

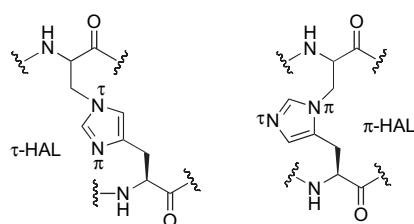
## Contents

## REPORT

**Histidinoalanine: a crosslinking amino acid**

Carol M. Taylor\* and Weihua Wang

pp 9033–9047

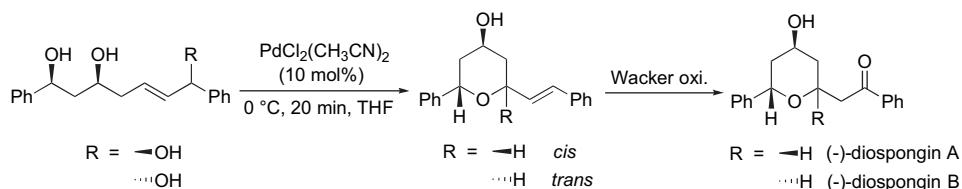


## ARTICLES

**Stereoselective synthesis of (−)-diospongins A and B and their stereoisomers at C-5**

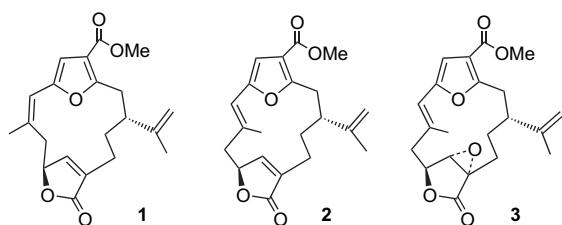
Nobuyuki Kawai, Sudhir Mahadeo Hande and Jun'ichi Uenishi\*

pp 9049–9056

**The oxidation profile at C-18 of furanocembranolides may provide a taxonomical marker for several genera of octocorals**

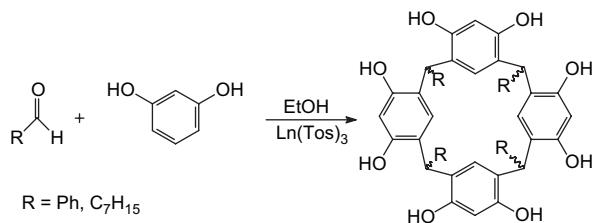
Enrique Dorta, Ana R. Díaz-Marrero, Inmaculada Brito, Mercedes Cueto, Luis D'Croz and José Darias\*

pp 9057–9062



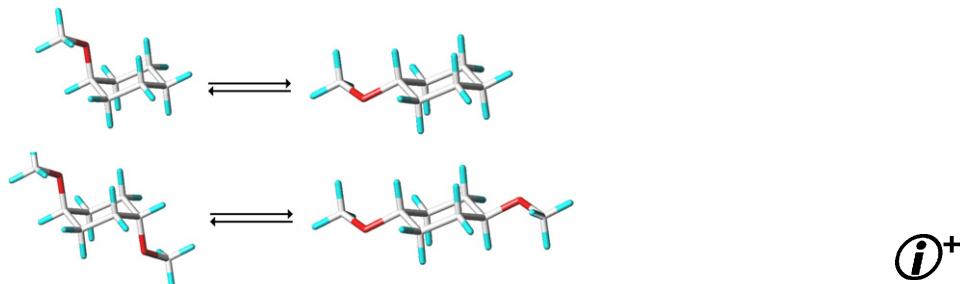
**Lanthanide(III) nitrobenzenesulfonates and *p*-toluenesulfonate complexes of lanthanide(III), iron(III), and copper(II) as novel catalysts for the formation of calix[4]resorcinarene** pp 9063–9070

Karen Deleersnyder, Hasan Mehdi, István T. Horváth, Koen Binnemans and Tatjana N. Parac-Vogt\*



**Syntheses and conformational analyses of mono- and *trans*-1,4-dialkoxy substituted cyclohexanes—the steric substituent/skeleton interactions** pp 9071–9081

