

Celebrating the 50th Anniversary of Tetrahedron 1957–2007

Guest editor: Stephen F. Martin

Chemistry and Biochemistry Department, The University of Texas, 1 University Station A5300, Austin, TX 78712-0165, USA

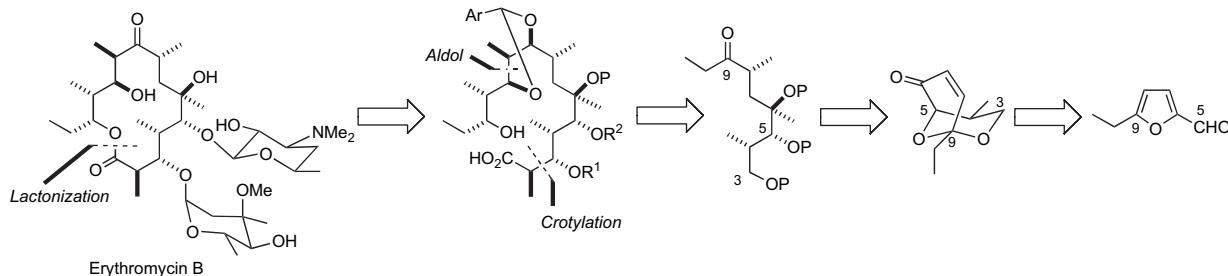
Contents

Announcement: Tetrahedron Symposia-in-Print	pp 5699–5701
Preface	p 5703
The Tetrahedron publications: a 50-year history	pp 5705–5708

ARTICLES

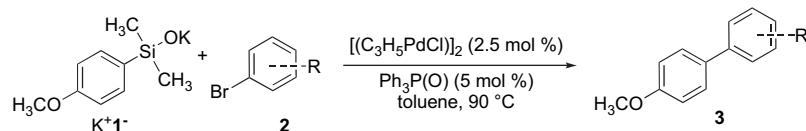
Total synthesis of erythromycin B pp 5709–5729

Philippe Breton, Paul J. Hergenrother, Tsuneaki Hida, Anne Hodgson, Andrew S. Judd, Erica Kraynack, Philip R. Kym, Wen-Cherng Lee, Michael S. Loft, Masayuki Yamashita and Stephen F. Martin*



Phosphine oxides as stabilizing ligands for the palladium-catalyzed cross-coupling of potassium arylidimethylsilanlates pp 5730–5738

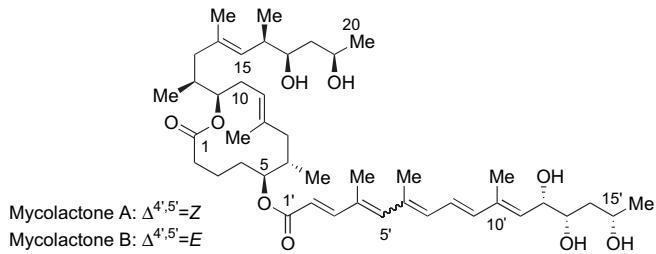
Scott E. Denmark,* Russell C. Smith and Steven A. Tymonko



Total synthesis of mycolactones A and B

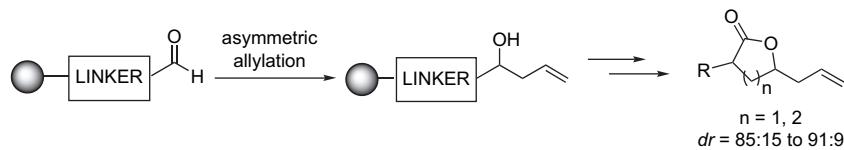
Fengbin Song, Steve Fidanze, Andrew B. Benowitz and Yoshito Kishi*

pp 5739–5753

**Stereoselective allylation of aldehydes on solid support and its application in biology-oriented synthesis (BIOS)**

Victor Mamane, Ana B. García, Jayant D. Umarye, Torben Lessmann, Stefan Sommer and Herbert Waldmann*

pp 5754–5767

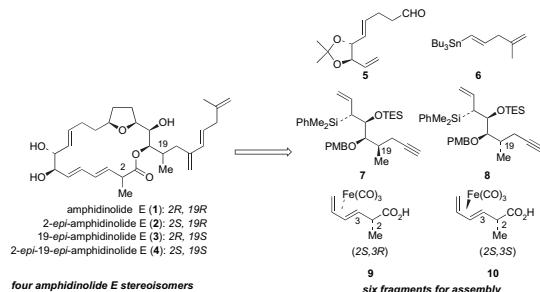


The first systematic study on the asymmetric allylboration of aldehydes on solid support is reported. Applications of this methodology are also described.

