

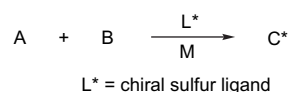
Contents

REPORT

Chiral sulfur-containing ligands for asymmetric catalysis

Hélène Pellissier

pp 1297–1330



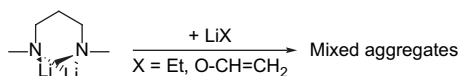
This review compiles the catalytic systems containing chiral sulfur ligands that have been applied in asymmetric catalysis from 1999 to 2006. This compilation clearly demonstrates that chiral sulfur-containing ligands represent a potential class of ligands to be applied in a considerable number of reactions, and that they have some peculiar properties, which differentiate them from more popular ligands such as those of phosphorus. In particular, the stereoelectronic assistance of organosulfur functionalities and the possibility of stereocontrol through stereogenic sulfur atoms can provide interesting results in many applications.

ARTICLES

Mixed aggregates of dilithiodiamines with alkylolithiums and lithium enolates

Lawrence M. Pratt,\* R. Mu, Carl Carter and Brittini Woodford

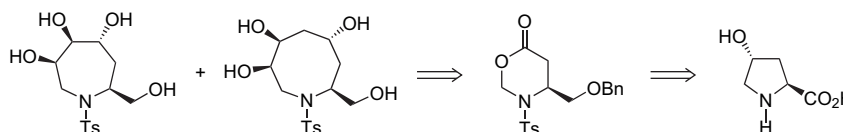
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Synthesis of DMJ analogs with seven- and eight-membered iminocyclitols

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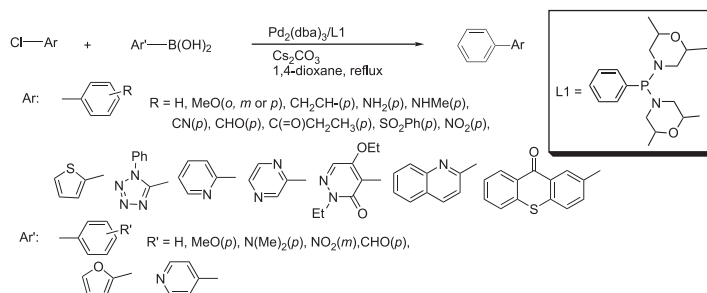
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**Suzuki–Miyaura coupling reaction of aryl chlorides using di(2,6-dimethylmorpholino)-phenylphosphine as ligand**

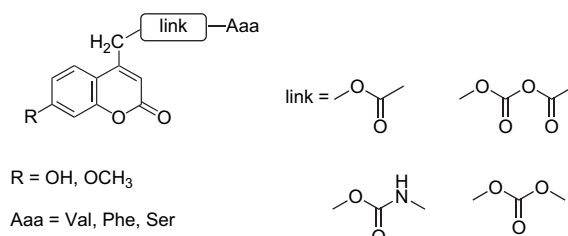
pp 1345–1352

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**Photocleavage studies of fluorescent amino acid conjugates bearing different types of linkages**

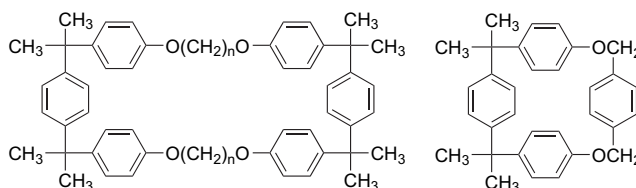
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Andrea S. C. Fonseca, M. Sameiro T. Gonçalves and Susana P. G. Costa\*


**Synthesis and solid-state structures of new cyclophane host molecules**

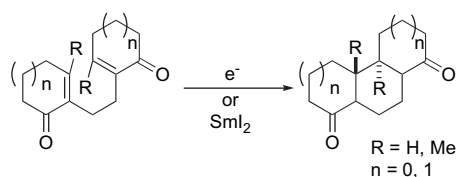
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Bronislaw P. Czech, Piotr Kus, Christopher M. Stetson, N. Kent Dalley and Richard A. Bartsch\*


**The intramolecular reductive cyclization of cyclic enones**

pp 1366–1371

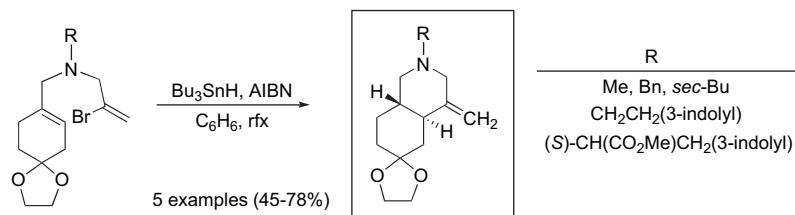
Scott T. Handy\* and Duncan Omune



### Synthesis of *trans*-perhydroisoquinolines by 6-*endo-trig* radical cyclization of amino-tethered vinyl bromides and cyclohexenes

pp 1372–1379

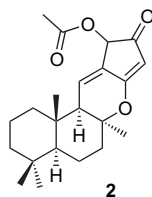
Josefina Quirante,\* Xavier Vila, Laura Paloma, Josep M. Guiu and Josep Bonjoch\*



