Organic & Biomolecular Chemistry

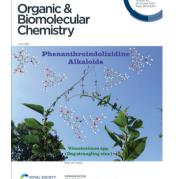
An international journal of synthetic, physical and biomolecular organic chemistry

rsc.li/obc

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1477-0520 CODEN OBCRAK 21(40) 8033-8204 (2023)



See James McNulty et al., pp. 8075-8078.

The background photograph was taken by Christine Kempthorne.

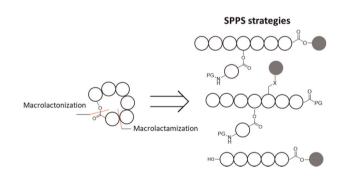
Image reproduced by permission of James McNulty from Org. Biomol. Chem., 2023, 21, 8075.

REVIEWS

8043

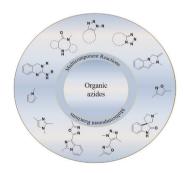
Macrocyclization strategies for the total synthesis of cyclic depsipeptides

André R. Paquette and Christopher N. Boddy*



Multicomponent cyclization with azides to synthesize N-heterocycles

Hong Guo, Bei Zhou, Jingjing Chang, Wenxu Chang, Jiyao Feng* and Zhenhua Zhang*



Editorial Staff

Executive Editor

Katie Lim

Deputy Editor

Jack Washington

Development Editor

Daniel Robertshaw

Editorial Production Manager

Sarah Whitehouse

Publishing Editors

Nicola Burton, Tom Cozens, Katie Fernandez, Ryan Kean, Roxane Owen

Editorial Assistant

Amy Cook

Publishing Assistant

Andrea Whiteside

Publisher

Sam Keltie

For queries about submitted papers, please contact Sarah Whitehouse, Editorial Production Manager in the first instance. E-mail: obc@rsc.org

For pre-submission queries please contact Katie Lim, Executive Editor. Email: obc-rsc@rsc.org

Organic & Biomolecular Chemistry (electronic: ISSN 1477-0539) is published 48 times a year by the Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, UK CB4 OWF.

All orders, with cheques made payable to the Royal Society of Chemistry, should be sent to the Royal Society of Chemistry Order Department, Royal Society of Chemistry, Thomas Graham House, Science Park, Milton Road, Cambridge, CB4 0WF, UK

Tel +44 (0)1223 432398; E-mail orders@rsc.org

2023 Annual (electronic) subscription price: £5164; US\$9267. Customers in Canada will be subject to a surcharge to cover GST. Customers in the EU subscribing to the electronic version only will be charged VAT.

If you take an institutional subscription to any RSC journal you are entitled to free, site-wide web access to that journal. You can arrange access via Internet Protocol (IP) address at www.rsc.org/ip

Customers should make payments by cheque in sterling payable on a UK clearing bank or in US dollars payable on a US clearing bank.

Whilst this material has been produced with all due care, the Royal Society of Chemistry cannot be held responsible or liable for its accuracy and completeness, nor for any consequences arising from any errors or the use of the information contained in this publication. The publication of advertisements does not constitute any endorsement by the Royal Society of Chemistry or Authors of any products advertised. The views and opinions advanced by contributors do not necessarily reflect those of the Royal Society of Chemistry which shall not be liable for any resulting loss or damage arising as a result of reliance upon this material. The Royal Society of Chemistry is a charity, registered in England and Wales, Number 207890, and a company incorporated in England by Royal Charter (Registered No. RC000524), registered office: Burlington House, Piccadilly, London W1J 0BA, UK, Telephone: +44 (0) 207 4378 6556.

Advertisement sales:

Tel +44 (0) 1223 432246; Fax +44 (0) 1223 426017; E-mail advertising@rsc.org

For marketing opportunities relating to this journal, contact marketing@rsc.org

Organic & Biomolecular Chemistry

Rapid publication of high quality organic chemistry research rsc.li/obc

Organic & Biomolecular Chemistry is a weekly journal for the publication of highly significant original research and reviews in all areas of organic chemistry, including organic synthesis, physical organic chemistry, and organic aspects of supramolecular chemistry and chemical biology

Editorial Board

Chair

Anthony Davis, University of Bristol, UK

Associate Editors

Associate Eulio's
Christian Hackenberger, Leibniz-Institut für
Molekulare Pharmakologie and Humboldt
Universität zu Berlin, Germany
Katrina Iolliffe University of Sydney Australi

Katrina Jolliffe, University of Sydney, Australia Motomu Kanai, University of Tokyo, Japan Lei Liu, Tsinghua University, China Xiaohua Liu, Sichuan University, China Santanu Mukherjee, Indian Institute of Science, Bangalore, India Scott Silverman, University of Illinois at Urbana-Champaign, USA

Cristina Trujillo, University of Manchester, UK

Members

Ivan Huc, Ludwig-Maximilian University of Munich, Germany S.SV Ramasastry, Indian Institute of Science Education and Research Mohali, India Corinna Schindler, University of Michigan,

