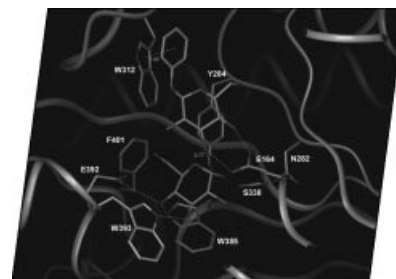


COVER PICTURE

The cover picture shows the molecular modeling of the active site of a “glycosynthase” mutant obtained by directed mutagenesis (E338S) of the native thermostable Tt- β -Glycosidase from *Thermus thermophilus*. The relative orientations of the donor (α -D-glucopyranosyl fluoride) and of the acceptor (phenyl β -D-glucopyranoside), which corresponded to an energy minimum, were in agreement with the β -(1 $\rightarrow$ 3) regioselectivity exhibited by this E338S mutant enzyme. The stabilization of the initial ligands in this state, particularly due to stacking between the phenyl aglycon group of the acceptor and W312, gives an explanation for the very good transglycosylation yields (95%) obtained by using phenyl β -D-glucopyranoside. Details are discussed in the article by M. Dion et al. on p. 1977ff.



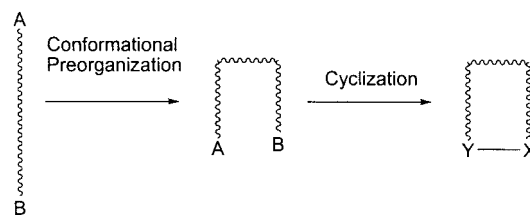
MICROREVIEW

Contents

1949 J. Blankenstein, J. Zhu*

Conformation-Directed Macrocyclization Reactions

Keywords: Macrocycles / Conformation-directed
 macrocyclization / Pre-organization /
 Natural products / Synthesis



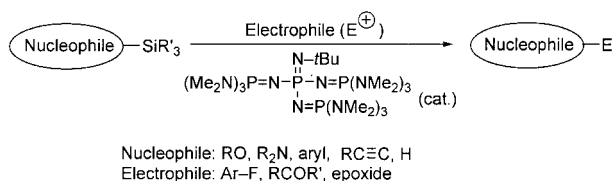
SHORT COMMUNICATIONS

1965 M. Ueno, C. Hori, K. Suzawa, M. Ebisawa, Y. Kondo*



Catalytic Activation of Silylated Nucleophiles Using *t*Bu-P4 as a Base

Keywords: Anions / Aromatic compounds / Catalysis / Phosphazenes

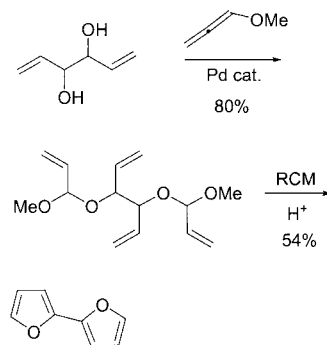


1969 T. J. Donohoe,* A. J. Orr, K. Gosby, M. Bingham



A Metathesis Approach to Aromatic Heterocycles

Keywords: Metathesis / Aromatic heterocycles / Methoxyallene



1972 B. Veldurthy, J.-M. Clacens, F. Figueras*



New Highly Active and Selective Heterogeneous Catalytic System for the Synthesis of Unsymmetrical Organic Carbonates: A Green Protocol

Keywords: Unsymmetrical organic carbonates / Cyclic carbonates / Alcohols / Diethyl carbonate / CsF on α -alumina / Green protocol

