

## Tetrahedron Letters Vol. 45, No. 13, 2004

### **Contents**

### **COMMUNICATIONS**

 $\hbox{$2$-Iodoxybenzenesulfamides: new pseudobenziodoxole-based hypervalent iodine reagents}$ 

pp 2719-2721

Alexey Y. Koposov, Dmitry N. Litvinov and Viktor V. Zhdankin\*

Amides of 2-iodoxybenzenesulfonic acid were prepared by the dioxirane oxidation of the corresponding 2-iodobenzenesulfamides and isolated as stable, microcrystalline products. These new representatives of the pseudocyclic hypervalent iodine compounds can selectively oxidize benzyl alcohols to aldehydes.

Simplified chemical and radiochemical synthesis of 2-arachidonoyl-glycerol, an endogenous ligand of cannabinoid receptors

Antonella Cartoni,\* Andrea Margonelli, Giancarlo Angelini, Alessandro Finazzi-Agrò and Mauro Maccarrone\*

$$\begin{array}{c} O \\ R \\ OH \\ \hline \\ CH_{2}Cl_{2} \\ \hline \\ CH_{2}Cl_{2} \\ \hline \\ R = CH_{3}(CH_{2})_{4}(CH=CHCH_{2})_{4}(CH_{2})_{2} \\ \hline \\ R = CH_{3}(CH_{2})_{4}(CH=CHCH_{2})_{4}(CH_{2})_{2} \\ \hline \\ \end{array} \begin{array}{c} O \\ CH_{2}OCH_{2}Ph \\ CH_{2}OCH_{2}Ph \\ CH_{2}OCH_{2}Ph \\ \hline \\ A. \\ H_{2}O, CH_{3}OH \\ \hline \\ A. \\ H_{2}O, CH_{3}OH \\ \hline \\ CH_{2}-OH \\ \hline \\$$

## Solid-phase synthesis of 3-alkyl-2-arylamino-3,4-dihydroquinazolines

pp 2727-2730

Aimin Song, Jan Mařík and Kit S. Lam\*

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

### Asymmetric synthesis of (R)- and (S)-2-trifluoromethylepinephrine

pp 2731-2733

Lun-Cong Dong, Michael Crowe, Jonathan West and Jeffrey R. Ammann\*



Short and efficient preparation of alkynyl selenides, sulfides and tellurides from terminal alkynes Lothar W. Bieber,\* Margarete F. da Silva and Paulo H. Menezes

pp 2735-2737

Cul/cot)

Selective *ortho*-cleavage of methoxymethyl- and 4-methoxybenzyl ethers John M. Keith\*

pp 2739-2742

 $R = CH_3OCH_2$ ,  $4-MeOC_6H_4$ X = Me, OR, OH, NHR

Synthesis of novel cationic cardiolipin analogues for the optimal delivery of therapeutic agents Krishnudu Kasireddy, Moghis U. Ahmad, Shoukath M. Ali and Imran Ahmad\*

pp 2743-2746

$$\begin{array}{c} C_{14}H_{29}O \\ C_{14}H_{29}O \\ \\ N \\ Br \end{array} \begin{array}{c} OH \\ OC_{14}H_{29} \\ O$$

Cationic cardiolipin analogue

#### Substituent effects on the barrier to carbamate C-N rotation

pp 2747-2749

Bradley D. Smith,\* DeeAnne M. Goodenough-Lashua, Carlisle J. E. D'Souza, Kieran J. Norton, Leslie M. Schmidt and James C. Tung

# Regiodivergent Baeyer-Villiger oxidation of fused ketone substrates by recombinant whole-cells expressing two monooxygenases from *Brevibacterium*

pp 2751-2754

Marko D. Mihovilovic\* and Peter Kapitán

$$X=C.O$$
 recombinant whole-cells  $X=C.O$ 

# Enantioselectivity and diastereoselectivity in the transesterification of secondary alcohols mediated by feruloyl esterase from *Humicola insolens*

pp 2755-2757

Nikos S. Hatzakis and Ioulia Smonou\*

## A new oligosaccharide synthesis using special hydroxy protecting group

pp 2759-2762

Shiro Komba,\* Motomitsu Kitaoka and Takafumi Kasumi\*

## A facile synthesis of benzo[c]phenanthridine alkaloids: oxynitidine and oxysanguinarine using lithiated pp 2763–2766 toluamide–benzonitrile cycloaddition

Thanh Nguyen Le, Seong Gyoung Gang and Won-Jea Cho\*

Benzo[c]phenanthridine alkaloids oxynitidine and oxysanguinarine were efficiently synthesized via toluamide–benzonitrile cycloaddition reaction in six steps.

