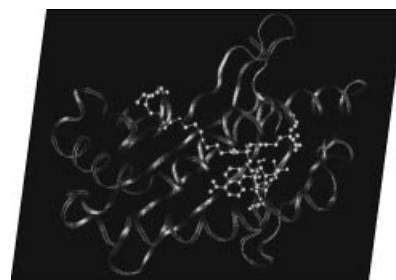


COVER PICTURE

The cover picture shows a model of a fluorescent derivative of sulfatide superimposed on the antigen-presenting molecule CD1a (PDB accession code 1ONQ). In spite of the presence of the fluorescent probe, this derivative maintains its ability to bind to CD1a immobilized on beads and opens the possibility of performing binding studies by flow cytometry. Details of the synthesis of this fluorogenic sulfatide are reported in the article by F. Compostella, L. Panza et al. on p. 4755ff.



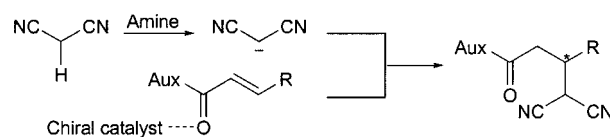
MICROREVIEW

Contents

4741 S. Kanemasa,* K. Ito

Double Catalytic Activation with Chiral Lewis Acid and Amine Catalysts

Keywords: Double catalytic activation / Enantioselective synthesis / Michael addition / Nickel(II) complex / Tetramethylpiperidine

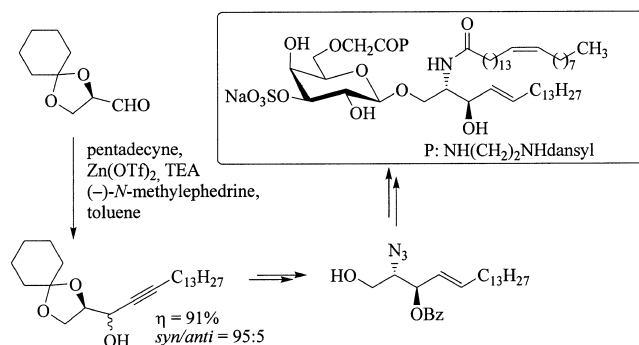


FULL PAPERS

- 4755** L. Franchini, F. Compostella,* A. Donda,
L. Mori, D. Colombo, G. De Libero,
P. Matto, F. Ronchetti, L. Panza*

Synthesis of a Fluorescent Sulfatide for the Study of CD1 Antigen Binding Properties

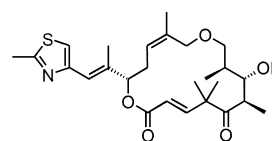
Keywords: Antigens / Azidosphingosine / CD1 proteins / Fluorescent probes / Glycolipids



- 4762** D. Quintard, P. Bertrand, C. Bachmann,
J.-P. Gesson*

Synthesis and Conformational Analysis of Macrocycles Related to 10-Oxa-epothilone

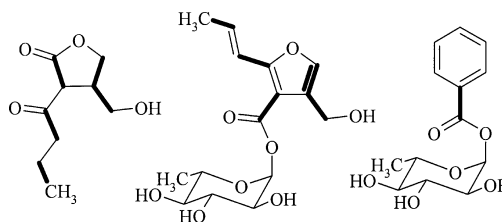
Keywords: Aldolisation / Epothilone / Macrocycles / Ring-closing metathesis



- 4771** L. Hoffmann, S. Grond*

Mixed Acetate-Glycerol Biosynthesis and Formation of Benzoate Directly from Shikimate in *Streptomyces* sp.

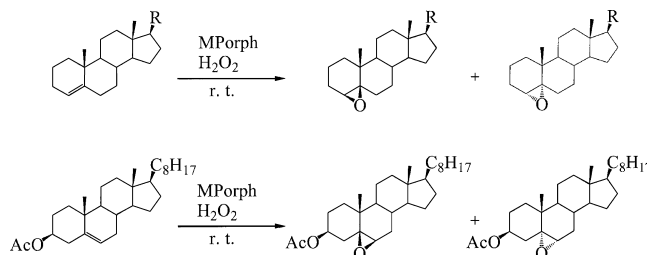
Keywords: Biosynthesis / Natural products / Lactones / Benzoate biosynthesis / Shikimate / *Streptomyces*



- 4778** S. L. H. Rebelo, M. M. Q. Simões,
M. G. P. M. S. Neves, A. M. S. Silva,
J. A. S. Cavaleiro,* A. F. Peixoto,
M. M. Pereira, M. R. Silva, J. A. Paixão,
A. M. Beja

