



## Tetrahedron Vol. 66, Issue 3, 2010

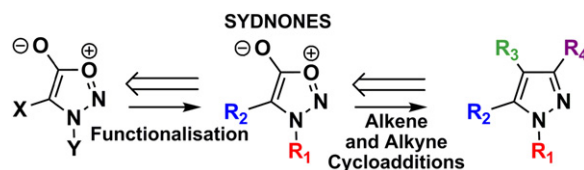
## Contents

## REPORT

## Recent developments in the chemistry of sydrones

Duncan L. Browne, Joseph P.A. Harrity\*

pp 553–568

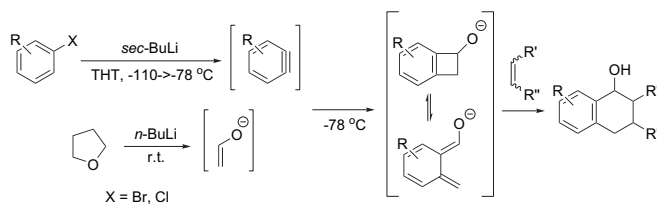


## ARTICLES

## A three-component reaction between benzyne, the enolate of acetaldehyde, and unsaturated esters and dihydroisoquinolines

George A. Kraus\*, Tao Wu

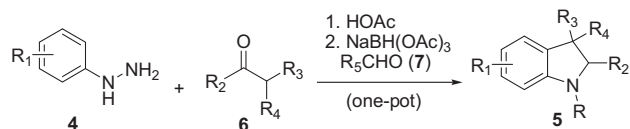
pp 569–572



**One-pot synthesis of highly substituted indolines**

pp 573–577

Kevin G. Liu\*, Jennifer R. Lo, Albert J. Robichaud

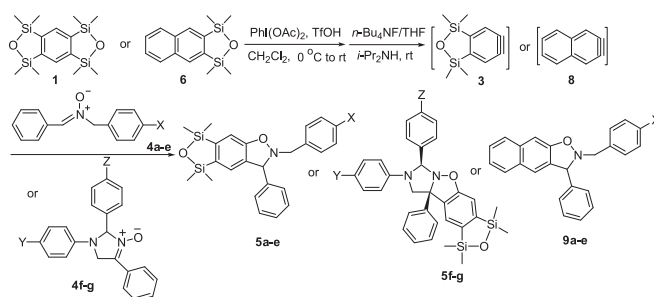


A general and convenient one-pot synthesis of highly substituted indolines from aryl hydrazines and aldehydes is reported.

**Cycloaddition of nitrones with arynes generated from benzobisoxadisilole or 2,3-naphthoxadisilole**

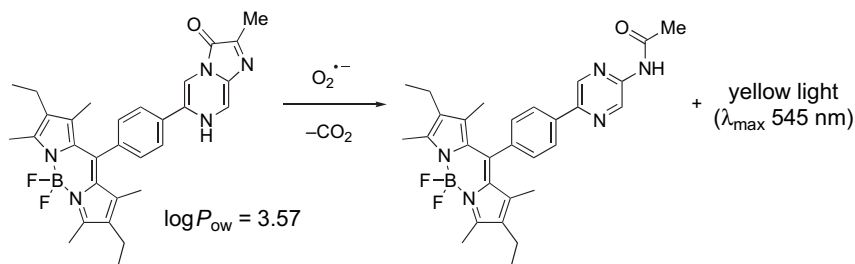
pp 578–582

Kaicheng Wu, Yali Chen\*, Yibei Lin, Weiguo Cao, Min Zhang, Jie Chen, Albert W.M. Lee\*

**Synthesis of boradiazaindacene–imidazopyrazinone conjugate as lipophilic and yellow-chemiluminescent chemosensor for superoxide radical anion**

