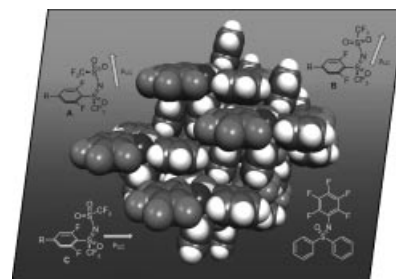


COVER PICTURE

The cover picture illustrates the conformational equilibrium of highly fluorinated sulfoximides. The conformation of this polar group critically influences the dielectric anisotropy of liquid crystals derived therefrom. The crystal structure of heterostilbene-like fluoroaromatic sulfoximides is dominated by stacking interactions of orthogonal aromatic substructures. Details are discussed in the article by P. Kirsch et al. on p. 797 ff.



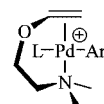
MICROREVIEW

Contents

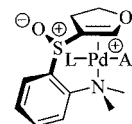
783 M. Oestreich*

Neighbouring-Group Effects in Heck Reactions

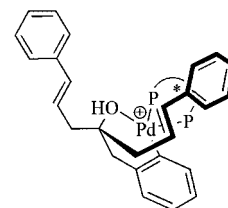
Keywords: Catalysis / C–C coupling / Heck reaction / Enantioselectivity / Regioselectivity



regiocontrol



diastereocontrol



enantiocontrol

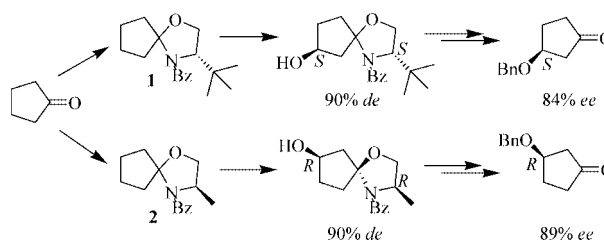
SHORT COMMUNICATION

793

D. F. Münzer, H. Griengl, A. Moutzi,
R. Saf, T. Terzani, A. de Raadt*

Chiral Auxiliaries as Docking/Protecting Groups in Biohydroxylation: (*S*)-Specific Hydroxylation of Enantiopure *tert*-Butyl-Substituted Spirooxazolidines Derived From Cyclopentanone

Keywords: Biohydroxylation / Biotransformations / Enantioselectivity / Substrate engineering



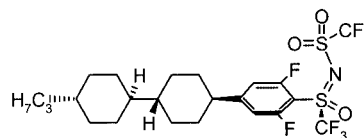
FULL PAPERS

797

P. Kirsch,* M. Lenges, D. Kühne,
K. Wanczek

Synthesis and Structural Characterization of Highly Fluorinated Sulfoximides and Sulfoximides as Functional Building Blocks for Materials Science

Keywords: Conformation analysis / Liquid crystals / Materials science / Organofluorine chemistry / Organosulfur chemistry



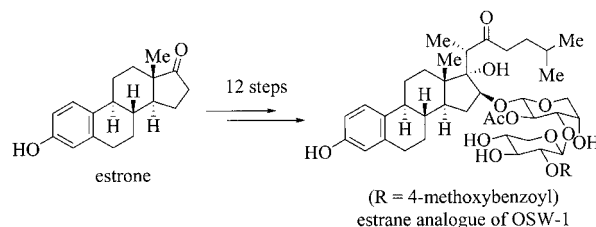
803

Y. Matsuya, S. Masuda, N. Ohsawa,
S. Adam, T. Tschamber, J. Eustache,
K. Kamoshita, Y. Sukenaga, H. Nemoto*



Synthesis and Antitumor Activity of the Estrane Analogue of OSW-1

Keywords: Antitumor agents / Structure-activity relationships / Natural products / Steroids / Glycosilation

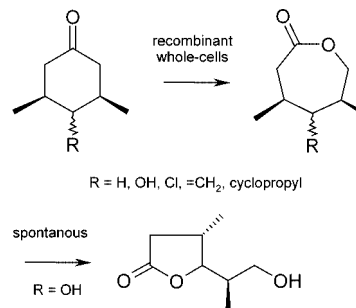


809

M. D. Mihovilovic,* F. Rudroff, B. Grötzl,
P. Stanetty

Microbial Baeyer–Villiger Oxidation of Prochiral Polysubstituted Cyclohexanones by Recombinant Whole-Cells Expressing Two Bacterial Monooxygenases

