

### Tetrahedron Letters Vol. 46, No. 31, 2005

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### **COMMUNICATIONS**

A novel synthesis of (Z)-2-(1-trimethylgermyl-1-alkenyl)-1,3,2-dioxaborinanes and their conversion into carboxylic acids

pp 5109-5111

Narayan G. Bhat,\* Zerremi Caga-Anan and Reynaldo Leija

$$RC = CGeMe_3 \xrightarrow{BHCl_2 \cdot SMe_2} \xrightarrow{R} C \xrightarrow{GeMe_3} \xrightarrow{NaOH} \xrightarrow{H_2O_2} RCH_2COOH$$

### An expeditious hydroxyamidation of carboxylic acids

pp 5113-5115

Abdellah Ech-Chahad, Alberto Minassi, Luca Berton and Giovanni Appendino\*

Synthesis of hydrophenanthrenes through a 'green' Fischer carbene–alkyne coupling process Rongti Li, Lei Zhang, Alejandro Camacho-Davila and James W. Herndon\*

pp 5117-5120

# Synthesis and spectral characterization of bisnaphthylmethyl and trinaphthylmethyl cations Lionel Sanguinet, Robert J. Twieg,\* Greg Wiggers, Guilin Mao, Kenneth D. Singer and Rolfe G. Petschek

pp 5121-5125

Triarylmethane dyes containing one, two or three naphthalene moieties have been prepared. Their synthesis and spectral characterization are reported here.



Advantages of the Ns group in the reactions of  $N^1$ -SO<sub>2</sub>R inosines with benzylamine and with  $^{15}$ NH<sub>3</sub> pp 5127–5130 Montserrat Terrazas, Xavier Ariza\* and Jaume Vilarrasa\*

The attack of PhCH<sub>2</sub>NH<sub>2</sub> and of  $^{15}$ NH<sub>3</sub> on C2 largely predominates over the attack on the sulfur atom and on C<sub>ipso</sub>, in the case of the  $N^1$ -Ns inosine derivative (shown above). The open intermediates arising from the attack on C2 afford the desired  $N^1$ -benzyl and  $N^1$ -labelled inosines, respectively, by heating under appropriate conditions.



## Anodic oxidation of chiral sulfinylamines: a new route to highly diastereoselective $\alpha$ -alkylation of piperidine

pp 5131-5134

Serge Turcaud, Thierry Martens, Emma Sierecki, Joëlle Pérard-Viret and Jacques Royer\*

## Fluoride-catalyzed three-component coupling reaction of a silylphosphine, activated alkenes and aldehydes

pp 5135-5138

Minoru Hayashi,\* Yutaka Matsuura and Yutaka Watanabe\*

## Traceless liquid-phase synthesis of 3-alkylamino-4,5-disubstituted-1,2,4-triazoles on polyethylene glycol (PEG)

pp 5139-5141

Ying-Xiao Zong, Jun-Ke Wang,\* Guo-Ren Yue, Lei Feng, Zheng-En Song, Hai Song and Yu-Qi Han

## Picolinyl group as an efficient alcohol protecting group: cleavage with $Zn(OAc)_2 \cdot 2H_2O$ under a neutral condition

pp 5143-5147

Ju Yuel Baek, Yong-Joo Shin, Heung Bae Jeon\* and Kwan Soo Kim\*

$$\begin{array}{c} \text{PicCl, Et}_3N \\ \text{CH}_2\text{Cl}_2, \text{ rt or } \Delta \\ \hline Zn(\text{OAc)}_2 \cdot 2\text{H}_2\text{O} \\ \text{CH}_2\text{Cl}_2/\text{MeOH (95/5)} \\ \text{rt or } \Lambda \end{array} \quad \text{RO} \quad \begin{array}{c} \text{RO} \\ \text{N} \end{array}$$

## First examples of hypervalent enhancement of photoallylation by allylsilicon compounds via photoinduced electron transfer

pp 5149-5151

Yutaka Nishigaichi,\* Akira Suzuki, Takahiro Saito and Akio Takuwa

## A diastereoselective synthesis 1-trimethylsilyl-(E)-1,3-alkenynes and a simple synthesis of alkyl trimethylsilylethynyl ketones via organoboranes

pp 5153-5155

Narayan G. Bhat,\* Patricia Wawroski, Gonzalo Perez-Garcia and Mayra Elizondo

### A new type of anomalous ozonolysis in strained allylic bicycloalkan-1-ols

pp 5157-5159

Antonio García Martínez,\* Enrique Teso Vilar, Amelia García Fraile, Santiago de la Moya Cerero\* and Beatriz Lora Maroto

### Stereoselective synthesis of Nuphar quinolizidine alkaloid, (-)-deoxynupharidine

pp 5161–5163

Miho Katoh, Hirotake Mizutani and Toshio Honda\*

A stereoselective synthetic route to (–)-deoxynupharidine is described that employs reductive carbon–nitrogen bond cleavage of a proline derivative with samarium diiodide and a RCM, as the key steps.

