



#### Tetrahedron Letters Vol. 45, No. 33, 2004

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#### **COMMUNICATIONS**

#### Stereocontrolled synthesis of a potent antimalarial alkaloid, (+)-febrifugine

pp 6221-6223

Miho Katoh, Ryuichiro Matsune, Hiromasa Nagase and Toshio Honda\*

TBSO TBSO Febrifugine
$$\begin{array}{c|c}
N \\
H
\end{array}$$
TBSO Febrifugine

A novel and stereocontrolled synthetic path to a potential antimalarial piperidine alkaloid, (+)-febrifugine, was established by employing a reductive deamination of a proline derivative with samarium diiodide, as a key step.

#### Novel trichothecanes, paecilomycine A, B, and C, isolated from entomopathogenic fungus, *Paecilomyces tenuipes*

pp 6225-6228

Haruhisa Kikuchi, Yasuhiro Miyagawa, Yuko Sahashi, Satoshi Inatomi, Asami Haganuma, Norimichi Nakahata and Yoshiteru Oshima\*

# $Oxovan a dium (V) \hbox{-} catalyzed \ en antios elective \ Meerwein-Ponndorf-Verley \ cyanation \ of aldehydes \ using \ acetone \ cyanohydrin$

pp 6229-6233

Akira Watanabe, Kazuhiro Matsumoto, Yuya Shimada and Tsutomu Katsuki\*

Oxovanadium(V)(salen) complex was found to be a promising catalyst for asymmetric MPV cyanation of aliphatic aldehydes.

#### Synthesis of benzofurans in ionic liquid by a PdCl<sub>2</sub>-catalyzed intramolecular Heck reaction

pp 6235-6237

Xingang Xie, Bo Chen, Jiangping Lu, Junjie Han, Xuegong She\* and Xinfu Pan\*

$$R_1 = \begin{pmatrix} & & & \\$$

## New polystyrene-supported stable source of 2-pyridylboron reagent for Suzuki couplings in combinatorial chemistry

pp 6239-6241

Philippe Gros,\* Abdelatif Doudouh and Yves Fort\*

$$OH + OH + OH - B(OiPr)_3$$

$$OH + OH - B(OiPr)_3$$

$$OH - B(OiPr)_4$$

$$OH - B(OiPr)_3$$

$$OH - B(OiPr)_4$$

$$OH - B$$

# Efficient synthesis of extended guanine analogues designed for recognition of an $A \cdot T$ inverted base pair in triple helix based-strategy

pp 6243–6247

Nathalie Van Craynest, Dominique Guianvarc'h, Corinne Peyron and Rachid Benhida\*

#### Approaches to the synthesis of 3-fluoroshikimic acids

pp 6249-6253

Lovely Begum, Michael G. B. Drew, Jane L. Humphreys, David J. Lowes, Pamela R. Russi, Helen L. Whitby and Roger C. Whitehead\*

## A new, efficient and simple method for the thionation of ketones to thioketones using P<sub>4</sub>S<sub>10</sub>/Al<sub>2</sub>O<sub>3</sub> Vivek Polshettiwar and M. P. Kaushik\*

pp 6255-6257

Where R and R' = alkyl, aryl

#### Direct determination of tautomerism in purine derivatives by low-temperature NMR spectroscopy

pp 6259-6263

Pavlína Sečkářová, Radek Marek,\* Kateřina Maliňáková, Erkki Kolehmainen, Dana Hocková, Michal Hocek and Vladimír Sklenář

An approach to determine the tautomeric forms of purine derivatives, based on simultaneous analysis of <sup>13</sup>C and <sup>15</sup>N chemical shifts and vicinal <sup>1</sup>H–<sup>13</sup>C coupling constants measured at low temperatures, is presented.

# Synthesis of 5-alkoxymethyl- and 5-aminomethyl-substituted 8-hydroxyquinoline derivatives and their luminescent Al(III) complexes for OLED applications

pp 6265-6268

Amaresh Mishra,\* Pabitra K. Nayak and N. Periasamy

#### **(i)**+

#### Oxazolidine-2-thiones: a molecular modeling study

pp 6269-6272

Neha Gandhi, Brijesh K. Srivastava, Vidya B. Lohray and Braj B. Lohray\*

Two oxazolidine-2-thiones, thio-analogs of linezolid, were synthesized and their antibacterial properties evaluated. Unlike oxazolidinones, the thio-analogs did not inhibit the growth of Gram positive bacteria. A molecular modeling study has been carried out to aid understanding of this unexpected finding.