Keywords: Baeyer–Villiger oxidation / Biocatalysis / Biotransformations / Ketones / Oxygenases

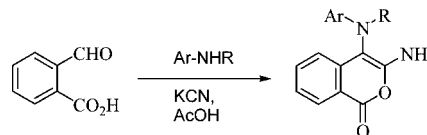


817

T. Opatz,* D. Ferenc

Facile Preparation of 3-Amino-4-(arylamino)-1*H*-isochromen-1-ones by a New Multicomponent Reaction

Keywords: Multicomponent reactions / Heterocycles / Cyclization / Amines / Strecker reaction



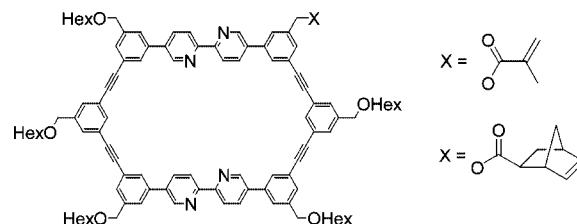
822

D. M. Opris, P. Franke, and A. D. Schlüter*



Shape-Persistent Macrocycles with Bipyridine Units: Progress in Accessibility and Widening of Applicability

Keywords: Cross-coupling / Macrocycles / Bipyridines / Aggregation / Polymerization

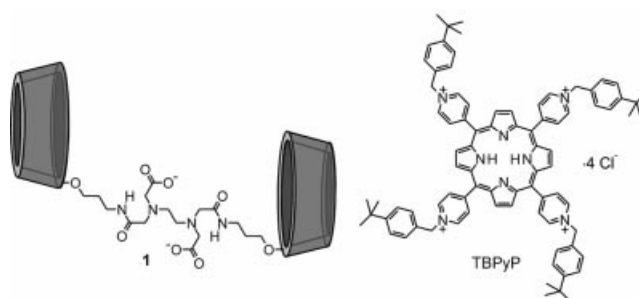


838

A. Mulder, J. Huskens,* D. N. Reinhoudt*

Complexation of Charged Porphyrins by Charged and Metal-Chelated EDTA-Tethered β -Cyclodextrin Dimers: A Thermodynamic Study on the Influence of Tether Charge and Flexibility on Binding Affinity

Keywords: Cyclodextrins / Molecular recognition / Host-guest systems / Porphyrinoids

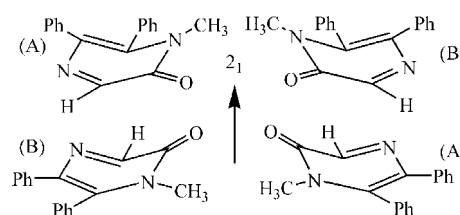


847

M. Kaftory,* V. Shteiman, T. Lavy,
J. R. Scheffer, J. Yang, V. Enkelmann

Discrimination in the Solid-State Photodimerization of 1-Methyl-5,6-diphenylpyrazin-2-one

Keywords: Chirality / Crystal structure / Enantioselectivity / Photochemistry / Solid-state reactions

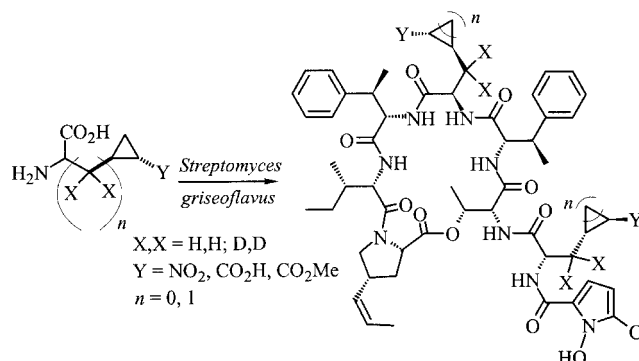


854

S. I. Kozhushkov, B. D. Zlatopolskiy,
M. Brandl, P. Alvermann, M. Radzom,
B. Geers, A. de Meijere,* A. Zeeck*

Hormaomycin Analogues by Precursor-Directed Biosynthesis – Synthesis of and Feeding Experiments with Amino Acids Related to the Unique 3-(*trans*-2'-Nitrocyclopropyl)alanine Constituent

