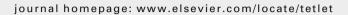


Contents lists available at ScienceDirect

## **Tetrahedron Letters**





# Tetrahedron Letters Vol. 50, No. 45, 2009

## **Contents**

#### COMMUNICATIONS

**Di(ethylene glycol) vinyl ether: a highly efficient deactivating reagent for olefin metathesis catalysts** Weidong Liu \*, Paul J. Nichols, Nathan Smith

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### Oxidative conversion of amines into benzoxazoles using hydrogen transfer catalysis

A. John Blacker, Mohamed M. Farah, Stephen P. Marsden \*, Ourida Saidi, Jonathan M. J. Williams

pp 6106-6109

R<sup>1</sup> NH<sub>2</sub> + H<sub>2</sub>N R<sup>2</sup> 
$$\frac{2 \text{ equiv. DMBQ}}{\text{mesitylene}}$$
 R<sup>1</sup> N R<sup>2</sup> R<sup>2</sup> R<sup>2</sup>

DMBQ = dimethoxybenzoquinone

Benzoxazoles are synthesised directly by oxidative condensation of o-aminophenols with amines using hydrogen transfer catalysis.

### Iron-catalysed Suzuki coupling? A cautionary tale

pp 6110-6111

Robin B. Bedford \*, Masaharu Nakamura \*, Nicholas J. Gower, Mairi F. Haddow, Mark A. Hall, Michael Huwe, Tohru Hashimoto, Rukeme A. Okopie

$$R \xrightarrow{Fe \text{ or } Pd?} R \xrightarrow{Fe \text{ or } Pd?}$$
+ PhB(OH)<sub>2</sub>

During an investigation on a reported iron-catalysed Suzuki reaction, we uncovered how little palladium contamination is required to generate positive results.

## A new approach to the synthesis of 3,4-dihydroisocoumarin derivatives

Mykola D. Obushak \*, Vasyl S. Matiychuk, Victor V. Turytsya

pp 6112-6115

# A facile one-pot three-component synthesis of ferrocene-grafted dispiro pyrrolidine/pyrrolizidine scaffolds through intermolecular [3+2] cycloaddition reaction of ferrocenyl Baylis-Hillman adduct

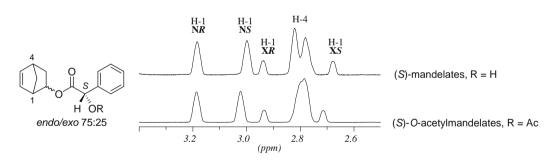
pp 6116-6120

Subban Kathiravan, Raghavachary Raghunathan

# An experimental/theoretical approach to determine the optical purity and the absolute configuration of *endo-* and *exo-*norborn-5-en-2-ol using mandelate derivatives

pp 6121-6125

Pablo L. Pisano, Ariel M. Sarotti, Silvina C. Pellegrinet





## $Palladium\text{-}catalyzed\ aminocarbonylation\ of\ heteroaryl\ halides\ using\ di\text{-}tert\text{-}butylphosphinoferrocene}$

pp 6126-6129

Bo Qu<sup>\*</sup>, Nizar Haddad, Zhengxu S. Han, Sonia Rodriguez, Jon C. Lorenz, Nelu Grinberg, Heewon Lee, Carl A. Busacca, DhileepKumar Krishnamurthy, Chris H. Senanayake



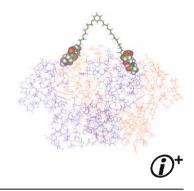
## Recognition between a divalent sialyl molecule and wheat germ agglutinin

Yi-Ping Yu, An-Tai Wu, Wei Zou, Chien-Sheng Chen \*, Shih-Hsiung Wu

A sialyl divalency between designed sialic acid-containing ligand and wheat germ agglutinin is demonstrated. Compared to the weak association constant between monovalent oligosialic acid and wheat germ agglutinin in the isothermal titration calorimetry experiment, the divalent recognition between divalent/trivalent ligand and lectin is estimated with the same magnitude association constant  $(10^7)$  in the surface plasmon resonance experiment.