Oxidation of Δ^4 - and Δ^5 -Steroids with Hydrogen Peroxide Catalyzed by Porphyrin Complexes of Mn^{III} and Fe^{III}

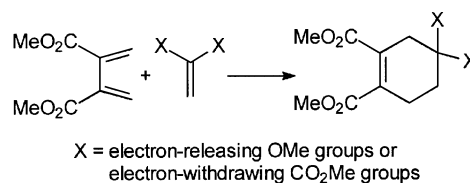
Keywords: Catalysis / Epoxidation / Iron / Manganese / Porphyrins / Steroids



- 4788** L. R. Domingo*

Why do Electron-Deficient Dienes React Rapidly in Diels–Alder Reactions with Electron-Deficient Ethylenes? A Density Functional Theory Analysis

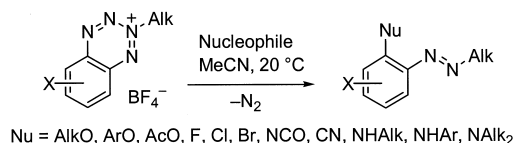
Keywords: Cycloaddition / Density functional calculations / Electrophilic addition / Electron-deficient compounds / Reaction mechanisms



- 4794** D. L. Lipilin, O. Y. Smirnov,
A. M. Churakov,* Y. A. Strelenko,
A. Y. Tyurin, S. L. Ioffe, V. A. Tartakovsky

2-Alkyl-1,2,3,4-benzotetrazinium Tetrafluoroborates: Their Reaction with Nucleophiles

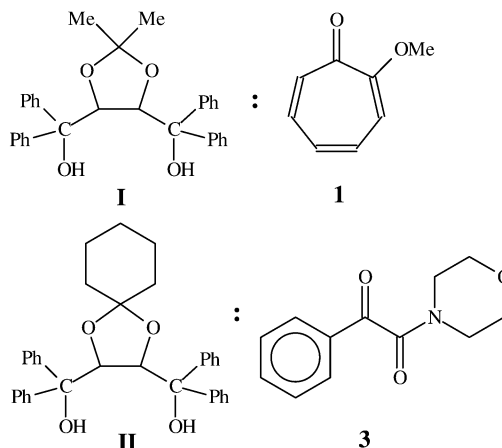
Keywords: Azo compounds / Nitrogen heterocycles / Fused-ring systems / Aromatic substitution



- 4802** T. Lavy, Y. Sheynin, M. Kaftory*

The Effects of Space Formed by Host Molecules in Inclusion Compounds on the Homogeneity/Heterogeneity of the Photoreaction in the Solid State

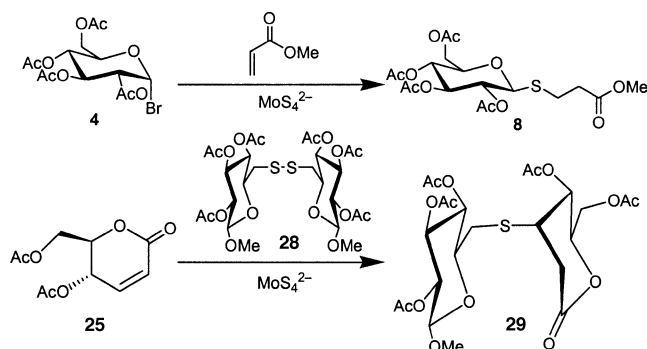
Keywords: Photochemistry / Solid state / Structure elucidation / Host-guest systems



- 4809** P. R. Sridhar, K. R. Prabhu,
S. Chandrasekaran*

Synthesis of Thioglycosides by Tetrathiomolybdate-Mediated Michael Additions of Masked Thiolates

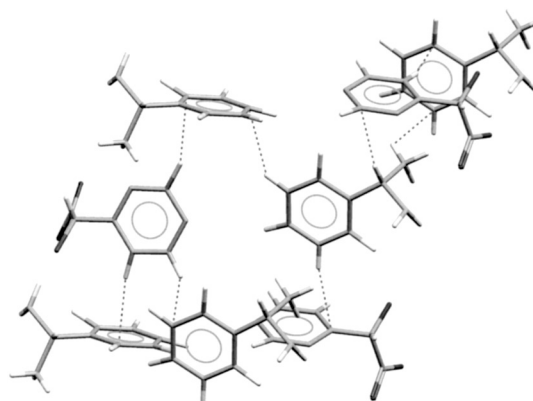
Keywords: Carbohydrates / Domino reactions / Michael addition / Tetrathiomolybdate / Thiosaccharides



