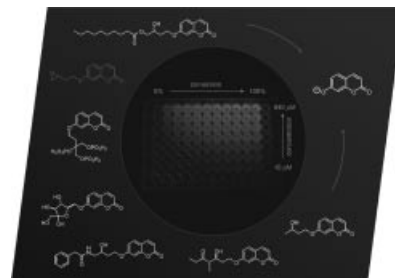


COVER PICTURE

The cover picture shows blue-fluorescent enzyme assays. The intense blue fluorescence of umbelliferone is readily detected under UV illumination (356 nm) when this fluorescent product is released from non-fluorescent ether precursors. This fluorescent signal is the key to a number of high-throughput enzyme assays, usually in a 96-well microtiter-plate format as shown. Fluorescence enzyme assays involving epoxide opening reactions with nucleophiles are discussed in the article by J.-L. Reymond et al. on page 2557ff.



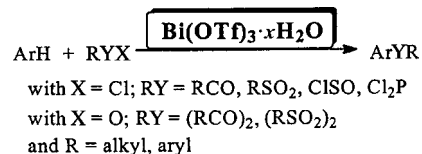
MICROREVIEWS

Contents

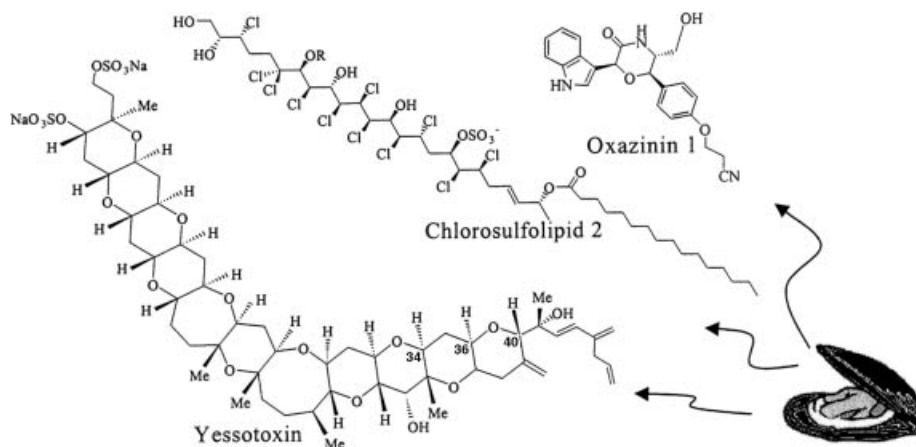
2517 H. Gaspard-Illoughmane, C. Le Roux*

Bismuth(III) Triflate in Organic Synthesis

Keywords: Bismuth triflate / Catalysis / Organic synthesis



Shellfish Toxins – Chemical Studies on Northern Adriatic Mussels



Keywords: Diarrhetic shellfish poisoning / Marine biotoxins / Yessotoxins / Cytotoxic compounds / Natural products / Seafood poisoning / Toxicology

