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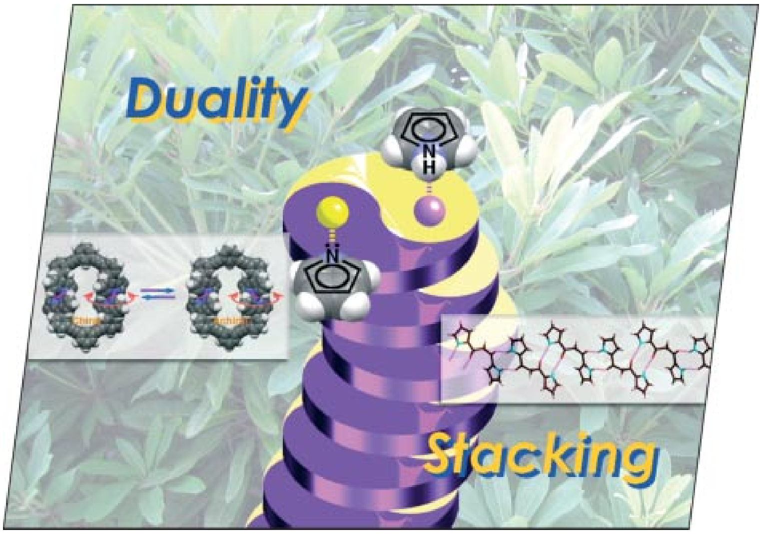
The EUChemSoc Societies have taken the significant step into the future by merging their traditional journals, to form two leading chemistry journals, the *European Journal of Inorganic Chemistry* and the *European Journal of Organic Chemistry*. Three further EUChemSoc Societies (Austria, Czech Republic and Sweden) are Associates of the two journals.

COVER PICTURE

The cover picture shows the two representative characteristics of pyrrole, "duality" as a hydrogen-bonding acceptor (or a metal-coordination ligand) N and a hydrogen-bonding donor (or an anion-binding ligand) NH and "planarity" to form stacking assemblies, depicted by the disks of Yin and Yang. Acyclic π-conjugated oligopyrrole derivatives, though less extensively studied so far, often potentially have even more advantages than cyclic ones. For example, the linear oligopyrroles prepared by the author form infinite and discrete coordination oligomers to give emissive spherical colloids and nanorings, hydrogen-bonding supramolecular assemblies to afford unique crystalline morphologies, and stacking structures to yield organogels that can be controlled by anions. Details are presented in the Microreview by H. Maeda on p. 5313ff. This picture has been provided by Mr. Takashi Hashimoto, one of the members in the author's group.



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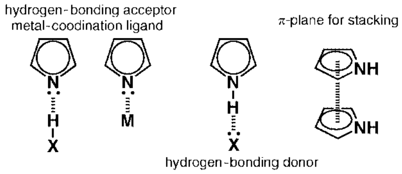
MICROREVIEW

Supramolecular Chemistry

H. Maeda* **5313–5325**

Supramolecular Chemistry of Acyclic Oligopyrroles

Keywords: Hydrogen bonding / Metal coordination / π-Conjugation / Pyrroles / Supramolecular chemistry



Acyclic π-conjugated oligopyrrole derivatives, though not extensively studied, often have more advantages as anion receptors and metal-coordination ligands than their cyclic counterparts. They can be used to form versatile complexes, supramolecular assemblies, and nanoscale materials.

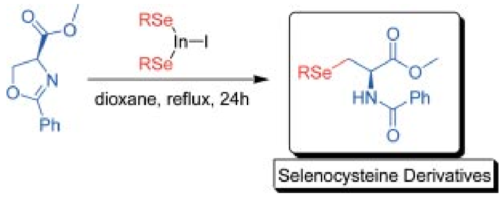
SHORT COMMUNICATIONS

Selenocysteine Derivatives

A. L. Braga,* F. Vargas, F. Z. Galetto,
M. W. Paixão, R. S. Schwab,
P. S. Taube **5327–5331**

One-Pot Indium Iodide Mediated Synthesis of Chiral β-Seleno Amides and Selenocysteine Derivatives by Ring-Opening Reaction of 2-Oxazolines

Keywords: Selenium / Nitrogen heterocycles / Oxygen heterocycles / Selenocysteine / Indium



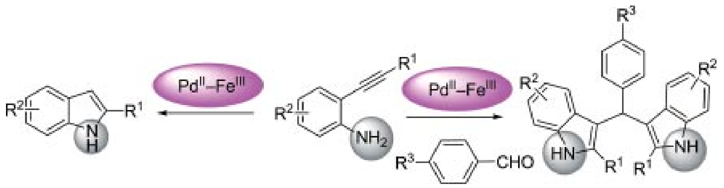
β-Seleno amides and selenocysteine derivatives were synthesized by a straightforward method involving a ring-opening reaction of 2-oxazolines by indium selenolates that was generated in situ.