### Studies on puupehenone-metabolites of a *Dysidea* sp.: structure and biological activity

pp 1380–1384

M. Letizia Ciavatta,\* M. Pilar Lopez Gresa, Margherita Gavagnin, Vanessa Romero, Dominique Melck, Emiliano Manzo, Yue-Wei Guo, Rob van Soest and Guido Cimino

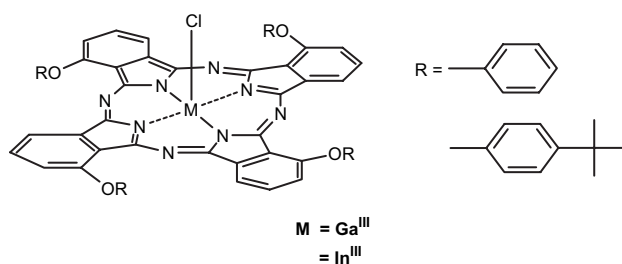


Compound **2** has been isolated along with known metabolites from a Chinese *Dysidea* sponge. A series of biological activity assays, including inhibition of the mitochondrial respiratory chain, have been carried out on all isolated puupehenone-congeners.

### Synthesis, photophysical and photochemical properties of aryloxy tetra-substituted gallium and indium phthalocyanine derivatives

pp 1385–1394

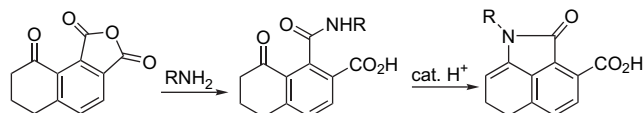
Mahmut Durmuş and Tebello Nyokong\*



### Unexpected regioselective reactivity of a substituted phthalic anhydride

pp 1395–1401

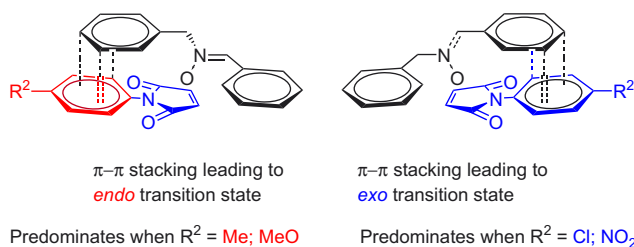
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### Substituent control in the diastereoselectivity of dipolar cycloadditions of nitrones and their Zn(II) complexes with *N*-arylmaleimides

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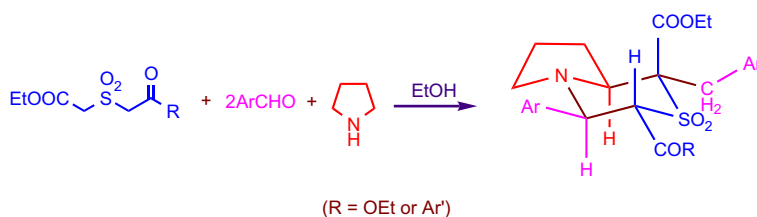
Necdet Coşkun\* and Aylin Öztürk



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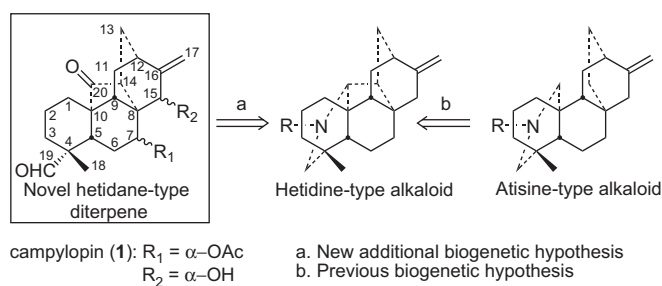
Sethuraman Indumathi, Raju Ranjith Kumar and Subbu Perumal\*



### Campylopin from *Delphinium campylocentrum*, the first hetidane C<sub>20</sub>-diterpene, suggests a new alkaloid biogenetic pathway

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Feng-Peng Wang\* and Lu-Ping Yan

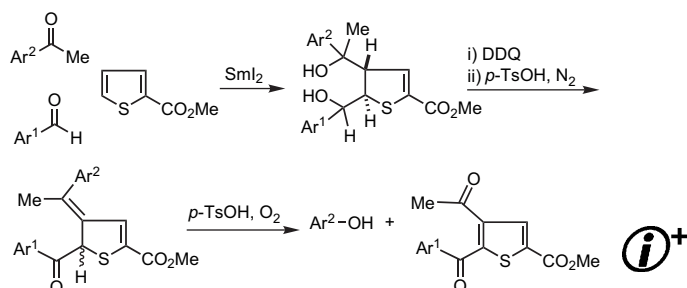


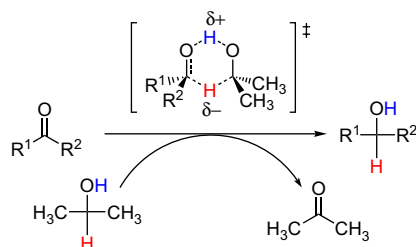
### Synthesis of polycyclic and 4,5-diacylthiophene-2-carboxylates via intramolecular Friedel–Crafts alkylations and unusual autooxidative fragmentation of the derivatives obtained from the samarium diiodide-promoted coupling reactions of thiophene-2-carboxylate with carbonyl compounds

