destabilization of Conjugated Systems of α -Dicarbonyls and of Cyanogen

A. A. Zavitsas, D. W. Rogers, N. Matsunaga 390

O–H Bond Dissociation Energies

B. Chan, M. Morris, L. Radom 394

The Distal Effect of *N*-Electron-withdrawing Groups on the Stability of Peptide Carbon Radicals

J. Ho, M. L. Coote, C. J. Easton 403

Synthetic and Computational Studies of Acyl Radical Cyclizations with β -Alkoxyacrylates:

Formal Synthesis of (\pm)-Longianone

H. M. Aitken, C. H. Schiesser, C. D. Donner 409

Fluoroazaindolines by an Uncommon Radical *ipso*-Substitution of a C-F Bond

Y. Laot, L. Petit, N. D. M. Tran, S. Z. Zard 416

A Profluorescent Azaphenylene Nitroxide for Nitroxide-Mediated Polymerization

J. M. Colwell, J. P. Blinco, C. Hulbert, K. E. Fairfull-Smith, S. E. Bottle 426

A Potential New RAFT–Click Reaction or a Cautionary Note on the Use of Diazomethane to Methylate RAFT-synthesized Polymers

M. Chen, G. Moad, E. Rizzardo 433

An Oxidized Abasic Lesion as an Intramolecular Source of DNA Adducts

L. Guan, M. M. Greenberg 438

Reaction of *N*-Acyloxy-*N*-alkoxyamides with Biological Thiol Groups

S. A. Glover, M. Adams 443

Synthesis of 2,3-Dihydro-4(1*H*)-quinolones and the Corresponding 4(1*H*)-Quinolones via Low-Temperature Fries Rearrangement of *N*-Arylazetid-2-ones

J. Lange, A. C. Bissember, M. G. Banwell, I. A. Cade 454

Studies Directed Towards the Preparation of Probes for the Photoaffinity Labelling of Gibberellin Receptors

J. R. Crow, P. M. Chandler, L. N. Mander 471

Phytochemical Study of *Fagraea* spp. Uncovers a New Terpene Alkaloid with Anti-Inflammatory Properties

Suciati, L. K. Lambert, B. P. Ross, M. A. Deseo, M. J. Garson 489

Wood Protection Properties of Quaternary Ammonium Spiroborate Esters Derived from Alkyl Tartrates

J. M. Carr, P. J. Duggan, D. G. Humphrey, J. A. Platts, E. M. Tyndall 495