**Total synthesis of amphidinolide E and amphidinolide E stereoisomers**

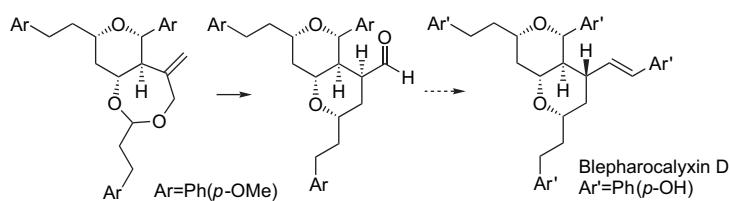
Porino Va and William R. Roush*

pp 5768–5796

**Stereoselective synthesis of (-)-blepharocalyxin D**

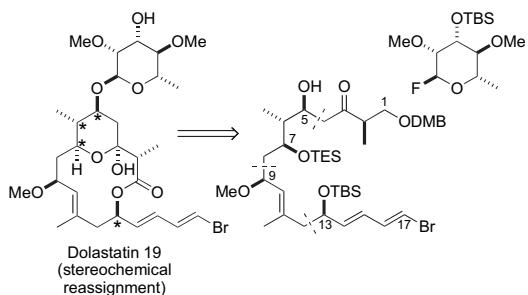
Haye Min Ko, Dong Gil Lee, Min Ah Kim, Hak Joong Kim, Jaejoon Park, Myoung Soo Lah and Eun Lee*

pp 5797–5805



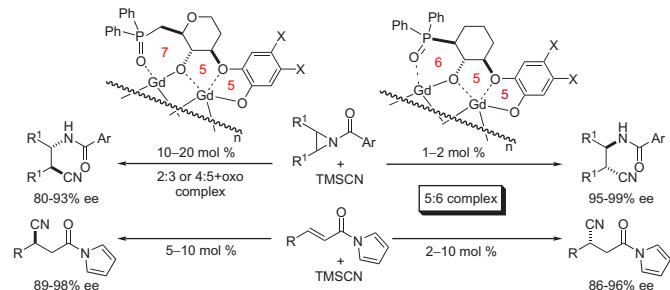
Total synthesis and stereochemical reassignment of (+)-dolastatin 19, a cytotoxic marine macrolide isolated from *Dolabella auricularia* pp 5806–5819

Ian Paterson,* Alison D. Findlay and Gordon J. Florence



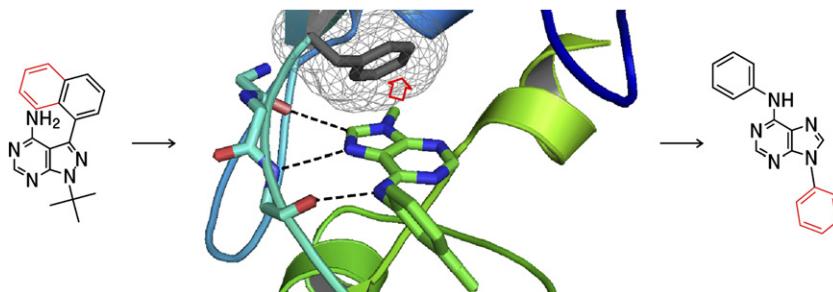
Toward a rational design of the assembly structure of polometallic asymmetric catalysts: design, synthesis, and evaluation of new chiral ligands for catalytic asymmetric cyanation reactions pp 5820–5831

Ikuro Fujimori, Tsuyoshi Mita, Keisuke Maki, Motoo Shiro, Akihiro Sato, Sanae Furusho, Motomu Kanai* and Masakatsu Shibasaki*



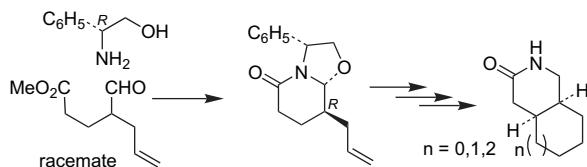
Enhanced selectivity for inhibition of analog-sensitive protein kinases through scaffold optimization pp 5832–5838

Chao Zhang and Kevan M. Shokat*



A general synthetic route to enantiopure cis-fused perhydrocycloalka[c]pyridines from phenylglycinol-derived lactams pp 5839–5848

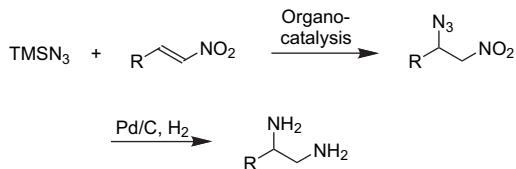
Mercedes Amat,* María Pérez, Annamaria T. Minaglia, Bruno Peretto and Joan Bosch*