Judy I-Chia Wu, University of Houston, USA

Advisory Board

Igor Alabugin, Florida State University, USA Gonçalo Bernardes, University of Cambridge,

Shunsuke Chiba, Nanyang Technological University, Singapore Andre Cobb, Kings College London, UK

Andre Cobb, Kings College London, UK Steven Cobb, Durham University, UK Ratmir Derda, University of Alberta, Canada Antonio Echavarren, Institute of Chemical Research of Catalonia, Spain Ben Feringa, University of Groningen, The

Amar Flood, Indiana University Bloomington, USA

Carmen Galan, University of Bristol, UK

Jason Harper, University of New South Wales, Australia

Elizabeth Krenske, University of Queensland, Australia

Mahesh Lakshman, The City College of New York, USA Shih-Yuan Liu, Boston College, USA

Geraldine Masson, Institut de Chimie des Substances Naturelles (CNRS), France Elizabeth New, University of Sydney, Australia Dhevalapally B. Ramachary, University of Hyderabad, India

Paolo Scrimin, University of Padova, Italy Oliver Seitz, Humboldt University of Berlin, Germany Jay Siegel, University of Zürich, Switzerland Corey Stephenson, University of Michigan,

Dean Tantillo, University of California Davis, USA

Mark Taylor, University of Toronto, Canada Georgios Vassilikogiannakis, University of Crete, Greece

Helma Wennemers, ETH Zürich, Switzerland Peter Wipf, University of Pittsburgh, USA Shuli You, Shanghai Institute of Organic Chemistry, China

Jian Zhou, East China Normal University, China

Information for Authors

Full details on how to submit material for publication in Organic & Biomolecular Chemistry are given in the Instructions for Authors (available from http://www.rsc.org/authors).

Submissions should be made via the journal's homepage: rsc.li/obc

Authors may reproduce/republish portions of their published contribution without seeking permission from the Royal Society of Chemistry, provided that any such republication is accompanied by an acknowledgement in the form: (Original Citation)–Reproduced by permission of the Royal Society of Chemistry.

This journal is © The Royal Society of Chemistry 2023.

Apart from fair dealing for the purposes of research or private study for non-commercial purposes, or criticism or review, as permitted under the Copyright, Designs and Patents Act 1988 and the Copyright and Related Rights Regulation 2003, this publication may only be reproduced, stored or transmitted, in any form or by any means, with the prior permission in writing of the Publishers or in the case of reprographic reproduction in accordance with the terms of licences issued by the Copyright Licensing Agency in the UK. US copyright law is applicable to users in the USA.

Registered charity number: 207890



COMMUNICATIONS

8075

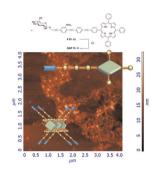
Rapid entry to phenanthroindolizidine alkaloids via an acid-catalysed acyliminium ionelectrocyclization cascade

Max St. Pierre, Christine J. Kempthorne, David K. Liscombe and James McNulty*

8079

Rod-like nanostructures through amphiphilic **OPE-porphyrin self-organization**

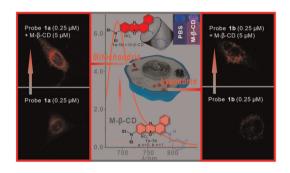
Chiara M. A. Gangemi, Maria A. Castriciano, Ester D'Agostino, Andrea Romeo, Paola M. Bonaccorsi, Anna Barattucci* and Luigi Monsù Scolaro*



8084

Improved emission performance of benzo[a]phenoxazine in aqueous solution through host-guest interaction

Shu-Yi Li, Wen-Li Wang, Chang Wang, Ru Sun* and Jian-Feng Ge*



8089

Electrochemical Fe-catalysed radical cyclization for the synthesis of oxindoles

Tianxiang Ren, Ruina Qu and Lu Song*

COMMUNICATIONS

(O), cleavage organocatalytic converge and rebuild converge High atomic utilization of substrate One-pot Simple operation 26 examples

High atomic utilization conversion of ethers into furancarbaldehydes *via* an ether oxidation iminium-ion activation cascade strategy

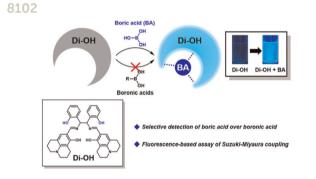
Zheyao Li, Chunmei Ma, Lin Zhao, Zhongren Lin, Yang Hu, Jianhong Zhao* and Xinhong Yu*

8098 R1 R2 5 mol% B(C₆F₅)₃ CDCl₃, 0 °C R1 R2 21 examples

Ether oxidation-iminium activation cascade strategy

$B(C_6F_5)_3\text{-catalyzed}$ hydrogermylation of enones: a facile route to germacycles

Jiangkun Xiong, Maying Yan, Lvnan Jin, Weihong Song, Lei Xiao, Dong Xu, Chunyang Zhai,* Douglas W. Stephan* and Jing Guo*



A fluorescent probe for selective detection of boric acids and its application for screening the conversion of the Suzuki-Miyaura coupling reaction