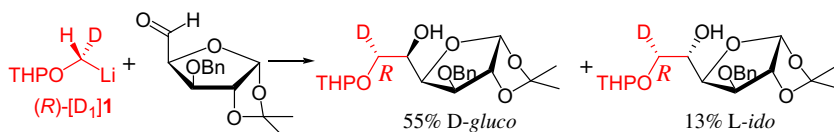
pp 583–590

Ryota Saito\*, Ayako Ohno, Eri Ito

**Novel formal synthesis of stereospecifically C-6 deuterated D-glucose employing configurationally stable alkoxymethylolithiums**

pp 591–598

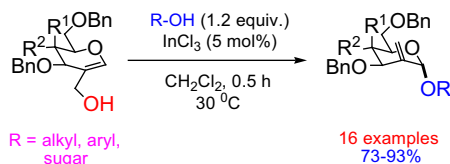
Dagmar C. Kapeller, Friedrich Hammerschmidt\*



**Stereoselective synthesis of 2-C-methylene glycosides and disaccharides via direct allylic substitution of hydroxy group in benzylated glycols**

pp 599–604

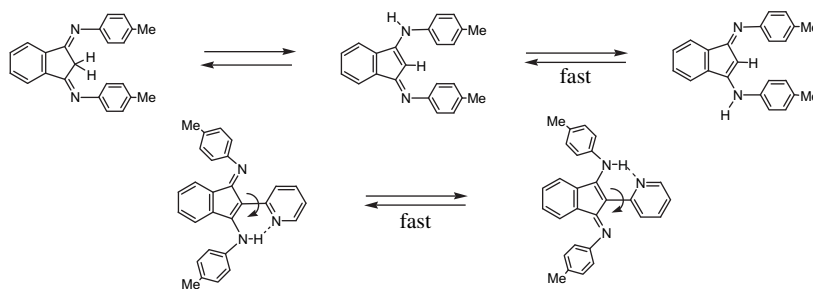
Paramathevar Nagaraj, Namakkal G. Ramesh\*



**Imino–enamine tautomerism and dynamic prototropy in 1-imino-3-amino-1*H*-indens**

pp 605–611

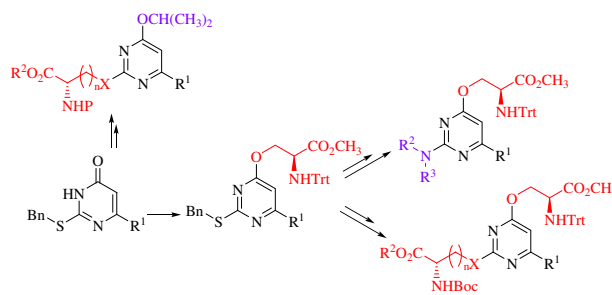
Yoko Mukano, Mai Momochi, Yuriko Takanashi, Mitsuaki Suzuki, Hidetsugu Wakabayashi, Hiroyuki Teramae, Keiji Kobayashi\*



**A simple approach for the synthesis of new pyrimidinyl  $\alpha$ -amino acids**

pp 612–623

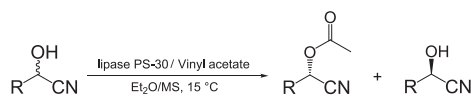
Abdelatif Elmarrouni, Mireia Güell, Cristina Collell, Montserrat Heras\*



**Enzymatic kinetic resolution of racemic cyanohydrins via enantioselective acylation**

pp 624–630

Qing Xu, Yongli Xie, Xiaohong Geng, Peiran Chen\*

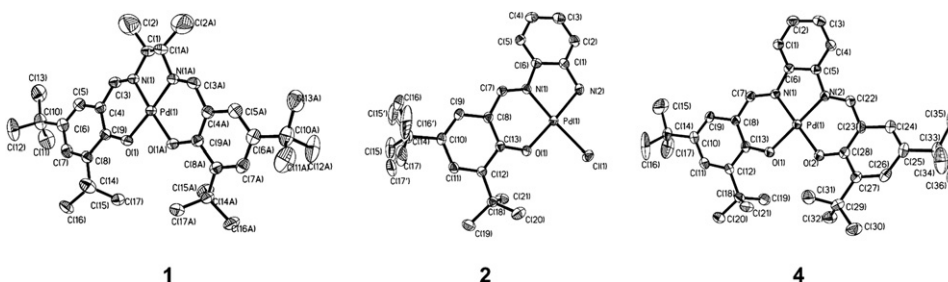


Twenty-three examples. When R=phenyl, 4-MeO-phenyl, 4-MeS-phenyl, 3-F-phenyl and phenethyl, the kinetic enantiomer ratio (*E*) reaches up to 314.

