

### Tetrahedron Letters Vol. 48, No. 12, 2007

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#### **COMMUNICATIONS**

# Sequential cross-metathesis/cyclopropanation: short syntheses of (+/-)-cascarillic acid and (+/-)-grenadamide

pp 2059-2062

Hani Salim and Olivier Piva\*

Two trans-cyclopropane natural products have been prepared according to a one-pot reaction in high chemical yields and significant trans/cis selectivities.

#### 3-Substituted 4-pyranones: a rapid approach using microwave heating

pp 2063-2065

Omar D. Lopez,\* Jason T. Goodrich, Fukang Yang and Lawrence B. Snyder

3-Substituted 4-pyranones were prepared rapidly and in good yields using cross-coupling conditions under microwave heating.

# Synthesis of 6-alkylidene-2,3-benzo-1,4-diaza-7-oxabicyclo[4.3.0]non-2-enes by cyclization of 1,3-bis(silyl enol ethers) with quinoxalines

pp 2067-2069

Andreas Schmidt, Jörg-Peter Gütlein and Peter Langer\*

# NbCl $_5$ -Catalyzed one-pot Mannich-type reaction: three component synthesis of $\beta$ -amino carbonyl compounds

pp 2071-2073

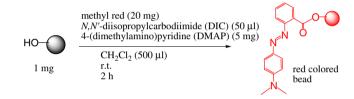
Rui Wang, Bo-gang Li, Tai-kun Huang, Lin Shi and Xiao-xia Lu\*

Three-component Mannich-type reaction of acetophenone, aromatic aldehydes and aromatic amines was efficiently catalyzed by NbCl<sub>5</sub> at ambient temperature to give various  $\beta$ -amino ketones in high yields.

### A new colorimetric test for detection of hydroxyl groups in solid-phase synthesis

pp 2075-2078

Shiro Komba,\* Sayoko Sasaki and Sachiko Machida





# Synthesis of $C_2$ -symmetric trans-2,6-diarylpiperidinones via aryl cuprate addition: an unexpected stereochemical outcome

pp 2079-2082

Christopher L. Hamblett,\* David L. Sloman, Laura T. Kliman, Bruce Adams, Richard G. Ball and Matthew G. Stanton\*



Novel Cinchona alkaloid derived ammonium salts as catalysts for the asymmetric synthesis of  $\beta$ -hydroxy pp 2083–2086  $\alpha$ -amino acids via aldol reactions

Bing Ma, Jared L. Parkinson and Steven L. Castle\*



#### A new reaction of N-aryl-2-pyrimidinamines with triphosgene

pp 2087-2089

Mahavir Prashad,\* Bin Hu, Hong-Yong Kim, Denis Har, Oljan Repič and Thomas J. Blacklock

### Novel cyclic tetraselenides of mannose: synthesis and mechanistic studies

pp 2091-2095

Kirubakaran Sivapriya, Perumal Suguna and Srinivasan Chandrasekaran\*

We disclose the synthesis of novel cyclic tetraselenides starting from mannose, which are very unusual and rare.

## One-pot synthesis of 1,4-disubstituted 1,2,3-triazoles from terminal acetylenes and in situ generated azides

pp 2097-2099

Kristin Odlo, Edmund André Høydahl and Trond Vidar Hansen\*

# Synthesis of chiral cyclohexane-backbone P,N-ligands derived from pyridine and their applications in asymmetric catalysis

Qi-Bin Liu and Yong-Gui Zhou\*

P,N-ligands *trans-*4 and *cis-*5 with a cyclohexane backbone were easily synthesized. The key step was chiral resolution of (±)-*trans-*2-pyridylcyclohexanols with DBTA. Enantiopure trans isomer was subjected to Mitsunobu reaction and deprotection to give the corresponding cis isomer. These ligands have been successfully used in asymmetric hydrogenation of arylalkenes with up to 93% ee using 5 and 90% ee using 4 and asymmetric allylic alkylations with up to 95% ee using 5 and 93% ee using 4. Trans and cis P,N-ligands 4 and 5 all gave the product with the same configuration. It was suggested that the absolute configuration of the product was controlled by the configuration of the stereogenic pyridyl-bearing carbon of the ligands.