- 4816** H. Suezawa,* S. Ishihara, Y. Umezawa,
S. Tsuboyama, M. Nishio*

The Aromatic CH/ π Hydrogen Bond as an Important Factor in Determining the Relative Stability of Diastereomeric Salts Relevant to Enantiomeric Resolution – A Crystallographic Database Study

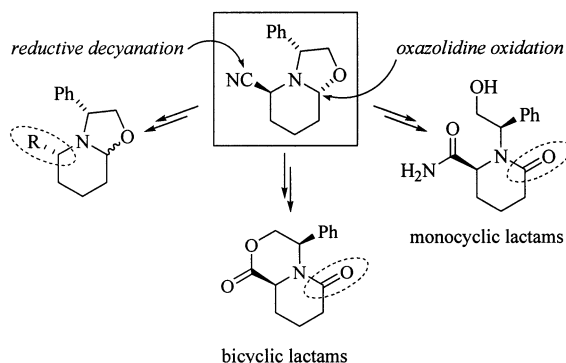
Keywords: Chiral resolution / Hydrogen bonds / π interactions / Supramolecular chemistry



4823 D. François, E. Poupon, N. Kunesch,
H.-P. Husson*

Reductive and Oxidative Transformations of the *N*-(Cyanomethyl)oxazolidine System to Expand the Chiral Pool of Piperidines

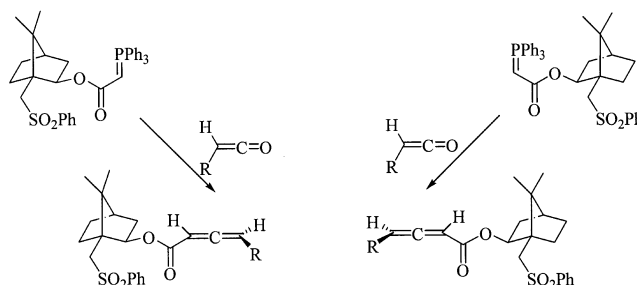
Keywords: Chirality / Lactams / Piperidines / Potassium permanganate / Raney nickel



4830 T. M. V. D. Pinho e Melo*, A. L. Cardoso,
A. M. d'A. Rocha Gonsalves, J. C. Pessoa,
J. A. Paixão, A. M. Beja

Novel Asymmetric Wittig Reaction: Synthesis of Chiral Allenic Esters

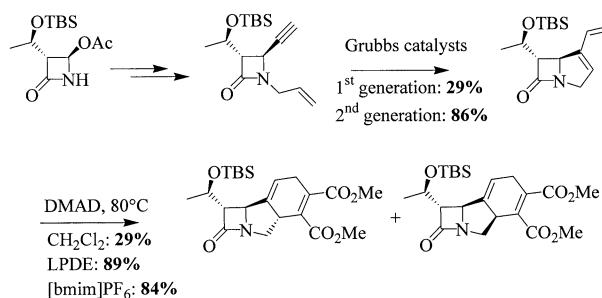
Keywords: Asymmetric Wittig reaction / Chiral allenic esters / Chiral phosphorus ylides



4840 N. Desroy, F. Robert-Peillard, J. Toueg,
R. Duboc, C. Hénaut, M. N. Rager,
M. Savignac,* J.-P. Genêt*

An Efficient Route to 4/5/6 Polycyclic β -Lactams

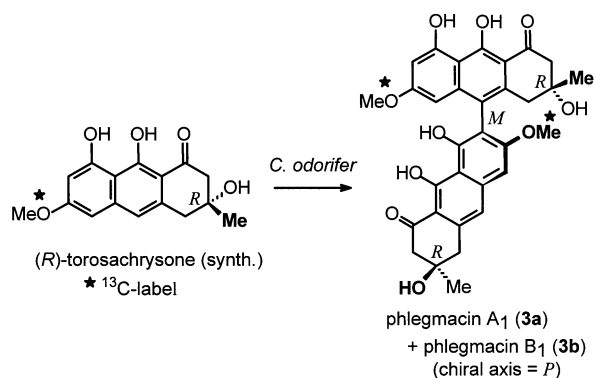
Keywords: Cycloaddition / Ionic liquids / Lactams / Metathesis



4850 M. Müller, K. Lamottke, W. Steglich,*
S. Busemann, M. Reichert, G. Bringmann,*
P. Spiteller

Biosynthesis and Stereochemistry of Phlegmacin-Type Fungal Pigments

Keywords: Biosynthesis / Biaryls / Fungal pre-anthraquinones / Oxidative phenolic coupling / Quantum chemical CD calculations

