JOC

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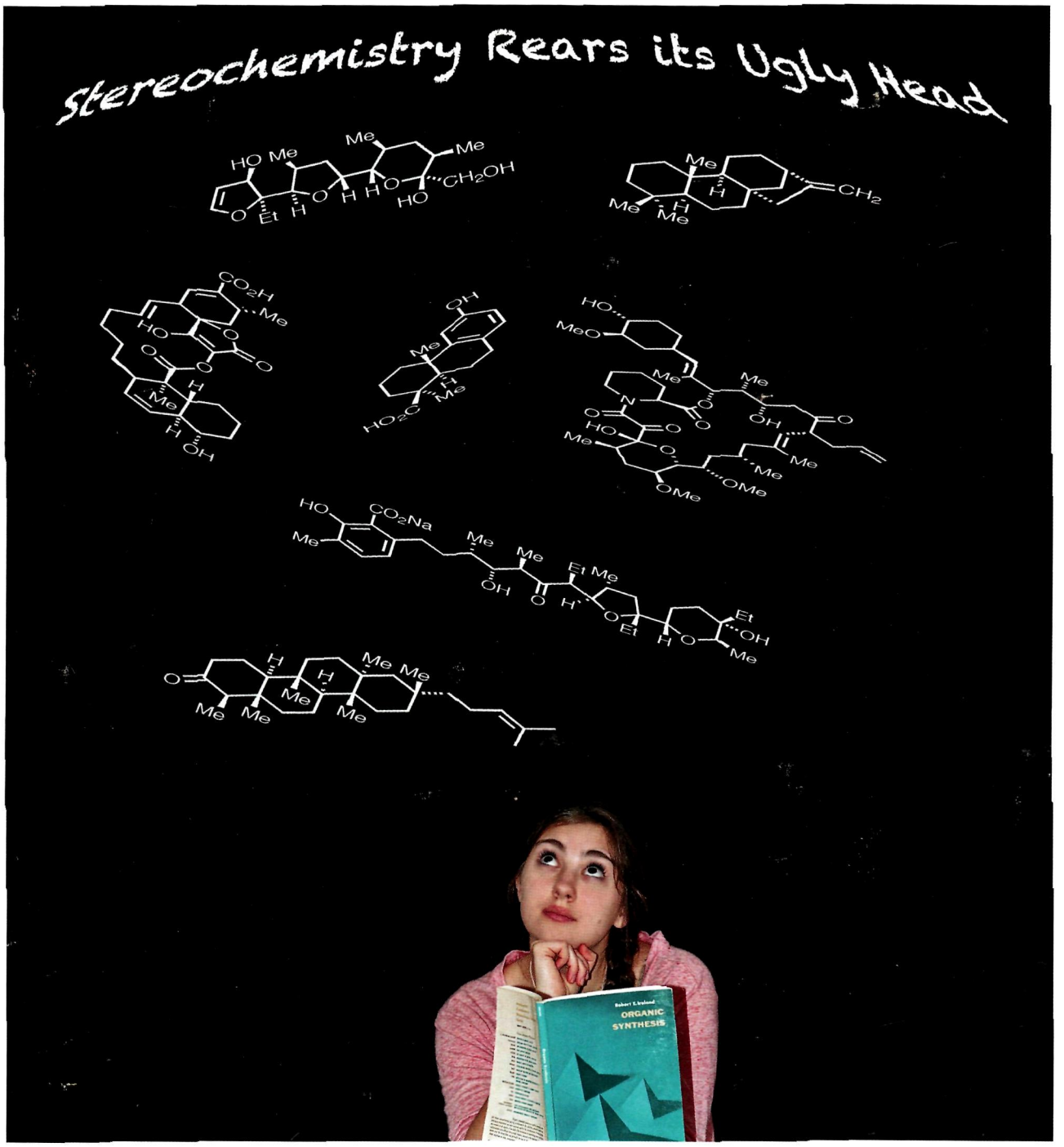

JOC The Journal of Organic Chemistry

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**ON THE COVER:** A student contemplates the meaning of "Stereochemistry Rears its Ugly Head" while reading Chapter 5 of the Ireland book on Organic Synthesis as structures of Ireland synthetic targets drift overhead. See Marshall, p 1.

