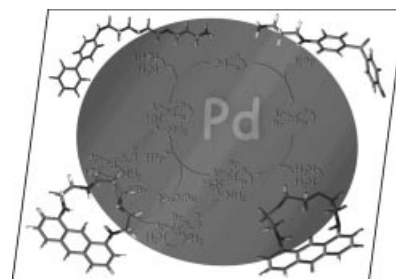


COVER PICTURE

The cover picture shows the model structures of four compounds among the hundred of arylated linear and cyclic polyamines prepared by palladium-catalyzed coupling of mono- and dihalogenoarenes with various aliphatic or aromatic polyamines. The reaction is strongly dependent on the nature and the concentration of the catalytic system, as well as the nature of the base. The competitive reaction between primary and secondary amines and the monoamination of dihalobenzenes have also been detailed in the article by R. Guillard et al. on p. 261 ff. In the following article by the same authors on p. 281 ff, the method has been applied to the synthesis of numerous nitrogen- and oxygen-containing macrocycles incorporating anthracene or anthraquinone moieties.



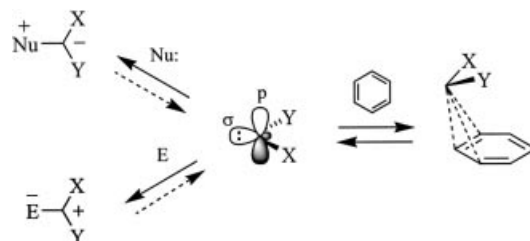
MICROREVIEW

Contents

237 W. Kirmse*

Carbene Complexes of Nonmetals

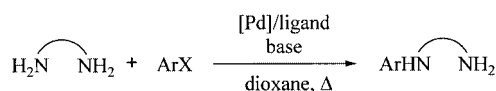
Keywords: Carbenes / Coordination modes / Ylides /
 Betaines / Methylene transfer



261 I. P. Beletskaya,* A. G. Bessmertnykh,
A. D. Averin, F. Denat, R. Guillard*

Palladium-Catalyzed Arylation of Linear and Cyclic Polyamines

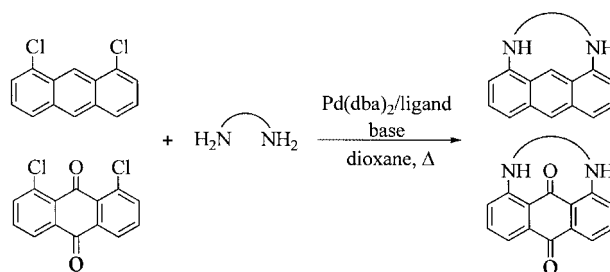
Keywords: Amines / Amination / Aromatic substitution / Homogeneous catalysis / Palladium



281 I. P. Beletskaya,* A. G. Bessmertnykh,
A. D. Averin, F. Denat, R. Guillard*

Palladium-Catalysed Amination of 1,8- and 1,5-Dichloroanthracenes and 1,8- and 1,5-Dichloroanthraquinones

Keywords: Amines / Aromatic substitution / Homogeneous catalysis / Macrocycles / Palladium

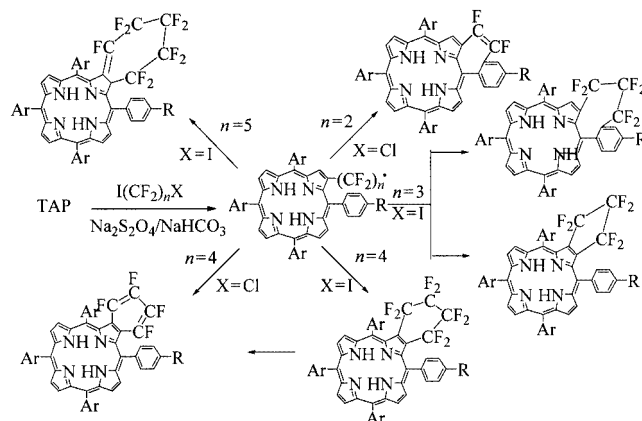


306 Z. Zeng, C. Liu, L.-M. Jin, C.-C. Guo,*
Q.-Y. Chen*



Unexpected Intramolecular Cyclization of 2-(Perfluoroalkyl)tetraarylporphyrin Radicals: Approaches for the Intramolecular Cyclization of 2-(Perfluoroalkyl)tetraarylporphyrin Radicals

