

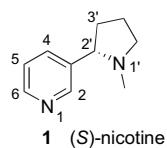
Contents

REPORT

Recent advances in the synthesis of nicotine and its derivatives

Florence F. Wagner and Daniel L. Comins*

pp 8065–8082



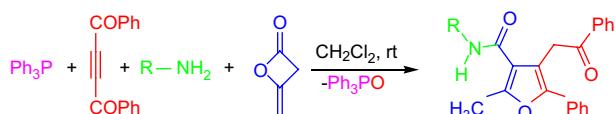
This review covers developments in the synthesis of nicotine and derivatives published mainly from 1996 to 2006.

ARTICLES

One-pot synthesis of functionalized furamide derivatives via a three-component reaction between an amine, diketene and dibenzoylacetylene in the presence of triphenylphosphine

Abdolali Alizadeh,* Nasrin Zohreh and Sadegh Rostamnia

pp 8083–8087

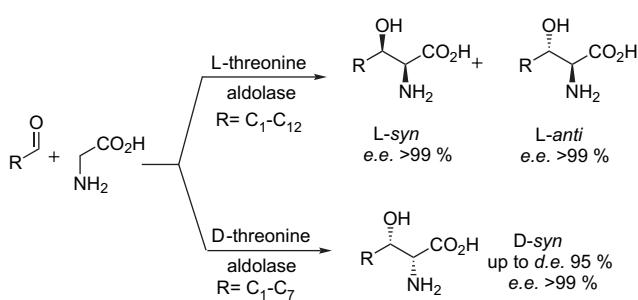


The reaction of *N*-alkyl-3-oxobutanamide (derived from the addition of a primary amine to diketene) with dibenzoylacetylene in the presence of triphenylphosphine lead to *N*³-(alkyl)-2-methyl-4-(2-oxo-2-phenylethyl)-5-phenyl-3-furamide derivatives.

Synthesis of γ -halogenated and long-chain β -hydroxy- α -amino acids and 2-amino-1,3-diols using threonine aldolases

Johannes Steinreiber, Kateryna Fesko, Clemens Mayer, Christoph Reisinger, Martin Schürmann and Herfried Griengl*

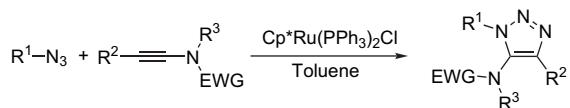
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1-Protected 5-amido 1,2,3-triazoles via ruthenium-catalyzed [3+2] cycloaddition of azides and ynamides

pp 8094–8098

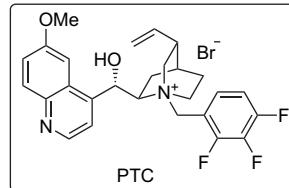
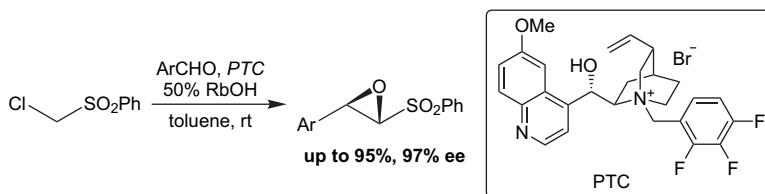
Sophie Oppilliart, Guillaume Mousseau, Li Zhang, Guochen Jia, Pierre Thuéry, Bernard Rousseau and Jean-Christophe Cinrat*



Asymmetric synthesis of α,β -epoxysulfones via phase-transfer catalytic Darzens reaction

pp 8099–8103

Jin-Mo Ku, Mi-Sook Yoo, Hyeung-geun Park, Sang-sup Jew* and Byeong-Seon Jeong*

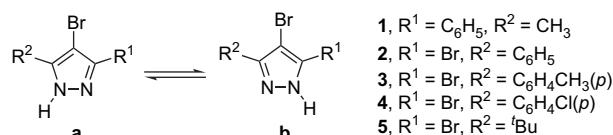


Structure and tautomerism of 4-bromo substituted 1*H*-pyrazoles

pp 8104–8111

Swiatoslav Trofimenco, Glenn P. A. Yap, Fernando A. Jove, Rosa M. Claramunt,* M. Ángeles García, M. Dolores Santa María, Ibon Alkorta and José Elguero