**Salen and half-salen palladium(II) complexes: synthesis, characterization and catalytic activity toward Suzuki–Miyaura reaction**

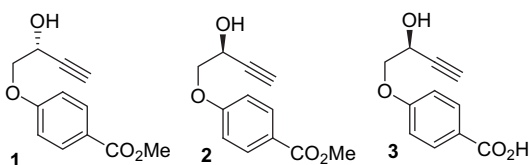
pp 631–636

Ping Liu, Xiu-Juan Feng, Ren He\*


**On the structure of penipratynolene and WA**

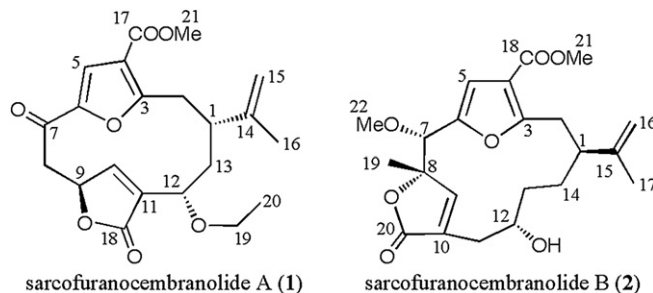
pp 637–640

Ya-Jun Jian, Yikang Wu\*


**Two unprecedented cembrene-type terpenes from an Indonesian soft coral *sarcophyton* sp.**

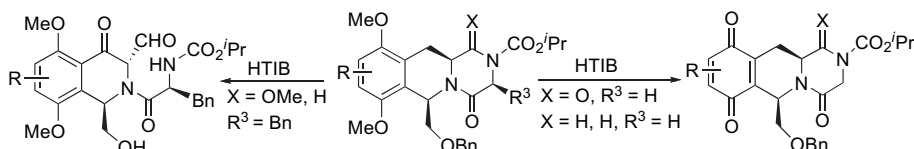
pp 641–645

Magie M. Kapojos, Jong-Soo Lee, Taiko Oda, Takahiro Nakazawa, Ohgi Takahashi, Kazuyo Ukai, Remy E.P. Mangindaan, Henki Rotinsulu, Defny S. Wewengkang, Sachiko Tsukamoto, Hisayoshi Kobayashi, Michio Namikoshi\*


**Reactions promoted by [hydroxy(tosyloxy)iodo]benzene in pyrazino[1,2-*b*]isoquinolines**

pp 646–652

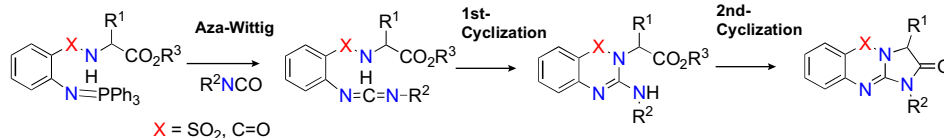
Irene Ortín, Juan Francisco González, Elena de la Cuesta, Carmen Avendaño\*



**Synthesis of nitrogen heterocycle-fused 1,2,4-benzothiadiazine-1,1-dioxide, quinazolinone, and pyrrolidinone derivatives with a guanidine joint via sequential aza-Wittig reaction/intramolecular NH-addition cyclization/nucleophilic substitution ring closure methodology, using functionalized carbodiimides as key intermediates**

pp 653–662

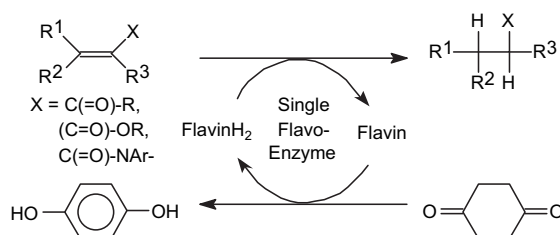
Shinsuke Hirota, Terumi Sakai, Nobuhide Kitamura, Keisuke Kubokawa, Noriki Kutsumura, Takashi Otani, Takao Saito\*