Keywords: Cyclization / Fused-ring systems / Porphyrinoids / Radicals

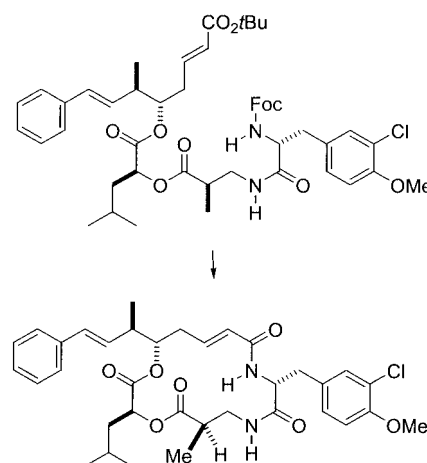


317 P. Danner, M. Bauer, P. Phukan,
M. E. Maier*



Total Synthesis of Cryptophycin 3

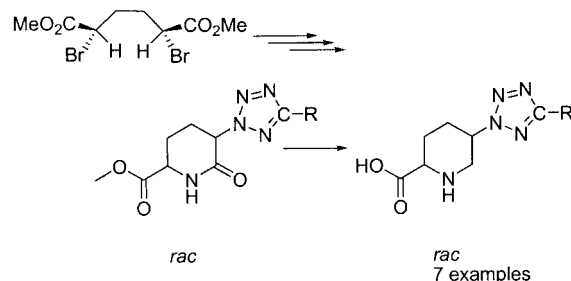
Keywords: Alkylation / Amino acids / Natural products / Peptidomimetics



326 F. Lenda, F. Guenoun, B. Tazi, N. Ben larbi,
H. Allouchi, J. Martinez, F. Lamaty*

Synthesis of New Tetrazole-Substituted Pyro-
aminoadipic and Pipelicolic Acid Derivatives

Keywords: Aminoadipic acid / Nitrogen heterocycles /
Substitution / Tetrazoles

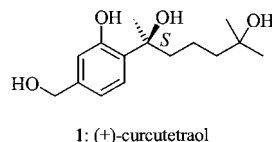


334 T. Mülhaupt, H. Kaspar, S. Otto,
M. Reichert, G. Bringmann, T. Lindel*



Isolation, Structural Elucidation, and Synthesis
of Curcutetraol

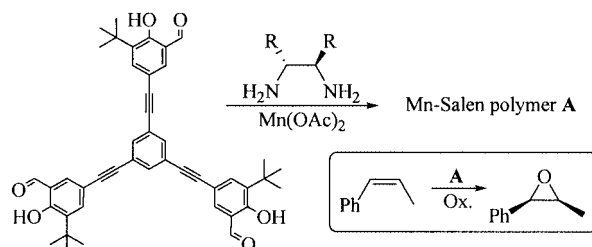
Keywords: Alcohols / Natural products / Stereo-
chemical analysis / Terpenoids / Total
synthesis



342 M. Nielsen, A. H. Thomsen, T. R. Jensen,
H. J. Jakobsen, J. Skibsted, K. V. Gothelf*

Formation and Structure of Conjugated Salen-
Cross-Linked Polymers and Their Application in
Asymmetric Heterogeneous Catalysis

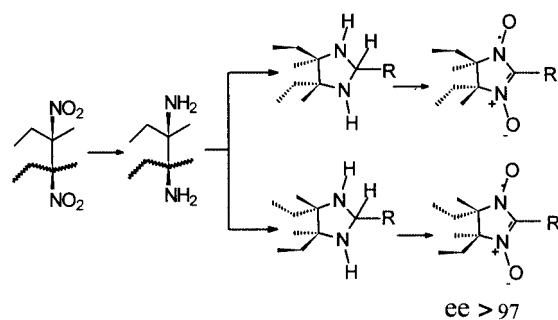
Keywords: Polymers / Asymmetric heterogeneous cata-
lysts / Nanostructures / Self-assembly



348 C. Hirel, J. Pécaut, S. Choua, P. Turek,
D. B. Amabilino, J. Veciana, P. Rey*

Enantiopure and Racemic Chiral Nitronyl
Nitroxide Free Radicals: Synthesis and Charac-
terization

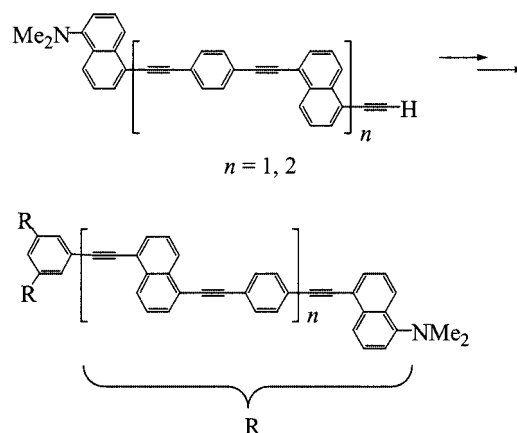
Keywords: Chirality / Imidazolidine / Magnetism /
Nitroxide