New Polybrominated 1*H*-Pyrazoles



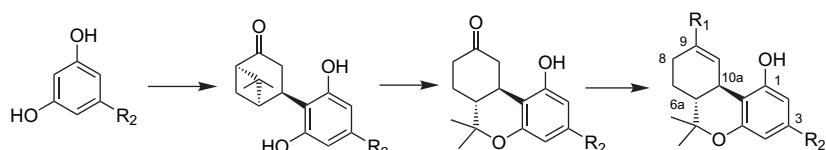
- 1, R¹ = C₆H₅, R² = CH₃
- 2, R¹ = Br, R² = C₆H₅
- 3, R¹ = Br, R² = C₆H₄CH₃(*p*)
- 4, R¹ = Br, R² = C₆H₄Cl(*p*)
- 5, R¹ = Br, R² = *t*Bu



A concise methodology for the synthesis of (−)-Δ⁹-tetrahydrocannabinol and (−)-Δ⁹-tetrahydrocannabivarin metabolites and their regiospecifically deuterated analogs

pp 8112–8123

Spyros P. Nikas,* Ganesh A. Thakur, Damon Parrish, Shakiru O. Alapafuja, Marilyn A. Huestis and Alexandros Makriyannis*

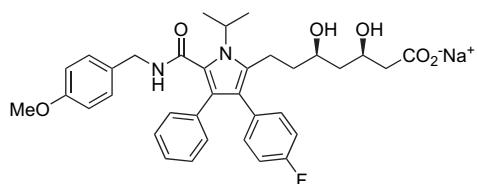


- R₁ = COOH, CH₂OH
 R₂ = (CH₂)₄CH₃, (CH₂)₃C²H₂C²H₃, (CH₂)₄C²H₃
 = CH₂C²H₂C²H₃, (CH₂)₂C²H₃

Development of a practical synthesis of novel, pyrrole-based HMG-CoA reductase inhibitors

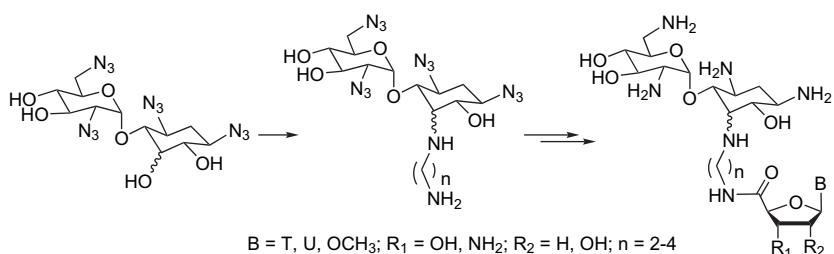
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Jeffrey A. Pfefferkorn,* Daniel M. Bowles, William Kissel, David C. Boyles, Chulho Choi, Scott D. Larsen, Yuntao Song, Kuai-Lin Sun, Steven R. Miller and Bharat K. Trivedi

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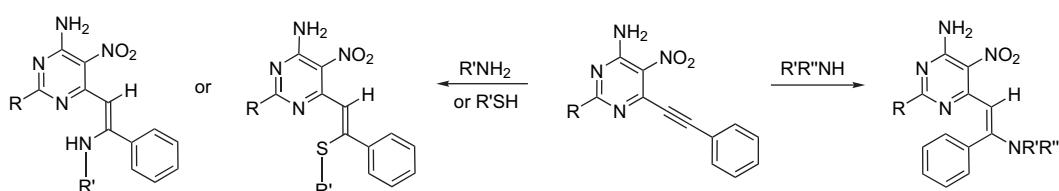
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**Study on the reactions of 4-amino-5-nitro-6-phenylethylnylpyrimidines with amines and thiols**

