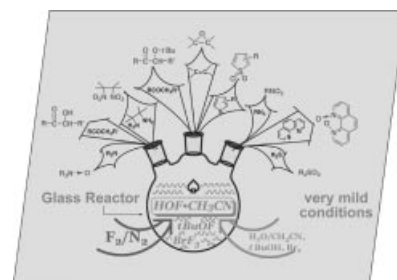


COVER PICTURE

The cover picture shows part of the synthetic possibilities opened now by using elemental fluorine as a starting material. Mixtures of F_2 with inert gases such as N_2 are commercially available or easily prepared from commercial 95% fluorine. During the last 15 years, chemists started to accept the notion that F_2 could be used for fluorination purposes. More recently, they slowly started to get acquainted with yet another side of this element – its ability to perform difficult reactions leading to fluorine-free derivatives. Thus, the most reactive element of the periodic table is an excellent tool for versatile regio- and stereospecific reactions which can not be performed without its “help”. Representative examples are presented in the Microreview by S. Rozen on p. 2433 ff.



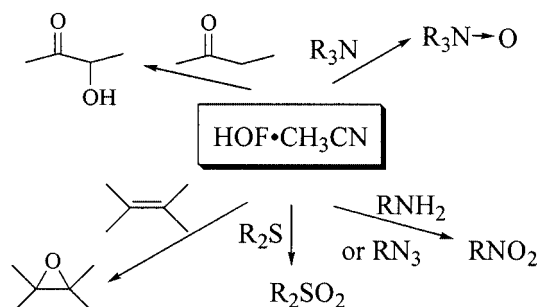
MICROREVIEW

Contents

2433 S. Rozen*

Elemental Fluorine and $HOF \cdot CH_3CN$ in Service of General Organic Chemistry

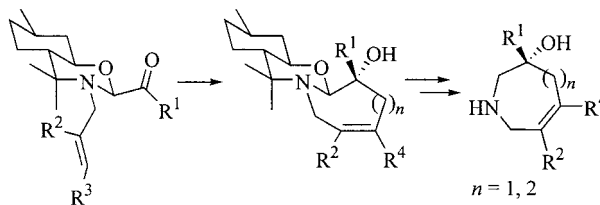
Keywords: Fluorine / Oxygenation / Hypofluorous acid



2449 R. Pedrosa, C. Andrés,*
A. Gutiérrez-Loriente, J. Nieto

Sequential Diastereoselective Addition of Allylic and Homoallylic Grignard Reagents to 2-Acylperhydro-1,3-benzoxazines and Ring-Closing Metathesis: an Asymmetric Route to Azepin-3-ol and Azocin-3-ol Derivatives

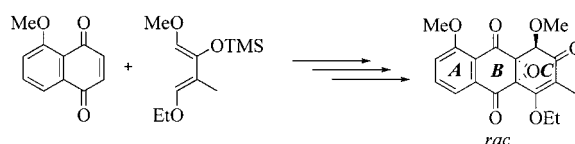
Keywords: Amino alcohols / Asymmetric synthesis / Azaheterocycles / Ring-closing metathesis



2459 L. F. Tietze,* C. Güntner, K. M. Gericke,
I. Schuberth, G. Bunkoczi

A Diels–Alder Reaction for the Total Synthesis of the Novel Antibiotic Antitumor Agent Mensacarcin

Keywords: Antitumor agents / Cycloadditions / Electrocyclic reactions / Epoxidation / Natural products

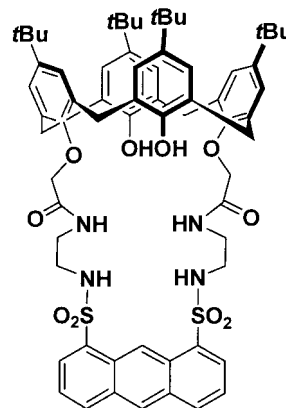


2468 Q.-Y. Chen, C.-F. Chen*



A Highly Selective Fluorescent Chemosensor for H_2PO_4^- Based on a Calix[4]arene Tetraamide Derivative