360 J. G. Rodríguez,* J. L. Tejedor

End-Capped, Conjugated (Dimethylamino)-
naphthyl Nanostructures with Alternating
(1-Naphthylethynyl-*p*-phenylethynyl)_x Branches
on a 1,3,5-Substituted Benzene Core

Keywords: Alkynes / Conjugation / Cross-coupling /
Dendrimers / Fluorescence

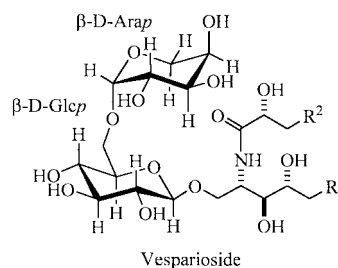


368 V. Costantino, E. Fattorusso, C. Imperatore,
A. Mangoni*



Vesparioside from the Marine Sponge *Spheciospongia vesparia*, the First Diglycosylceramide with a Pentose Sugar Residue

Keywords: Glycolipids / Natural products / Sphingolipids / Structure elucidation / Pentose

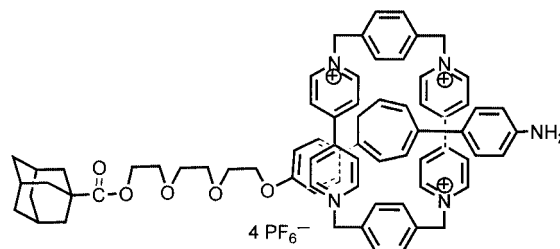


374 W. Abraham,* L. Grubert,
S. Schmidt-Schäffer, K. Buck



Pseudorotaxanes and Rotaxanes Incorporating Diarylcycloheptatriene Stations

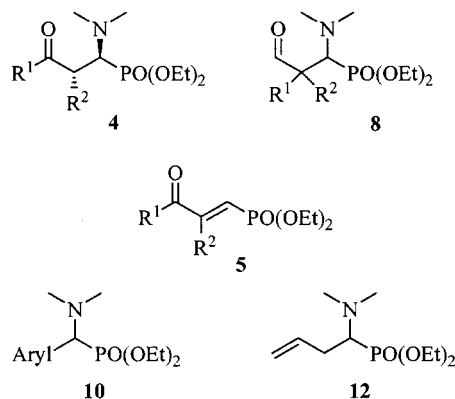
Keywords: Cycloheptatriene / Rotaxanes / Supramolecular chemistry / Tropylium ion



387 N. Risch,* S. Piper, A. Winter,
A. Lefarth-Risse

An Efficient Synthesis of Novel α -Aminophosphonates Based on a Mannich-Type Reaction

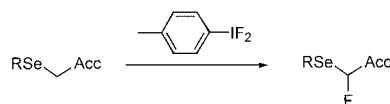
Keywords: Aminoalkylation / Mannich bases / Iminium salts / α -Aminophosphonates / Synthetic methods



395 M. A. Arrica, T. Wirth*

Fluorinations of α -Seleno Carboxylic Acid Derivatives with Hypervalent (Difluoroiodo)toluene

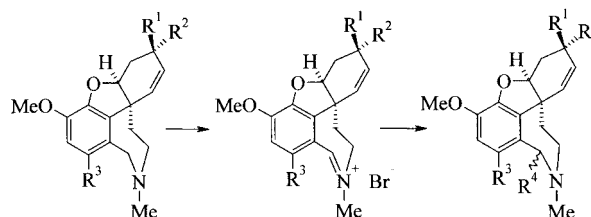
Keywords: Fluorination / Hypervalent iodine / Selenides



404 C. Hametner,* M. Hemetsberger, M. Treu,
K. Mereiter, U. Jordis, J. Fröhlich

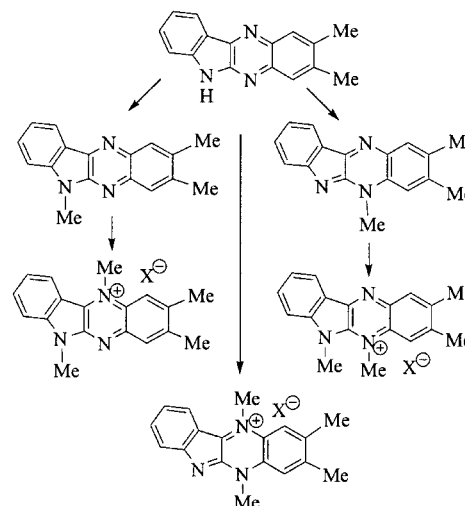
Addition of Nucleophiles to Immonium Galanthamines