Asymmetric conjugate addition of azide to α,β -unsaturated nitro compounds catalyzed by cinchona alkaloids

pp 5849–5854

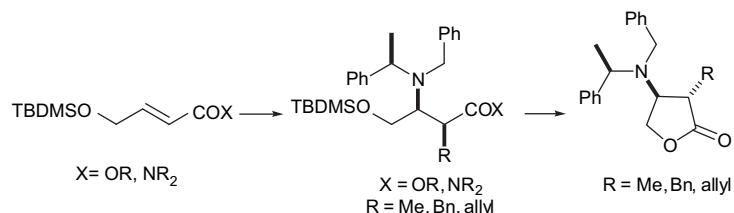
Martin Nielsen, Wei Zhuang and Karl Anker Jørgensen*



Asymmetric synthesis of 4-amino- γ -butyrolactones via lithium amide conjugate addition

pp 5855–5872

Elin Abraham, Jason W. B. Cooke, Stephen G. Davies,* Alan Naylor, Rebecca L. Nicholson, Paul. D. Price and Andrew D. Smith

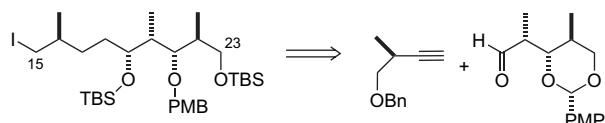


The conjugate addition of homochiral lithium *N*-benzyl-*N*-(α -methylbenzyl)amide to a range of γ -*tert*-butyldimethylsilyloxy but-2-enoates and but-2-enamides, and subsequent enolate functionalisation followed by deprotection, allows access to a range of 3-substituted-4-amino- γ -butyrolactones.

Synthesis of the C15–C23 fragment of dictyostatin using a highly stereoselective Carreira alkynylation

Ofer Sharon, Chiara Monti and Cesare Gennari*

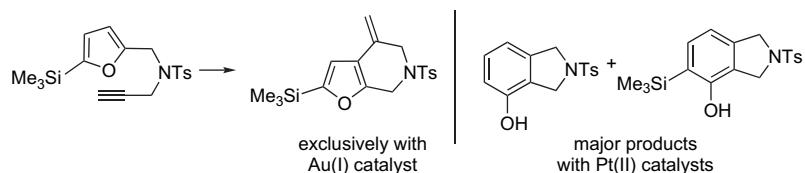
pp 5873–5878



Gold catalysis contra platinum catalysis in hydroarylation contra phenol synthesis

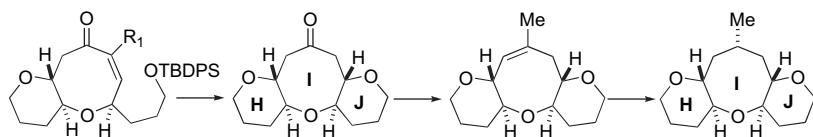
pp 5879–5885

A. Stephen K. Hashmi,* Elzen Kurpejović, Wolfgang Frey and Jan W. Bats



Synthesis of symmetric HIJ-ring model of ciguatoxin
Akihito Nonoyama, Akinari Hamajima and Minoru Isobe*

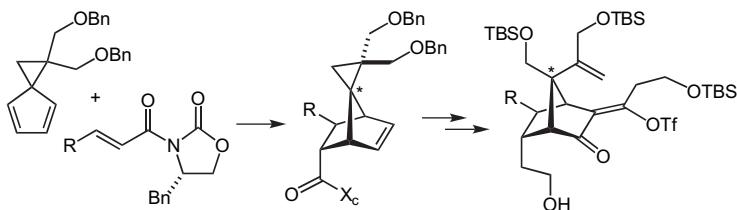
pp 5886–5894



A modified approach to the phomoidrides: synthesis of a late-stage intermediate containing a key carbon quaternary stereocenter

Bastien Castagner and James L. Leighton*

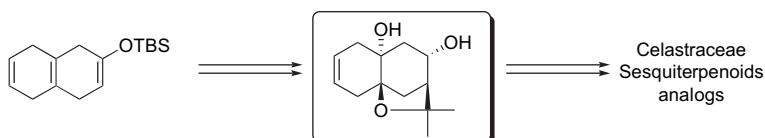
pp 5895–5902



Total synthesis of the tricyclic skeleton of the natural Celastraceae sesquiterpenoids and related synthetic analogs