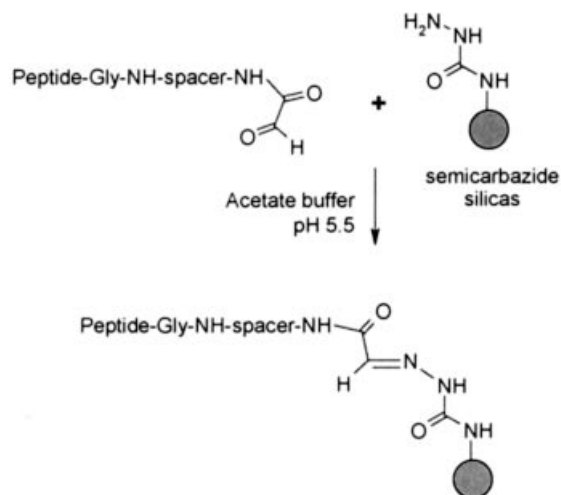
Keywords: Calixarenes / Chemosensors / Dihydrogenphosphate / Fluorescence / Sulfonamides



2473 P. Joly, N. Ardès-Guisot, S. Kar, M. Granier,
J.-O. Durand,* O. Melnyk*

Hybrid Bioorganic–Inorganic Materials Prepared by Site-Specific Ligation of Peptides to Functionalized Polydisperse Silica Particles

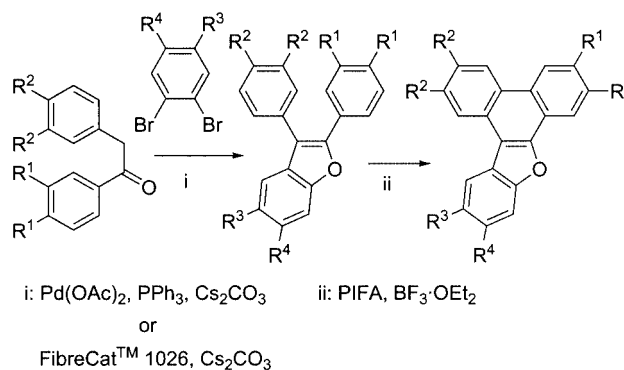
Keywords: Organic-inorganic hybrid composites / Peptides / Semicarbazides / Silica



2481 F. Churruca, R. SanMartin, I. Tellitu,
E. Domínguez*

A New, Expedient Entry to the Benzophenanthrofurane Framework by a Pd-Catalyzed C- and O-Arylation/PIFA-Mediated Oxidative Coupling Sequence

Keywords: Fused-ring systems / Heterogeneous catalysis / Oxidative coupling / Oxygen heterocycles / Palladium

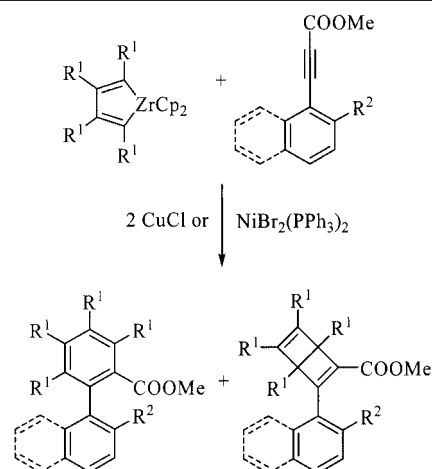


2491 L. Dufková, M. Kotora,* I. Císařová



Synthesis of Sterically Hindered Biaryls by Zr-Mediated Co-cyclotrimerization of Alkynes