Iron–Palladium Association

V. Terrasson, J. Michaux, A. Gaucher,
J. Wehbe, S. Marque, D. Prim,*
J.-M. Campagne* **5332–5335**

Iron–Palladium Association in the Preparation of Indoles and One-Pot Synthesis of Bis(indolyl)methanes

Keywords: Iron / Palladium / Indole / Bis(indolyl)methane



Indoles were prepared by annulation of alkynylanilines with the use of a new $FeCl_3-PdCl_2$ catalytic combination. One pot access to bis(indolyl)methanes and trisubstituted indoles through annulation/Friedel–Crafts alkylation and annulation/1,4-Michael addition are described.

FULL PAPERS

Intramolecular Hydroamination

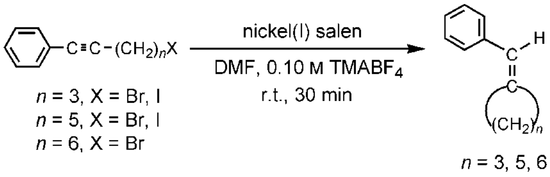
The synthesis of 3-methyl- and 3,4-dimethyltetrahydroisoquinolines from aromatic aminoalkenes, using intramolecular hydroamination by reductive aminomercuration or sub-stoichiometric amounts of *n*-butyllithium, is reported.

R. Pathak, P. Naicker, W. A. Thompson, M. A. Fernandes, C. B. de Koning, W. A. L. van Otterlo* .... **5337−5345**

Intramolecular Hydroaminations Mediated by Reductive Mercuration or *n*-Butyllithium To Afford 3-Methyl- and 3,4-Dimethyl-1,2,3,4-tetrahydroisoquinolines

Keywords: Hydroamination / Tetrahydroisoquinolines / Reductive mercuration / *n*-Butyllithium

Synthesis of Benzylidenecycloalkanes



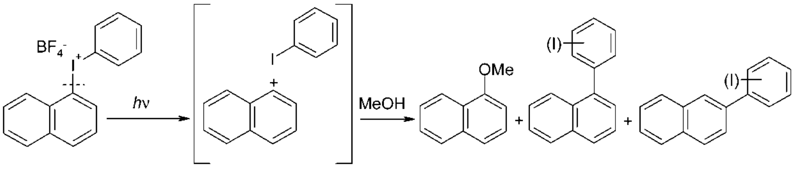
Phenyl-conjugated acetylenic halides (e.g. 7-bromo- or 7-iodo-1-phenyl-1-heptyne) are catalytically reduced by nickel(I) salen electrogenerated at a glassy carbon cathode to afford benzylidenecycloalkanes, along with diphenylalkadiynes, alkynes, and alkenynes.

M. S. Mubarak,* T. B. Jennermann, M. A. Ischay, D. G. Peters* ... **5346−5352**

Catalytic Reduction of Phenyl-Conjugated Acetylenic Halides by Nickel(I) Salen: Cyclization versus Coupling

Keywords: Catalysis / Nickel / Acetylenic halides / Intramolecular cyclization / Radical coupling

Spin-Isomeric Naphthyl Cations



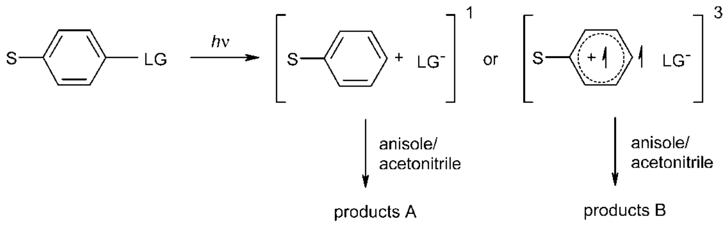
The reactivity of photogenerated naphthyl cations has been investigated with the aid of product studies and MO calculations.

M. Slegt, F. Minne, H. Zuilhof, H. S. Overkleeft, G. Lodder* .... **5353−5363**

Photochemical Generation and Reactivity of Naphthyl Cations: *cine* Substitution

Keywords: Photochemistry / Naphthyl cations / Spin multiplicity / *cine* substitution/ Ab initio calculations

Spin-Selective Phenyl Cation Trapping



The reactivities of singlet and triplet phenyl cations were studied by use of their chemoselectivities and the regioselectivities of their attacks on methoxybenzene.