## A simple synthesis of 6-deoxoteasterone and its 20-epimer

pp 2767-2769

Bunta Watanabe, Shuji Yamamoto, Kanako Sasaki, Yoshiaki Nakagawa\* and Hisashi Miyagawa

$$R_1$$
  $R_2$   $R_2$   $R_3$   $R_4$   $R_2$   $R_3$   $R_4$   $R_4$   $R_5$   $R_5$ 



## Facile and selective copper-palladium catalyzed addition of terminal alkynes to activated alkynes in water

pp 2771–2774

Liang Chen and Chao-Jun Li\*

### Investigation of the behavior of arenediazonium salts with olefins in BmimPF<sub>6</sub>

pp 2775–2777

George W. Kabalka,\* Gang Dong and Bollu Venkataiah

$$N_2BF_4$$
 +  $X$   $\frac{Pd(OAc)_2}{BmimPF_6}$   $R$   $X=COOMe, CN$   $R$   $X=Ar$   $Ar$   $Ar$ 

The palladium-catalyzed reactions of olefins with arenediazonium salts in ionic liquids were investigated. For methyl acrylate and methyl acrylonitrile, normal Heck cross-coupling products are obtained in good yields. However, highly selective dimerization products are formed in excellent yields for styrenes. The catalyst system can be recycled.

#### Synthesis of L-aminohomohistidine (L-Ahh)

Manuel Friedel and Thomas Lindel\*

pp 2779-2781

A short synthesis of L-aminohomohistidine (L-Ahh) is described, which starts from readily available  $\delta$ -hydroxy-L-lysine. The embedding of the basic guanidino moiety in the aromatic imidazole lowers the basicity of the side chain to a p $K_a$  of 8.3. It is proposed that L-Ahh may be employed as an arginine-mimetic in medicinal chemistry.

## New methodology for acridine synthesis using a rhodium-catalyzed benzannulation

Philippe Belmont,\* Jean-Christophe Andrez and Charlotte S. M. Allan

pp 2783-2786

One-step facile synthesis of deuterium labeled aldehydes from tertiary amides using  $Cp_2Zr(D)Cl$  Jared T. Spletstoser, Jonathan M. White and Gunda I. Georg\*

pp 2787-2789

$$\begin{array}{c|c}
O \\
R
\end{array}$$

$$\begin{array}{c|c}
Cp_2Zr(D)CI \\
\hline
Cp_2Zr(D)CI
\end{array}$$

$$\begin{array}{c|c}
O \\
R = aryl, alky$$

## Preparation of 5-amino-6-oxo-1,6-dihydro[1,2,4]triazine-3-carboxylic acid derivatives and synthesis of compound libraries thereof

pp 2791-2795

Romain Gambert, Christoph Kuratli and Rainer E. Martin\*

### Synthesis of a first thiophene containing analog of the HIV protease inhibitor nelfinavir

pp 2797-2799

Carlo Bonini,\* Lucia Chiummiento, Margherita De Bonis, Maria Funicello and Paolo Lupattelli

A stereoselective and efficient preparation of a thiophene containing intermediate 2 from ethyl 3-thienyl propenoate 4 as the core of new possible HIV protease inhibitors is described.

## Synthesis of ladder polyaromatics as new molecular device candidates

pp 2801-2803

Jacob W. Ciszek and James M. Tour\*



## Ring-closing metathesis toward the synthesis of 2,5-dihydrofuran and 2,5-dihydropyrrole skeletons from Baylis-Hillman adducts

pp 2805-2808

Jeong Mi Kim, Ka Young Lee, Sangku Lee and Jae Nyoung Kim\*

# Syntheses of two cytotoxic polyunsaturated pyrrole metabolites of the marine sponge $Mycale\ micracanthoxea$

pp 2809-2811

Trond Vidar Hansen\* and Lars Skattebøl

Eicosapentaenoic acid

Mycalazol 5 X = O and Y = CH<sub>2</sub>OH

Mycalazal 2 X = H,H and Y = CHO

## Synthesis and reactivity of amino-substituted BEDT-TTF donors as building blocks for bifunctional materials

pp 2813-2816

Jon-Paul Griffiths, Anna A. Arola, Glynn Appleby and John D. Wallis\*

# Synthesis of differentially protected cyclopentitol: its application towards the stereoselective synthesis of 5-epi-calditol

pp 2817-2819

C. V. Ramana,\* Bethi Sridhar Reddy and Mukund K. Gurjar

## Addition of carbon nucleophiles to cyclic N-acyliminium ions in SDS/water

pp 2821-2823

Nilton Soares Camilo and Ronaldo Aloise Pilli\*

OMe + Nu 
$$\frac{\text{Acid (cat.)}}{\text{SDS/H}_2O}$$
 Nu  $\frac{\text{Nu}}{\text{Boc}}$  Nu = PhC(OSiMe<sub>3</sub>)=CH<sub>2</sub>, (Z)- PhC(OSiMe<sub>3</sub>)=CHMe, EtOCH=CH<sub>2</sub>, 1,3-dicarbonyls