**Nicotinamide-independent asymmetric bioreduction of C=C-bonds via disproportionation of enones catalyzed by enoate reductases**

pp 663–667

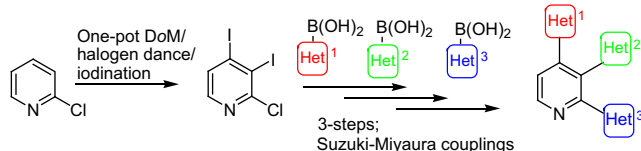
Clemens Stueckler, Tamara C. Reiter, Nina Baudendistel, Kurt Faber\*



**Iterative and regioselective cross-couplings of 2-chloro-3,4-diiodopyridine leading to 2,3,4-triheteroarylpyridines**

pp 668–675

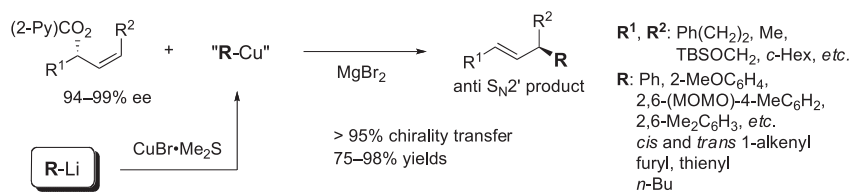
Laura M. Daykin, Jamie S. Siddle, Adrian L. Ankers, Andrei S. Batsanov, Martin R. Bryce\*



**Highly efficient substitution of allylic picolinates with copper reagents derived from aryl-, alkenyl-, furyl-, and thienyl-lithiums**

pp 676–684

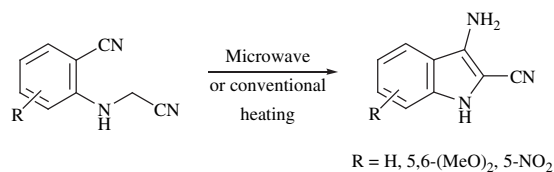
Yohei Kiyotsuka, Yuichi Kobayashi\*



### Microwave assisted synthesis of 3-aminoindole-2-carbonitriles from anthranilonitriles via *N*-unprotected 2-(cyanomethylamino)benzonitriles

pp 685–688

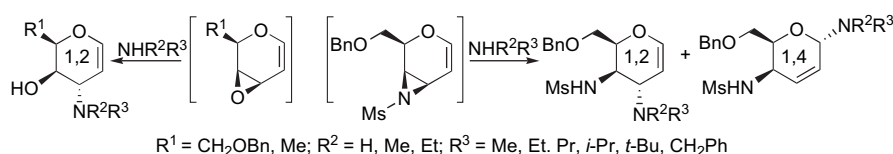
Sophia S. Michaelidou, Panayiotis A. Koutentis\*



### Aminolysis of glycal-derived allyl epoxides and activated aziridines. Effects of the absence of coordination processes on the regio- and stereoselectivity

pp 689–697

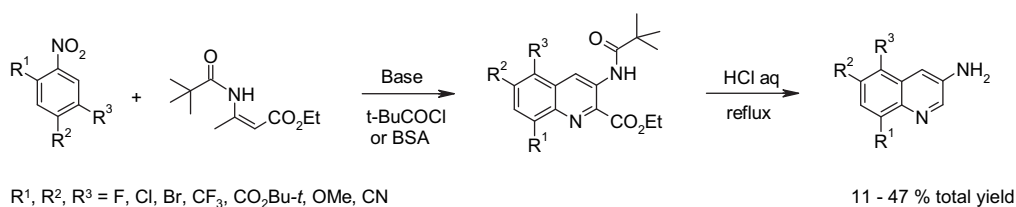
Valeria Di Bussolo\*, Lorenzo Checchia, Maria Rosaria Romano, Lucilla Favero, Mauro Pineschi, Paolo Crotti\*