Keywords: Biaryls / Zirconium / Benzene / Cyclotrimerization / Dewar benzene

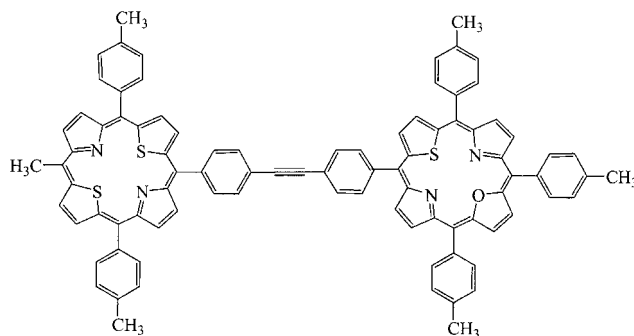


2500 S. Punidha, N. Agarwal, M. Ravikanth*



A Simple Route to Prepare Monofunctionalised 21-Thia-, 21,23-Dithia-, and 21-Thia-23-oxaporphyrins from Unsymmetrical Thiophene Diols and Their Use in the Synthesis of Covalently Linked Unsymmetrical Porphyrin Dimers

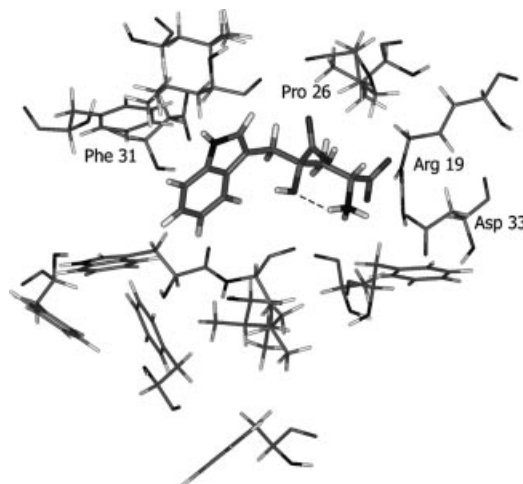
Keywords: Thiophene diols / Porphyrins / Synthetic methods



2518 A. Bassoli,* G. Borgonovo, G. Busnelli,
G. Morini, L. Merlini

Monatin, Its Stereoisomers and Derivatives: Modeling the Sweet Taste Chemoreception Mechanism

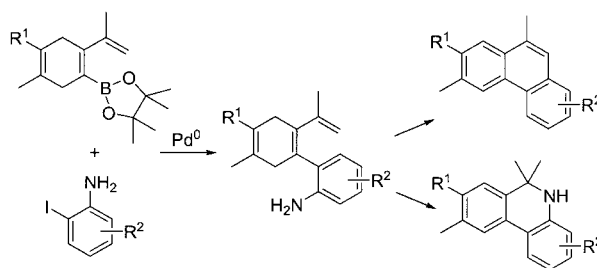
Keywords: Sweet taste / Monatin / Molecular modeling / Sweet taste receptor / Pseudo-receptor modeling



2526 G. Hilt,* W. Hess, F. Schmidt

Dihydroaromatic Boronic Esters as Building Blocks for the Synthesis of Phenanthrenes and Phenanthridines

Keywords: Boronic esters / Diazotisation / Heck reaction / Hydroamination / Suzuki coupling

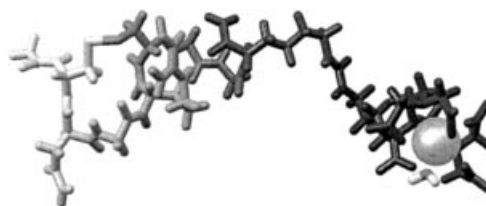


2534 S. Langereis, A. Dirksen, B. F. M. De Waal, M. H. P. Van Genderen, Q. G. De Lussanet, T. M. Hackeng,* E. W. Meijer*



Solid-Phase Synthesis of a Cyclic NGR-Functionalized Gd^{III}DTPA Complex

Keywords: Solid-phase synthesis / Target-specific oligopeptide / MRI contrast agent / Gadolinium

