COMMUNICATION
Bor-Cherng Hong et al.
Organocatalyzed Michael–Henry reactions: enantioselective synthesis of cyclopentanecarbaldehydes via the dienamine organocatalysis of a succinaldehyde surrogate
FEATURE ARTICLE

7777

Dynamic asymmetric organocatalysis: cooperative effects of weak interactions and conformational flexibility in asymmetric organocatalysts

Yoshihiro Sohtome* and Kazuo Nagasawa*

This review describes recent advances in the design and applications of conformationally flexible guanidine/bisthiourea organocatalysts to facilitate unique processes, including retro-free enantiodivergent, entropy-controlled, and cycle-specific organocatalysis.

COMMUNICATIONS

7790

Organocatalyzed Michael–Henry reactions: enantioselective synthesis of cyclopentanecarbaldehydes via the dienamine organocatalysis of a succinaldehyde surrogate

Bor-Cherng Hong,* Po-Yuan Chen, Prakash Kotame, Pei-Ying Lu, Gene-Hsiang Lee and Ju-Hsiou Liao

Asymmetric formal [3 + 2] cycloadditions of 4-hydroxybut-2-enal, a succinaldehyde surrogate, and nitroalkenes with an organocatalyst provided cyclopentanecarbaldehydes containing four consecutive stereogenic centers with excellent enantioselectivities.
ChemComm
Chemical Communications
www.rsc.org/chemcomm

EDITORIAL STAFF
Editor
Robert Eagling
Deputy editor
Joanne Thomson
Senior publishing editor
Philippa Ross
Development editor
Ross McLaren
Publishing editors
Helen Bache, Will Dennis, Rowan Frame,
Celia Gitteman, Alan Holder, Marc Hutchby,
Eleanor Merrett, Tamsin Phillips, Matthew Reaveley
Publishing assistants
Rachel Blakeburn, Bethany Johnson, Kate McCallum
Publisher
Emma Wilson

For queries about submitted papers, please contact
Philippa Ross, Senior publishing editor in the first instance.
E-mail: chemcomm@rsc.org

For pre-submission queries please contact
Robert Eagling, Editor. Email chemcomm-rsc@rsc.org

Chemical Communications (print: ISSN 1359-7345;
electronic: ISSN 1364-5480) is published 100 times a year by
the Royal Society of Chemistry, Thomas Graham House,
Science Park, Milton Road, Cambridge, UK CB4 0WF:
All orders, with cheques made payable to the
Royal Society of Chemistry, should be sent to RSC
Distribution Services, c/o Portland Customer Services,
Commerce Way, Colchester, Essex, UK CO2 8HP.
Tel +44 (0)1206 226050; E-mail: sales@rscdistribution.org

2012 Annual (print+electronic) subscription price: £2953;
US$5551. 2012 Annual (electronic) subscription price:
£2805; US$5235. 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
the electronic version only will be charged VAT. If you take an
institutional subscription to any RSC journal you are entitled
the electronic version only will be charged VAT. If you take an
surcharge to cover GST. Customers in the EU subscribing to
the electronic version only will be charged VAT. If you take an


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 dollar payable on a
US clearing bank.

Periodicals postage paid at Jamaica NY 11431.
US Postmaster: Send address changes to
Chemical Communications, Air Business Ltd, c/o Worldnet
Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica,
NY 11434, USA.

Advertiement 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

INFORMATION FOR AUTHORS

Full details on how to submit material for publication in
Chemical Communications are given in the Instructions
for Authors (available from http://www.rsc.org/authors).
Submissions should be made via the journal’s homepage:
http://www.rsc.org/chemcomm

Authors may reproduce/republish portions of their
published contribution without seeking permission
from the RSC, 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 2012.
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.

The Royal Society of Chemistry takes reasonable care in
the preparation of this publication but does not accept liability
for the consequences of any errors or omissions.

The paper used in this publication meets the
requirements of ANSI/NISO Z39.48–1992
(Permanence of Paper).

Royal Society of Chemistry: Registered Charity No. 207890.