#### Peptide dithiodiethanol esters for in situ generation of thioesters for use in native ligation

pp 2105-2107

A. Pernille Tofteng, Knud J. Jensen and Thomas Hoeg-Jensen\*

# Theoretical elucidation of the antioxidant mechanism of 1,3-dihydro-1-methyl-2H-imidazole-2-selenol (MSeI)

pp 2109-2112

Y. Soujanya\* and G. Narahari Sastry

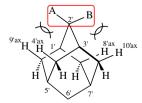


## Synthesis of new dithiocarbamate-based organosilanes for grafting on silica

pp 2113-2116

Stéphanie Goubert-Renaudin, Raphaël Schneider\* and Alain Walcarius\*

Ranking the effect of [1A(ax), 1B(eq)] versus [1A(eq), 1B(ax)] cyclohexane ring substitution on the  $^1$ H pp 2117–2122 chemical shifts of  $\gamma$ -methylene cyclohexane ring protons using 2,2-disubstituted adamantanes as models Antonios Kolocouris



The <sup>1</sup>H chemical shift separation at 298 K within 4',9'-H and 8',10'-H methylenes was compared for different pairs of substituents A, B in various 2,2-disubstituted adamantanes. This provides an accessible protocol to compare the effect of [1A(ax), 1B(eq)] and [1A(eq), 1B(ax)] substitution on the <sup>1</sup>H resonance separation within cyclohexane ring  $\gamma$ -CH<sub>2</sub> protons.

# Process for preparing Ezetimibe intermediate by enantioselective CBS catalyzed ketone reduction with $pp\ 2123-2125$ $BH_3-DEA$ prepared in situ

Blandine Bertrand, Sonia Durassier, Stéphane Frein and Alain Burgos\*

$$NaBH_4 + Me_2SO_4 + DEA \xrightarrow{1/DME} BH_3 - DEA \xrightarrow{3/(R)-MeCBS, Toluene} BH_3 - DEA \xrightarrow{4/F} NHF F$$

## Carteramine A, an inhibitor of neutrophil chemotaxis, from the marine sponge Stylissa carteri

pp 2127-2129

Hirotsugu Kobayashi, Koki Kitamura, Koji Nagai, Yoichi Nakao, Nobuhiro Fusetani,

Rob W. M. van Soest and Shigeki Matsunaga\*

#### Synthesis of oxazolidinones in supercritical CO2 under heterogeneous catalysis

pp 2131-2134

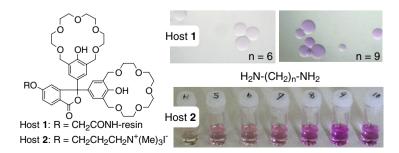
Raimondo Maggi,\* Chiara Bertolotti, Emilia Orlandini, Chiara Oro, Giovanni Sartori and Maurizio Selva

Basic alumina efficiently promotes the reaction of propargylamines with scCO<sub>2</sub> for the synthesis of variously substituted oxazolidinones that, after filtration of the catalyst (reusable for several runs) are isolated by methanol crystallization.

### Colorimetric recognition of the length of $\alpha$ , $\omega$ -diamines in water

pp 2135-2138

Kazunori Tsubaki,\* Daisuke Tanima, Takahiro Sasamori, Norihiro Tokitoh and Takeo Kawabata





### New syntheses of dalbergichromene and dalbergin from vanillin via neoflavene intermediate Sie-Rong Li, Liang-Yeu Chen, Jui-Chi Tsai, Jing-Yu Tzeng, Ian-Lih Tsai and Eng-Chi Wang\*

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### Synthesis and evaluation of hexitol nucleoside congeners as ambiguous nucleosides

pp 2143-2145

Catia Lambertucci, Guy Schepers, Gloria Cristalli, Piet Herdewijn and Arthur Van Aerschot\*

# (j)+

#### A novel approach to the synthesis of benzo[b]fluoren-11-ones

pp 2147-2149

Ana Martínez, José C. Barcia, Amalia M. Estévez, Fernando Fernández, Lucía González, Juan C. Estévez and Ramón J. Estévez\*

$$\begin{array}{c} & & & \\ & &$$

# The synthesis of unusual isocoumarin derivatives: the chemistry of homophthalic acid Sevil Özcan, Ertan Şahin and Metin Balci\*

pp 2151-2154



# Three-component tandem reactions of (2-arylsulfanyl-3-aryl-2-oxiranyl)(aryl)methanones and *o*-phenylenediamine: formation of quinoxalines

pp 2155-2158

M. Kamal Nasar, Raju Ranjith Kumar and Subbu Perumal\*

C1
$$S \stackrel{2}{\longrightarrow} 1$$

$$R^{1} \stackrel{H_{2}O_{2}/NaOH}{EtOH} \stackrel{R^{1}}{\longrightarrow} C1$$

$$S \stackrel{2}{\longrightarrow} 1$$

$$R^{1} \stackrel{NH_{2}}{\longrightarrow} Cat. AcOH, EtOH (reflux)$$
or cat. AcOH, MW
$$R^{2} \stackrel{NH_{2}}{\longrightarrow} 1$$

# Uncatalyzed Michael addition of indoles: synthesis of some novel 3-alkylated indoles via a three-component reaction in solvent-free conditions

pp 2159-2163

### The first synthesis of single enantiomers of ketomycolic acids

pp 2165-2169

Gani Koza and Mark S. Baird\*

We report the synthesis of a single enantiomer of two protected ketomycolic acids, one containing a *cis*-cyclopropane the other an  $\alpha$ -methyl-*trans*-cyclopropane, and of related hydroxy-mycolic acids.

