### Synthesis of 3-alkyl-5-hydroxycyclohex-2-enones via aldolic addition/sulfinate elimination tandem reactions

Tetrahedron Letters 44 (2003) 4631

Enrique Pandolfi\* and Horacio Comas

Departamento de Química Orgánica, Facultad de Química, Universidad de la República, Av. Gral. Flores 2124, CC 1157 Montevideo, Uruguay

30 % R =  $(CH_2)_4CH_3$ 35 % R =  $(CH_2)_2Ph$ 

#### Synthetic studies on ecteinascidin 743: asymmetric synthesis of the versatile amino acid component

Tetrahedron Letters 44 (2003) 4635

Wei Jin and Robert M. Williams\*

Department of Chemistry, Colorado State University, Fort Collins, CO 80523, USA

### $Per(3-deoxy)-\gamma$ -cyclomannin: a non-glucose cyclooligosaccharide featuring inclusion properties

Tetrahedron Letters 44 (2003) 4641

Cheng Yang,<sup>a</sup> De-Qi Yuan,<sup>a,\*</sup> Yasuyoshi Nogami<sup>b</sup> and Kahee Fujita<sup>a,\*</sup>

<sup>a</sup>Department of Molecular Medicinal Sciences, Graduate School of Biomedical Sciences, Nagasaki University, Nagasaki 852-8521, Japan

<sup>b</sup>Daiichi College of Pharmaceutical Sciences, Fukuoka 815, Japan

### Carbon-carbon bond formation by radical addition-fragmentation reactions of *O-tert*-alkyl enols and *O*-cyclopropylcarbinyl enols

Tetrahedron Letters 44 (2003) 4645

Yudong Cai and Brian P. Roberts\*

Department of Chemistry, University College London, 20 Gordon Street, London WC1H 0AJ, UK

Conditions: AIBN (5 mol%) initiator, 2,4,6-collidine (10 mol%), refluxing benzene

## Samarium(II) iodide-induced tandem reductive coupling-Dieckmann condensation reaction: one-step synthesis of bicyclic oxacyclopentanecarboxylate from bis-α,β-unsaturated esters

Ikuo Shinohara, a Masayuki Okue, b Yasuji Yamada b and Hiroto Nagaoka a,\*

<sup>a</sup>Meiji Pharmaceutical University, Noshio, Kiyose, Tokyo 204-8588, Japan

<sup>b</sup>Tokyo University of Pharmacy and Life Science, Horinouchi, Hachioji, Tokyo 192-0392, Japan

### Synthesis of 6-substituted tetrahydropyridinones and cyclization to indolizidine and quinolizidine structures

Tetrahedron Letters 44 (2003) 4653

Shang-Shing P. Chou,\* Hao-Chieh Chiu and Chia-Cheng Hung

Department of Chemistry, Fu Jen Catholic University, Taipei, Taiwan 242, ROC

#### Reactivity of 2-methyl thioisomünchnone with acid chlorides

Tetrahedron Letters 44 (2003) 4657

Martín Ávalos, a Reyes Babiano, a Pedro Cintas, a Jesús Díaz, a

Michael B. Hursthouse, b José L. Jiménez, Mark E. Light, b Ignacio López and Juan C. Palaciosa,\*

<sup>a</sup>Departamento de Química Orgánica, Facultad de Ciencias, Universidad de Extremadura, Avda. Elvas s/n, E-06071 Badajoz, Spain

<sup>b</sup>Department of Chemistry, University of Southampton, Southampton SO17 1BJ, UK

### An easy approach for the acetylation of saccharidic alcohols. Applicability for regioselective protections

Tetrahedron Letters 44 (2003) 4661

Matteo Adinolfi, Gaspare Barone, Alfonso Iadonisi\* and Marialuisa Schiattarella

Dipartimento di Chimica Organica e Biochimica, Università degli Studi di Napoli Federico II, Via Cynthia 4, I-80126 Napoli, Italy

#### Complementary kinetic and thermodynamic resolution of a chiral biaryl axis

David J. Edwards, Robin G. Pritchard and Timothy W. Wallace\*

Department of Chemistry, UMIST, PO Box 88, Manchester M60 1QD, UK

### Substituent dependent photochemical rearrangements of halostyrylheterocycles in acid media

Tetrahedron Letters 44 (2003) 4669

Jinn-Hsuan Ho and Tong-Ing Ho\*

Department of Chemistry, National Taiwan University, Taipei, Taiwan, ROC

### Preparation of substituted allyl acetates and sulfones from Baylis-Hillman adducts in ionic liquid media

Tetrahedron Letters 44 (2003) 4673

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

<sup>a</sup>Department of Chemistry, The University of Tennessee, 611 Buehler Hall, Knoxville, TN 37996-1600, USA <sup>b</sup>Department of Radiology, The University of Tennessee Medical Center, 1924 Alcoa Highway, Knoxville, TN 37920-6999, USA