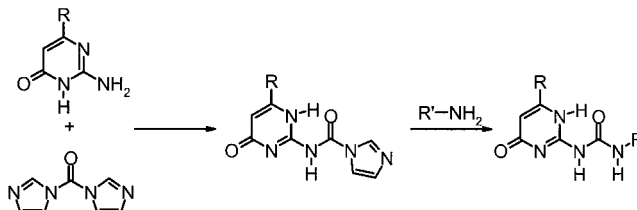
SHORT COMMUNICATION

2553 H. M. Keizer, R. P. Sijbesma,* E. W. Meijer*



The Convenient Synthesis of Hydrogen-Bonded Ureidopyrimidinones

Keywords: Supramolecular polymers / Synthetic methods

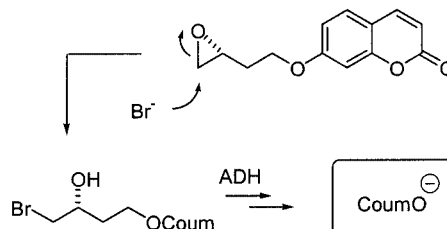


FULL PAPERS

2557 F. Badalassi, G. Klein, P. Crotti, J.-L. Reymond*

Fluorescence Assay and Screening of Epoxide Opening by Nucleophiles

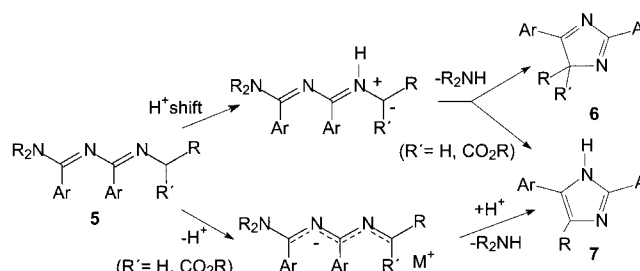
Keywords: Catalytic antibodies / Enzymes / Epoxides / Fluorescence assay



2567 N. Habersaat, R. Fröhlich, E.-U. Würthwein*

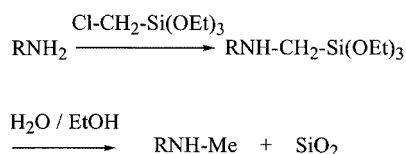
4*H*-Imidazoles and Imidazoles from Anionic and Dipolar Electrocyclization Reactions of 2,4-Diazapenta-1,3-dienes

Keywords: Electrocyclization reaction / 2,4-Diazapentadienes / Lithium compounds / 1,5-Dipoles / Quantum chemical calculations / Imidazoles



2582 A. Adima, C. Bied, J. J. E. Moreau,*
M. Wong Chi Man

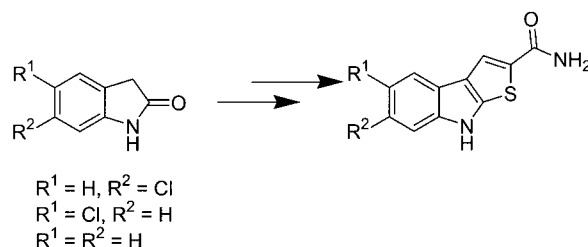
Facile Cleavage of Si–C Bonds during the Sol-Gel Hydrolysis of Aminomethyltrialkoxysilanes – A New Method for the Methylation of Primary Amines



Keywords: Alkylation / Amines / Condensation / Hydrolysis / Sol-gel processes

2589 R. Engqvist, A. Javaid, J. Bergman*

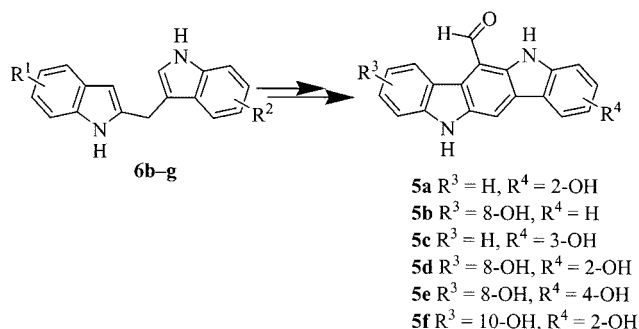
Synthesis of Thienodolin



Keywords: Alkaloid / Total synthesis / Indoles

2593 N. Wahlström, I. Romero, J. Bergman*

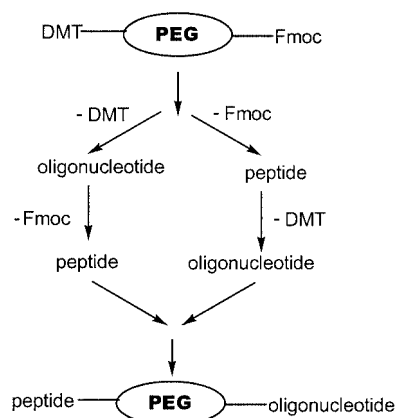
Synthesis of Metabolites of the Ah Receptor Ligand 6-Formylindolo[3,2-*b*]carbazole



Keywords: Bis(indoles) / Acylations / Ah receptor / 6-Formylindolo[3,2-*b*]carbazole / Metabolite