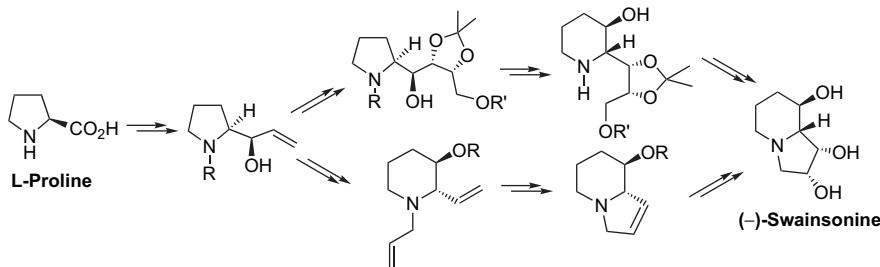
Erich Kleinpeter\* and Jörg Thielemann



**Enantioselective ring expansion of prolinol derivatives. Two formal syntheses of (−)-swainsonine**

Ingrid Déchamps, Domingo Gomez Pardo\* and Janine Cossy\*

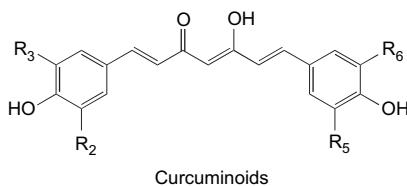
pp 9082–9091



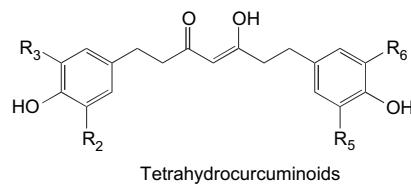
Two enantioselective formal syntheses of (−)-swainsonine have been achieved from L-proline by using an enantioselective ring enlargement of a substituted prolinol as the key step. The more efficient synthesis has been achieved in 14 steps with an overall yield of 14%.

**A comparative study on the antioxidant properties of tetrahydrocurcuminoids and curcuminoids** pp 9092–9099

Elise Portes, Christian Gardrat and Alain Castellan\*



Curcuminoids



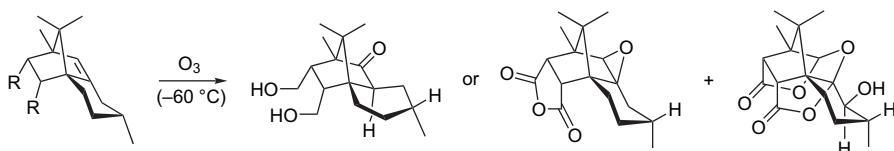
Tetrahydrocurcuminoids

The antioxidant power of curcuminoids and tetrahydrocurcuminoids is due to phenol units and not the enolic part of the chain. The enhanced antioxidant power of tetrahydrocurcuminoids compared to curcuminoids is due to the presence of easily oxidizable benzylic hydrogens.

**Unusual reactivity of bicyclo[2.2.1]heptene derivatives during the ozonolysis**

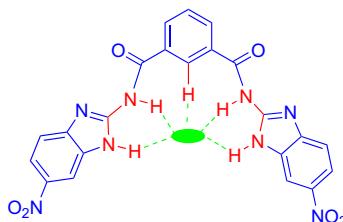
Isabelle Kondolff, Marie Feuerstein, Céline Reynaud, Michel Giorgi, Henri Doucet\* and Maurice Santelli\*

pp 9100–9105

**Colorimetric anion chemosensor based on 2-aminobenzimidazole: naked-eye detection of biologically important anions**

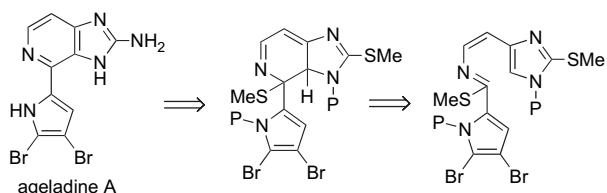
Kyung Soo Moon, Narinder Singh, Gang Woo Lee and Doo Ok Jang\*

pp 9106–9111

**A convergent total synthesis of the marine sponge alkaloid ageladine A via a strategic 6π-2-azatriene electrocyclization**