### Chiral diaminophosphine ligands with stable C(aryl)–N(amine) axial chirality derived from prolinol

Tetrahedron Letters 44 (2003) 4677

Takashi Mino,\* Youichi Tanaka, Yutaka Sato, Akio Saito, Masami Sakamoto and Tsutomu Fujita Department of Materials Technology, Faculty of Engineering, Chiba University, Inage-ku, Chiba 263-8522, Japan

New type chiral ligands with chiral carbon center and stable C(aryl)–N(amine) axial chirality, such as (aS,S)-3d, were prepared and applied to Pd-catalyzed AAA reaction.

#### Unprecedented cyclisations of calix[4]arenes with glycols under the Mitsunobu protocol. Part 1: A new perspective for the synthesis of calixcrowns

Viktor Csokai,<sup>a</sup> Alajos Grün<sup>b</sup> and István Bitter<sup>a,\*</sup>

<sup>a</sup>Department of Organic Chemical Technology, Budapest University of Technology and Economics, H-1521 Budapest, Hungary

bOrganic Chemical Technology Research Group of the Hungarian Academy of Sciences, Budapest University of Technology and Economics, H-1521 Budapest, Hungary

### A novel preparation of methyl ketones through one-carbon homologation of aldehydes

Tetrahedron Letters 44 (2003) 4685

Lei Wang, a,b,\* Pinhua Li, Jincan Yana and Zhongzhi Wuc

<sup>a</sup>Department of Chemistry, Huaibei Coal Teachers College, Huaibei, Anhui 235000, PR China

<sup>b</sup>State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry,

Chinese Academy of Sciences, Shanghai 200032, PR China

<sup>c</sup>Department of Chemistry, The University of Tennessee, Knoxville, TN 37996-1600, USA

$$R = \frac{CBr_4 / PPh_3}{CH_2Cl_2} \qquad R = \frac{Br}{Br} \qquad \frac{Zn}{H_2O (275 \ ^{\circ}C)} \qquad R = \frac{R}{O}$$

### A facile zirconium(IV) chloride catalysed selective deprotection of *t*-butyldimethylsilyl (TBDMS) ethers

Tetrahedron Letters 44 (2003) 4689

G. V. M. Sharma,\* B. Srinivas and Palakodety Radha Krishna

D-211, Discovery Laboratory, Organic Chemistry Division-III, Indian Institute of Chemical Technology, Hyderabad 500 007, India

A simple and efficient protocol for the selective deprotection of *t*-butyldimethylsilyl (TBDMS) ethers using 20 mol% ZrCl<sub>4</sub> in CH<sub>3</sub>CN is reported.

ROTBDMS 
$$\xrightarrow{\text{ZrCl}_4 (20 \text{ mol}\%)}$$
 ROH rt, 20-45 min.

#### ZrCl<sub>4</sub> as a mild and efficient catalyst for the one-pot conversion of TBS and THP ethers to acetates

Tetrahedron Letters 44 (2003) 4693

Ch. Sanjeeva Reddy, a,\* G. Smitha and S. Chandrasekhar b

<sup>a</sup>Department of Chemistry, Kakatiya University, Warangal-506009, India

<sup>b</sup>Indian Institute of Chemical Technology, Hyderabad-500007, India

$$\begin{array}{c|c} R \\ \hline \\ OP \end{array} \xrightarrow{ZrCl_4 (5 \text{ mol}\%)-Ac_2O} \begin{array}{c} R \\ \hline \\ CH_3CN, r. t. \end{array} \begin{array}{c} R \\ \hline \\ R' \end{array} \begin{array}{c} OAc \\ \hline \end{array}$$

P= TBS or THP R, R'= Aryl, Alkyl, H

#### ent synthesis and decomposition study of optically nonlinear Tetrahedron Letters 44 (2003) 4697

#### Efficient synthesis and decomposition study of optically nonlinear adducts of tetracyanoquinodimethane

Cara A. M. Weir, Tayebeh Hadizad, Andrew M. R. Beaudin and Zhi Yuan Wang\*

Department of Chemistry, Carleton University, 1125 Colonel By Drive, Ottawa, Ontario, Canada K1S 5B6