## Synthesis of selenoxides by oxidation of selenides with superoxide radical anions and 2-nitrobenzenesulfonyl chloride

pp 5165-5168

Marcello Tiecco,\* Lorenzo Testaferri, Andrea Temperini, Raffaella Terlizzi, Luana Bagnoli, Francesca Marini and Claudio Santi

R-SePh 
$$\xrightarrow{\text{SO}_2\text{Cl}}$$
  $\xrightarrow{\text{NO}_2}$   $\xrightarrow{\text{R}-\text{SePh}}$   $\xrightarrow{\text{KO}_{21}-15\,^{\circ}\text{C}}$   $\xrightarrow{\text{R}-\text{SePh}}$ 

### Direct mono-phosphorylation of 1,3-diols. A synthesis of FTY720-phosphate

pp 5169-5172

Shuzo Takeda,\* Masao Chino, Masatoshi Kiuchi and Kunitomo Adachi

HO OH 
$$C_8H_{17}$$
  $C_8H_{17}$   $C_8H_{17}$ 

A novel method for selective and direct phosphorylation of various diols using silver(I) oxide, tetrabenzyl pyrophosphate (TBPP), and tetrahexylammonium iodide affording mono-phosphates was developed. We applied the present method to the synthesis of FTY720-phosphate.



### Nickel-mediated carboxylative cyclization of enynes

pp 5173-5176

Masanori Takimoto, Takashi Mizuno, Yoshihiro Sato\* and Miwako Mori\*

Hydrogenation of substituted aromatic aldehydes: nucleophilic trapping of the reaction intermediate, application to the efficient synthesis of methylene linked flavanol dimers

François-Didier Boyer and Paul-Henri Ducrot\*

Methylene linked flavanol dimers and analogues have been synthesized through hydrogenation of the corresponding 8-formyl flavanol in the presence of an appropriate nucleophile.

## A stereodivergent cascade imine $\rightarrow$ azomethine ylide $\rightarrow$ 1,3-dipolar cycloadditive approach to $\alpha$ -chiral pyrrolidines

pp 5181-5185

Philip Garner\* and H. Ümit Kaniskan

### $\mathbf{O}^{+}$

### ortho-Phosphoryl stabilized hypervalent iodosyl- and iodyl-benzene reagents

Bindu V. Meprathu, Michael W. Justik and John D. Protasiewicz\*

pp 5187-5190

$$\begin{array}{c} " \\ Ph_2 P \\ 2 \\ unstable \end{array} \qquad \begin{array}{c} 0 \\ Ph_2 P \\ + \end{array} \qquad \begin{array}{c} 0 \\ Ph_2 P \\ + \end{array}$$

The synthesis and reactivity of a new potential IBX analogue (2-iodylphenyl)diphenyl-phosphine oxide 10 is described herein along with its analysis by single crystal X-ray diffraction.



### Glycosyl azides of sugar 2-sulfonic acids

pp 5191-5194

Ferenc Sajtos, László Lázár, Anikó Borbás, István Bajza and András Lipták\*

Microwave mediated hydrogen deuterium exchange: a rapid synthesis of <sup>2</sup>H-substituted benzimidazole pp 5195–5197 Srirajan Vaidyanathan and Bruce W. Surber\*

$$R_{3} = R_{2} = NH_{2}; R_{3} = H$$

$$D_{2}O,DCl, MWI* BrCH_{2}CO_{2}H, MWI* D D N N D N N D D N D N D N D D N N D D N D N D N D D N D N D N D D N D N D D N D N D D N D N D D N D N D D N D N D D N D$$

Aromatic deuterium compounds were prepared from the unlabeled parent compounds under microwave irradiation. This novel methodology was applied to the deuterium substituted benzimidazole derivative.

#### Synthesis of the fungal natural product (-)-xylariamide A

pp 5199-5201

Rohan A. Davis\* and Michael Kotiw

The first synthesis of the fungal natural product (–)-xylariamide A 1 is reported. N,O-Bis(trimethylsilyl)acetamide induced coupling of D-tyrosine with (E)-but-2-enedioic acid 2,5-dioxo-pyrrolidin-1-yl ester methyl ester 5 produced the dechloro natural product 6, which was subsequently monochlorinated using oxone and KCl to yield synthetic 1. (–)-Xylariamide A 1, (+)-xylariamide A 2 and (–)-dechloroxylariamide A 6 displayed no cytotoxic or antimicrobial activity.



