

#### Tetrahedron Letters Vol. 48, No. 14, 2007

### **Contents**

#### **COMMUNICATIONS**

Unexpected regioselectivity in the reaction between cycloalkenyl-1-diazenes and thioamides: useful entry pp 2449–2451 to fused cycloalkyl-thiazoline and cycloalkyl-thiazoline–pyrazole systems

Orazio A. Attanasi, Stefano Berretta, Lucia De Crescentini, Gianfranco Favi, Paolino Filippone, Gianluca Giorgi, Samuele Lillini and Fabio Mantellini\*

Facile synthesis of primary amides and ketoamides via a palladium-catalysed carbonylation-deprotection pp 2453-2456 reaction sequence

Eszter Takács, Csilla Varga, Rita Skoda-Földes\* and László Kollár

R-I 
$$\xrightarrow{CO, H_2N^tBu}$$
  $\xrightarrow{R}$   $\xrightarrow{R}$ 

Primary amides and ketoamides have been synthesised in good yields in two steps from alkenyl/aryl iodides. The reaction sequence involves palladium-catalysed carbonylation in the presence of *t*-BuNH<sub>2</sub> followed by selective cleavage of the *t*-Bu group using TBDMSOTf.

New practical access to 2-azatryptophans and dehydro derivatives via the Wittig-Horner reaction

François Crestey, Valérie Collot,\* Silvia Stiebing, Jean-François Lohier,

Jana Sopkova-de Oliveira Santos and Sylvain Rault

#### Photovoltaic properties of new cyanine-naphthalimide dyads synthesized by 'Click' chemistry

pp 2461-2465

Wen-hai Zhan, Wen-jun Wu, Jian-li Hua, Yin-hua Jing, Fan-shun Meng and He Tian\*

Two novel cyanine dyads in which a naphthalimide unit is attached to benzoindole ring of unsymmetric trimethine cyanine dyes have been synthesized via 'Click' reaction. They are promising sensitizers for nanocrystalline dye-sensitized solar cell.

### Lanthanide triflate catalyzed generation of N-acyliminium ions from $\alpha$ -amido sulfones: the synthesis of pp 2467–2470 (1-alkyl-1-aryl)methyl phenyl sulfones

Chutima Kuhakarn, Kassrin Tangdenpaisal, Palangpon Kongsaeree, Samran Prabpai, Patoomratana Tuchinda, Manat Pohmakotr\* and Vichai Reutrakul\*

NHCO<sub>2</sub>Bn ArH Ar Ar SO<sub>2</sub>Ph M(OTf)<sub>n</sub>, CH<sub>2</sub>Cl<sub>2</sub>, rt R SO<sub>2</sub>Ph 
$$\frac{Ar}{Ar}$$

R = alkyl, aryl ArH = electron rich aromatics and heteroaromatics

### A convenient synthetic route to enantiopure N-tosylazetidines from $\alpha$ -amino acids

pp 2471-2475

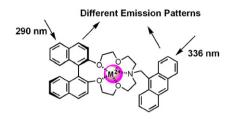
Manas K. Ghorai,\* Kalpataru Das and Amit Kumar



# Generation and reaction of heteroaromatic zirconocene: synthetic application to polycyclic heterocycles pp 2477–2480 Yutaka Ikeuchi, Toshiaki Saitoh, Takeo Taguchi and Yuji Hanzawa\*

## Fluorescent studies of two new binaphthyl-azacrown-anthracene fluorophores with metal ions and chiral pp 2481-2484 guests: dual fluorescent detection via binaphthyl and anthracene groups

Kwang Soo Kim, Eun Jin Jun, Sook Kyung Kim, Hee Jung Choi, Jaeduk Yoo, Chang-Hee Lee, Myung Ho Hyun\* and Juyoung Yoon\*





### A simple, rapid and efficient protocol for the synthesis of methylthiomethyl esters under Swern oxidation pp 2485–2487 conditions

Sunil B. Jadhav and Usha Ghosh\*

R = alkyl, alkenyl, aryl and N-substituted alkyl

# An efficient, solvent-free approach to heteroarylcarbazoles: synthesis of 3-chromenylcarbazoles, 3,6-bis-(chromenyl)carbazoles and 3-quinolylcarbazoles

pp 2489-2492

T. Krishna Chaitanya and Rajagopal Nagarajan\*

An easy and efficient synthesis of new 3-chromenylcarbazoles, 3,6-bis-(chromenyl)carbazoles and 3-quinolylcarbazoles is reported.