Keywords: Acetylcholine esterase inhibitor / Drug research / Galanthamine / Immonium halides / Nucleophilic addition



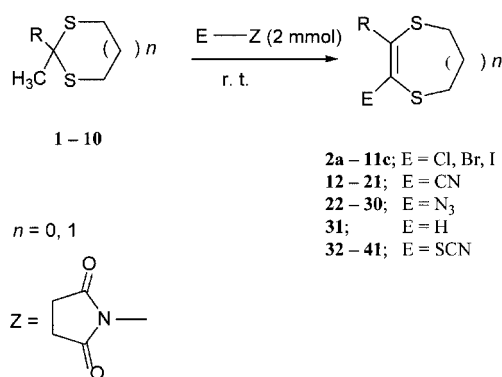
Alkylation of 5- and 6-Methylindolo[2,3-*b*]quinoxalines: Revised Structures of the *N,N'*-Dimethylated Salts

Keywords: Alkylation / Indoloquinoxalines / Nitrogen heterocycles / Structure elucidation



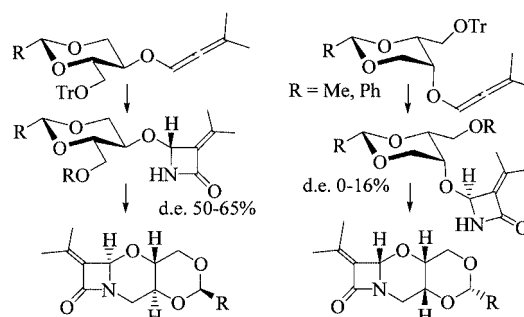
Facile Ring-Expansion Substitution Reactions of 1,3-Dithiolanes and 1,3-Dithianes Initiated by Electrophilic Reagents to Produce Monohalo-, -cyano-, -azido- and -thiocyanato-1,4-dithiins and -1,4-dithiepins

Keywords: Ring-expansion / Electrophilic substitution / 1,3-Dithiolane / 1,3-Dithiane / 1,4-Dithiin / 1,4-Dithiepin / *N*-Halosuccinimide / *N*-Thiocyanatosuccinimide / *N*-Cyanosuccinimide / *N*-Azidosuccinimide



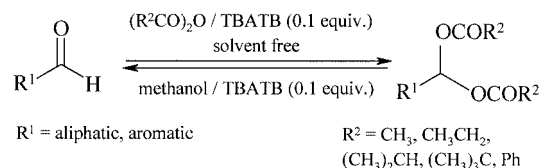
Stereochemistry of the [2+2] Cycloaddition of Chlorosulfonyl Isocyanate to Chiral Alkoxyallenes Derived from 1,3-Alkylidene-L-erythritol and -D-threitol

Keywords: Alkoxyallenes / [2+2] Cycloaddition / β -Lactams



Reinvestigation of the Mechanism of *gem*-Diacylation: Chemoselective Conversion of Aldehydes to Various *gem*-Diacylates and Their Cleavage under Acidic and Basic Conditions

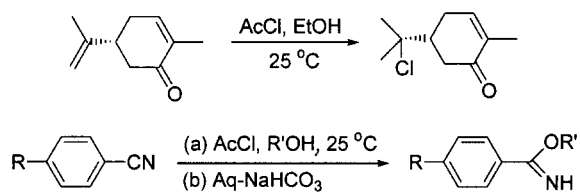
Keywords: Aldehydes / Chemoselectivity / Diacylates / Solvent-free synthesis / Thermodynamics





A Remarkably Efficient Markovnikov Hydrochlorination of Olefins and Transformation of Nitriles into Imidates by Use of AcCl and an Alcohol

Keywords: Acetyl chloride / Alcohols / Markovnikov hydrochlorination / Nitrile-imidate transformation



CORRECTION

457 I. El-Sayed, R. Grønæk Hazell,
J. Ø. Madsen, P.-O. Norrby, A. Senning*

An Unprecedented [2+3] Cycloadditive Dimerization of a Transient Thiocarbonyl *S*-Ylide

Keywords: Cycloaddition / Ab initio calculations / Sulfur / Ylides