## Synthesis of new fluorescent 2-(2',2"-bithienyl)-1,3-benzothiazoles

pp 2825-2828

Rosa M. F. Batista, Susana P. G. Costa and M. Manuela M. Raposo\*

 $R{=}\;H,\;alkoxy,\;N{,}N{-}dialkylamino$ 

### Stereochemical assignment of the fungal metabolite xestodecalactone A by total synthesis

pp 2829-2831

Gerhard Bringmann,\* Gerhard Lang, Manuela Michel and Markus Heubes

The fungal metabolite xestodecalactone A (1) has been synthesised as a racemate and in both enantiomeric forms. Comparison by CD spectroscopy and HPLC on a chiral phase showed the natural product to possess the (R)-configuration.



#### Novel ent-kaurane dimers from Isodon rubescens var. rubescens

Quanbin Han, Yang Lu, Lili Zhang, Qitai Zheng and Handong Sun\*

pp 2833–2837

Three novel chiral *ent*-kaurane dimers, xindongnins M–O were isolated from *Isodon rubescens* var. *rubescens*, all characterized by the unique linkage of a single carbon–carbon bond between two subunits.

#### A triazene-based new photolabile linker in solid phase chemistry

pp 2839-2841

Dieter Enders,\* Christiaan Rijksen, Elke Bremus-Köbberling, Arnold Gillner and Johannes Köbberling

### An efficient synthesis of the orally-active GpIIb/IIIa antagonist FR184764

pp 2843-2845

Toshio Yamanaka,\* Mitsuru Ohkubo,\* Fumie Takahashi and Masayuki Kato

An efficient synthesis of the orally-active GpIIb/IIIa antagonist FR184764 was achieved. The key intermediate, an optically active ethynyl  $\beta$ -amino ester, was synthesized efficiently by utilizing a lipase catalyzed kinetic resolution step.

### The first total synthesis of lymphostin

pp 2847-2850

Kuniaki Tatsuta,\* Keisuke Imamura, Sayaka Itoh and Soko Kasai

$$\begin{array}{c} \text{CO}_2\text{Me} \\ \text{NHZ} & \xrightarrow{\text{H}_2\text{N}} & \xrightarrow{\text{O}} & \text{NH}_2 \\ & & & & \\ \text{N} & & \\ \text{N} & & \\ \text{N} & & & \\ \text{N} & & \\$$

A novel conversion of *erythro* phospholane epoxides to one-carbon atom homologated allylic alcohols

Valluru Krishna Reddy, Buchammagari Haritha, Tatsuo Oshikawa and Mitsuji Yamashita\*

$$\begin{array}{c} R \\ P \\ P \\ O \\ \hline \\ THF, -20 \ ^{\circ}C \ to \ RT \\ \hline \\ O \\ O \\ \hline \\ A2 - 55\% \\ \end{array}$$

A novel method has been developed in the synthesis of C-2 homologated allylic alcohols of phospholane oxides from the corresponding *erythro-*2,3-epoxy-3-methylphospholane 1-oxides.



Radical cyclizations to quinolone and isoquinolone systems under oxidative and reductive conditions Yazmin M. Osornio,\* Luis D. Miranda, Raymundo Cruz-Almanza and Joseph M. Muchowski\*

pp 2855-2858

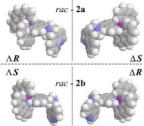
## The B-N bond controls the balance between locally excited (LE) and twisted internal charge transfer (TICT) states observed for aniline based fluorescent saccharide sensors

pp 2859-2862

Laurence I. Bosch, Mary F. Mahon and Tony D. James\*

The diastereoisomeric forms of a mononuclear Ru(II) complex bearing a bis-phenanthroline Tröger's pp 2863–2866 base

Carole Bresson, Michel Luhmer, Martine Demeunynck, Andrée Kirsch-De Mesmaeker and Frédéric Pierard\*



Structural elucidation by <sup>1</sup>H NMR and passignment of the diastereoisomeric forms of a novel Ru(II) complex bearing a chiral 'V'-shaped Trogër's base is reported.

### **OTHER CONTENTS**

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\*Corresponding author

(1) Supplementary data available via ScienceDirect

### **COVER**

At the heart of the total synthesis of lymphostin, a novel immunosuppressant, are six kinds of regioselectively oxidative reactions from tryptophan. See *Tetrahedron Letters* **2004**, *45*, 2847–2850. © 2004 K. Tatsuta. Published by Elsevier Ltd.



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