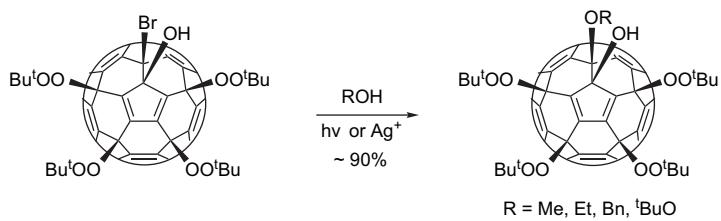
Matthew L. Meketa and Steven M. Weinreb\*

pp 9112–9119

**Efficient conversion of bromofullerene to alkoxyfullerenes through either homolytic or heterolytic cleavage of C60–Br bond**

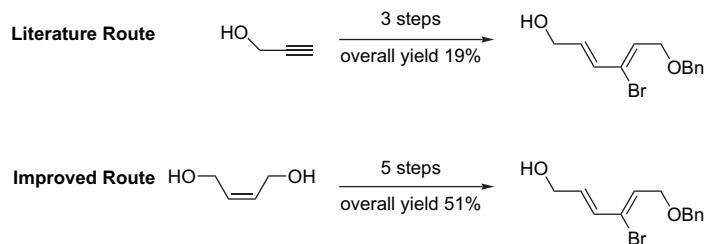
Zhenshan Jia, Qianyan Zhang, Yuliang Li, Liangbing Gan,\* Bo Zheng, Gu Yuan, Shiwei Zhang\* and Daoben Zhu

pp 9120–9123



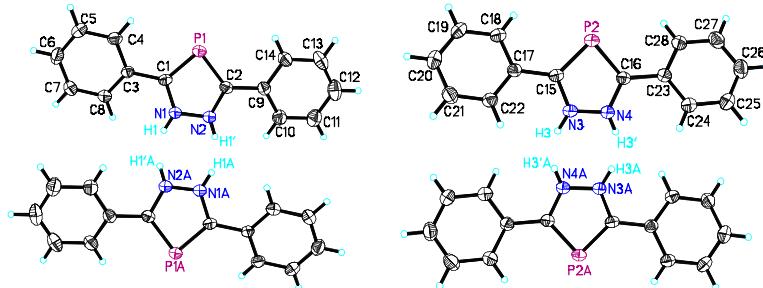
**An improved synthesis of (2E,4Z)-6-(benzyloxy)-4-bromohexa-2,4-dien-1-ol**  
 Paul A. Clarke,\* Gabriele A. Rolla, Andrew P. Cridland and Andrew A. Gill

pp 9124–9128



**The structural and theoretical study of 1*H*-3,5-di-phenyl-1,2,4-diazaphosphole in the solid state**  
 Li Wan, Ibon Alkorta,\* José Elguero, Jie Sun and Wenjun Zheng\*

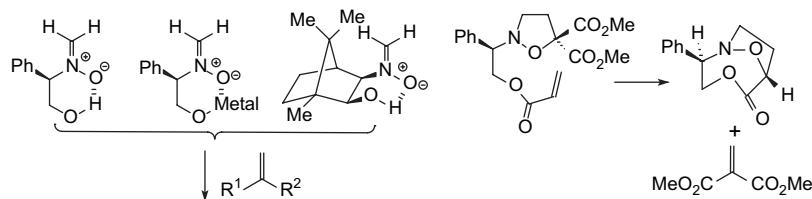
pp 9129–9133



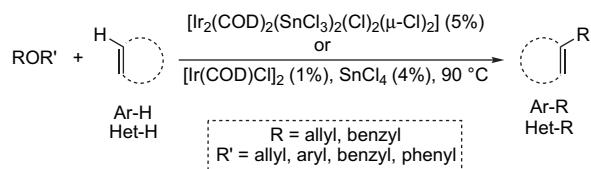
The title compound (**1**) forms two cyclic dimers presenting a dynamic equilibrium involving proton transfer.