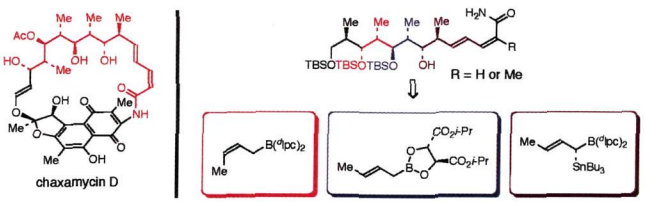
## SPECIAL ISSUE: ROBERT IRELAND MEMORIAL ISSUE

# Editorial

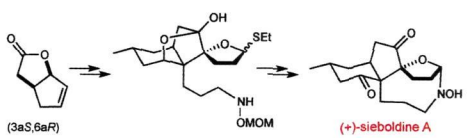


# Articles







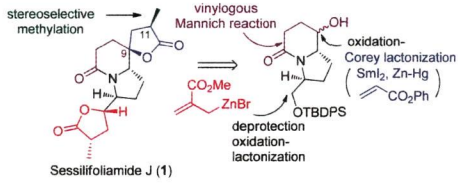



35 S

dx.doi.org/10.1021/jo3014484

**Total Synthesis of (−)-Sessilifoliamide J**

Xue-Kui Liu, Jian-Liang Ye, Yuan-Ping Ruan, Yu-Xiu Li, and Pei-Qiang Huang*

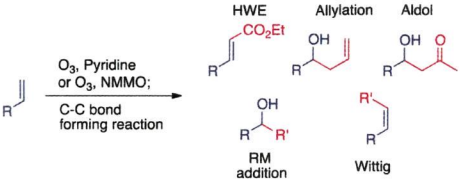



42 S

dx.doi.org/10.1021/jo3015775

**Tandem Application of C–C Bond-Forming Reactions with Reductive Ozonolysis**

Rachel Willand-Charnley and Patrick H. Dussault*

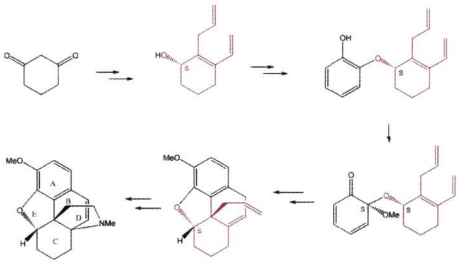



48 S

dx.doi.org/10.1021/jo3014098

**From Chiral *ortho*-Benzoquinone Monoketals to Nonracemic Indolinocodeines through Diels–Alder and Cope Reactions**

Jihong Gao, Josephine Orso Simon, Russell Rodrigo,* and Abdeljalil Assoud

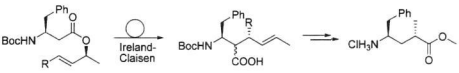


59 S

dx.doi.org/10.1021/jo301693d

**Synthesis of Tubuphenylalanines via Ireland–Claisen Rearrangement**

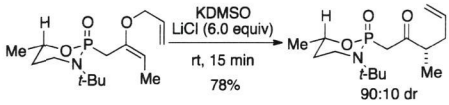
Dominic Becker and Uli Kazmaier*



66 S dx.doi.org/10.1021/jo301919e

**Carbanion-Accelerated Claisen Rearrangements: Asymmetric Induction with Chiral Phosphorus-Stabilized Anions**

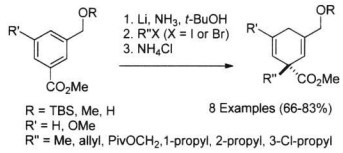
Scott E. Denmark,* John E. Marlin, and G. Rajendra




83 S dx.doi.org/10.1021/jo301872n

**Birch Reductive Alkylation of Methyl *m*-(Hydroxymethyl)benzoate Derivatives and the Behavior of *o*- and *p*-(Hydroxymethyl)benzoates under Reductive Alkylation Conditions**

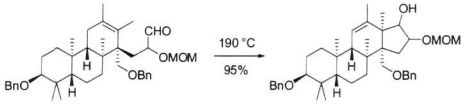
Samuel J. Fretz, Christopher M. Hadad, David J. Hart,* Shubham Vyas, and Dexi Yang




93 S dx.doi.org/10.1021/jo301948h

**Toward the Total Synthesis of (±)-Andrastin C**

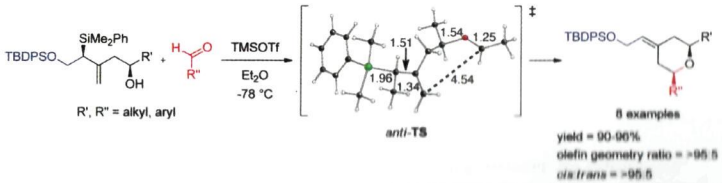
Rei Okamoto, Kazutaka Takeda, Hidetoshi Tokuyama, Masataka Ihara, and Masahiro Toyota*