## A concise synthesis of highly functionalized $\alpha,\beta$ -unsaturated $\gamma$ -butyrolactones through ring contraction of 2H-pyran-2-ones

pp 6273-6276

Diptesh Sil, Ashoke Sharon, Prakas R. Maulik and Vishnu Ji Ram\*

$$A_{1} \xrightarrow{X} CN \xrightarrow{C} CN \xrightarrow{X} C$$

A synthesis of highly functionalized  $\alpha,\beta$ -unsaturated  $\gamma$ -butyrolactones is reported.

## Synthesis and complexing properties of 1,5:3,7-doubly bridged calix[8] arenes with mixed spanning elements

pp 6277-6281

Luisa Gregoli, Laura Russo, Ivan Stefio, Carmine Gaeta, Françoise Arnaud-Neu, Véronique Hubscher-Bruder, Poupak Khazaeli-Parsa, Corrada Geraci and Placido Neri\*

#### A synthetic entry to 2,3-fused ring indole derivatives by ring-closing metathesis reactions

pp 6283-6285

M.-Lluïsa Bennasar,\* Ester Zulaica and Sven Tummers

Lewis acid deprotection of silyl-protected oligonucleotides and base-sensitive oligonucleotide analogues pp 6287–6290 Fernando Ferreira, Jean-Jacques Vasseur and François Morvan\*

# Synthesis of cis-2-aryl-3-pyrrolidine carboxylic esters via diastereoselective cyclization of $\gamma$ -imino esters using a TiCl<sub>4</sub>/Et<sub>3</sub>N reagent system

pp 6291-6293

Surisetti Suresh and Mariappan Periasamy\*

R COOMe 
$$\frac{\text{TiCl}_4/\text{Et}_3\text{N}}{\text{CH}_2\text{Cl}_2, 0 \, ^\circ\text{C-rt}, 3 \, h}$$
 R R

#### Modulating spin delocalization in conjugated nitroxides: 2-(N-aminoxyl-N-tert-butyl)-benzothiazole

pp 6295-6298

Patrick S. Taylor, Prasanna Ghalsasi and Paul M. Lahti\*

A convenient two-step synthesis of the title radical from benzothiazole gives the product as a thick oil with multi-day persistence in air. Its ESR hyperfine coupling shows that the sulfur atom induces greater delocalization of spin than is observed for the structural analog where S is replaced by NH. This is in good accord with B3LYP hybrid density functional calculations.



# Novel synthesis of 4-chloro-3-hydroxy-2-pyrone by the reaction of acetonide protected 4,5-dihydroxy-2-chloroglycidic ester with magnesium chloride

pp 6299-6301

Takuzo Komiyama, Yutaka Takaguchi and Sadao Tsuboi\*

Treatment of acetonide protected 4,5-dihydroxy-2-chloroglycidic ester with magnesium chloride gave 4-chloro-3-hydroxy-2-pyrone in excellent to good yields.

#### New synthesis of 3-substituted indoles using lithium trimethylsilyldiazomethane

pp 6303-6305

Takashi Miyagi, Yoshiyuki Hari and Toyohiko Aoyama\*

## An expeditious entry to carbohydrate derived enynes and ene-diynes via Sonogashira coupling of halo-exo-glycals

pp 6307-6310

Ana M. Gómez,\* Ana Pedregosa, Aitor Barrio, Serafin Valverde and J. Cristóbal López\*

#### Stereoselective synthesis of $C^{\alpha}$ -tetrasubstituted azabicyclo[X.3.0]alkane amino acids

pp 6311-6315

Leonardo Manzoni,\* Laura Belvisi, Matteo Colombo, Eliana Di Carlo, Alessandra Forni and Carlo Scolastico\*

COOtBu

R
HN
Ph
$$n = 1, 2$$
 $R = -CH_2Ph, -CH_2CH=CH_2$ 

#### **(i)**+

#### A simple deprotection of triflate esters of phenol derivatives

pp 6317-6320

Tadaaki Ohgiya and Shigeru Nishiyama\*

$$R \xrightarrow{\text{II}} OSO_2CF_3 \xrightarrow{\text{Et}_4NOH} R \xrightarrow{\text{II}} OH$$