**The stereochemistry of 1,3-dipolar cycloaddition of internally H-bonded chiral methylenenitrones**  
 Shaikh A. Ali\* and Muhammad Z. N. Iman

pp 9134–9145



**Efficient and selective alkylation of arenes and heteroarenes with benzyl and allyl ethers using a Ir/Sn bimetallic catalyst**  
 Susmita Podder and Sujit Roy\*



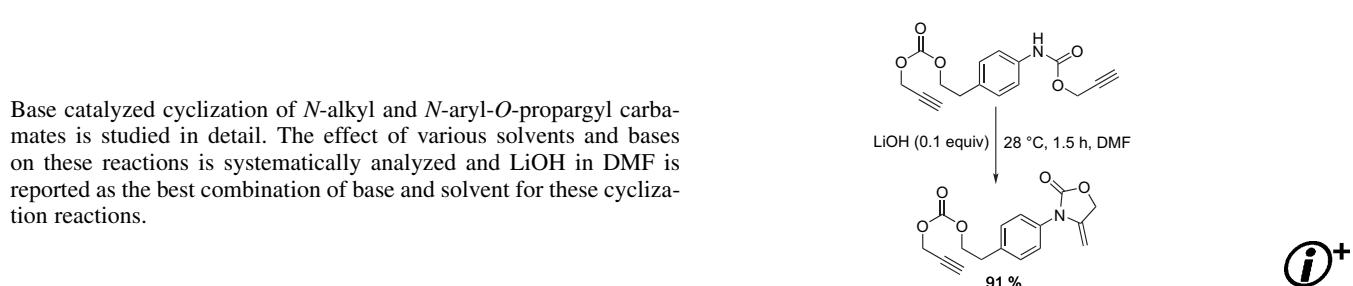
A high-valent heterobimetallic catalyst namely  $[\text{Ir}_2(\text{COD})_2(\text{SnCl}_3)_2(\text{Cl})_2(\mu\text{-Cl})_2]$  (5 mol %), or dual catalyst system of  $[\text{Ir}(\text{COD})\text{Cl}]_2$  (1 mol %) and  $\text{SnCl}_4$  (4 mol %), promotes the benzylation or allylation of arenes and heteroarenes using ethers as the alkylating agents. An electrophilic mechanism is proposed from a Hammett correlation.



**Base catalyzed cyclization of *N*-aryl and *N*-alkyl-*O*-propargyl carbamates to 4-alkylidene-2-oxazolidinones**

pp 9153–9162

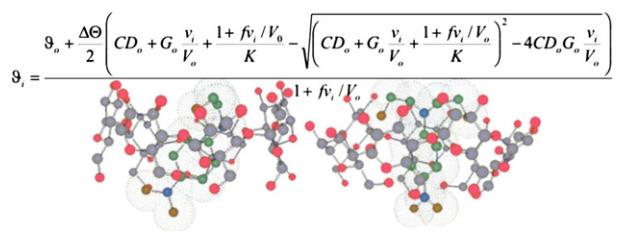
Ramapanicker Ramesh, Yogesh Chandrasekaran, Rajendran Megha and Srinivasan Chandrasekaran\*



**Host–guest interactions involving cyclodextrins: useful complementary insights achieved by polarimetry**

pp 9163–9171

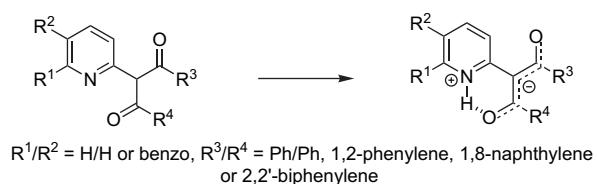
Paolo Lo Meo,\* Francesca D'Anna, Serena Riela, Michelangelo Gruttaduria and Renato Noto\*



**Tautomeric preferences of phthalones and related compounds**

pp 9172–9178

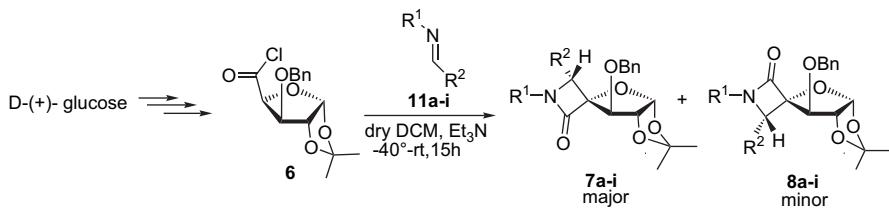
Robert Dobosz, Erkki Kolehmainen, Arto Valkonen, Borys Ośmiałowski and Ryszard Gawinecki\*



