

## Tetrahedron Letters Vol. 46, No. 25, 2005

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### **COMMUNICATIONS**

Iridium-catalyzed double incorporation reaction of N-benzylmaleimide to styrene via ortho-C-H bond activation, initiated by precoordination of the double bond of styrene to iridium

pp 4279-4282

Syun-ichi Kiyooka\* and Yushi Takeshita

Michael reaction of 1,3-dicarbonyls with enones catalyzed by a hydroxyapatite-bound La complex Kohsuke Mori, Michitaka Oshiba, Takayoshi Hara, Tomoo Mizugaki, Kohki Ebitani and Kiyotomi Kaneda\*

pp 4283-4286

Stereoselective synthesis of the various isomers of 3,4-dideoxy furanoid sugar amino acids with methyl pp 4287–4290 substitution at the C6 position

Tushar Kanti Chakraborty\* and Gangarajula Sudhakar

# One-step exchange-labelling of piperidines, piperazines and dialkylamines with deuterium oxide: catalysis by various ruthenium complexes

pp 4291-4293

Efstathios Alexakis, Michael J. Hickey, John R. Jones, Lee P. Kingston, William J. S. Lockley,\* Andrew N. Mather, Traci Smith and David J. Wilkinson

R = Various aryl and aralkyl groups X = N or CH

# Reductive allylation of 1H-pyridine-2-(thio)ones by means of the novel lithium allyldibutylmagnesate reagent

pp 4295-4298

Jacek G. Sośnicki

# $\beta\text{-}Cyclodextrin$ promoted allylation of aldehydes with allyltributyltin under supramolecular catalysis in water

pp 4299-4301

N. Srilakshmi Krishnaveni, K. Surendra, V. Pavan Kumar, B. Srinivas, C. Suresh Reddy and K. Rama Rao\*

R-CHO + 
$$SnBu_3$$
  $\beta$ -CD/H<sub>2</sub>O OH R-CHO  $\uparrow$  R

#### A new liquid crystal compound based on an ionic imidazolium salt

pp 4303-4305

Jean-Moïse Suisse, Stéphane Bellemin-Laponnaz, Laurent Douce,\* Aline Maisse-François and Richard Welter

$$C_{12}H_{25}O - \bigvee_{H} NH_{2} - \bigvee_{C_{12}H_{25}O} OC_{12}H_{25} - \bigvee_{C_{1$$

This imidazolium salt exhibits a lamellar liquid crystal mesophase.

### A simple and efficient method to prepare thioesters in aqueous solutions

pp 4307-4310

Tricia M. Coleman, Na Li and Faqing Huang\*

## Synthesis of a tetrasubstituted arylphosphonate via the anionic phospho-Fries rearrangement

pp 4311-4313

Krishanthi P. Jayasundera, Amy J. Watson and Carol M. Taylor\*



# A simple and efficient procedure for the synthesis of benzimidazoles using air as the oxidant Songnian Lin\* and Lihu Yang

pp 4315-4319

$$R^{1}$$
 $NH_{2}$ 
 $NH$ 

Direct one-step synthesis of various benzimidazoles from phenylenediamines and aldehydes is described using air as the oxidant. The salient features of this method include a simple procedure, mild conditions, no coupling agents or commercial oxidants/additives used, no waste produced (only by-product being water), easy purification, and high generality.

## Stereoselective synthesis of nucleoside monophosphate $HepDirect^{\scriptscriptstyle{TM}}$ prodrugs

pp 4321-4324

K. Raja Reddy,\* Serge H. Boyer and Mark D. Erion



## New chiral bis(diphenylphospholane) ligands: design, synthesis, and application to catalytic enantioselective aldol reaction to ketones

pp 4325-4329

Kounosuke Oisaki, Dongbo Zhao, Yutaka Suto, Motomu Kanai\* and Masakatsu Shibasaki\*

# Novel $C_2$ -symmetric chiral 18-crown-6 derivatives with two aromatic sidearms as chiral NMR discriminating agents

pp 4331–4335

Yohji Nakatsuji,\* Yoshio Nakahara, Akiko Muramatsu, Toshiyuki Kida and Mitsuru Akashi\*



Synthesis of a S-linked heparan sulfate trisaccharide as the substrate mimic of heparanase Hongzhi Cao and Biao  $Yu^*$ 

pp 4337-4340

An approach to the construction of the  $\beta$ -(1 $\rightarrow$ 4)-S-linkage between a glucuronic and a glucosamine unit, and then to the synthesis of a heparan sulfate trisaccharide containing such a linkage (1) as a nonhydrolyzable substrate mimic of heparanase was developed.