Catalytic asymmetric dihydroxylation of olefins with recyclable osmate-exchanged chloroapatite catalyst pp 2493–2496 Sanjay K. Dehury\* and V. S. Hariharakrishnan\*

#### A mild hydrolysis of esters mediated by lithium salts

pp 2497-2499

Sara Mattsson, Mikael Dahlström and Staffan Karlsson\*

X or Y = heteroatom

At room temperature, when treated with an amine such as triethylamine and a lithium salt such as LiBr, esters are efficiently hydrolyzed to the corresponding acids in a mild and selective manner.



### Synthesis of a lactone natural product found in Greek tobacco

pp 2501-2503

J. Stephen Clark,\* Stewart T. Hayes, Alexander J. Blake and Luca Gobbi

$$EtO_2C \underbrace{Sml_2, MeOH,}_{H} \underbrace{HO}_{H} \underbrace{1. Swern}_{-78 \, ^{\circ}C} \underbrace{O}_{H} \underbrace{HO}_{H} \underbrace{HO}_{H} \underbrace{O}_{H} \underbrace{O}_{H}$$

The natural product  $(3R^*,4R^*,7R^*)$ -3,7-epoxy-4,8-dimethyl-8-nonen-4-olide has been synthesised in six steps and 22% overall yield starting from simple commercially available materials. A samarium(II) iodide mediated reductive cyclisation reaction has been used to construct the tetrahydropyran core of the natural product.

### Design, synthesis and biological evaluation of new oxazines with potential antiparasitic activity

pp 2505-2507

Daniela Gamenara, Horacio Heinzen and Patrick Moyna\*

Twelve new oxazines were prepared through Diels-Alder reactions, using eucarvone derivatives as dienes and nitrosoarenes with different electronic characteristics as dienophiles. The antiparasitic activity was evaluated with in vitro assays.



An efficient synthesis of new 1-H-4'-methyl-3',4'-dihydrospiro[piperidine-4,2'(1'H)quinoline] scaffolds Leonor Y. Vargas Méndez and Vladimir V. Kouznetsov\*

pp 2509-2512

Efficient synthesis of new 3',4'-dihydrospiro[piperidine-4,2'(1'H)quinolines] by a four step synthetic route based on 1-benzyl-4-piperidone reactivity is reported.



## Rapid preparation of pyranoquinolines using microwave dielectric heating in combination with fractional pp 2513–2517 product distillation

Tahseen Razzaq and C. Oliver Kappe\*



pp 2519-2525

### An improved synthesis of N-aryl and N-heteroaryl substituted piperidones

Uwe Schön,\* Josef Messinger, M. Buckendahl, M. S. Prabhu and A. Konda

# Assignment of the absolute configuration of blasticidin A and revision of that of aflastatin A Shohei Sakuda,\* Nobuaki Matsumori, Kazuo Furihata and Hiromichi Nagasawa

pp 2527-2531

Synthesis of the dysiherbaine tetrahydropyran core employing a tethered aminohydroxylation reaction pp 2533–2536 Jamie L. Cohen and A. Richard Chamberlin\*



### Stereoselective enzymatic reduction of keto-salinosporamide to (-)-salinosporamide A (NPI-0052)

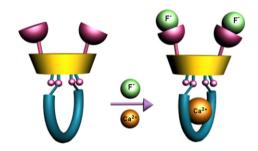
pp 2537-2540

Rama Rao Manam, Venkat R. Macherla\* and Barbara C. M. Potts

### Dual colorimetric sensoring bis(indolyl)calix[4]crown-6

pp 2541-2546

Jeong Won Lee, Sun Young Park, Byoung-Ki Cho and Jong Seung Kim\*



### Synthesis of opioid ligands having oxabicyclo[2.2.2]octane and oxabicyclo[2.2.1]heptane skeletons

pp 2547-2553

Hiroshi Nagase,\* Akio Watanabe, Toru Nemoto, Naoshi Yamamoto, Yumiko Osa, Noriko Sato, Kenji Yoza and Toshitsugu Kai