**Stereoselective synthesis of spiro-β-lactams using D-(+)-glucose derived chiral pool: remarkable influence of the torquoelectronic effect**

pp 9179–9187

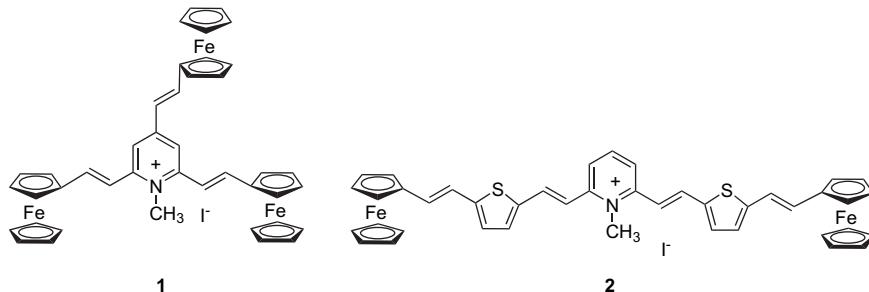
P. M. Chincholkar, Vedavati G. Puranik and A. R. A. S. Deshmukh\*



**Synthesis and nonlinear optical absorption properties of two new conjugated ferrocene-bridge-pyridinium compounds**

pp 9188–9194

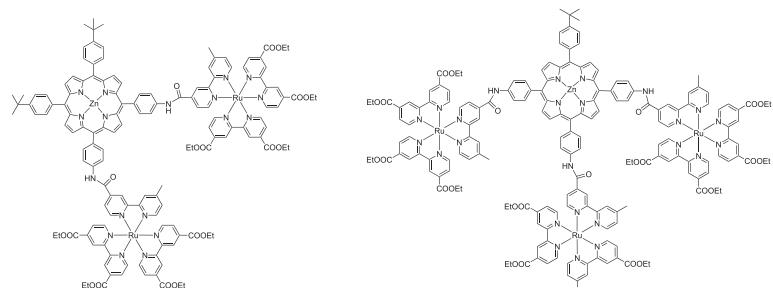
Fan Yang, Xiu-Ling Xu, Yong-Hua Gong, Wen-Wei Qiu, Zhen-Rong Sun, Jin-Wei Zhou, Pierre Audebert and Jie Tang\*



**Synthesis, electrochemical, and photophysical studies of multicomponent systems based on porphyrin and ruthenium(II) polypyridine complexes** pp 9195–9205

Xien Liu, Jianhui Liu,\* Jingxi Pan, Samir Andersson and Licheng Sun\*

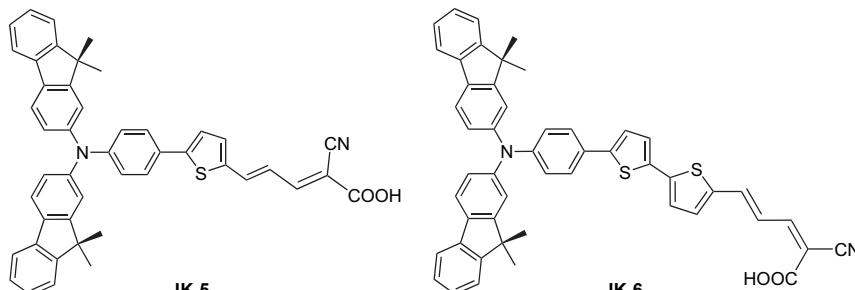
Two ruthenium tris-bipyridine functionalized porphyrins **4**, **8** and their Zn derivatives **4-Zn**, **8-Zn** were designed, synthesized, and characterized. Primary dynamic studies on the electron injection and back recombination between these complexes and TiO<sub>2</sub> nanoparticle are carried out by means of transient absorption spectrum. The results indicate that a long-lived charge separation state was obtained in these assemblies.