2603 I. Adamo, M. Ballico, P. Campaner,
S. Drioli, G. M. Bonora*

Interchangeable PEG-Supported Synthesis of Peptide-Oligonucleotide Chimeras

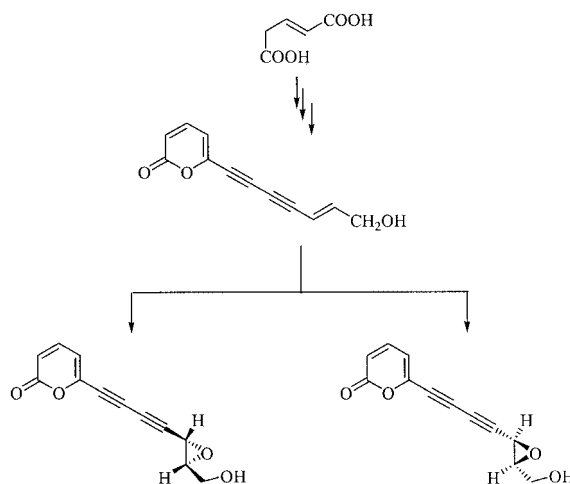


Keywords: Conjugates / Oligonucleotides / Peptides / Poly(ethylene glycol) / Supported synthesis

2610 F. Bellina, A. Carpita,* L. Mannocci,
R. Rossi*

First Total Synthesis of Naturally Occurring
(-)-Nitidon and Its Enantiomer

Keywords: C–C coupling / Lactones / Natural
products / Synthetic methods

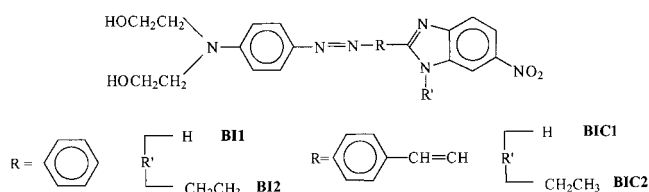


2620 A. Carella, R. Centore,* A. Fort, A. Peluso,
A. Sirigu, A. Tuzi



Tuning Second-Order Optical Nonlinearities in
Push-Pull Benzimidazoles

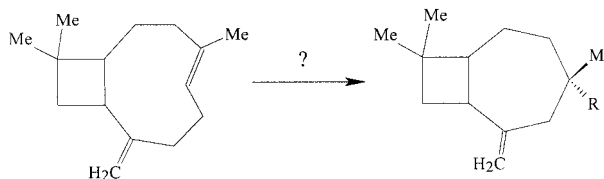
Keywords: Azo compounds / Chromophores / Hetero-
cycles / Nonlinear optics



2627 K. D. Klika,* B. Demirci, J.-P. Salminen,
V. V. Ovcharenko, S. Vuorela,
K. H. Can Başer, K. Pihlaja

New, Sesquiterpenoid-Type Bicyclic Compounds
from the Buds of *Betula pubescens* – Ring-
Contracted Products of β -Caryophyllene?

Keywords: Caryophyllenes / Natural products / NMR
spectroscopy / Mass spectrometry /
Sesquiterpenes / Structural elucidation

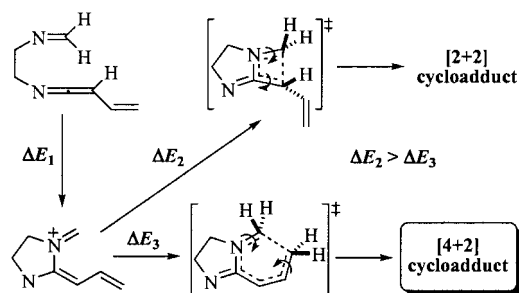


2636 M. Alajarín,* P. Sánchez-Andrada,* A. Vidal,
F. Tovar



A Mechanistic Rationale for the Mode Selec-
tivity in the Intramolecular Cyclization of Ethyl-
ene-Tethered Iminoketenimines: [2+2] versus
[4+2] Stepwise Cycloadditions

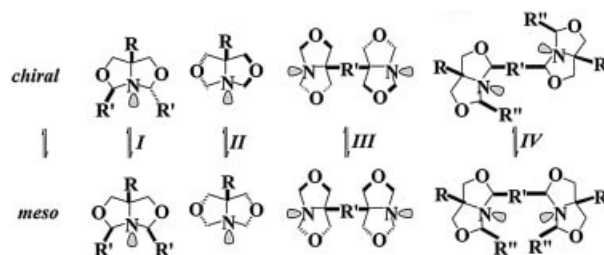
Keywords: Ab initio and density functional calcu-
lations / Cumulenes / Cycloaddition /
Reaction mechanisms / Schiff bases