M. Slegt, H. S. Overkleeft, G. Lodder* .... **5364−5375**

Fingerprints of Singlet and Triplet Phenyl Cations

Keywords: Photochemistry / Phenyl cations / Spin multiplicity / Regioselectivity / Chemoselectivity

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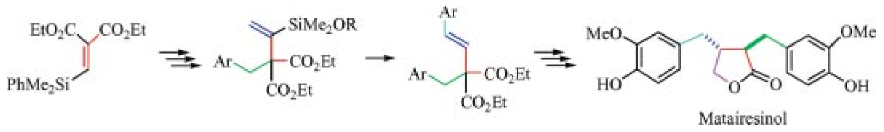
CONTENTS

Dibenzylbutyrolactone Lignans

R. Singh, G. C. Singh,
S. K. Ghosh* 5376–5385

A Novel Approach Towards Dibenzylbutyrolactone Lignans Involving Heck and Radical Reactions: Application to (±)-Matairesinol Synthesis

Keywords: Olefination / Stereoselective synthesis / Radical cyclization / Dibenzylbutyrolactone / Matairesinol



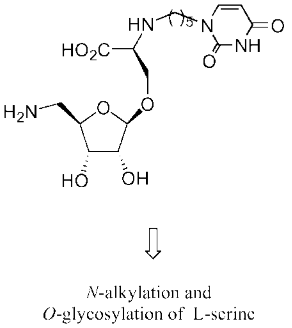
Functionalized 1,4-diaryl butenes, precursors to the dibenzylbutyrolactone lignan skeleton, have been synthesized by a stereoselective Heck reaction of iodoarenes with in situ generated vinylated malonates. The lactone ring has been constructed by a diastereoselective radical cyclization. This strategy has been applied in the synthesis of (±)-matairesinol.

Enzyme Inhibitors

L. Le Corre, C. Gravier-Pelletier,*
Y. Le Merrer* 5386–5394

Towards New MraY Inhibitors: A Serine Template for Uracil and 5-Amino-5-deoxyribosyl Scaffolding

Keywords: Translocase MraY inhibitors / Antibiotics / Glycosylation / Reductive amination / Amino acids



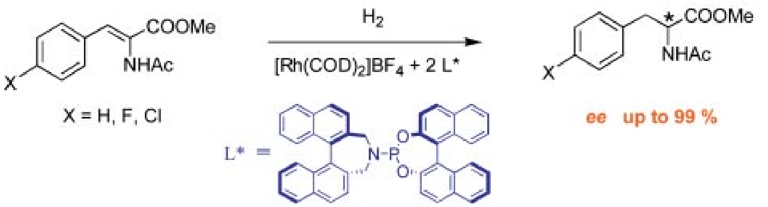
The bacterial translocase MraY is a good target for the development of new antibiotics since it is ubiquitous and essential for bacterial growth. The goal of this work was the synthesis of simplified analogues of natural inhibitors of this enzyme. The structure of the targeted compound retains the uracil and aminoribose parts linked by a serinyl template.

Asymmetric Catalysis

L. Eberhardt, D. Armspach,* D. Matt,*
L. Toupet, B. Oswald 5395–5403

Efficient, Rhodium-Catalyzed Hydrogenation of α-Dehydroamino Acid Esters with Chiral Monodentate Aminophosphanes Bearing Two Binaphthyl Groups

Keywords: Asymmetric catalysis / Hydrogenation / Rhodium / Phosphoramidites / Binaphthyl / Azepines / Binol



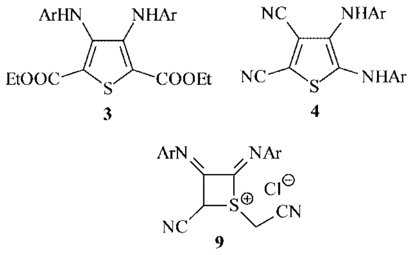
A chiral monodentate ligand containing a dinaphtho-fused 1,3,2-dioxaphosphepine unit N–P-bonded to a dinaphtho-fused azepine ring system has been synthesised and tested in the hydrogenation of methyl 2-(acetylamino)-3-arylpropenoates; *ee* values of up to 99 % were obtained.

Push-Pull Thiophenes

G. Buehrdel, R. Beckert,* E. Birckner,
U.-W. Grummt, B. Beyer, S. Kluge,
J. Weston, H. Goerls 5404–5409

A Simple One-Pot Synthesis of Solvatofluorescent Push-Pull Thiophenes

Keywords: Thiophene / Fluorescence / Bisimidoyl chlorides / Cyclization reaction / Rearrangement



Cyclization of thiodiglycolate with bisimidoyl chlorides yields the expected symmetric thiophenes of type **3**. Surprisingly, exchanging thiodiglycolate for thiodiacetonitrile yields asymmetric 2,3-diamino-4,5-dicyanothiophenes **4**, which show strongly solvent-dependent fluorescence (solvatofluorescence). The substitution pattern was confirmed by single-crystal X-ray analysis and possibly originates from a 1,2-rearrangement of a thietanium salt intermediate of type **9**.