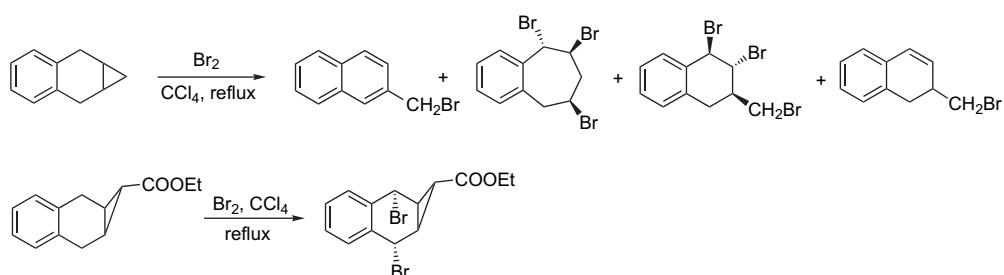
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Inga Cikotiene,* Erika Pudziuvelyte, Algirdas Brukstus and Sigitas Tumkevicius

**High temperature bromination. Part 22: Bromination of 1a,2,7,7a-tetrahydro-1H-cyclopropa[b]naphthalene**

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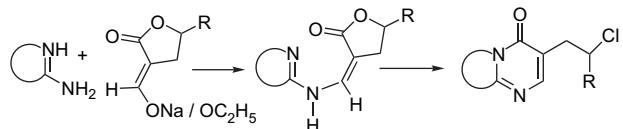
Demet Demirci-Gültekin, Duygu D. Günbaş, Yavuz Taşkesenligil* and Metin Balci*



Synthesis of fused pyrimidines from amines and cyclic β -formylesters

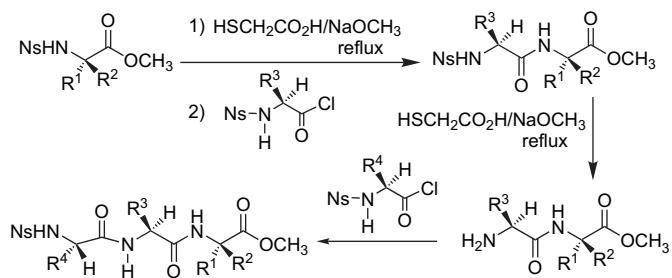
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Raghunath B. Toche,* Bhausaheb K. Ghotekar, Muddassar A. Kazi, Dhananjay B. Kendre and Madhukar N. Jachak

**N-Nosyl- α -amino acids in solution phase peptide synthesis**

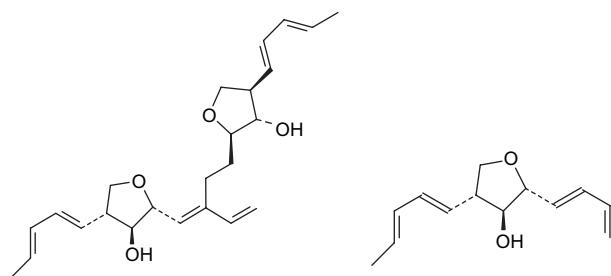
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**Musanahol: a new aureonitol-related metabolite from a *Chaetomium* sp.**

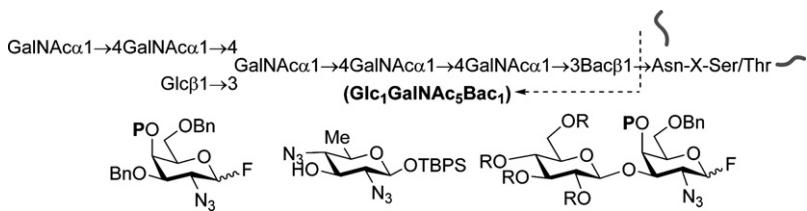
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Ruchi G. Marwah, Majekodunmi O. Fatope,* Mike L. Deadman, Yousif Mohammed Al-Maqbali and John Husband

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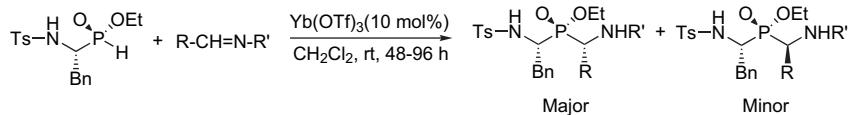
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Mohammed Nurul Amin, Akihiro Ishiwata and Yukishige Ito*