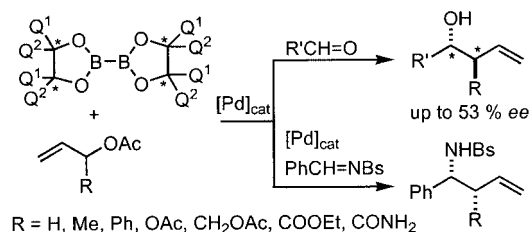


2539 S. Sebelius, K. J. Szabó*



Allylation of Aldehyde and Imine Substrates with In Situ Generated Allylboronates. A Simple Route to Enantioenriched Homoallyl Alcohols

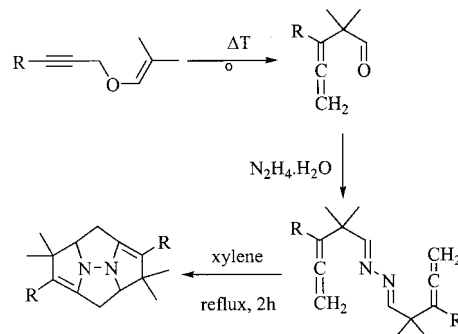
Keywords: Allylic compounds / Boron / Diboronates / Electrophilic addition / Homogenous catalysis / Palladium



2548 H. Zachová, S. Man, M. Nečas, M. Potáček*

Fused Tetracyclic Heterocycles by Thermally Initiated Intramolecular Criss-Cross Cycloaddition of 3-Substituted Homoallenylaldazines

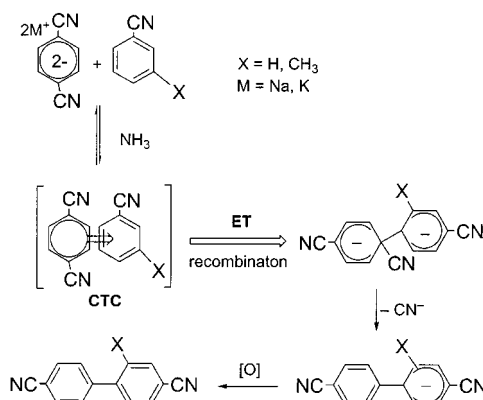
Keywords: Allenes / Cycloaddition / Nitrogen heterocycles / Sigmatropic rearrangement / Polycycles



2558 E. V. Panteleeva, L. N. Shchegoleva, V. P. Vysotsky, L. M. Pokrovsky, V. D. Shteingarts*

Cyanophenylation of Aromatic Nitriles by Terephthalonitrile Dianion: Is the Charge-Transfer Complex a Key Intermediate?

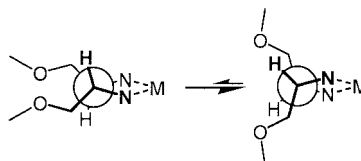
Keywords: Biaryls / Cyanides / Electron transfer / Reaction mechanisms / Reactive intermediates



- 2566** A. Scheurer,* H. Maid, F. Hampel,
R. W. Saalfrank,* L. Toupet, P. Mosset,*
R. Puchta, N. J. R. van Eikema Hommes

Influence of the Conformation of Salen Complexes on the Stereochemistry of the Asymmetric Epoxidation of Olefins

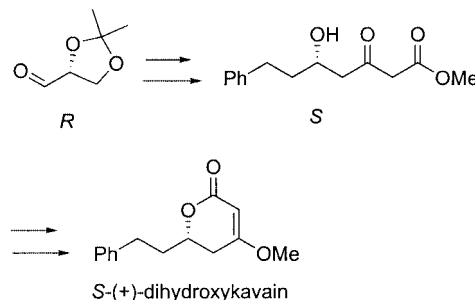
Keywords: Asymmetric catalysis / N,O ligand complexes / Conformation analysis / X-ray diffraction / Density functional calculations



- 2575** F.-D. Wang, J.-M. Yue*

A Total Synthesis of (+)- and (–)-Dihydrokavain with a Sonochemical Blaise Reaction as the Key Step

Keywords: Dihydroxykavain / Mitsunobu reaction / Natural products / Sonochemistry / Total synthesis