## Novel synthesis of $\alpha$ -nitroalkenes from nitroalkanes via halogenation of intermediate N,N-bis(silyloxy)enamines

pp 5203-5205

Roman A. Kunetsky, Alexander D. Dilman,\* Marina I. Struchkova, Vladimir A. Tartakovsky and Sema L. Ioffe

$$R^{2} \xrightarrow[R^{1}]{NO_{2}} \xrightarrow[R^{1}]{Me_{3}SiBr/NEt_{3}} R^{2} \xrightarrow[R^{1}]{NSiMe_{3}} \xrightarrow[X_{2}, 2 \text{ Bu}_{4}NOAc]{} X_{2} \times 2 \text{ Bu}_{4}NOAc} R^{2}$$

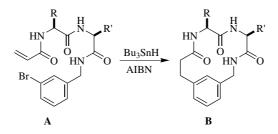
The oxidation of N,N-bis(silyloxy)enamines as the key stage in a new synthesis of  $\alpha$ -nitroalkenes from nitro compounds is described.



## Synthesis of small cyclic peptides constrained with 3-(3-aminomethylphenyl)propionic acid linkers using free radical-mediated macrocyclization

pp 5207-5210

V. Balraju, D. Srinivasa Reddy, Mariappan Periasamy and Javed Iqbal\*





### The first synthesis of a noreremophilane isolated from the roots of Ligularia przewalskii

pp 5211-5213

D. Srinivasa Reddy,\* Kalpana Palani, D. Balasubrahmanyam, Viju B. Kamath and Javed Iqbal

## Catalytic transfer hydrogenation of ketones catalyzed by orthometalated ruthenium(III) 2-(arylazo)phenolate complexes containing triphenylarsine

pp 5215-5218

Galmari Venkatachalam and Rengan Ramesh\*

$$R = R = \text{alkyl (or) aryl}$$

$$[RuBr(AsPh_3)_2(azo-OMe)] OH$$

$$Catalyst : 0.0125 \text{ mmol}$$

$$i\text{-PrOH/KOH}$$

$$R = R = \text{alkyl (or) aryl}$$

## First total synthesis of yanuthones: novel farnesylated epoxycyclohexenoid marine natural products Goverdhan Mehta\* and Subhas Chandra Pan

pp 5219-5223

Yanuthone A

### Imination of sulfoxides using 3-acetoxyaminoquinazolinone as nitrogen source in the presence of hexamethyldisilazane

pp 5225-5227

Semistan Karabuga, Cavit Kazaz, Hamdullah Kilic, Sabri Ulukanli\* and Ayhan Celik

The reaction of 3-acetoxyaminoquinazolinone (QNHOAc) with various sulfoxides in the presence of HMDS as an acetic acid scavenger, afforded the corresponding sulfoximides in good yields. Sulfoximidation of phenyl methyl sulfoxide using a Q\*NHOAc having a stereogenic centre on its 2-position gave the products in 1.3:1 ratio of diastereomers.

### Cu-nanoparticles: a chemoselective catalyst for the aza-Michael reactions of N-alkyl- and N-arylpiperazines with acrylonitrile

pp 5229-5232

Akhilesh K. Verma,\* Rupesh Kumar, Preeti Chaudhary, Amit Saxena, Ravi Shankar, Subho Mozumdar and Ramesh Chandra

Cu-nanoparticles, 14–17 nm in size, efficiently catalyse the Michael-type reaction of N-alkyl- and N-arylpiperazines with acrylonitrile in high yield under mild reaction conditions.



### Remarkable rate acceleration of water-promoted nucleophilic substitution of Baylis-Hillman acetate: a facile and highly efficient synthesis of N-substituted imidazole

pp 5233-5237

Jian Li, Xiaoxia Wang and Yongmin Zhang\*

Without additional reagents, the Baylis-Hillman acetates 2 underwent nucleophilic substitution reaction with imidazole readily in aqueous THF solution to afford the corresponding N-substituted imidazole derivatives 3 in good to excellent yields. Moreover, the reaction between the in situ generated DABCO salt of Baylis-Hillman acetates 4 and imidazole occurs in aqueous THF providing the S<sub>N</sub>2 type products 5. The simpler operational procedure, better stereoselectivity, and higher efficiency over conventional methods make the present protocol practical for the preparation of imidazole derivatives.

### A new synthetic approach to enantiomerically enriched dihydrobenzofurans; use of a hydrolytic kinetic resolution and an intramolecular epoxide ring opening protocol using 1-benzyloxy-2-oxiranylmethylbenzenes

pp 5239-5242

Umadevi Bhoga

**1b**:  $R^1 = R^2 = R^4 = H$ ;  $R^3 = CH_3$ 1c:  $R^1 = CH_3$ ;  $R^2 = R^4 = H$ ;  $R^3 = CI$ 

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\*Corresponding author

\*\* Supplementary data available via ScienceDirect



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