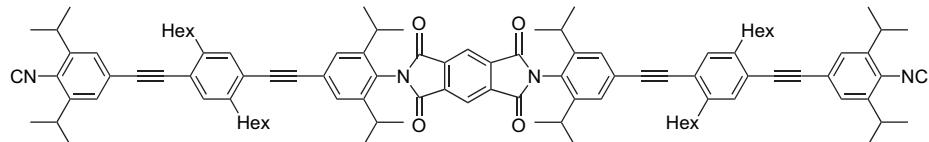
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Babak Kaboudin,* Terumitsu Haruki, Takehiro Yamagishi and Tsutomu Yokomatsu*



Synthesis of oligo(phenyleneethynylene)s containing central pyromellitiimide or naphthalenediimide groups and bearing terminal isocyanide groups: molecular components for single-electron transistors pp 8206–8217

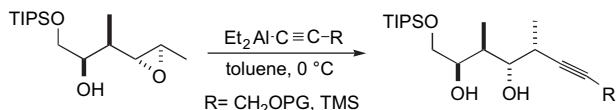
Andreas Mayr,* Muthialu Srisailas, Qun Zhao, Yuan Gao, Heidi Hsieh, Mahsa Hoshmand-Kochi and Natalie St. Fleur



Oligo(phenyleneethynylene)s which contain a central arenediimide group as an electron acceptor and are terminated by surface-binding isocyanide groups have been prepared as potential molecular building blocks for single-electron devices.

Regioselective cleavage of 3,4-epoxy alcohols with substituted alkynylaluminum reagents: application to the stereoselective synthesis of polypropionates pp 8218–8226

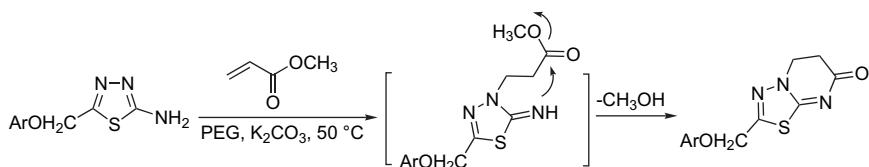
Wilnelia Dávila, Wildeliz Torres and José A. Prieto*



(i)⁺

Michael additions of dihydropyrimidines and 2-amino-1,3,4-thiadiazoles to α,β -ethylenic compounds: using polyethylene glycols as a green reaction media pp 8227–8233

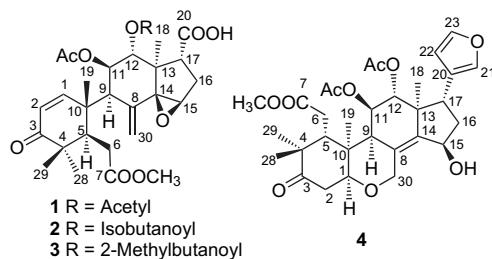
Xicun Wang,* Zhengjun Quan and Zhang Zhang



Eight new limonoids from *Turraea pubescens*

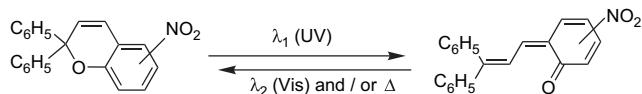
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Xiao-Ning Wang, Sheng Yin, Cheng-Qi Fan, Li-Ping Lin, Jian Ding and Jian-Min Yue*

**First synthesis of nitro-substituted 2,2-diphenyl-2H-1-benzopyrans via the *ipso*-nitration reaction**

pp 8242–8249

Lahoussine Bougdid, Arnault Heynderickx, Stéphanie Delbaere and Corinne Moustrou*

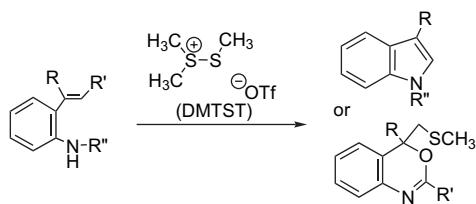


The first synthesis of a series of nitro-substituted chromenes, showing photochromic behaviour was achieved by an *ipso*-nitration reaction of their corresponding boronic acid using the Crivello's reagent.