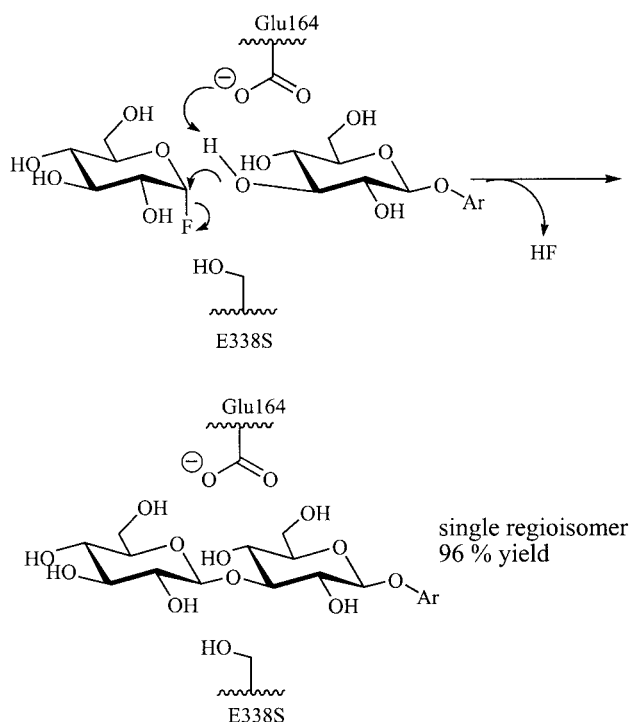


FULL PAPERS

1977 J. Drone, H. Feng, C. Tellier, L. Hoffmann, V. Tran, C. Rabiller, M. Dion*

Thermus thermophilus Glycosynthases for the Efficient Synthesis of Galactosyl and Glucosyl β -(1 $\rightarrow$ 3)-Glycosides

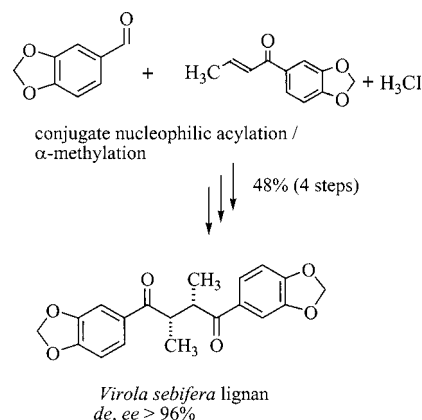
Keywords: Glycosynthase / Transglycosidation / Thermophilic β -glycosidase / *Thermus thermophilus* / β -(1 $\rightarrow$ 3)-Disaccharides / Molecular modeling



1984 D. Enders,* M. Milovanovic, E. Voloshina,
G. Raabe, J. Fleischhauer

First Asymmetric Synthesis and Determination
of the Absolute Configuration of a Lignan
Isolated from *Virola sebifera*

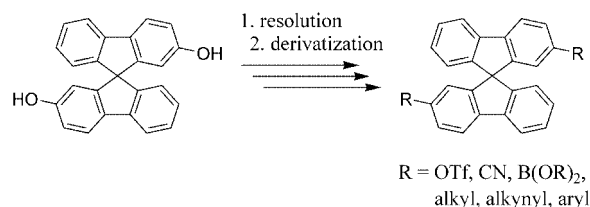
Keywords: Lignans / Nucleophilic acylation / α -Amino
nitriles / Michael addition / Circular dichro-
ism



1991 F. Thiemann, T. Piehler, D. Haase, W. Saak,
A. Lützen*

Synthesis of Enantiomerically Pure Dissymmet-
ric 2,2'-Disubstituted 9,9'-Spirobifluorenes

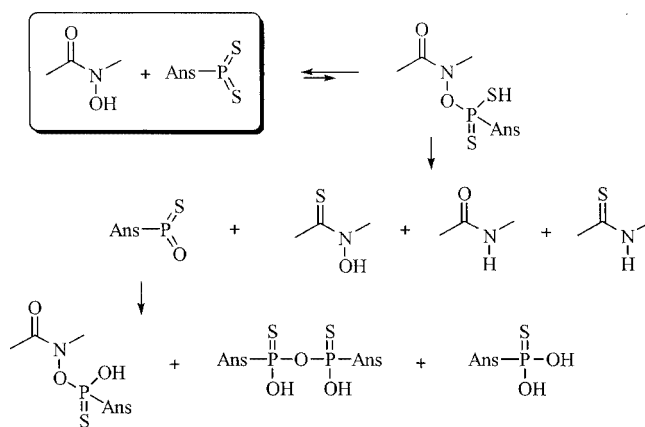
Keywords: Resolution / Clathrates / Dissymmetric
molecules / Cross-coupling / Spiro com-
pounds