### Novel approach to synthesis of substituted 3-aminoquinolines from nitroarenes and protected ethyl aminocrotonate

pp 698–708

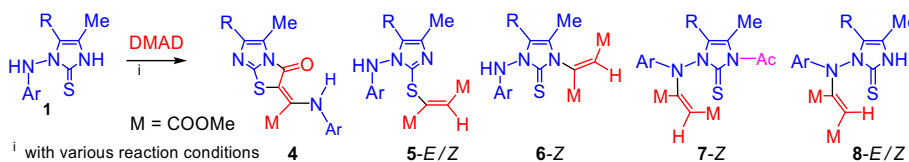
Robert Bujok, Andrzej Kwast, Piotr Cmoch, Zbigniew Wróbel\*



### A thorough study on the reaction of DMAD with 1-arylaminoimidazole-2-thiones. Expedient synthesis of imidazo[2,1-*b*][1,3]thiazoles through a novel arylamino rearrangement

pp 709–714

Constantinos Neochoritis, Nicolaos Eleftheriadis, Constantinos A. Tsoleridis\*, Julia Stephanidou -Stephanatou\*

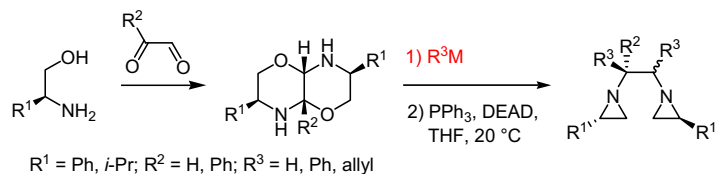


Upon reaction of 1-arylamino-imidazole-2-thiones **1** with DMAD only the *S*-substituted products **5** were formed, whereas in the presence of 2.2 equiv of NaH imidazo[2,1-*b*][1,3]thiazoles **4** were exclusively formed. Compounds **5** could be converted either to **6** by heating in benzene, or to **8** upon reaction with 1.1 equiv of NaH, and also to **7** upon reaction with acetic anhydride.

**Stereoselective synthesis of substituted 1,2-ethylenediaziridines and their use as ligands in palladium-catalyzed asymmetric allylic alkylation**

pp 715–720

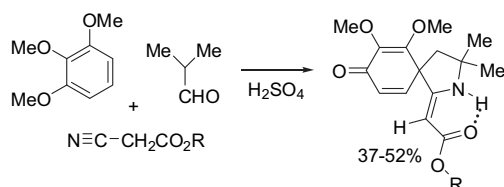
Andrea Gualandi, Francesco Manoni, Magda Monari, Diego Savoia\*



**Synthesis of 1-substituted 2-azaspiro[4.5]deca-6,9-diene-8-ones and 2-azaspiro[4.5]deca-1,6,9-triene-8-ones by a three-component condensation of 1,2,3-, 1,2,4- or 1,3,5-trimethoxybenzene with isobutyric aldehyde and nitriles**

pp 721–729

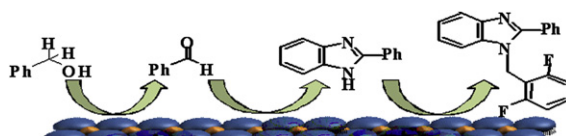
Vladimir A. Glushkov\*, Olga G. Stryapunina, Alexey A. Gorbunov, Olga A. Maiorova, Pavel A. Slepukhin, Sandra Ya. Ryabukhina, Elena V. Khorosheva, Valentina I. Sokol, Yurii V. Shklyayev



**New route for the synthesis of benzimidazoles by a one-pot multistep process with mono and bifunctional solid catalysts**

pp 730–735

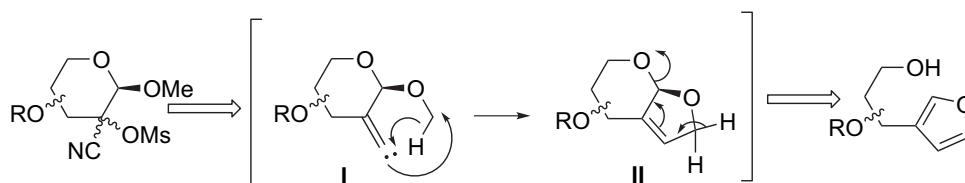
Violeta R. Ruiz, Avelino Corma\*, María J. Sabater\*