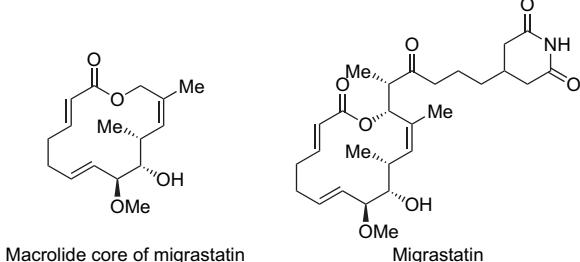
Aleksandra Siwicka, David Cuperly, Livio Tedeschi,* Ronan Le Vézouët,* Andrew J. P. White and Anthony G. M. Barrett*

pp 5903–5917

*i*⁺

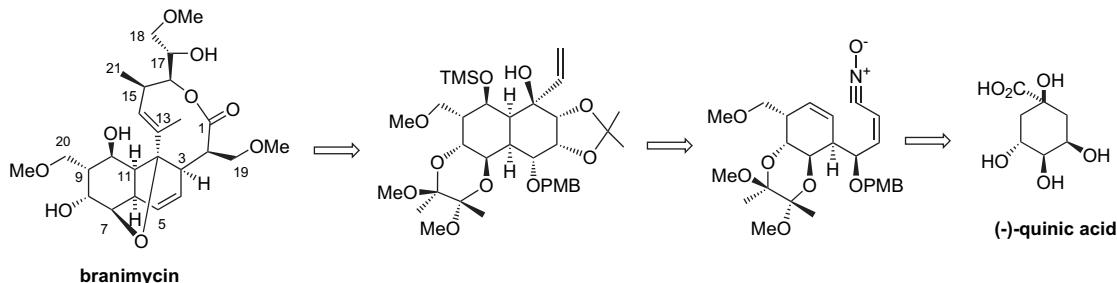
Synthesis of migrastatin and its macrolide core
Sébastien Reymond and Janine Cossy*

pp 5918–5929



Stereocontrolled formation of highly substituted *cis*-decalins via INOC annulation. An access to the branimycin core pp 5930–5939

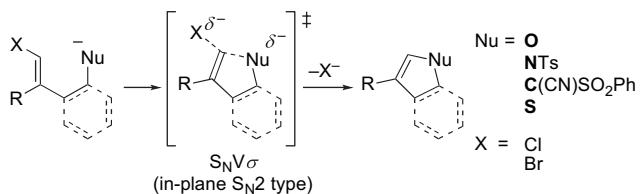
Valentin S. Enev,* Martina Drescher and Johann Mulzer*



Synthesis of hetero- and carbocycles by nucleophilic substitution at sp^2 carbon

pp 5940–5953

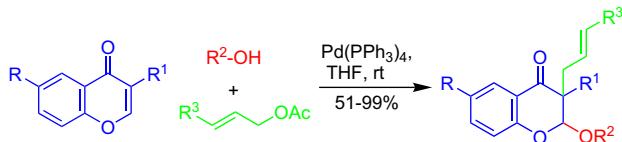
Hironori Miyauchi, Shunsuke Chiba, Koji Fukamizu, Kaori Ando* and Koichi Narasaka*



Palladium catalyzed three component coupling reaction between chromones, alcohols, and allylic acetates: diversity-oriented synthesis of highly substituted chromones

pp 5954–5961

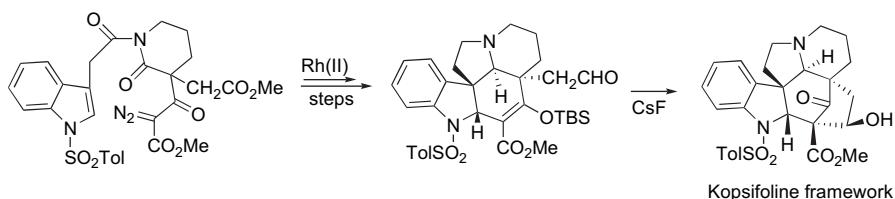
Nitin T. Patil, Zhibao Huo and Yoshinori Yamamoto*