2002 W. Przychodzeń*

Mechanism of the Reaction of Lawesson's
Reagent with *N*-Alkylhydroxamic Acids

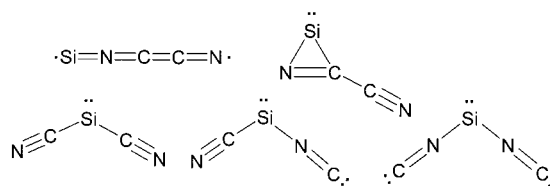
Keywords: Reaction mechanisms / Reactive inter-
mediates / Chemoselectivity / Reduction



2015 G. Maier,* H. P. Reisenauer

Reactions of Silicon Atoms with Cyanogen:
Generation and Matrix-Spectroscopic Identifi-
cation of Five C₂N₂Si Isomers

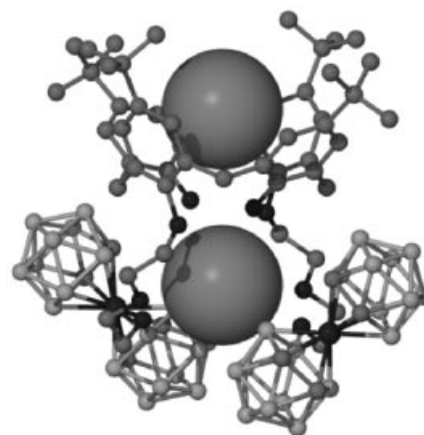
Keywords: Matrix isolation / Photoisomerizations /
Co-condensation / Reaction mechanisms /
Silylenes



- 2022** B. Grüner,* L. Mikulášek, J. Báča,
I. Císařová, V. Böhmer, C. Danila,
M. M. Reinoso-García, W. Verboom,
D. N. Reinhoudt, A. Casnati, R. Ungaro

Cobalt Bis(dicarbollides)(1–) Covalently Attached to the Calix[4]arene Platform: The First Combination of Organic Bowl-Shaped Matrices and Inorganic Metallaborane Cluster Anions

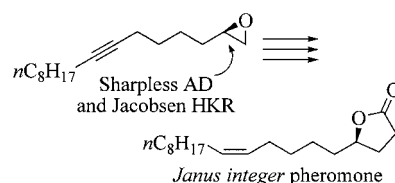
Keywords: Calixarenes / Carboranes / Dicarbollides / Metallocarboranes / Resorcane cavitands



- 2040** K. Mori*

Concise Synthesis of (4*R*,9*Z*)-Octadec-9-en-4-olide, the Female Sex Pheromone of *Janus integer*

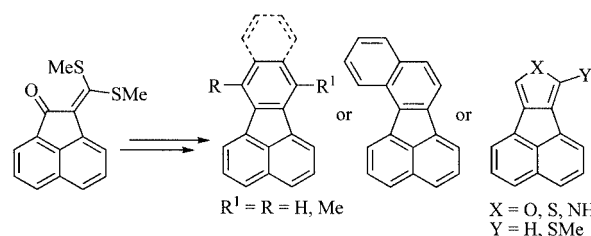
Keywords: Dihydroxylation / Epoxides / Lactones / Natural products / Pheromones



- 2045** K. Panda, C. Venkatesh, H. Ila,*
H. Junjappa

Efficient Routes to Acenaphthylene-Fused Polycyclic Arenes/Heteroarenes and Heterocyclic Fluoranthene Analogues

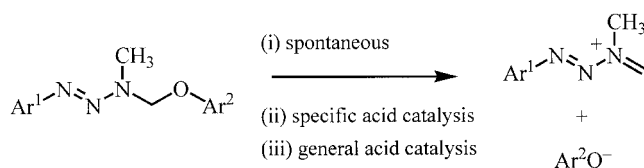
Keywords: Arenes / Annulation / Carbocycles / Heterocycles / Fused-ring systems



- 2056** E. Carvalho, A. P. Francisco, J. Iley,*
E. Rosa*

The Mechanism of Hydrolysis of Aryl Ether Derivatives of 3-Hydroxymethyltriazenes