# Mild alkaline hydrolysis of some 7-O-flavone glycosides. Application to a novel access to rutinose heptaacetate

pp 4341-4343

Jérôme Quintin and Guy Lewin\*



# Mn(III)-promoted cyclization of substituted thioformanilides under microwave irradiation: a new reagent for 2-substituted benzothiazoles

pp 4345-4347

Xue-Jun Mu, Jian-Ping Zou,\* Run-Sheng Zeng and Jun-Chen Wu

$$\begin{array}{c|c}
R^1 & S & Mn(OAc)_3.2H_2O \\
\hline
R^1 & AcOH & MW
\end{array}$$

R = Aryl, benzoyl

Manganese triacetate is introduced as a new reagent to replace potassium ferricyanide or bromine for radical cyclization of thioformanilides. 2-Substituted benzothiazoles are generated in 6 min under microwave irradiation.



Regioselective Michael-induced cyclisation of  $\gamma$ - and  $\delta$ -hydroxy vinyl sulfides and vinyl dithiocarbamates pp 4349–4352 V. Aucagne, C. Lorin, A. Tatibouët and P. Rollin\*

$$\begin{array}{c|c}
OH & S & N \\
X & Conditions
\end{array}$$
basic
conditions
$$\begin{array}{c}
O \\
S & X
\end{array}$$

## A short and efficient synthesis of (+)-disparlure and its enantiomer

Alexandros E. Koumbis\* and Demetrios D. Chronopoulos

pp 4353-4355

# Medium-dependent lithiated side products in the reductive lithiation of allylic phenyl thioethers. Diethyl ether versus tetrahydrofuran

pp 4357-4360

Constantinos G. Screttas,\* Georgios A. Heropoulos, Maria Micha-Screttas and Barry R. Steele

## Synthesis of reactive cytidine derivatives as building blocks for cross-linking oligonucleotides

pp 4361-4364

Marco Radi, Claudia Mugnaini, Elena Petricci, Federico Corelli\* and Maurizio Botta\*

## Selective oxidations of sulfides to sulfoxides using immobilised cerium alkyl phosphonate

pp 4365-4368

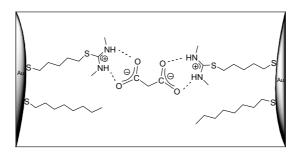
Mohammed Al-Hashimi, Gopa Roy, Alice C. Sullivan\* and John R. H. Wilson

A range of sulfides can be selectively oxidised to the corresponding sulfoxides in good yields using catalytic quantities of immobilised cerium alkyl phosphonate and either sodium bromate or *tert*-butyl hydroperoxide as oxidants.

# Isothiouronium-modified gold nanoparticles capable of colorimetric sensing of oxoanions in aqueous MeOH solution

pp 4369-4372

Yuji Kubo,\* Sayaka Uchida, Yuichi Kemmochi and Tatsuya Okubo





# An improved cyclization protocol for the synthesis of diazabicyclo[4.3.0]alkanes Daniel C. Grohs and Wolfgang Maison\*

pp 4373-4376

$$\begin{array}{c} O \\ CO_2R \\ CbzNH \\ \end{array}$$

$$\begin{array}{c} CO_2R \\ CbzNH \\ \end{array}$$

$$\begin{array}{c} CO_2R \\ CbzN \\ \end{array}$$

$$\begin{array}{c} CO_2R \\ CO_2R \\ \end{array}$$

The synthesis of 3,5-disubstituted prolines and 5-substituted diazabicycloalkanes from a common precursor is described and a model for the observed stereoselectivities is proposed.