Keywords: Aldol reactions / Amino acids / Biosynthesis / Hormaomycin / Isotopic labeling / Natural products / Synthetic methods

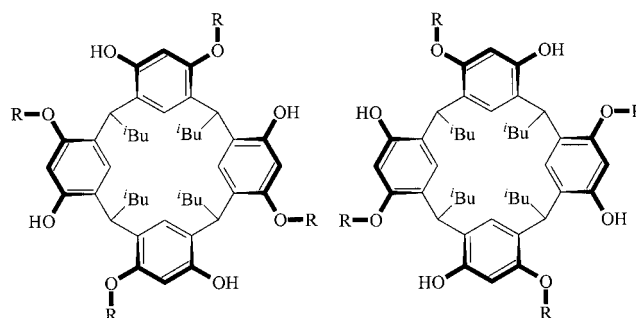


864

M. Klaes, B. Neumann, H. Stammler,
J. Mattay*

Determination of the Absolute Configuration of Inherently Chiral Resorc[4]arenes

Keywords: Inherent chirality / Resorc[4]arenes



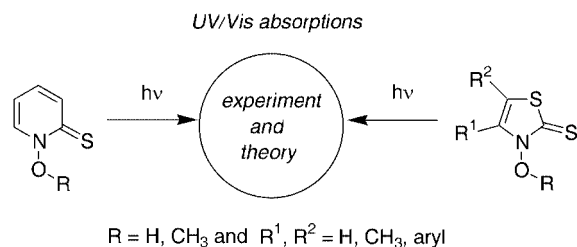
869

J. Hartung, K. Špehar, I. Svoboda, H. Fuess,
M. Arnone, B. Engels*



4- and 4,5-Substituted *N*-Methoxythiazole-2(3*H*)-thiones – Preparation, UV/Vis Spectra, and Assignment of Electronic Transitions in Comparison to *N*-Methoxypyridine-2(1*H*)-thione Using Time-Dependent Density Functional Theory Calculations

Keywords: Alkoxy radical precursor / Pyridinethione / Thiazolethione / Thiocarbonyl chromophore / Time-dependent density functional theory

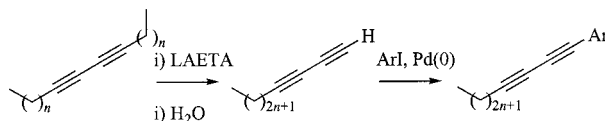


882

I. A. Balova,* V. N. Sorokoumov,
S. N. Morozkina, O. V. Vinogradova,
D. W. Knight, S. F. Vasilevsky

A Convenient Synthesis of Functionalised 1-Aryl-1,3-alkadiynes

Keywords: 1,3-Alkadienes / Acetylene zipper / 1-Aryl-alka-1,3-diyne / Cross-coupling / Rearrangement

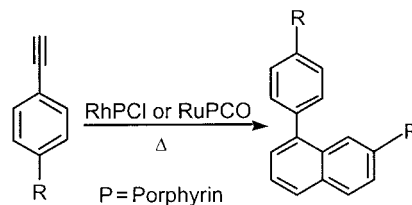


889

E. Elakkari, B. Floris, P. Galloni,
P. Tagliatesta*

The Formation of 1-Aryl-Substituted Naphthalenes by an Unusual Cyclization of Arylethynes Catalyzed by Ruthenium and Rhodium Porphyrins

Keywords: Metalloporphyrins / Catalysis / Rhodium / Ruthenium / Cyclooligomerization