**Experimental and computational investigation of the unexpected formation of  $\beta$ -substituted polyoxygenated furans from conveniently functionalized carbohydrates**

pp 736–742

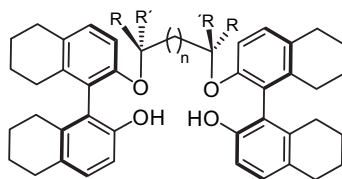
Romarc Cordonnier, Albert Nguyen Van Nhien\*, Elena Soriano, José Marco-Contelles, Denis Postel\*



### Synthesis of new bis-BINOL-2,2'-ethers and bis-H<sub>8</sub>BINOL-2,2'-ethers evaluation of their Titanium complexes in the asymmetric ethylation of benzaldehyde

pp 743–749

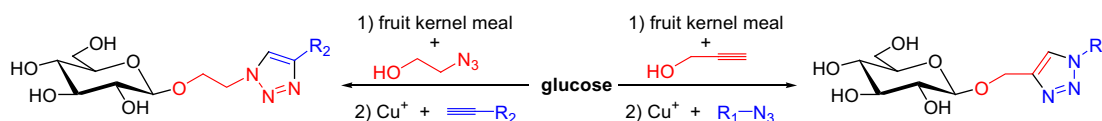
Artur R. Abreu, Mariette M. Pereira\*, J. Carles Bayón\*



### Expanding the application scope of glycosidases using click chemistry

pp 750–757

Wen-Ya Lu, Xing-Wen Sun, Chen Zhu, Jian-He Xu, Guo-Qiang Lin\*



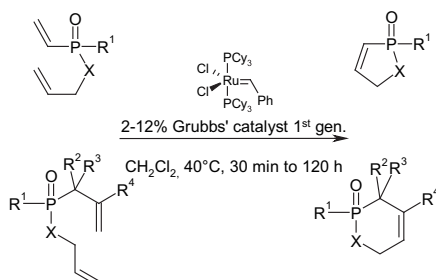
Glycosidase-mediated glycosylation of alkynyl alcohols and azide-containing alcohols was followed by a click reaction, affording various types of triazole glycosides. The activities of triazole glycosides detected in subsequent bioassays show that this procedure is a feasible approach to the development of anti-fungal drugs.



### Oxaphospholene and oxaphosphinene heterocycles via RCM using unsymmetrical phosphonates or functional phosphinates

pp 758–764

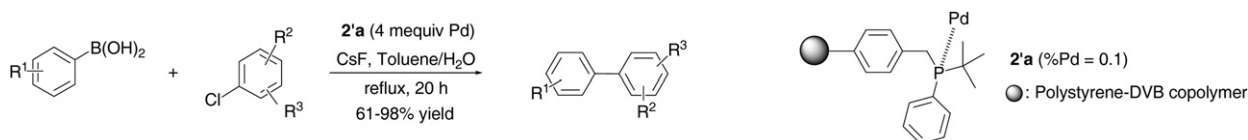
Pierre Fourgeaud, Camille Midrier, Jean-Pierre Vors, Jean-Noël Volle, Jean-Luc Pirat, David Virieux\*



### Highly efficient reusable polymer-supported Pd catalysts of general use for the Suzuki reaction

pp 765–772

Stéphane Schweizer, Jean-Michel Becht\*, Claude Le Drian

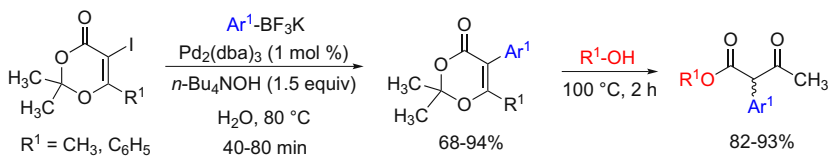




**Highly efficient palladium-catalyzed Suzuki–Miyaura reactions of potassium aryltrifluoroborates with 5-iodo-1,3-dioxin-4-ones in water: an approach to  $\alpha$ -aryl- $\beta$ -ketoesters**

pp 773–779

Adriano S. Vieira, Rodrigo L.O.R. Cunha, Clécio F. Klitzke, Julio Zukerman-Schpector, Hélio A. Stefani\*



\*Corresponding author

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®



ELSEVIER

ISSN 0040-4020