A dipolar cycloaddition approach toward the kopsifoline alkaloid framework

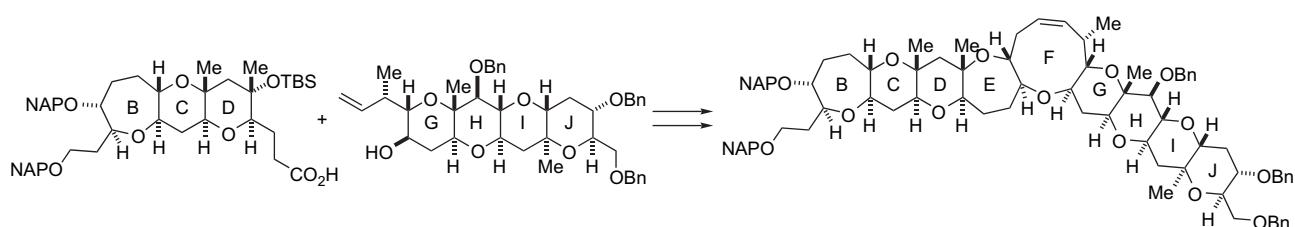
pp 5962–5976

Xuechuan Hong, Stefan France and Albert Padwa*



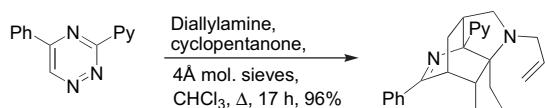
Convergent synthesis of the BCDEFGHIJ-ring polyether core of gambieric acids, potent antifungal polycyclic ethers pp 5977–6003

Kazushi Sato and Makoto Sasaki*



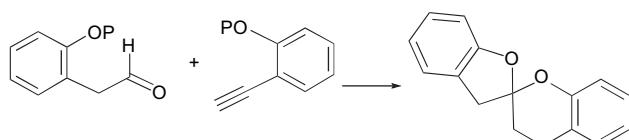
Tandem inverse electron demand Diels–Alder, retro-Diels–Alder and intramolecular Diels–Alder sequences: one-pot synthesis of diaza-polycycles pp 6004–6014

William J. Bromley, Mairi Gibson, Stuart Lang, Steven A. Raw,* Adrian C. Whitwood and Richard J. K. Taylor*



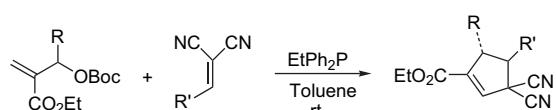
Synthesis of aromatic spiroacetals related to γ -rubromycin based on a 3*H*-spiro[1-benzofuran-2,2'-chromane] skeleton pp 6015–6034

Kit Yee Tsang and Margaret A. Brimble*



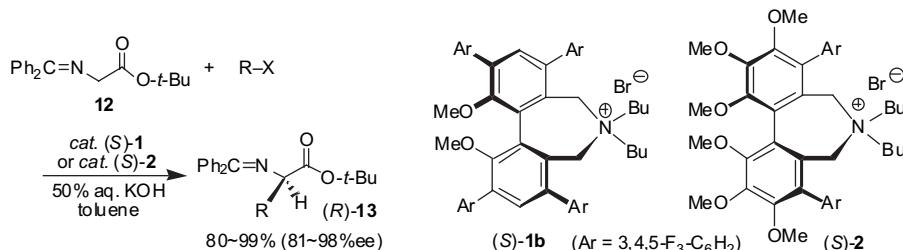
A highly regio- and stereo-selective [3+2] annulation of allylic compounds and 2-substituted 1,1-dicyanoalkenes through a catalytic carbon–phosphorus ylide reaction pp 6035–6041

Jianqing Feng, Xiyan Lu,* Aidi Kong and Xiuling Han



Convenient preparation of chiral phase-transfer catalysts with conformationally fixed biphenyl core for catalytic asymmetric synthesis of α -alkyl- and α,α -dialkyl- α -amino acids: application to the short asymmetric synthesis of BIRT-377 pp 6042–6050

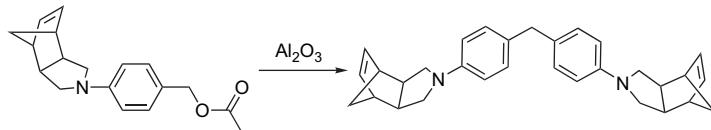
Yong-Gang Wang, Mitsuhiro Ueda, Xisheng Wang, Zhenfu Han and Keiji Maruoka*



Alumina-mediated dealkylation dimerization of 4-aminobenzyl esters

pp 6051–6055

Yu-Ying Lai, Nai-Ti Lin, Yi-Hung Liu, Yu Wang and Tien-Yau Luh*



*Corresponding author

i+ Supplementary data available via ScienceDirect

COVER

The cover graphic of this issue depicts the five different cover designs of *Tetrahedron*, since its launch in 1957.
© 2007 Elsevier Ltd.



Full text of this journal is available, on-line from **ScienceDirect**. Visit www.sciencedirect.com for more information.

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei Compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®



ISSN 0040-4020