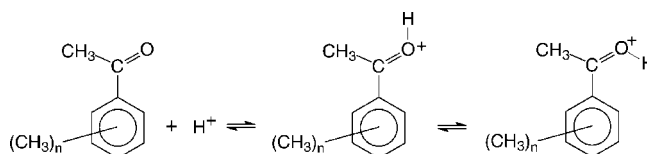


- 2580** S. Böhm, J.-F. Gal, P.-C. Maria,
J. Kulháněk, O. Exner*



Steric Effects in Isolated Molecules: Gas-Phase Basicity of Methyl-Substituted Acetophenones

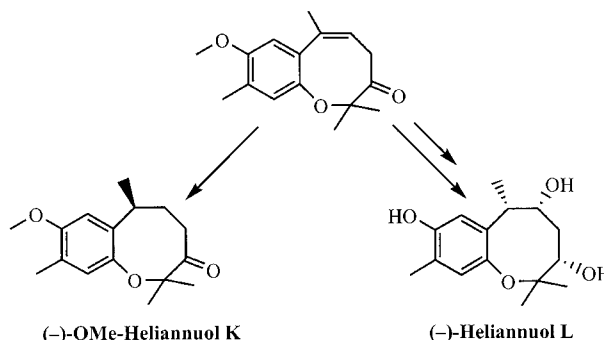
Keywords: Density functional calculations / Gas-phase basicity / Inhibition of resonance / Isodesmic reaction / Steric effects / Conformational analysis



- 2589** F. Lecornué, R. Paugam,
J. Ollivier*

Strategies for the Total Asymmetric Synthesis of Heliannuols K and L: Scope and Limitations

Keywords: Asymmetric synthesis / Oxygen heterocycles / Natural products / Titanium

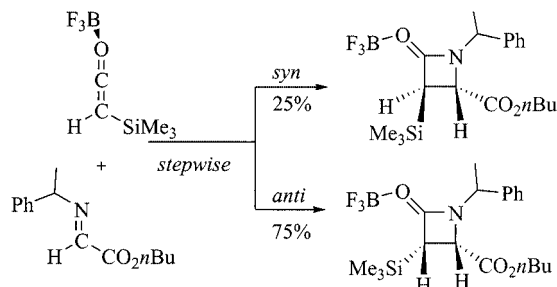


- 2599** B. Pelotier, M. Rajzmann, J.-M. Pons,
P. Campomanes, R. López, T. L. Sordo*



The Formation of Silylated β -Lactams from Silylketenes through Lewis Acid Promoted [2+2] Cycloaddition: A Combined Theoretical and Experimental Study

Keywords: Silylketenes / Lactams / Lewis acids / Reaction mechanisms / Density functional calculations

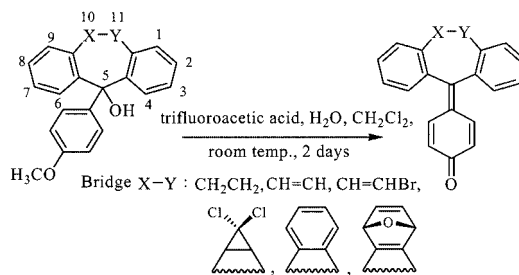


2607 B. Taljaard,* J. H. Taljaard, C. Imrie,
M. R. Caira



The Synthesis of Novel *p*-Quinone Methides: *O*-Dealkylation of 5-(*p*-Alkyloxyaryl)dibenzo-10,11-dihydro[*a,d*]cyclohepten-5-ols and Related Compounds

Keywords: Cleavage reactions / Conjugation / Dealkylation / Medium-ring compounds / Quinone methides / Dienones



2620 D. Möhring, M. Nieger, B. Lewall,
K. H. Dötz*

Tricarbonyl(naphthoquinone)chromium: Synthesis and Application in [4+2] Cycloaddition Reactions

Keywords: Arene complexes / Chromium / Naphthoquinone / Diels–Alder reactions / Cycloaddition

