

### Tetrahedron Letters Vol. 46, No. 19, 2005

### **Contents**

Publisher's note p 3277

### **COMMUNICATIONS**

Highly efficient KF/Al<sub>2</sub>O<sub>3</sub>-catalyzed versatile hetero-Michael addition of nitrogen, oxygen, and sulfur nucleophiles to  $\alpha,\beta$ -ethylenic compounds

pp 3279-3282

Lei Yang, Li-Wen Xu\* and Chun-Gu Xia\*

The *para*-siletanylbenzyl (PSB) ether: a peroxide-cleavable protecting group for alcohols and phenols pp 3283–3285 Hubert Lam, Sarah E. House and Gregory B. Dudley\*

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

A novel arylmethyl protecting group that is electronically similar to benzyl (Bn) but that can be cleaved with hydrogen peroxide under mildly basic conditions is reported.



Sustainable domino Michael reaction catalyzed by a Brønsted base on silica gel: synthesis of bicyclo[2.2.2]octane-2,5-dione derivatives

pp 3287-3290

Masakazu Fukushima, Satoru Endou, Takashi Hoshi, Toshio Suzuki and Hisahiro Hagiwara\*

### Chemo-enzymatic short-step total synthesis of symbioramide

pp 3291-3295

Tsukasa Takanami, Hiroki Tokoro, Dai-ichiro Kato, Shigeru Nishiyama and Takeshi Sugai\*

Natural (2S,3R,2'R)-form of symbioramide and its (2R,3S,2'R)-isomer was directly synthesized by lipase-catalyzed coupling between erythro- $(\pm)$ -dihydrosphingosine and (R)-2-hydroxyester, both of which were derived from common intermediate, methyl  $(\pm)$ -trans-2,3-epoxyoctadecanoate.

## Efficient and highly diastereoselective preparation of a myrtenal derived bis-sulfoxide and its preliminary evaluation as chiral acyl donor

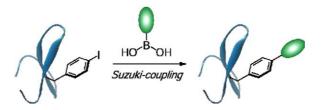
pp 3297-3300

M. Elena Vargas-Díaz, Selene Lagunas-Rivera, Pedro Joseph-Nathan, Joaquín Tamariz and L. Gerardo Zepeda\*

### Suzuki coupling for protein modification

pp 3301-3305

Akio Ojida, Hiroshi Tsutsumi, Noriyuki Kasagi and Itaru Hamachi\*



## Supercritical $CO_2$ improved phosphine imide reaction on peracetylated $\beta$ -cyclodextrin Stephane Menuel, Michel Wagner, Danielle Barth and Alain Marsura\*

pp 3307-3309

$${}^{6}[R_{2}]$$
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An alternative synthesis of ureido-cyclodextrins in absence of organic solvent is described. This reaction may be potentially useful for the general synthesis of ureas.

### A new, practical and efficient sulfone-mediated synthesis of trifluoromethyl ketones from alkyl and alkenyl bromides

pp 3311-3313

Lourdes Muñoz, Esmeralda Rosa, Mª Pilar Bosch and Angel Guerrero\*

### First example of base-promoted tandem alkylation-bromination of 2-bromothiophene via halogen dance process: a remarkable temperature effect

pp 3315-3318

Corinne Peyron, Jean-Michel Navarre, Nathalie Van Craynest and Rachid Benhida\*

## A new efficient enantioselective synthesis of malonylphenylalanyl and malonylmethylphenylalanyl derivatives suitable for solid phase peptide synthesis

pp 3319-3322

Huixiong Chen, Jean-Philippe Luzy and Christiane Garbay\*

t-BuO 
$$X$$

t-BuO  $X$ 
 $R_1$ 
 $R_1$ 

We describe the enantioselective synthesis of two *para*-malonylphenylalanyl and *para*-malonylmethylphenylalanyl derivatives suitably protected by Fmoc, Boc or Cbz. These compounds can be incorporated into peptides by solid phase synthesis.

## TEMPO-catalyzed oxidation of benzylic alcohols to aldehydes with the $H_2O_2/HBr/ionic\ liquid\ [bmim]PF_6\ system$

pp 3323-3326

Nan Jiang and Arthur J. Ragauskas\*

$$CH_2OH + H_2O_2$$
  $\xrightarrow{3 \text{ mol}\% \text{ TEMPO, 6 mol}\% \text{ HBr}}$   $R$   $CHO$   $R$  up to 92 %

ф 3311–331.