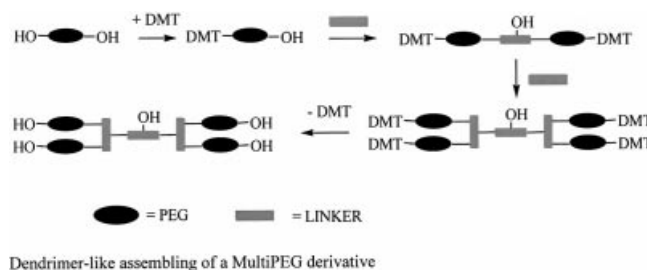
Keywords: Prodrug / Hydrolysis / Kinetics



- 2064** M. Ballico, S. Drioli, G. M. Bonora*

MultiPEGs: High Molecular Weight Multifunctional Poly(ethylene glycol)s Assembled by a Dendrimer-Like Approach

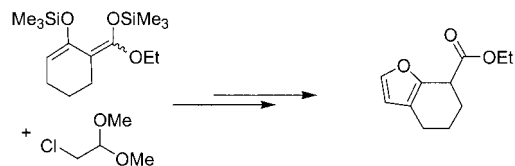
Keywords: Dendrimers / Polymers / Poly(ethylene glycol) / Supported synthesis / Liquid-phase synthesis



2074 E. Bellur, H. Görls, P. Langer*

Regioselective Synthesis of Functionalized Furans by Cyclization of 1,3-Bis-Silyl Enol Ethers with 1-Chloro-2,2-dimethoxyethane

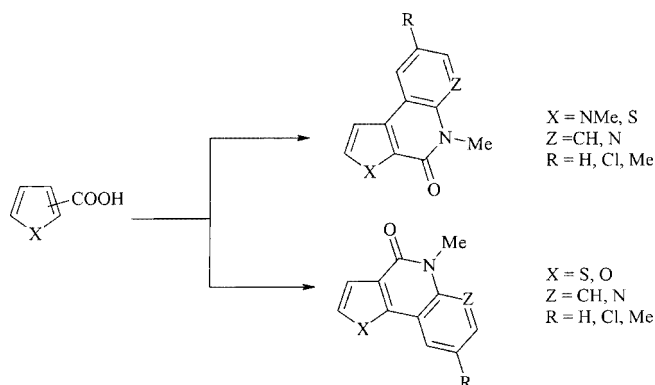
Keywords: Cyclization / Chemoselectivity / Silyl enol ethers / Regioselectivity / Tetrahydrofurans



2091 E. M. Beccalli,* G. Brogini, M. Martinelli, G. Paladino, C. Zoni

Synthesis of Tricyclic Quinolones and Naphthyridones by Intramolecular Heck Cyclization of Functionalized Electron-Rich Heterocycles

Keywords: Heck reaction / Palladium / Cyclization / Lactam / Microwaves

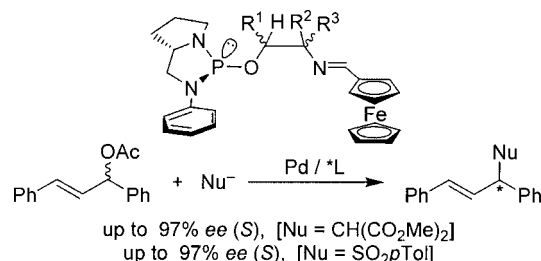


2097 V. N. Tsarev,* S. E. Lyubimov, O. G. Bondarev, A. A. Korlyukov, M. Y. Antipin, P. V. Petrovskii, V. A. Davankov, A. A. Shiryaev, E. B. Benetsky, P. A. Vologzhanin, K. N. Gavrilov



Novel Highly Efficient *P*-Chiral Ferrocenyl-imino Diamidophosphite Ligands for Pd-Catalysed Asymmetric Allylation