**Novel conjugated organic dyes containing bis-dimethylfluorenyl amino phenyl thiophene for efficient solar cell**

pp 9206–9212

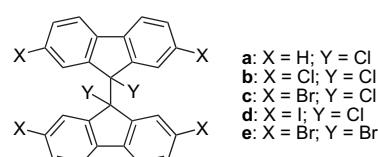
Sanghoon Kim, Hyunborg Choi, Duckhyun Kim, Kihyung Song, Sang Ouk Kang\* and Jaejung Ko\*



**Inclusion crystals of 2,2',7,7',9,9'-hexahalo-9,9'-bisfluorenyl derivatives: a new family of polyhalo aryl hosts**

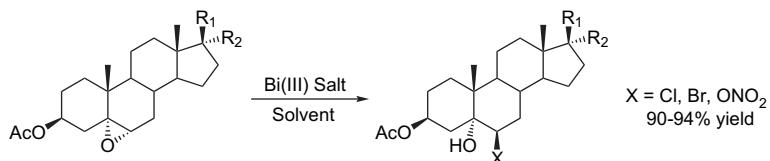
pp 9213–9220

Koichi Tanaka,\* Shin-ichi Wada and Mino R. Caira\*



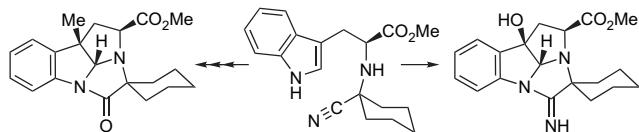
**Bismuth(III) salts mediated regioselective ring opening of epoxides: an easy route to halohydrins and  $\beta$ -hydroxy nitrates** pp 9221–9228

Rui M. A. Pinto, Jorge A. R. Salvador\* and Christophe Le Roux



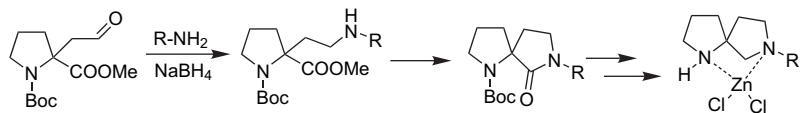
**Synthesis of indole alkaloid analogues containing the novel hexahydropyrrolo[1',2':1,9a,9]imidazo[1,2-*a*]indole skeleton by ring-closing reactions of tryptophan-derived  $\alpha$ -amino nitriles** pp 9229–9234

Juan A. González-Vera, M. Teresa García-López and Rosario Herranz\*



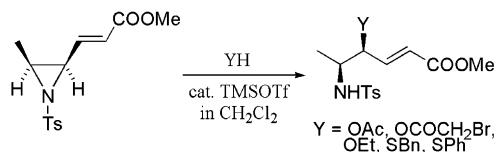
**Spirobicyclic diamines. Part 3: Synthesis and metal complexation of proline-derived [4.4]-spirodiamines** pp 9235–9242

Fintan Kelleher,\* Sinead Kelly and Vickie McKee



**Versatile use of acid-catalyzed ring-opening of  $\beta$ -aziridinyl- $\alpha$ , $\beta$ -enoates to stereoselective synthesis of peptidomimetics** pp 9243–9254

Hirokazu Tamamura,\* Tomohiro Tanaka, Hiroshi Tsutsumi, Koji Nemoto, Satoko Mizokami, Nami Ohashi, Shinya Oishi and Nobutaka Fujii\*



**OTHER CONTENTS**

<b>Corrigendum</b>	<b>p 9255</b>
<b>Corrigendum</b>	<b>p 9256</b>

\*Corresponding author

 <sup>†</sup> Supplementary data available via ScienceDirect



Full text of this journal is available, on-line from **ScienceDirect**. Visit [www.sciencedirect.com](http://www.sciencedirect.com) for more information.

Abstracted/indexed in: AGRICOLA, Beilstein, BIOSIS Previews, CAB Abstracts, Chemical Abstracts, Current Contents: Life Sciences, Current Contents: Physical, Chemical and Earth Sciences, Current Contents Search, Derwent Drug File, Ei compendex, EMBASE/Excerpta Medica, Medline, PASCAL, Research Alert, Science Citation Index, SciSearch. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®



ISSN 0040-4020