## An efficient stereoselective synthesis of (3S,4R)-4-(hydroxymethyl)pyrrolidin-3-ol from (S)-diethylmalate

pp 3327-3330

Pravin L. Kotian and Pooran Chand\*

### Convenient route to dialkyl diselenides from alkyl tosylates. Synthesis of di(cis-myrtanyl) diselenide

pp 3331-3334

Jacek Ścianowski

### Super fast cobalt carbonyl-mediated synthesis of ureas

pp 3335-3339

Per-Anders Enquist, Peter Nilsson, Johan Edin and Mats Larhed\*

### A convenient solid phase synthesis of S-palmitoyl transmembrane peptides

pp 3341-3345

Dirk T. S. Rijkers,\* John A. W. Kruijtzer, J. Antoinette Killian and Rob M. J. Liskamp

### Cyclic chlorophosphites as scaffolds for the one-pot synthesis of $\alpha$ -aminophosphonates under solvent-free conditions

pp 3347-3351

K. C. Kumara Swamy, \* Sudha Kumaraswamy, K. Senthil Kumar and C. Muthiah

New enantiomerically enriched and racemic α-aminophosphonates are obtained by a solvent-free, one-pot procedure.



## An octa-cationic core-shell dendrimer as a molecular template for the assembly of anionic fullerene derivatives

pp 3353-3356

Rob van de Coevering, Robert Kreiter, François Cardinali, Gerard van Koten, Jean-François Nierengarten\* and Robertus J. M. Klein Gebbink\*

An assembly comprising the non-covalent binding of eight mono-anionic fullerene subunits to a polyaryl ether dendrimer with an octa-cationic tetra[bis(benzylammonium)aryl]silane core has been prepared via a straightforward anion exchange reaction.

### One-pot synthesis of substituted catechols from the corresponding phenols

pp 3357-3358

Trond Vidar Hansen\* and Lars Skattebøl

R = F. Cl. Br. Me

### Synthesis of $\alpha_1$ -(Cbz-aminoalkyl)- $\alpha_2$ -(hydroxyalkyl)phosphinic esters

pp 3359-3362

Marcin Drag\* and Józef Oleksyszyn

A synthesis of  $\alpha_1$ -(Cbz-aminoalkyl)- $\alpha_2$ -(hydroxyalkyl)phosphinic esters was achieved by the 1,2-addition of the appropriate aldehyde to Cbz-protected phosphinic analogues of amino acid esters in the presence of at least three equivalents of trimethylsilyl chloride and NEt<sub>3</sub>. The complete deprotection of the product esters could be achieved in one step using 35% HBr in acetic acid.

## Amino acid catalyzed direct enantioselective formation of carbohydrates: one-step de novo synthesis of ketoses

pp 3363-3367

Ismail Ibrahem and Armando Córdova\*

## Stereoselective synthesis of tri- and tetrasubstituted oxepanes via n-Bu<sub>3</sub>SnH mediated 7-endo-trig vinyl radical cyclisation

pp 3369-3372

Ponnusamy Shanmugam\* and Paramasivan Rajasingh

 $Ar^{1}$ = Ph, 4-Cl-C<sub>6</sub>H<sub>4</sub>, 4-Me-C<sub>6</sub>H<sub>4</sub>; E = CO<sub>2</sub>CH<sub>3</sub>, CN; R = H, Ph, 4-Cl-C<sub>6</sub>H<sub>4</sub>, 4-Me-C<sub>6</sub>H<sub>4</sub>

## Enantioselective total synthesis of polyoxygenated cyclohexanoids: (+)-streptol, *ent*-RKTS-33 and putative '(+)-parasitenone'. Identity of parasitenone with (+)-epoxydon

pp 3373-3376

Goverdhan Mehta,\* Shashikant R. Pujar, Senaiar S. Ramesh and Kabirul Islam

### Photoresponsive upper-rim azobenzene substituted calix[4]resorcinarenes

pp 3377-3379

Laura Husaru, Margit Gruner, Thomas Wolff,\* Wolf D. Habicher\* and Reiner Salzer\*

## An efficient construction of a $C_3$ -symmetric macrocycle by head to tail cyclotrimerization of an unsymmetrical diene via a sequence of highly regio- and stereoselective metathesis reactions

pp 3381-3383

A. Srikrishna\* and Dattatraya H. Dethe

Novel organic catalysts for the direct enantioselective α-oxidation of carbonyl compounds Henrik Sundén, Nils Dahlin, Ismail Ibrahem, Hans Adolfsson\* and Armando Córdova\* pp 3385-3389