### Open air palladium catalyzed cyanation—the use of PMHS to protect from oxygen

pp 2555-2557

Michael T. Martin,\* Bing Liu, Bobby E. Cooley, Jr. and John F. Eaddy



### Cholesteric medium inductive asymmetric polymerization: preparation of optically active polythiophene pp 2559–2562 derivatives from achiral monomers in cholesteric liquid crystals

Fumihiro Togashi, Reina Ohta and Hiromasa Goto\*

### One-pot tandem complexity-generating reaction based on Ugi four component condensation and intramolecular cyclization

pp 2563-2567

Andrey S. Trifilenkov, Alexey P. Ilyin, Volodymyr M. Kysil, Yuri B. Sandulenko and Alexandre V. Ivachtchenko\*

# New bioactive hydrogenated linderazulene-derivatives from the gorgonian *Echinogorgia complexa* Emiliano Manzo,\* Maria Letizia Ciavatta, Maria Pilar Lopez Gresa, Margherita Gavagnin, Guido Villani, Chandrakant Govind Naik and Guido Cimino

pp 2569-2571

iso-Echinofuran (3) and 8,9-dihydro-linderazulene (4) are inhibitors of mitochondrial respiratory chain.

### Indium trichloride catalyzed efficient one-pot synthesis of highly substituted furans

pp 2573-2575

Sumit Dey, Debkumar Nandi, Prasun K. Pradhan, Venkatachalam Sesha Giri and Parasuraman Jaisankar\*



### Solvent and substituent effects on the conformational equilibria and intramolecular hydrogen bonding of pp 2577–2581 4-substituted-2-hydroxybenzaldehydes

Sonia E. Blanco and Ferdinando H. Ferretti\*

The influence of *p*-substituents and solvent effects on the conformational equilibria and the strength of the intramolecular hydrogen bond of 4-substituted-2-hydroxybenzaldehydes were studied by means of a B3LYP/6-31G(d) method that makes use of the SCIPCM model.

X = H, Cl, F, NO<sub>2</sub>, CH<sub>3</sub>O, OH and NH<sub>2</sub>

#### Synthesis of 1,4-diazepin-5-ones under microwave irradiation and their reduction products

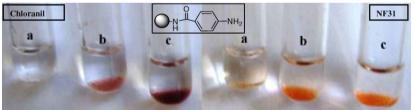
pp 2583-2586

Nicolas Wlodarczyk, Pauline Gilleron, Régis Millet, Raymond Houssin and Jean-Pierre Hénichart\*

#### Fast and easy detection of aromatic amines on solid support

pp 2587-2589

Steven E. Van der Plas, Pierre J. De Clercq and Annemieke Madder\*



The use of NF31, previously developed in our group for the detection of free aliphatic amines on solid support, has now been shown to also offer a reliable method for the detection of free aromatic amines. As little as 3.4  $\mu$ mol g<sup>-1</sup> of free aniline amino groups can be detected. The method has shown to be more sensitive for the detection of sterically hindered aromatic amines than the existing alternative based on reaction with chloranil.

#### Acid-functionalized dissymmetric salen ligands and their manganese(III) complexes

pp 2591-2595

You-Moon Jeon, Jungseok Heo and Chad A. Mirkin\*

Acid-functionalized symmetric and dissymmetric salen-type ligands were synthesized via a novel self-protection step in a quantitative yield. These ligands and the Mn(III) complexes formed from them can be used as chiral building blocks for a wide range of catalysts and chemically tailorable coordination polymers.