### Total synthesis of hirsutellide A

pp 4377-4379

Yanjie Xu, Ligong Chen, Xuemin Duan, Yi Meng, Liqin Jiang, Meiling Li,

Guangle Zhao and Yang Li\*

The total synthesis of hirsutellide A 1 was described.

# Stereocontrolled synthesis of 3-amino-2-hydroxyalkyl diphenylphosphine oxides mediated by chiral azetidinium salts and epoxyamines

pp 4381-4384

Bożena Krawiecka and Agata Jeziorna\*

# Photocyclization of 1-(2-halophenyl)-3,4-dihydro-6,7-dimethoxyisoquinolines: a short and new synthesis of triclisine

pp 4385-4386

M. M. V. Ramana,\* R. H. Sharma and J. A. Parihar

### Synthesis of azamacrocycles via a Mitsunobu reaction

pp 4387-4389

Jari Hovinen\* and Reijo Sillanpää

### Domino addition of allylzinc bromide to nitrile oxides: synthesis of 5-butenylisoxazolines

pp 4391-4393

Naveed A. Qazi, H. M. Sampath Kumar\* and S. C. Taneja

ArCNO + 
$$Z_{nBr}$$
 THF  $Z_{nBr}$   $Z_$ 

## Three novel diepoxy tetrahydrochromones from agarwood artificially produced by intentional wounding

pp 4395-4398

Toru Yagura, Naomi Shibayama, Michiho Ito, Fumiyuki Kiuchi and Gisho Honda\*

Three novel diepoxy tetrahydrochromones, oxidoagarochromones A (1), B (2), and C (3), were isolated from intentionally wounded agarwood and they are considered to be produced at the early stage of agarwood formation.

# A C–C bond formation reaction at the $\alpha$ -carbon atom of $\alpha$ -oxo ketene dithioacetals via the Baylis–Hillman type reaction

pp 4399-4402

Yan-Bing Yin, Mang Wang,\* Qun Liu,\* Jiang-Lei Hu, Shao-Guang Sun and Jing Kang

The first example of  $TiCl_4$ -mediated Baylis–Hillman type reaction of  $\alpha$ -acetyl cyclic ketene dithioacetals with arylaldehydes was described. This methodology adds a new entry to the C–C bond formation at the  $\alpha$ -carbon atom of  $\alpha$ -oxo ketene dithioacetals.

### Mild non-transition metal catalyzed deprotection of N-allyloxycarbonyl amines

pp 4403-4405

Ronald H. Szumigala, Jr.,\* Ekama Onofiok, Sandor Karady, Joseph D. Armstrong, III and Ross A. Miller\*



#### Preparation of 2,3-diaminopropionate from ring opening of aziridine-2-carboxylate

pp 4407-4409

Yongeun Kim, Hyun-Joon Ha,\* Kyusung Han, Seung Whan Ko, Hoseop Yun, Hyo Jae Yoon, Min Sung Kim and Won Koo Lee\*

# DMSO-triggered enhancement of enantioselectivity in Novozyme[435]-catalyzed transesterification of pp 4411–4413 chiral 1-phenylethanols

Amrit Goswami\* and Jonali Goswami

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\*Corresponding author

\*Supplementary data available via ScienceDirect

### **COVER**

The cover picture shows a self-organized lamellar mesophase (Smectic A) formed from an imidazolium salt with alkyl tails. Ionic liquids incorporating imidazolium cations are the most extensively studied group of such materials due to their excellent solvent properties, thermal stability, negligible vapour pressure, high conductivity and electrochemical stability. Where a liquid-crystalline or mesomorphic state can be induced by supramolecular interactions, numerous applications such as in displays, sensors, actuators and even artificial muscles can be envisaged. This article deals with such prospects in considering the convergence of the chemistry of mesophases and ionic liquids. *Tetrahedron Letters* **2005**, *46*, 4303–4305.

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