- 2644** M. Darabantu,* C. Maieranu,
I. Silaghi-Dumitrescu, L. Toupet,
E. Condamine, Y. Ramondenc, C. Berghian,
G. Plé, N. Plé

3,7-Dioxa-1-azabicyclo[3.3.0]octanes Substituted
at the C-5 Position – From Local to Global
Stereochemistry

Keywords: Chirality / Conformation analysis / Dia-
stereoselectivity / Hyperconjugation /
Molecular modeling

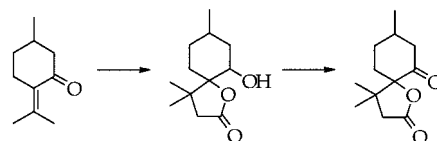


I: R = CH₂OH, CH₂OMe, CH₂OBzl; R' = Ph; **II:** R = Me, Et, CH₂OH,
CH₂OMe, CH₂OEt, CH₂OBzl, CH₂OTs; **III:** R' = bis-2,6-(methoxy)
pyrazine; **IV:** R = Me, Et, CH₂OH; R' = 1,4-phenylene; R'' = H, Ph

- 2662** I. Dams,* A. Białońska, Z. Ciunik,
C. Wawrzęczyk

Synthesis of Terpenoid Lactones with the
p-Menthane System

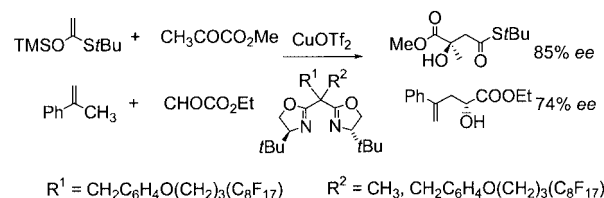
Keywords: Antifeedants / Lactones / Natural
products / Pulegone / Terpenoids



- 2669** B. Simonelli, S. Orlandi, M. Benaglia*,
G. Pozzi

New Perfluoroalkyl-Substituted Bisoxazolines as
Chiral Ligands in Asymmetric Cu^{II}-Catalyzed
Reactions

Keywords: Biphasic catalysis / Chiral bisoxazolines /
Fluorous ligands / Fluorous silica gel chro-
matography / Homogeneous catalysis

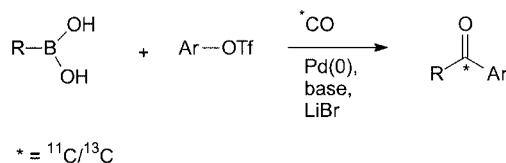


R¹ = CH₂C₆H₄O(CH₂)₃(C₈F₁₇) R² = CH₃, CH₂C₆H₄O(CH₂)₃(C₈F₁₇)

- 2674** O. Rahman, J. Llop, B. Långström*

Organic Bases as Additives to Improve the
Radiochemical Yields of [¹¹C]Ketones Prepared
by the Suzuki Coupling Reaction

Keywords: [¹¹C]/(¹³C)Carbon monoxide / Car-
bonylation / Organic base / Positron
emission tomography / Suzuki cross-
coupling

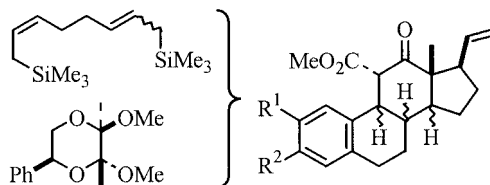


* = ¹¹C/¹³C

- 2679** N. Mariet, H. Pellissier, M. Ibrahim-Ouali,
M. Santelli*

Dialkylation of Various Butane-2,3-diacetals
Using Allylsilane and 1,8-Bis(trimethylsilyl)-2,6-
octadiene

Keywords: Asymmetric synthesis / Chiral pool /
Electrophilic substitution / Oxygen hetero-
cycles / Steroids