Novel formation of indoles and 3,1-benzoxazines from *o*-alkenylanilides and dimethyl(methylthio)sulfonium trifluoromethanesulfonate

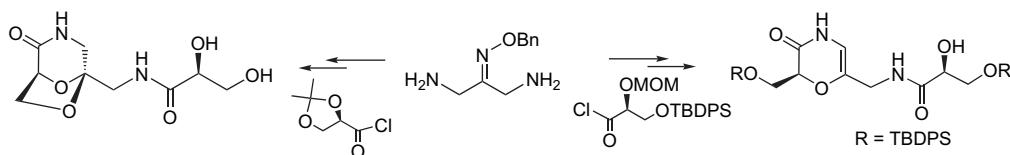
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Kentaro Okuma,* Takumi Yasuda, Itsuki Takeshita, Kosei Shioji and Yoshinobu Yokomori

**Synthetic studies towards 4,10-diaza-1,7-dioxaspiro[5.5]undecanes: access to 3-aza-6,8-dioxabicyclo[3.2.1]octan-2-one and 2*H*-1,4-oxazin-3(4*H*)-one frameworks**

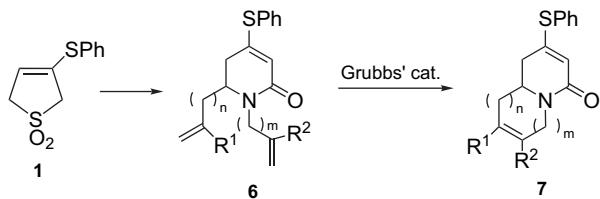
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Marlène Goubert, Loïc Toupet, Marie-Eve Sinibaldi* and Isabelle Canet*

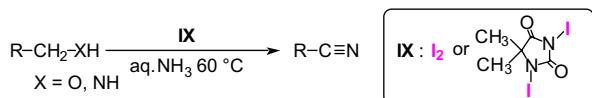


Synthesis of sulfur-substituted quinolizidines and pyrido[1,2-a]azepines by ring-closing metathesis
Shang-Shing P. Chou,* Chu-Fang Liang, Tse-Ming Lee and Chih-Fen Liu

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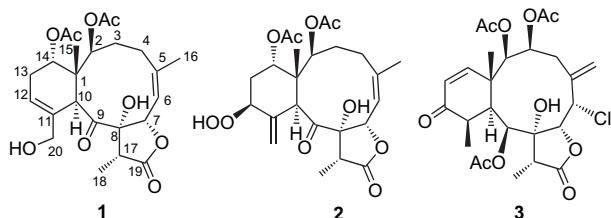


Direct oxidative conversion of alcohols and amines to nitriles with molecular iodine and DIH in aq NH₃ pp 8274–8281
Shinpei Iida and Hideo Togo*



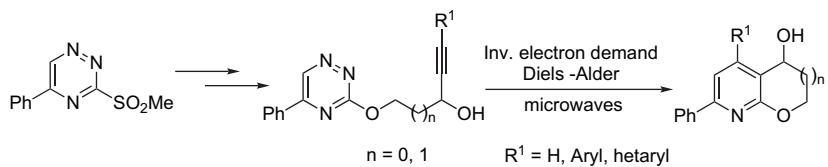
Briarenolides A–C, briarane diterpenoids from the gorgonian coral *Briareum* sp.
Jui-Hsin Su, Ping-Jyun Sung, Yao-Haur Kuo, Chi-Hsin Hsu and Jyh-Horng Sheu*

pp 8282–8285



Polysubstituted 2,3-dihydrofuro[2,3-*b*]pyridines and 3,4-dihydro-2*H*-pyrano[2,3-*b*]pyridines via microwave-activated inverse electron demand Diels–Alder reactions
Youssef Hajbi, Franck Suzenet,* Mostafa Khouili, Said Lazar and Gérald Guillaumet*