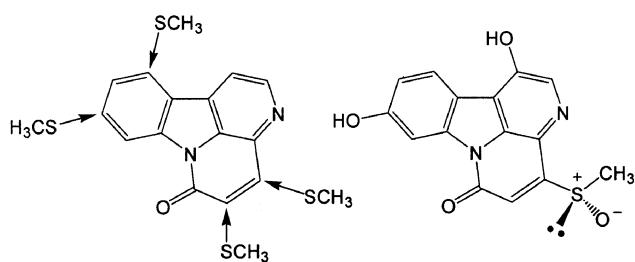


4856

M. G. Bröckelmann, J. Dasenbrock,
B. Steffan, W. Steglich,* Y. Wang,
G. Raabe, J. Fleischhauer*

An Unusual Series of Thiomethylated Canthin-6-ones from the North American Mushroom *Boletus curtisii*

Keywords: Natural products / Canthin-6-ones / Indole alkaloids / Chiral sulfoxides / Quantum chemical calculations



Position of the substituent in (methylthio)canthin-6-ones 2-5

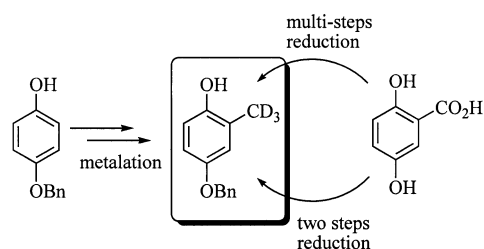
Curtisin (6a)

4864

F. Mazzini, A. Mandoli, P. Salvadori,*
T. Netscher, T. Rosenau

Approaches to the Preparation of 4-Benzyloxy-2-(α,α,α -D₃)methylphenol, a Building Block for Labeled δ -Tocopherol, and a New Synthesis of *R,R,R*-5-D₃- δ -Tocopherol

Keywords: Natural products / Tocopherols / Deuterium labeling / Chroman ring / Reduction

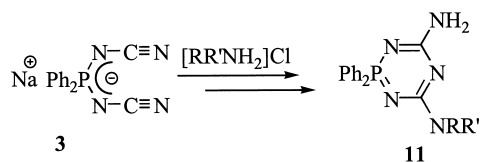


4870

N. Inguibert, L. Jäger,* M. Taillefer,*
M. Biedermann, H.-J. Cristau

Synthesis of 1,3,5,2 λ ⁵-Triazaphosphinines by Intramolecular Cyclisation of (*N*-Cyanophosphorimidoyl)guanidines and Diguanidinophosphonium Chlorides

Keywords: Azides / Guanidines / P heterocycles / Phosphorus ylides

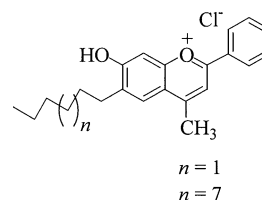


4877

A. C. Fernandes,* C. C. Romão, C. P. Rosa,
V. P. Vieira, A. Lopes, P. F. Silva,
A. L. Maçanita

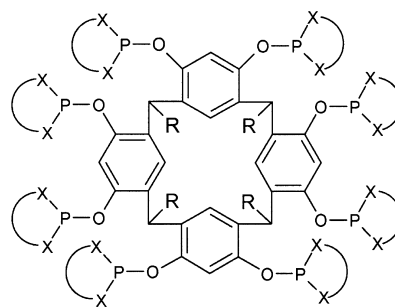
One-Step Synthesis of Novel Flavylium Salts Containing Alkyl Side Chains in Their 3-, 4'-, 5- or 6-Positions and Their Photophysical Properties in Micellar Media

Keywords: Alkyl side chain / Hydrophobic flavylium salts / Micelles / Photochromism / Ultrafast proton transfer

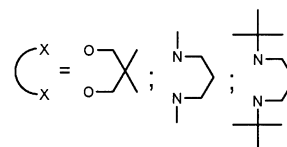


- 4884** V. I. Maslennikova, O. S. Serkova,
M. Gruner, S. Goutal, I. Bauer,
W. D. Habicher,* K. A. Lyssenko,
M. Y. Antipin, E. E. Nifantsev*

Synthesis and Conformation Analysis of New
Perphosphorylated Calix[4]resorcinarenes