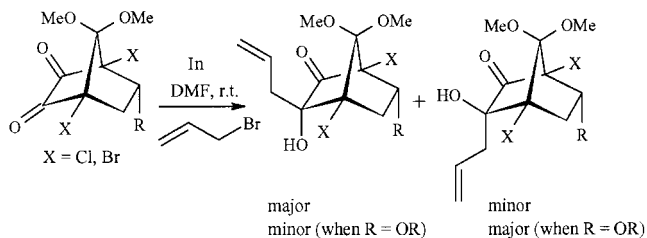
2692

F. A. Khan,* J. Dash



Diastereoselection During Allylindium Addition to Norbornyl α -Diketones

Keywords: Allylation / Diastereoselectivity / α -Diketones / Indium / Regioselectivity



2701

J. Christoffers,* H. Scharl, W. Frey, A. Baro

Synthesis of an Optically Active Decahydro-6-isoquinolone Scaffold with a Quaternary Stereocenter

Keywords: Chirality / Isoquinolones / Nitrogen heterocycles / Quaternary stereocenters / Scaffolds

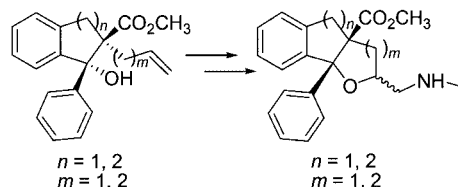


2707

F. Maertens, S. Toppet, F. Compennolle,* G. J. Hoornaert

Incorporation of Diarylbutylamine Pharmacophore into Indeno- or Naphtho[1,2-*b*]pyran Ring Systems

Keywords: Epoxidation / Furans / Heterocyclic compounds / Pyrans

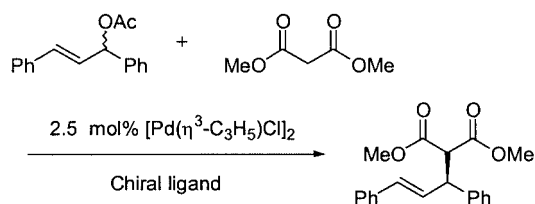


2715

P. H. Schneider, H. S. Schrekker, C. C. Silveira, L. A. Wessjohann, A. L. Braga*

First Generation Cysteine- and Methionine-Derived Oxazolidine and Thiazolidine Ligands for Palladium-Catalyzed Asymmetric Allylations

Keywords: Allylic alkylation / Homogeneous catalysis / Palladium / Oxazolidine / Asymmetric catalysis

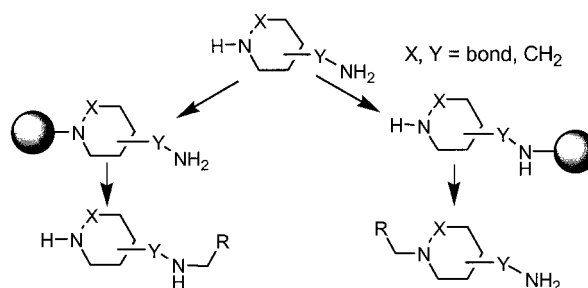


2723

S. Ayesa, D. Argyropoulos, T. Maltseva, C. Sund, B. Samuelsson*

An Expedient Library Synthesis of *N*-Monoalkylated Aminopiperidines and -pyrrolidines

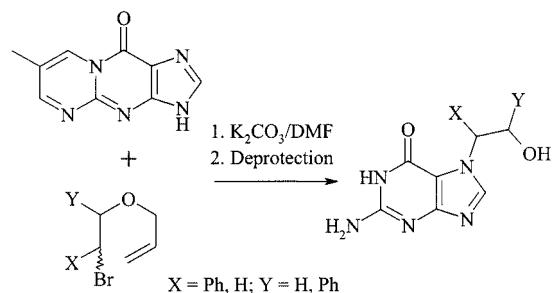
Keywords: NMR spectroscopy / Combinatorial chemistry / Reductive alkylation / Solid-phase synthesis / Parallel synthesis



2738 J. Novák, I. Linhart,* H. Dvořáková

Syntheses of 7-(2-Hydroxy-1-phenylethyl- and 7-(2-Hydroxy-2-phenylethyl)guanine, DNA Adducts Derived from Styrene 7,8-Oxide

Keywords: DNA adducts / Alkylation / Heterocycles / Protecting groups / Guanine derivatives



CORRECTION

2747 B. A. Hess, Jr.

Formation of the B Ring in Steroids and Hopanoids from Squalene

Keywords: Density functional calculations / Steroids / Conformational analysis / Terpenoids / Reaction mechanisms