pp 1421–1428

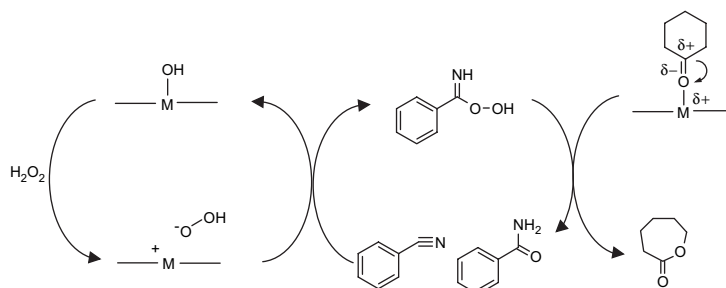
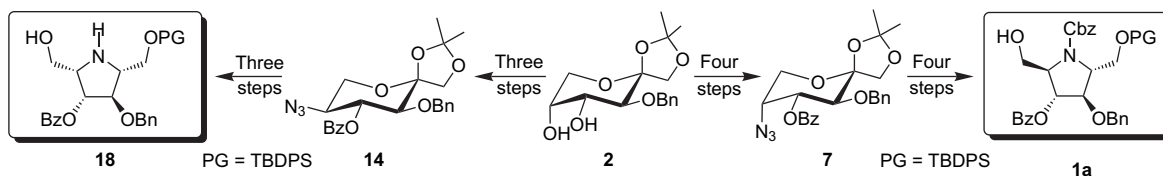
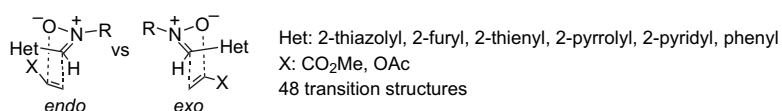
Shyh-Ming Yang and Jim-Min Fang\*

An efficient method, comprising the  $\text{SmI}_2$ -promoted three-component coupling reaction, alcohol oxidation, dehydration, and the acid promoted autooxidative fragmentation, was explored to prepare 4,5-diacylthiophene-2-carboxylates that were easily elaborated to heterocycle-fused thiophenes.



**Mechanism for the reduction of ketones to the corresponding alcohols using supercritical 2-propanol** pp 1429–1434  
 Takashi Kamitanaka,\* Tomoko Matsuda and Tadao Harada\*


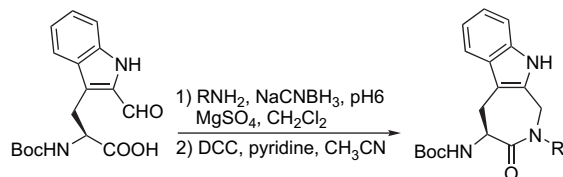
Regarding the reduction of the carbonyl group using supercritical 2-propanol, a low Hammett's reaction constant tells us that simultaneous transfers of  $H^{\delta+}$  and  $H^{\delta-}$  from the 2-propanol to the carbonyl group occur.

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**Synthesis of 4-amino-3-oxo-tetrahydroazepino[3,4-*b*]indoles: new conformationally constrained Trp analogs**

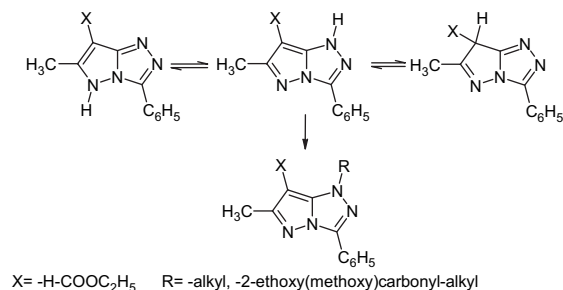
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Karolina Pulka, Debby Feytens, Isabelle Van den Eynde, Rien De Wachter, Piotr Kosson, Aleksandra Misicka, Andrzej Lipkowski, Nga N. Chung, Peter W. Schiller and Dirk Tourwé\*


**Regioselective alkylation of 1*H*-7-ethoxycarbonyl-6-methyl-3-phenyl-pyrazolo[5,1-*c*][1,2,4]triazole and 1*H*-6-methyl-3-phenyl-pyrazolo[5,1-*c*][1,2,4]triazole**

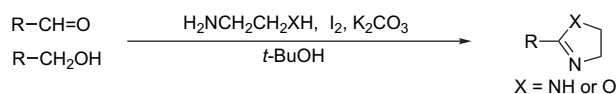
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Valentin Badea,\* Maria D. Șofei, Monica M. Venter and Vasile N. Bercean


**Direct oxidative conversion of aldehydes and alcohols to 2-imidazolines and 2-oxazolines using molecular iodine**

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Midori Ishihara and Hideo Togo\*


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\*Corresponding author

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