R = CH₃, C₃H₇, C₆H₁₃, C₆H₅

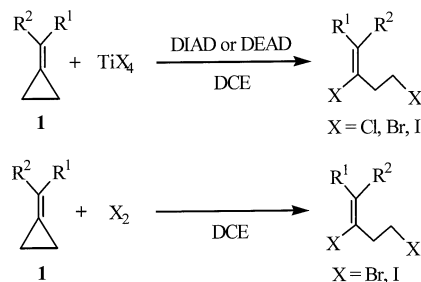


Keywords: Calixarenes / Conformation analysis /
Phosphorylation

- 4894** L.-X. Shao, L.-J. Zhao, M. Shi*



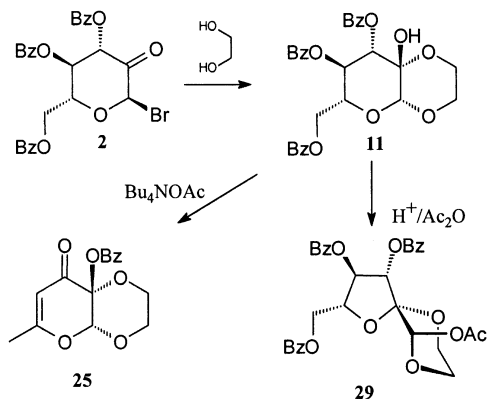
Dihalogenation of *gem*-Aryl-Disubstituted
Methylenecyclopropanes by DEAD, DIAD/
TiX₄ or Free Halogen



Keywords: Dihalogenation / Ring-opening reactions /
Lewis acids / Diisopropyl azodicarboxylate
(DIAD) / Diethyl azodicarboxylate
(DEAD)

- 4901** E. Cuny, F. W. Lichtenthaler,*
H. J. Lindner

Pyrano[2,3-*b*]dioxanes through Bisacetalic An-
nulation of 2-Ketosugars to Glycol

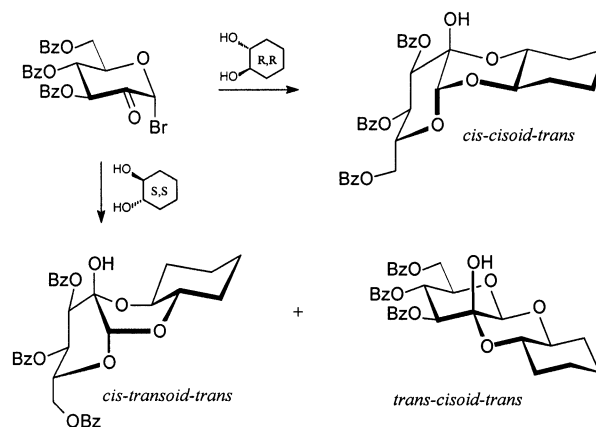


Keywords: Carbohydrates / Ulosyl bromides / Glyco-
sitation / *cis*-1,4,5-Trioxadecalins / Trioxa-
spiro[4,5]decanes

4911 F. W. Lichtenthaler,* E. Cuny

Linear Fused Pyran-Dioxane-Cyclohexane Tri-cycles: Synthesis of the Five Linkage Isomers and Ensuing Reactions

Keywords: Carbohydrates / Glycosylation / Ulosyl bromides / Trioxa-perhydroanthracenes

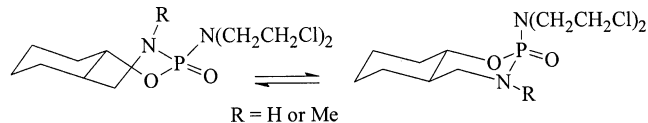


4921 P. Tähtinen,* A. Bagno, A. Koch, K. Pihlaja



Conformational Analysis of Saturated *trans*-Fused 1,3,2-Benzoxazaphosphinine 2-Oxides – DFT Calculation of NMR $J(P,H)$ Coupling Constants

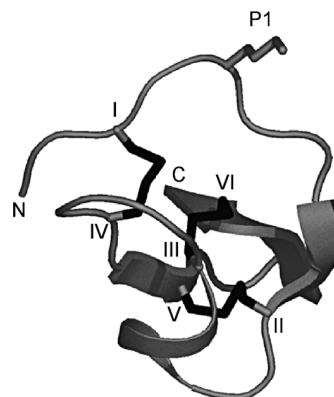
Keywords: Ab initio calculations / Conformation analysis / Density functional calculations / NMR spectroscopy / Phosphorus heterocycles



4931 O. Avrutina, H.-U. Schmoldt, H. Kolmar, U. Diederichsen*

Fmoc-Assisted Synthesis of a 29-Residue Cystine-Knot Trypsin Inhibitor Containing a Guaninyl Amino Acid at the P1-Position

Keywords: Cyclotides / Amino acids / Protein mimetics / Solid-phase synthesis / Trypsin inhibitors



4936 H. Takemura,* K. Takehara, M. Ata

Synthesis and Redox Behavior of Wurster Blue Cyclophanes

Keywords: Cyclophane / Wurster blue radical / Cyclic voltammetry / CT complex