## Convergent synthesis of the ABCDE-ring fragment of the Caribbean ciguatoxin C-CTX-1

pp 2171-2175

Masayuki Inoue,\* Fumihito Saito, Masafumi Iwatsu, Yuuki Ishihara and Masahiro Hirama\*

### Synthesis of the LMN-ring fragment of the Caribbean ciguatoxin C-CTX-1

pp 2177-2180

Keita Yoshikawa, Masayuki Inoue\* and Masahiro Hirama\*

### A simple and concise catalytic asymmetric entry to tetrahydroxanthenones

pp 2181-2184

Ramon Rios, Henrik Sundén, Ismail Ibrahem and Armando Córdova\*

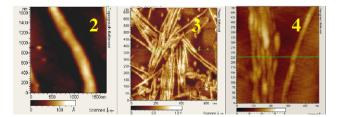
### A novel approach for the synthesis of alkyl and aryl sulfonamides

pp 2185-2188

Ahmad Shaabani,\* Ebrahim Soleimani and Ali Hossein Rezayan

# Metalated peptide fibers derived from a natural metal-binding peptide motif Surajit Ghosh and Sandeep Verma\*

pp 2189-2192



This report describes the generation of metalated peptide fibers, having a natural metal-binding peptide sub-segment, with high thermal stability making them suitable for potential nano(bio)technological applications.

# Enantioselective organocatalytic conjugate addition of amines to $\alpha,\beta$ -unsaturated aldehydes: one-pot asymmetric synthesis of $\beta$ -amino acids and 1,3-diamines

pp 2193-2198

Jan Vesely, Ismail Ibrahem, Ramon Rios, Gui-Ling Zhao, Yongmei Xu and Armando Córdova\*

$$R^{1} = R^{2} = 0$$
 $R^{1} = R^{2} = 0$ 
 $R^{2} =$ 

### Spiroleucettadine: synthetic studies and investigations towards structural revision

pp 2199-2203

Nicholas Aberle, Simon P. B. Ovenden, Guillaume Lessene, Keith G. Watson\* and Brian J. Smith

$$\begin{array}{c} \text{OH } \overset{\text{C}}{\hookrightarrow} \text{H}_3 \\ \text{O} & \overset{\text{OH }}{\longrightarrow} \text{NH} \\ \text{N} & \text{The real spiroleucettadine?} \\ \text{H}_3\text{CO} & \text{CH}_3 \\ \end{array}$$

Density functional theory calculations were used to propose an alternative structure for spiroleucettadine.



Iodine as a versatile reagent for the Prins-cyclization: an expeditious synthesis of 4-iodotetrahydropyran pp 2205–2208 derivatives

J. S. Yaday,\* B. V. Subba Reddy, G. G. K. S. Narayana Kumar and T. Swamy

# Diastereoselective allylation of planar chiral substituted ferrocenecarboxaldehyde: an efficient entry to pp 2209–2211 chiral ferrocenyl ligands

Hao Li, Hin-Soon Cheng, Ai-Hua Seow and Teck-Peng Loh\*

2,2'-Disubstituted ferrocenecarboxaldehydes are subjected to zinc-mediated allylation to form homoallylic ferrocenyl alcohols. The effects of *ortho*-substituted functional groups on facial selectivities of planarly chiral aldehydes were studied and it was found that the corresponding homoallylic alcohols were obtained as single diastereomers in excellent yields.



### Expeditious synthesis of imidazo[1,2-c]pyrimidines via a [4+1]-cycloaddition

pp 2213-2216

Michael Umkehrer,\* Günther Ross, Nadine Jäger, Christoph Burdack, Jürgen Kolb, Hong Hu,\* Maria Alvim-Gaston and Christopher Hulme

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\*Corresponding author

\*\* Supplementary data available via ScienceDirect

#### **COVER**

Ciguatoxin C-CTX-1 was isolated as a principan causative toxin of ciguatera seafood poisoning in the Caribbean Sea. In the two consecutive papers, we report the synthesis of the ABCDE- and LMN-ring fragments of C-CTX-1.

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