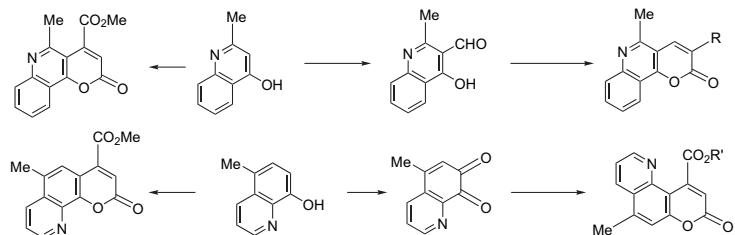
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Synthesis of novel pyridocoumarins and benzo-fused 6-azacoumarins

pp 8298–8304

Evangelia Galarinotiou, Vakis Fragos, Aristeia Makri, Konstantinos E. Litinas* and Demetrios N. Nicolaides*

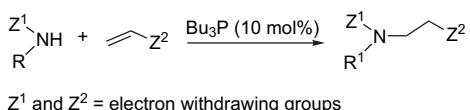


Pyridocoumarins and benzo[7,8]-fused 6-azacoumarins are easily prepared from 6- or 8- and 4-quinolinols.

Tributylphosphine, excellent organocatalyst for conjugate additions of non-nucleophilic N-containing compounds

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Carolina Gimbert, Marcial Moreno-Mañas, Elisabet Pérez and Adelina Vallribera*

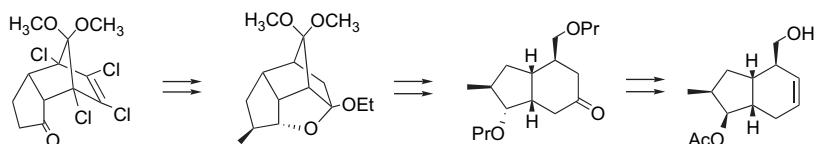


Towards EPC-syntheses of the structural class of cochleamycins and macquarimicins.

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Part 1: EPC-synthesis of the hydrindene subunit of the cochleamycins

A. Chrobok, E. Gössinger,* E. Orglmeister, K. Pfuglseder, J. Schwaiger and F. Wuggenig

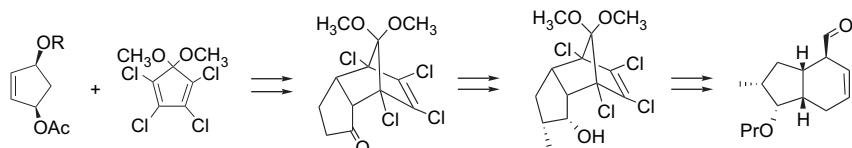


Towards EPC-syntheses of the structural class of cochleamycins and macquarimicins.

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Part 2: EPC-synthesis of the hydrindene subunit of the macquarimicins

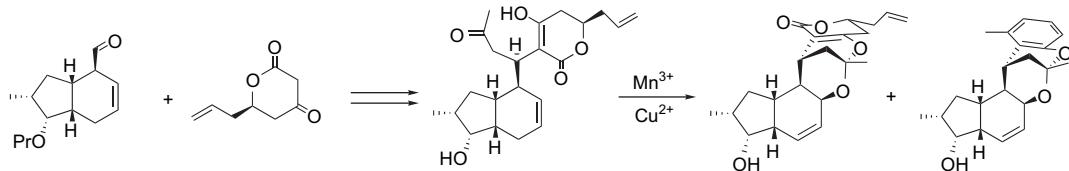
A. Chrobok, E. Gössinger,* R. Kalb, E. Orglmeister and J. Schwaiger



**Towards EPC-syntheses of the structural class of cochleamycins and macquarimicins.
Part 3: EPC-syntheses of the β -keto lactone subunits and first attempts towards the
syntheses of the pentacyclic antibiotics of this group**

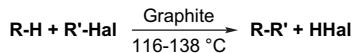
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A. Chrobok, E. Gössinger,* K. Grünberger, H. Kählig, M. J. White and F. Wuggenig



The synthetic potential of graphite-catalyzed alkylation
Grigoriy A. Sereda,* Vikul B. Rajpara and Ryan L. Slaba

pp 8351–8357



R = Ar-, AlkO-; R' = benzyl-, alkyl-; Hal = Cl-, Br-, I-

*Corresponding author

(i)* Supplementary data available via ScienceDirect

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