R = Me, H, -(CH<sub>2</sub>)<sub>n</sub>- and -(CH=CHCR"<sub>2</sub>CH<sub>2</sub>)-

## Stereoselective intramolecular hetero Diels-Alder reactions of 1-oxa-1,3-butadienes: synthesis of novel annelated pyrrolo[1,2-a]indoles

pp 3391-3393

Harsha N. Borah, Mohit L. Deb, Romesh C. Boruah and Pulak J. Bhuyan\*

### Photodecarboxylative cyclizations of $\omega$ -phthalimido-ortho-phenoxy carboxylates

pp 3395-3398

Ae Rhan Kim, Kyoung-Sub Lee, Cheon-Woo Lee, Dong Jin Yoo,\* Fadi Hatoum and Michael Oelgemöller\*

### Phenacyl esters as a new photocleavable linker in liquid-phase chemistry

pp 3399-3402

Li-Hua Du, Shu-Jia Zhang and Yan-Guang Wang\*

PEG-supported 2-methylphenacyl ester as a new photocleavable linker is reported.

### Dynamic kinetic resolution of secondary alcohols with a readily available ruthenium-based racemization catalyst

pp 3403-3406

Thomas H. Riermeier, Peter Gross, Axel Monsees, Manfred Hoff and Harald Trauthwein\*

An in situ mixture of ruthenium cymene chloride with readily available chelating aliphatic amines is a very efficient racemization catalyst for secondary alcohols, which is successfully applied in the lipase catalyze dynamic kinetic resolution of alcohols.

# A new method for stereoselective oxidation of chiral 2-pyrrolidino-1-ethanol derivatives to oxazolopyrrolidines using trimethylamine-N-oxide in the presence of iron carbonyls Anthony J. Pearson\* and Yoonhyun Kwak

pp 3407-3410



### 2'-Methyl taxanes: synthesis and NMR configurational assignment

pp 3411-3415

Paolo Dambruoso, Carla Bassarello, Giuseppe Bifulco, Giovanni Appendino,\* Arturo Battaglia, Andrea Guerrini, Gabriele Fontana and Luigi Gomez-Paloma\*



## 4-Acetoxy-2,2-dimethylbutanoate: a useful carbohydrate protecting group for the selective formation of $\beta$ -(1 $\rightarrow$ 3)-D-glucans

pp 3417-3421

Hai Yu, David L. Williams and Harry E. Ensley\*

## Synthesis of fused bicyclic pyridines with microwave-assisted intramolecular hetero-Diels-Alder cycloaddition of acetylenic pyrimidines

pp 3423-3427

Bin Shao

$$R_1 \xrightarrow{R_3} R_2$$
Nitrobenzene
Microwave irradiation
3.5 min

$$X = 0, NH, NMe$$

$$Y = (H_2, C(CH_3)_2, CH_2CH_2)$$

$$R_3 \xrightarrow{R_3} CH_2CH_2$$

$$R_1 \xrightarrow{R_3} CH_2CH_2$$

$$R_2 \xrightarrow{R_3} CH_2CH_2$$

$$R_3 \xrightarrow{R_3} CH_2CH_2$$

$$R_4 \xrightarrow{R_3} CH_2CH_2$$

$$R_5 \xrightarrow{R_3} CH_2CH_2$$

$$R_7 \xrightarrow{R_3} CH_2CH_2$$

$$R_8 \xrightarrow{R_3} CH_2CH_2$$

$$R_9 \xrightarrow{R_3} CH_2CH_2$$

A series of acetylene-tethered pyrimidines was synthesized and subjected to microwave irradiation. The substrates generally gave moderate to high yield of the fused bicyclic pyridines with shorter reaction time.



A base-catalyzed, direct synthesis of 3,5-disubstituted 1,2,4-triazoles from nitriles and hydrazides Kap-Sun Yeung,\* Michelle E. Farkas, John F. Kadow and Nicholas A. Meanwell

pp 3429-3432

$$R_1-C \equiv N$$
 +  $H_2N$   $N$   $R_2$   $R_2$   $R_2$   $R_3$   $R_4$   $R_4$   $R_4$   $R_5$   $R_6$   $R_7$   $R_8$ 

Nitriles and hydrazides with diverse range of functional groups and heterocycles.

### **OTHER CONTENTS**

Corrigendum
Contributors to this issue
Instructions to contributors

p 3433 p ] pp III–V]

\*Corresponding author

\*Supplementary data available via ScienceDirect



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