Described are the high-yield synthesis and decomposition study of Z- $\beta$ -(1-substituted-4-pyridinium)- $\alpha$ -cyano-4-styryldicyanomethanide chromophores.

$$R-N$$
 $R-N$ 
 $R-N$ 

i. MeCN, DBU, 80 °C, 14-30 hrs, 68-97%. R = n-C<sub>8</sub>H<sub>17</sub>, C<sub>3</sub>H<sub>6</sub>OH

## Nitroketene dithioacetal chemistry. Part 2: Synthesis of novel 4-(alkylsulfanyl)-2-[1-nitromethylidene]-1,3-dithioles from the dipotassium salt of 2-nitro-1,1-ethylenedithiol

H. Surya Prakash Rao,\* L. Sakthikumar, S. Vanitha and S. Siva Kumar

Department of Chemistry, Pondicherry University, Pondicherry-605 014, India

$$K^+S^ NO_2$$
 $NO_2$ 
 $NO_2$ 

#### Co/C-catalyzed tandem carbocyclization reaction of 1,6-diynes

Tetrahedron Letters 44 (2003) 4705

Tetrahedron Letters 44 (2003) 4701

Sang Ick Lee,<sup>a</sup> Seung Uk Son,<sup>a</sup> Mi Ra Choi,<sup>a</sup> Young Keun Chung<sup>a,\*</sup> and Sueg-Geun Lee<sup>b</sup>

<sup>a</sup>School of Chemistry and Center for Molecular Catalysis, Seoul National University, Seoul 151-747, Republic of Korea <sup>b</sup>Korea Research Institute of Chemical Technology, PO Box 107, Yusong, Taejeon 305-600, Republic of Korea

Cobalt on charcoal (Co/C) can be used as a catalyst in the tandem carbocycloaddition reaction of 1,6-diyne and carbon monoxide. The reaction product is dependent upon the reaction temperature, the position of the functional group, and the substrate itself. 0 0

#### A synthetic entry to 3,5-disubstituted pyridines

Tetrahedron Letters 44 (2003) 4711

M.-Lluïsa Bennasar,\* Ester Zulaica, Tomàs Roca, Yolanda Alonso and Manuel Monerris Laboratory of Organic Chemistry, Faculty of Pharmacy, University of Barcelona, Barcelona 08028, Spain

R<sup>1</sup> = electron-withdrawing group

### Cr<sup>III</sup>(salen) catalysed asymmetric ring opening of monocyclic terpene-epoxides

Bart M. L. Dioos and Pierre A. Jacobs\*

Centre for Surface Chemistry and Catalysis, K.U.Leuven, Kasteelpark Arenberg 23, 3001 Heverlee, Belgium

Using a racemic Cr<sup>III</sup>(salen) complex for the ARO of 1,2-epoxy-terpenes, highly diastereo-enriched epoxide and ring opened products were obtained.

$$\begin{array}{c} CH_3 \\ \hline \\ TMSN_3, \text{ ether, RT} \\ \hline \\ racemic-Cr(salen) \\ \hline \\ R \end{array} \qquad \begin{array}{c} CH_3 \\ \hline \\ N_3 \end{array} \qquad \begin{array}{c} CH_3 \\ \hline \\ N_3 \end{array}$$

### Variation of xanthene-based bidentate ligands in the palladium-catalyzed arylation of ureas

Tetrahedron Letters 44 (2003) 4719

Alexey G. Sergeev, Galina A. Artamkina and Irina P. Beletskaya\*

Moscow State University, Chemistry Department, Leninskie Gory, 119992, Moscow, Russia

$$R \xrightarrow{H} Br + H_2N \xrightarrow{N} O \xrightarrow{N} Ph(H) \xrightarrow{Pd(0), L} R \xrightarrow{N} O \xrightarrow{N} O \xrightarrow{H} O \xrightarrow{H} O \xrightarrow{H} O \xrightarrow{XAr_2} X \xrightarrow{XAr_2} X \xrightarrow{XAr_2} X \xrightarrow{X=P; Ar=o-CH_3C_6H_4, C_6F_5, p-CH_3OC_6H_4, C_6F_6, p-CH_3OC_$$

 $R = o-, p-Cl, o-, m-, p-CH_3, o-CH_3O$ 

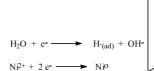
### Electrocatalytic hydrogenation of organic compounds using current density gradient and sacrificial anode of nickel