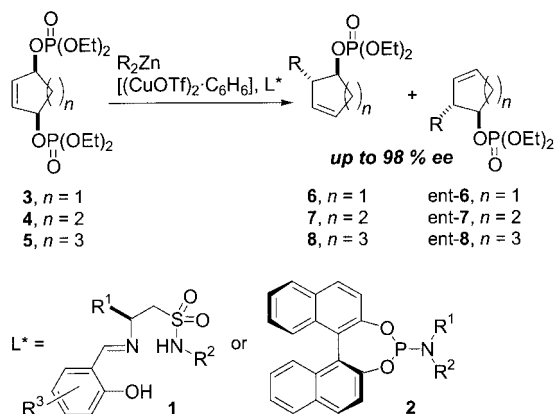


895

U. Piarulli,* P. Daubos, C. Claverie,
C. Monti, C. Gennari*

Copper-Catalysed, Enantioselective Desymmetrisation of *meso* Cyclic Allylic Bis(diethyl phosphates) with Organozinc Reagents

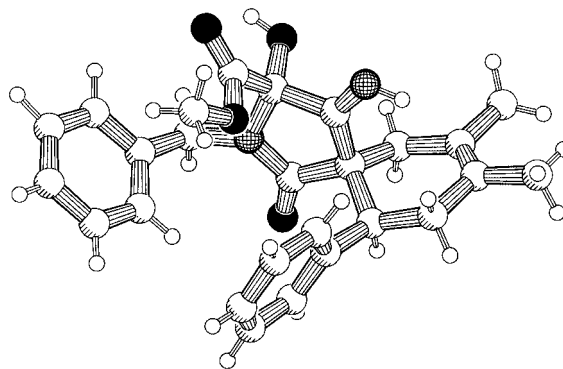
Keywords: Allylic substitution / Asymmetric synthesis / *meso* Desymmetrisation / Chiral ligands / Copper / Zinc



907

L. W. A Van Berkom, R. de Gelder,
H. W. Scheeren*

6-Spiro-1,4-diazepane-2,5-diones by Head-to-Tail N1/C2 Amide Bond Formation

Keywords: Spiroheterocycles / Cyclisation / Cyclic dipeptides / Diazepane

918

R. E. J. N. Litjens, L. J. van den Bos,
J. D. C. Codée, R. J. B. H. N. van den Berg,
H. S. Overkleef, G. A. van der Marel*

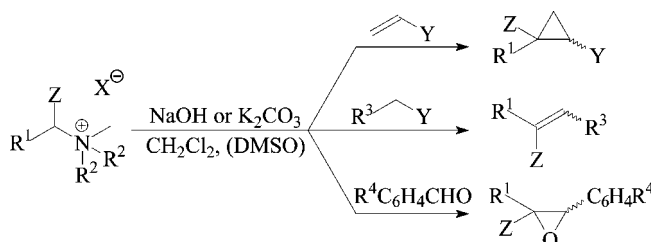
Sulfonium Triflate Mediated Glycosidations of Aryl 2-Azido-2-deoxy-1-thio-D-mannosides

Keywords: Carbohydrates / Glycosylation / β -Mannosamine / Oligosaccharides / Sulfonium triflates

925

A. Kowalkowska, D. Suchołbiak,
A. Jończyk*

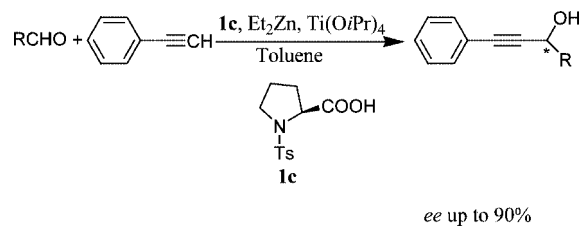
Generation and Reaction of Ammonium Ylides in Basic Two-Phase Systems

Keywords: Alkenes / Cyclopropanes / Oxiranes / Phase-transfer catalysis / Ylides

934

Z. Han, R. Wang,* Y. Zhou, L. Liu

Simple Derivatives of Natural Amino Acids as Chiral Ligands in the Catalytic Asymmetric Addition of Phenylacetylene to Aldehydes

Keywords: Asymmetric catalysis / Amino acids / Addition reactions / Phenylacetylene / Aldehydes

939

D. Taddei, A. M. Z. Slawin, J. D. Woollins*

2-(Benzylsulfanyl)-6-chloro-9-isopropylpurine, a Valuable Intermediate in the Synthesis of Diaminopurine Cyclin Dependent Kinase Inhibitors

Keywords: Antitumor agents / Enzymes / Inhibitors / Nitrogen heterocycles / Template synthesis