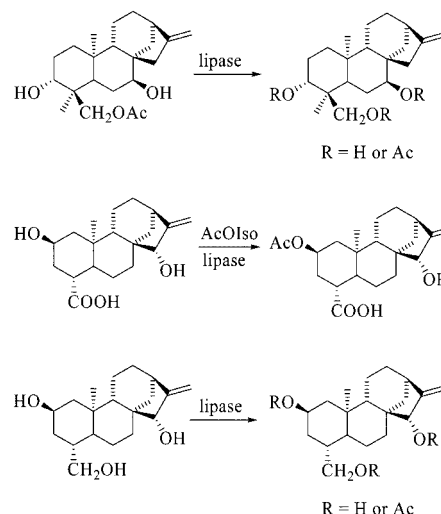
Keywords: Allylic substitution / Asymmetric catalysis / Palladium / *P,N*-Bidentate ligands / Rhodium



2106 L. N. Monsalve, S. Rosselli, M. Bruno, A. Baldessari*

Enzyme-Catalysed Transformations of *ent*-Kaurane Diterpenoids

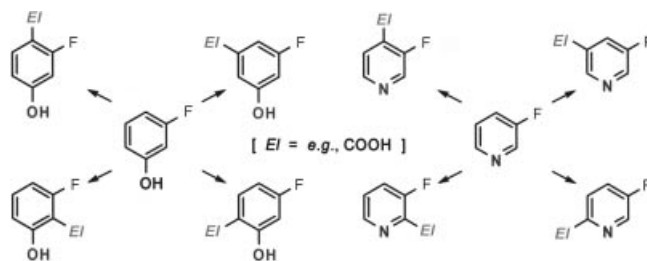
Keywords: Enzyme catalysis / Acetylation / Deacetylation / Diterpenoids / *ent*-Kauranes



**2116 E. Marzi, C. Bobbio, F. Cottet,
M. Schlosser***

Converting Core Compounds into Building Blocks: The Concept of Regiochemically Exhaustive Functionalization

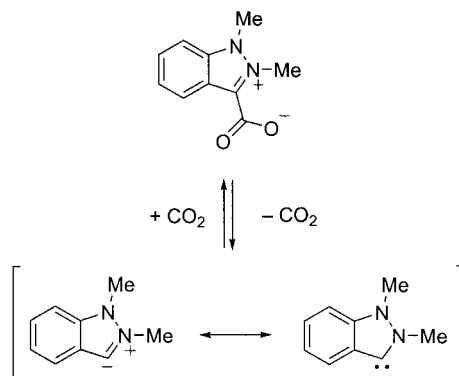
Keywords: Carboxylation / Halogen-metal permutation / Halogen migration / Metalation / Phenols / Pyridines / Regioselectivity



2124 A. Schmidt,* L. Merkel, W. Eisfeld

Nucleophilic Carbenes and Pseudo-Cross-Conjugated Mesomeric Betaines of Indazole Starting from Analogues of the Alkaloid-Betaine Nigellicine

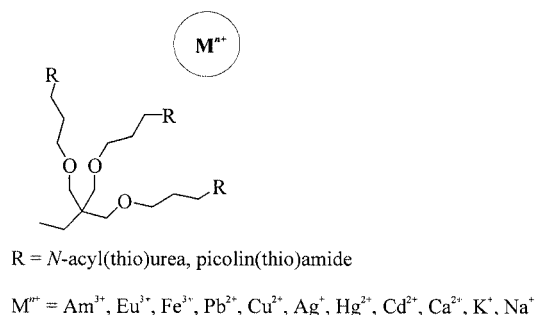
Keywords: Betaines / Nitrogen heterocycles / Carbenes / Insertion / Indazolium salts



**2131 M. M. Reinoso-García, A. Dijkman,
W. Verboom,* D. N. Reinhoudt,
E. Malinowska, D. Wojciechowska,
M. Pietrzak, P. Selucky**

Metal Complexation by Tripodal *N*-Acyl(thio)urea and Picolin(thio)amide Compounds: Synthesis/Extraction and Potentiometric Studies

Keywords: Tripodands / Nuclear waste / Extractions / Ion-selective electrodes



CORRECTION

2139 S. Vagin, M. Hanack*

Synthesis and Some Properties of Aryl- and Aryloxy-Substituted Phthalocyanines and Their Metal Complexes: A Comparison with Porphyrazine and Naphthalocyanine Analogues

Keywords: Aryl-substituted phthalocyanines / Macrocycles / Macrocyclic ligands / Metal complexes