#### pp 6130-6132

pp 6133-6138



# Pd-catalyzed synthesis of $\alpha$ -aryl ketones through couplings of $\alpha$ -arylacetyl chlorides with triarylbismuths as multi-coupling nucleophiles

Maddali L. N. Rao \*, Somnath Giri, Deepak N. Jadhav

R<sup>1</sup>
R<sup>2</sup>
R<sup>3</sup>
(3 equiv)

$$R^4$$
 $R^4$ 
 $R^4$ 
 $R^3$ 
 $R^3$ 
 $R^4$ 
 $R^3$ 
 $R^4$ 
 $R^$ 

# A novel synthesis of 1-aryl tetrazoles promoted by employing the synergy of the combined use of DMSO and an ionic liquid as the solvent system at ambient temperature

pp 6139-6142

Satish N. Dighe, Kishor S. Jain, Kumar V. Srinivasan

A mild, convenient, efficient, and rapid protocol for the synthesis of 1-aryl-1*H*-1,2,3,4-tetrazoles via the condensation of amines, triethyl orthoformate, and sodium azide at ambient temperature in excellent isolated yields (85–90%) by the combined use of DMSO and an ionic liquid as a solvent has been reported.

# Total synthesis of macrocyclic glycosides, clemochinenosides A and B, and berchemolide, by fluorous mixture synthesis

pp 6143-6149

Masaru Kojima, Yutaka Nakamura, Shun Ito, Seiji Takeuchi

## Synthesis of the starfish ganglioside AG2 pentasaccharide

pp 6150-6153

Shinya Hanashima \*, Yoshiki Yamaguchi, Yukishige Ito, Ken-ichi Sato

First synthesis of the AG2 pentasaccharide, using the silylene-oxazolidinone double-locked sialic acid building block was successfully conducted.



## DDQ-mediated oxidative cross-coupling between propargylic sp<sup>3</sup> and indoles sp<sup>2</sup> carbons

pp 6154-6158

G. L. V. Damu, J. Jon Paul Selvam, C. Venkata Rao \*, Y. Venkateswarlu \*

Synthesis of propargyl indoles has been accomplished by oxidative cross-coupling between propargylic sp<sup>3</sup> and indole sp<sup>2</sup> carbons using DDQ.

# $Synthesis\ and\ electronic\ properties\ of\ nanometer-size\ symmetrical\ \textit{tetrakis} (poly-\textit{p}-phenylene) ethylenes$

pp 6159-6162

Vijay S. Vyas, Moloy Banerjee, Rajendra Rathore



### A Peterson avenue to 5-alkenyloxazoles

Jaclyn Chau, Jianmin Zhang, Marco A. Ciufolini \*



## An efficient synthesis of (R)- and (S)-baclofen via desymmetrization

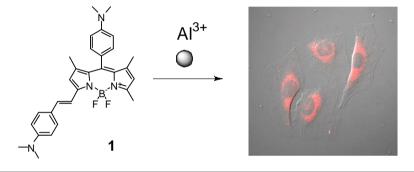
Lei Ji, Yuheng Ma, Jin Li, Liangren Zhang \*, Lihe Zhang

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## A colorimetric and fluorescent turn-on chemosensor for Al<sup>3+</sup> and its application in bioimaging

Yan-Wei Wang, Meng-Xiao Yu, Yan-Hong Yu, Zhi-Ping Bai, Zhen Shen \*, Fu-You Li \*, Xiao-Zeng You

pp 6169-6172



### Synthesis of novel aryl-1,2-oxazoles from ortho-hydroxyaryloximes

Trevor J. Dale, Aaron C. Sather, Julius Rebek Jr.

pp 6173-6175

The reaction of *ortho*-hydroxyaryloximes with *p*-toluenesulfonyl chloride in the presence of an amine base efficiently generates the corresponding aryl-1,2-oxazole, and the synthesis of four novel aryl-1,2-oxazoles is presented.