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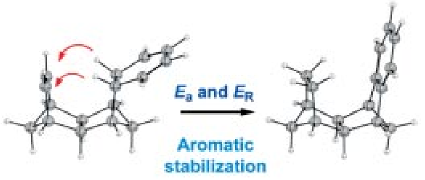
Aromatic Stabilization Energies

The double group transfer reactions in *syn*-sesquinorbornanes, which involves the concomitant formation of an aromatic ring, are suggested as benchmarks for energetic aromaticity criteria.



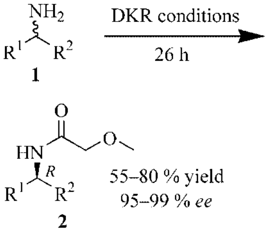
G. Frenking, F. P. Cossío, M. A. Sierra,
I. Fernández* 5410–5415

Double Group Transfer Reactions as Indicators of Aromatic Stabilization

Keywords: Aromaticity / Double group transfer reactions / Aromatic stabilization energy / Density functional calculations

Dynamic Kinetic Resolution

A modified version of the Bäckvall system for the dynamic kinetic resolution (DKR) of amines is reported, allowing complete conversion of various amine substrates with high *ee* within 26 h for most substrates.

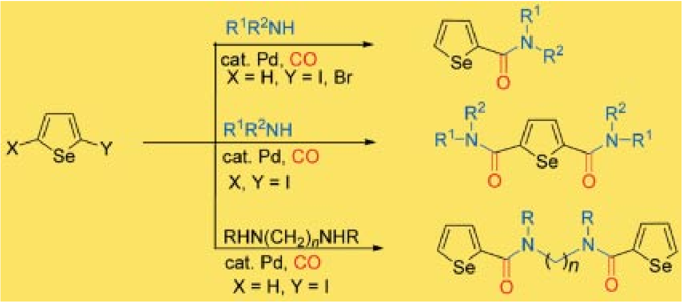


M. A. J. Veld, K. Hult, A. R. A. Palmans,*
E. W. Meijer* 5416–5421

Fast DKR of Amines Using Isopropyl 2-Methoxyacetate as Acyl Donor

Keywords: Dynamic kinetic resolution (DKR) / Amines / Enzyme catalysis / Asymmetric synthesis / Ruthenium

Pd-Catalyzed Carbonylation



The palladium-catalyzed carbonylation reaction of haloselenophenes and amines under carbon monoxide atmosphere was performed. The description of a new route to prepare selenophene-2-carboxamides, selenophene-2,5-dicarboxamides and *N*,*N*′-bridged selenophene-2-carboxamides is reported.

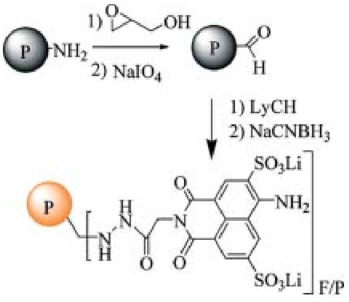
P. Prediger, R. Brandão,
C. W. Nogueira, G. Zeni* 5422–5428

Palladium-Catalyzed Carbonylation of 2-Haloselenophenes: Synthesis of Selenophene-2-carboxamides, Selenophene-2,5-dicarboxamides and *N*,*N*′-Bridged Selenophene-2-carboxamides

Keywords: Selenophene / Carbonylation / Palladium / Amides / Carbon monoxide

Bioconjugation Using Glycidol

The reactions between glycidol and either the nonglycosylated protein BSA or the glycoprotein avidin (AV), followed by mild oxidation of the intermediate glycol moieties, afforded reactive aldehyde functionalities. As an application, the functionalized proteins were derivatized with the fluorescent dye Lucifer Yellow CH, affording highly fluorescent bioprobes.



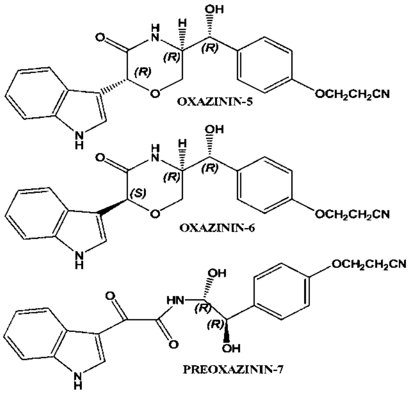
J.-M. Heldt, N. Fischer-Durand,
M. Salmain, A. Vessières,*
G. Jaouen 5429–5433

The Use of Glycidol to Introduce Aldehyde Functions Into Proteins – Application to the Fluorescent Labelling of Bovine Serum Albumin and Avidin

Keywords: Amination / Protein modifications / Lucifer Yellow CH / Fluorescent probes / Nucleophilic substitution

CONTENTS

Marine Biotoxins



CORRECTION

If not otherwise indicated in the article, papers in issue 31 were published online on October 16, 2007