# A verification of the photolytic decomposition pathways of 3-tert-butyl-3-chlorodiazirine based on the application of the $C_{60}$ probe technique

pp 6321-6322

Midori O. Ishitsuka, Yasuyuki Niino, Takatsugu Wakahara, Takeshi Akasaka,\* Michael T.H. Liu,\* Kaoru Kobayashi and Shigeru Nagase\*

 $C_{60}$  acts as a mechanistic probe for the formation of carbene and for the rearranged product via the excited state in the photolysis of 3-t-butyl-3-chlorodiazirine.

#### Design and synthesis of novel type somatostatin analogs with antiproliferative activities on A431 tumor cells

pp 6323-6327

Anna Miyazaki, Toshio Yokoi, Yoshifumi Tachibana, Riyo Enomoto, Eibai Lee, Gyongyi Bokonyi, Gyorgy Keri, Yuko Tsuda and Yoshio Okada\*

# The formylation of the upper-rims of thiacalixarenes: synthesis of the first tetra-formylated and the first *meta*-substituted thiacalix[4]arenes

pp 6329-6331

Cedric Desroches, Vadim G. Kessler and Stephane Parola\*

The formylation of the thiacalixarene was achieved using BuLi and N-formylpiperidine.

#### Diastereoselectivity in the solid-phase synthesis of peptide heterocycle hybrids

pp 6333-6336

John H. Grimes, Jr.,\* Weifan Zheng and Wayne D. Kohn



# Boron trifluoride-induced reactions of phenylglycidyl ethers: a convenient synthesis of enantiopure, stereodefined fluorohydrins

pp 6337-6341

Gabriela Islas-González, Cristina Puigjaner, Anton Vidal-Ferran, Albert Moyano, Antoni Riera and Miquel A. Pericàs\*

#### Fluorophores related to the green fluorescent protein

pp 6343-6348

Maryline Bourotte, Martine Schmitt, Anny Follenius-Wund, Claire Pigault, Jacques Haiech and Jean-Jacques Bourguignon\*

HO 
$$X = 0$$
, NR  $Y = N$ , CH

# Stereodivergent total asymmetric synthesis of polyhydroxylated pyrrolidines via tandem allylic epoxidation and intramolecular cyclization reactions

pp 6349-6352

Satwinder Singh and Hyunsoo Han\*

# First synthesis of arylpyrrolo- and pyrazolopyrrolizinones as useful agents with potential biological interest

pp 6353–6355

Christophe Rochais, Vincent Lisowski, Patrick Dallemagne\* and Sylvain Rault

Novel arylpyrrolo- and pyrazolopyrrolizinones with potential biological interest were prepared in an efficient manner from aminoarylpyrrole and pyrazole carboxylates.

## Poly(ethylene glycol)-supported $\alpha,\alpha,\alpha$ -trifluoroacetophenone in dioxirane mediated alkene epoxidation reactions

pp 6357-6359

Jovi Tze Wai Kan and Patrick H. Toy\*

$$R^1$$
 $R^2$ 
 $R^4$ 
 $R^4$ 
 $R^2$ 
 $R^4$ 
 $R^4$ 

# Synthesis of efficient blue and red light emitting phenanthroline derivatives containing both hole and electron transporting properties

pp 6361-6363

Yuan Ji Bing, Louis M. Leung\* and Gong Menglian

Unusual reaction of aryldiazoacetates with enamines: highly effective synthesis of  $\gamma$ -ketoesters

pp 6365-6367

Ming Yan,\* Wei-Jie Zhao, Dan Huang and Shun-Jun Ji

$$N_2$$
 $Ar^1$ 
 $COOMe$ 
 $+$ 
 $Ar^2$ 
 $N$ 
 $Cu(hfacac)_2$ 
 $CH_2Cl_2$ 
 $CH_2Cl_2$ 
 $O$ 
 $Ar^2$ 
 $Ar^1$ 

up to 85% yield

The reaction of aryldiazoacetates with enamines catalyzed by copper and dirhodium complexes provides exclusively  $\gamma$ -ketoesters in high yields.

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\*\*D+ Supplementary data available via ScienceDirect



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