Min Sik Eom, Byoung Yong Park, Seungyoon Kang and Min Su Han*

8107

Palladium-catalyzed [4 + 2] cycloaddition of 2-methylidenetrimethylene carbonate or methylene cyclic carbamate with sulfamate-derived cyclic imines

Li Sun, Jiyu Li, Yafei Wu, Ying Li, Junqi Chen, Xiaoye Xia, Chunhao Yuan, Hongchao Guo* and Biming Mao*

PAPERS

8112

Toward tryptathionine-stapled one-bead-onecompound (OBOC) libraries: solid phase synthesis of a bioactive octretoate analog

Antoine Blanc, Mihailo Todorovic, Iulia Dude, Helen Merkens, François Bénard and David M. Perrin*



8117

Dithioallyl cation (3 + 2) cycloadditions under aprotic reaction conditions: rapid access to spiro-fused cyclopentane scaffolds

Frederick Degroote, Bram Denoo, Bram Ryckaert, Brenda Callebaut, Kristof Van Hecke, Jan Hullaert and Johan M. Winne*

mild conditions \Diamond regioselective \Diamond stereoselective \Diamond multiple examples

8125

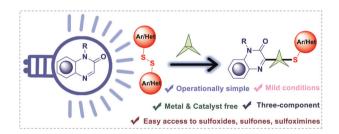
A safety-catch protecting group strategy compatible with Boc-chemistry for the synthesis of peptide nucleic acids (PNAs)

K. P. Nandhini, Sikabwe Noki, Edikarlos Brasil, Fernando Albericio* and Beatriz G. de la Torre*

8136

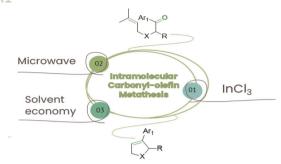
Metal and catalyst-free strategy to access 1,3-thio-heteroaryl BCP derivatives

Surbhi Gupta, Vinjamuri Srinivasu and Devarajulu Sureshkumar*



PAPERS

8141



InCl₃-catalyzed intramolecular carbonyl-olefin metathesis

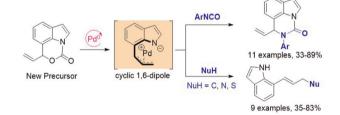
Marianela G. Pizzio, Zoe B. Cenizo, Luciana Méndez, Ariel M. Sarotti and Ernesto G. Mata*

R1 Properties of the state of t

Visible-light-promoted organic-dye-catalyzed sulfonylation/cyclization to access indolo[2,1-a]isoquinoline derivatives

Yucai Tang,* Jinglin Duan, Biyu Yang, Yupeng He, Changyuan Du and Xiangyang Zhang

8162



Studies on the [4 + 2] cycloaddition and allylic substitution of indole-fused zwitterionic π -allylpalladium

Zhengyu Han, Yu Xue, Xiang Li, Xinzhe Hu, Xiu-Qin Dong, Jianwei Sun and Hai Huang*

Visible-light-induced halocyclization of 2-alkynylthioanisoles with simple alkyl halides towards 3-halobenzo[b]thiophenes without an external photocatalyst

Fen-Dou Wang, Chunmiao Wang, Min Wang,* Han Yan, Jin Jiang and Pinhua Li*

PAPERS

8176

Sequential annulation and isomerisation reaction of 3-acylmethylidene oxindoles with Huisgen zwitterions and synthesis of 5-(3-oxindolyl)oxazoles

Feixue Xue, Chang-Jiang Yang,* Tong Tang and Zhengjie He*

8182

Phosphite—imidazole catalyzed *N*-formylation and *N*-acylation of amines

Babak Kaboudin,* Hesam Esfandiari, Meysam Kakavand, Masoumeh Sohrabi, Elahe Yousefian Amirkhiz, Abdollah Neshat, Teru Kawazoe, Haruhiko Fukaya and Hikaru Yanai*

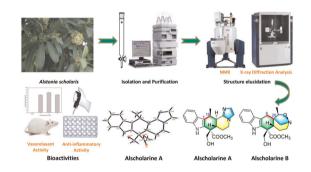
100 °C, 24 h

3 examples up to 93% yield

8190

Alscholarines A and B, two rearranged monoterpene indole alkaloids from *Alstonia* scholaris

Guanqun Zhan, Fuxin Zhang, Kailing Yang, Tao Yang, Ruixi Zhou, Wenwen Chen, Jingwei Zhang, Xinxin Zhang and Zengjun Guo*



8197

A facile approach to phenothiazinones *via* catalytic aerobic oxidation: discovery of an antiproliferative agent

Su-Hui Ji, Qian Wang and Yun-Rui Cai*

Metal-free condition | Sustainable and safe oxidant | Broad scope | Facile scalability

CORRECTION

8201

Correction: Turn-on fluorogenic sensors based on an anthraquinone signaling unit for the detection of Zn(II) and Cd(II) ions

Chawanakorn Kongsak, Natthiti Chiangraeng, Puracheth Rithchumpon, Piyarat Nimmanpipug, Puttinan Meepowpan, Thawatchai Tuntulani and Praput Thavornyutikarn*