#### Selective palladium-catalyzed amination of the heterocyclic core of variolins

pp 2597-2601

Alejandro Baeza, Carolina Burgos,\* Julio Alvarez-Builla and Juan J. Vaquero\*

$$X = H, CI \qquad X$$

$$R = N$$

$$X = R$$

$$N = N$$

$$N = R$$

$$R = N$$

$$R = N$$

### Straightforward synthesis of (R,R/S,S)-2-[2-(2-aryl)-1-phenyl-ethyl]-morpholines: a new class of inhibitors of the norepinephrine transporter

pp 2603-2605

Javier Agejas\* and Carlos Lamas\*

Synthesis of the title compounds has been achieved through the preparation of the key *E*-enol-triflate and its further coupling with benzylzinc reagents.

#### Total synthesis of (-)-martinellic acid

pp 2607-2610

Vivek Badarinarayana and Carl J. Lovely\*

A Pd-catalyzed coupling and an intramolecular azomethine ylide–alkene cycloaddition provide an enantioselective entry to the pyrrolo[3,2-c]quinoline alkaloid martinellic acid.

### Lewis and Brönsted acid catalyzed Friedel–Crafts hydroxyalkylation of mucohalic acids: a facile synthesis of functionalized $\gamma$ -aryl $\gamma$ -butenolides

pp 2611-2615

Ji Zhang,\* Peter G. Blazecka and Timothy T. Curran



The reaction of (N-isocyanimino)triphenylphosphorane with dialkyl acetylenedicarboxylates in the presence of 1,3-diphenyl-1,3-propanedione: a novel three-component reaction for the stereoselective synthesis of dialkyl (Z)-2-(5,7-diphenyl-1,3,4-oxadiazepin-2-yl)-2-butenedioates

pp 2617-2620

Ali Souldozi, Ali Ramazani,\* Nouri Bouslimani and Richard Welter

Reactions of dialkyl acetylenedicarboxylates with (*N*-isocyanimino)triphenylphosphorane in the presence of 1,3-diphenyl-1,3-propanedione proceed smoothly at room temperature to afford dialkyl (*Z*)-2-(5,7-diphenyl-1,3,4-oxadiazepin-2-yl)-2-butenedioates in high yields.

### Protecting group directed ring-closing metathesis (RCM): the first total synthesis of an anti-malarial pp 2621–2625 nonenolide

Debendra K. Mohapatra,\* Dhondi K. Ramesh, Michael A. Giardello, Mukund S. Chorghade, Mukund K. Gurjar and Robert H. Grubbs\*

### Microwave-assisted synthesis of metalloporphyrazines

pp 2627-2630

M. Chandrasekharam,\* Ch. Srinivasa Rao, Surya P. Singh, M. Lakshmi Kantam, M. Ramesh Reddy, P. Yella Reddy and T. Toru

R=N(CH<sub>3</sub>)<sub>2</sub>: M=Zn, Cu, Mg, Ni, Co, InCl M=Zn: R=N(CH<sub>3</sub>)<sub>2</sub>, NBn<sub>2</sub>, Ph, 4-tBu-C<sub>6</sub>H<sub>4</sub> 4-CN-C<sub>6</sub>H<sub>4</sub>, SCH<sub>3</sub>, SCH<sub>2</sub>C<sub>6</sub>H<sub>5</sub>

The synthesis of metalloporphyrazines with enhanced yields directly from substituted maleonitriles via tetramerization is described.

#### Enantioselective synthesis of the tricyclic core of (-)-FR901483

pp 2631-2634

Asnuzilawati Asari, Plamen Angelov, James M. Auty and Christopher J. Hayes\*

An enantioselective synthesis of the tricyclic core structure of the immunosuppressant natural product (–)-FR901483 has been achieved using a Pd(0)-catalysed enolate  $\alpha$ -alkenylation reaction as a key step.

#### 4-Fluorocyclohexa-2,5-dienones as new acceptors for the Hauser annulation

pp 2635-2638

Pallab Pahari, Bidyut Senapati and Dipakranjan Mal\*

### Efficient Beckmann rearrangement and dehydration of oximes via phosphonate intermediates

pp 2639-2643

A. R. Sardarian,\* Z. Shahsavari-Fard, H. R. Shahsavari and Z. Ebrahimi

$$\begin{array}{c|c}
R^2 & R^$$

#### **OTHER CONTENTS**

Calendar pp I–III

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\*Supplementary data available via ScienceDirect

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