104 S dx.doi.org/10.1021/jo301953h

**Mechanistic and Computational Studies of Exocyclic Stereocontrol in the Synthesis of Bryostatin-like *Cis*-2,6-Disubstituted 4-Alkylidenetetrahydropyrans by Prins Cyclization**

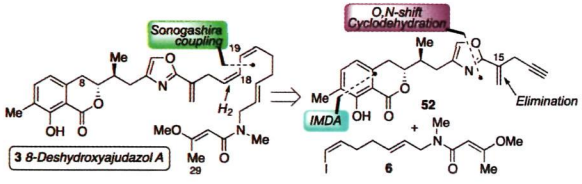
Yasuyuki Ogawa, Phillip P. Painter, Dean J. Tantillo,* and Paul A. Wender*



116 S dx.doi.org/10.1021/jo302055w

**Total Synthesis of the Proposed Structure of 8-Deshydroxyajudazol A: A Modified Approach to 2,4-Disubstituted Oxazoles**

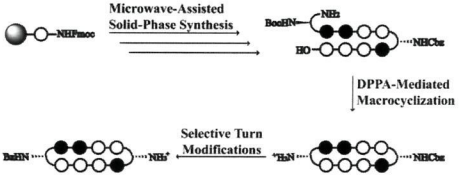
Stephen Birkett, Danny Ganame, Bill C. Hawkins, Sébastien Meiries, Tim Quach, and Mark A. Rizzacasa*




124 S dx.doi.org/10.1021/jo302053v

**Synthesis of Cyclic Py-Im Polyamide Libraries**

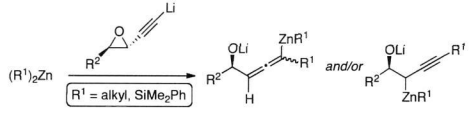
Benjamin C. Li, David C. Montgomery, James W. Puckett, and Peter B. Dervan*




134 S dx.doi.org/10.1021/jo302128n

**Three-Carbon Homologation of Diorganozincs with Lithiated Acetylenic Epoxides**

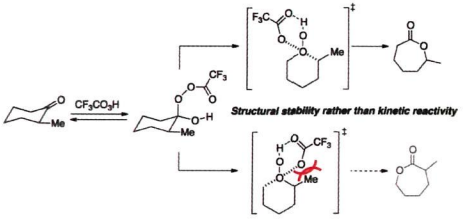
Aurélien Denichoux, Laurent Debien, Mathieu Cyklinsky, Malika Kaci, Fabrice Chemla,* Franck Ferreira,* and Alejandro Pérez-Luna




146 S dx.doi.org/10.1021/jo302151r

**Theoretical Study on the Regioselectivity of Baeyer–Villiger Reaction of α-Me-, -F-, -$CF_3$-Cyclohexanones**

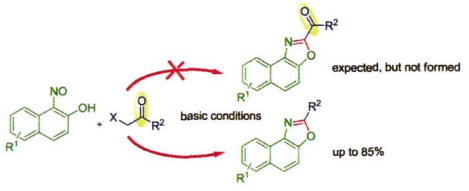
Yoshimitsu Itoh, Masahiro Yamanaka, and Koichi Mikami*



154 Ⓢ dx.doi.org/10.1021/jo3022956

**Reaction of 1-Nitroso-2-naphthols with α-Functionalized Ketones and Related Compounds: The Unexpected Formation of Decarbonylated 2-Substituted Naphtho[1,2-*d*][1,3]oxazoles**

Nayyef Aljaar, Chandi C. Malakar, Jürgen Conrad, Wolfgang Frey, and Uwe Beifuss*




167 Ⓢ dx.doi.org/10.1021/jo3022605

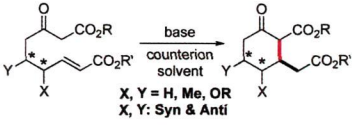
**5-Hydroxyindoles by Intramolecular Alkynol–Furan Diels–Alder Cycloaddition**

Matthew LaPorte, Ki Bum Hong, Jie Xu, and Peter Wipf*


175 Ⓢ dx.doi.org/10.1021/jo302138z

**The Stereochemical Course of Intramolecular Michael Reactions**

Eugene E. Kwan, Jonathan R. Scheerer, and David A. Evans*

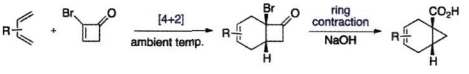



# Notes

204 Ⓢ dx.doi.org/10.1021/jo302230m

**Halocycloalkenones as Diels–Alder Dienophiles. Applications to Generating Useful Structural Patterns**

Audrey G. Ross, Steven D. Townsend, and Samuel J. Danishefsky*




Ⓢ Supporting Information available via online article