## Development of recyclable iridium catalyst for C-H borylation

Tsuyoshi Tagata, Mayumi Nishida, Atsushi Nishida \*

pp 6176-6179

A new heterogeneous and reusable iridium catalyst for C-H borylation was developed by the reaction of  $[IrCl(COD)]_2$  and bis(pinacolato)diboron in the presence of 2,2′-bipyridinedicarboxylic acids.

## Reactivity of allenoates toward aziridines: [3+2] and formal [3+2] cycloadditions

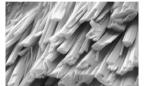
Fernanda M. Ribeiro Laia, Teresa M. V. D. Pinho e Melo

pp 6180-6182

## Microscopic and macroscopic anisotropy in supramolecular hydrogels of histidine-based surfactants

Andreea Pasc\*, Patrick Gizzi, Nicolas Dupuy, Stéphane Parant, Jaafar Ghanbaja, Christine Gérardin

The synthesis of novel histidine-based surfactants and their self-assembling properties into anisotropic microscopic and macroscopic spaces are reported. Below pH 8, surfactant molecules self-assemble into micelles whereas hydrogelation occurs above pH 8 even at very low concentrations (0.3%w/v). Structure, size, and morphology of the fiber-like lamellar aggregates were determined by SAXS and WAXS measurements, polarized optical microscopy, transmission and scanning electron microscopy, and linear and circular dichroism.



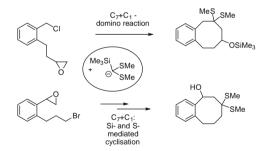
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### Silicon- and sulfur-mediated synthesis of benzoannulated cyclooctanols

Florian Genrich, Ernst Schaumann



The reaction of a silyl-substituted thioacetal with ortho-difunctionalized benzenes as biselectrophiles allows access to multifunctional cyclooctanols.

# A facile domino protocol for the regioselective synthesis and discovery of novel 2-amino-5-arylthieno-[2,3-b]thiophenes as antimycobacterial agents

pp 6191-6195

Kamaraj Balamurugan, Subbu Perumal \*, Aaramadaka Sunil Kumar Reddy, Perumal Yogeeswari, Dharmarajan Sriram



## Pd-catalyzed addition-carbocyclization of $\alpha$ , $\omega$ -diynes with H-P(0)R<sub>2</sub> compounds

Jun Kanada, Koh-ichiro Yamashita, Satish Kumar Nune, Masato Tanaka

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## Microwave irradiation and COMU: a potent combination for solid-phase peptide synthesis

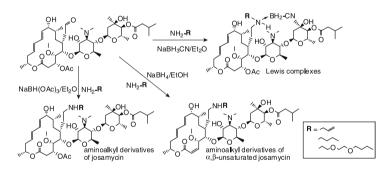
Ramon Subiros-Funosas, Gerardo A. Acosta, Ayman El-Faham, Fernando Albericio

Oxyma-based uronium-type coupling reagent COMU has shown perfect compatibility with microwave-assisted peptide synthesizers. Consistent with previous reports, COMU displayed higher efficiency than benzotriazole classical immonium salts HATU/HBTU in the demanding synthesis of the Aib derivative of Leu-Enkephalin pentapeptide, giving rise to no Oxyma-based byproducts. The combination of microwave irradiation and COMU, therefore, resulted in a similar performance to that observed by manual synthesis in considerably shorter time.

## Unexpected $\alpha,\beta$ -unsaturated products of reductive amination of the macrolide antibiotic josamycin

pp 6203-6207

Piotr Przybylski \*, Krystian Pyta, Bogumil Brzezinski





\*Corresponding author

\* Supplementary data available via ScienceDirect

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