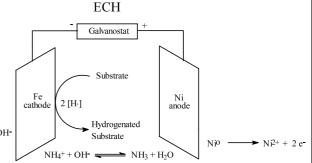
Tetrahedron Letters 44 (2003) 4725

Diogo S. Santana, Márcio V. F. Lima,

Jorge R. R. Daniel and Marcelo Navarro\*

Departamento de Química Fundamental, C.C.E.N., Universidade Federal de Pernambuco, Cidade Universitária CEP, 50670-901 Recife PE, Brazil





# Studies on the construction of glycosidic linkage in guanofosfocins. Glycosylation of 8-oxoinosine and 8-oxoguanosine derivatives with mannopyranosyl bromide

Tetrahedron Letters 44 (2003) 4729

Hideyuki Sugimura\* and Yumiko Natsui Faculty of Education and Human Science, Yokohama National University, 79-2, Tokiwadai, Hodogaya-ku, Yokohama 240-8501, Japan

R=Bn, 4-NO<sub>2</sub>C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>CH<sub>2</sub> Y=H, TrNH

#### Synthesis of 3-methoxyquinolines via cyclization of 1-isocyano-2-(2-lithio-2-methoxyethenyl)benzenes

Kazuhiro Kobayashi,\* Keiichi Yoneda, Tatsuya Mizumoto, Hironobu Umakoshi,

Osamu Morikawa and Hisatoshi Konishi

Department of Materials Science, Faculty of Engineering, Tottori University, Koyama-minami, Tottori 680-8552, Japan

3-Methoxyquinolines were prepared by treating 2-(2-isocyanophenyl)acetaldehyde dimethyl acetals with 4 equivalents of LDA.

### A survey of mono- or bis-decarboxylation of $\beta$ -methyl polyethylenic-malonic acids

Tetrahedron Letters 44 (2003) 4737

Alain Valla, a,b,\* Régis Le Guillou, Dominique Cartier and Roger Labia

<sup>a</sup>VA R&D Pépinière d'Entreprises, 140 boulevard de Creac'h Gwen, 29561 Quimper Cedex, France

<sup>b</sup>Laboratoire de chimie et biologie des substances naturelles, 6, rue de l'Université, 29000 Quimper, France

# Facile reduction of aromatic nitro/azido functionality on solid support employing Al/NiCl<sub>2</sub>·6H<sub>2</sub>O and Al/NH<sub>4</sub>Cl: synthesis of pyrrolo[2,1-c][1,4]benzodiazepines

Tetrahedron Letters 44 (2003) 4741

Ahmed Kamal,\* K. Laxma Reddy, V. Devaiah and G. Suresh Kumar Reddy

Division of Organic Chemistry, Indian Institute of Chemical Technology, Hyderabad-500 007, India

$$R = NO_2, N_3$$

#### A concise synthesis of protected diethyl 1-amino-2hydroxyalkylphosphonates

Tetrahedron Letters 44 (2003) 4747

Katarzyna Błażewska, Dorota Sikora and Tadeusz Gajda\*

Institute of Organic Chemistry, Technical University (Politechnika), Żeromskiego St. 116, 90-924 Lodz, Poland

$$(EtO)_{2}P \qquad NCS \xrightarrow{RCHO/Base} R \xrightarrow{P(OEt)_{2}} P \xrightarrow{OH} OH O II P(OEt)_{2}$$

$$NH \qquad R = Ph \qquad NHBoc$$

#### A new fluorescent chemosensor for transition metal cations and on/off molecular switch controlled by pH

Tetrahedron Letters 44 (2003) 4751

Yu-Dong Cao, Qi-Yu Zheng,\*

Chuan-Feng Chen and Zhi-Tang Huang\*

Laboratory of Chemical Biology, Center for Molecular Science, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100080, China

#### Towards a selective Boc deprotection on acid cleavable Wang resin

Tetrahedron Letters 44 (2003) 4757

Valérie Lejeune, Jean Martinez and Florine Cavelier\*

Laboratoire des Aminoacides, Peptides et Protéines, UMR-CNRS 5810, Universités Montpellier I et II, 34095 Montpellier cedex 05, France

Quantitative yield of Boc deprotection of an amino acid attached to the Wang resin has been achieved with less than 10% loss of resin loading with trimethylsilyltriflate.

Fmoc-Lys(Boc) 
$$\frac{1 - [TMSOTf] = 0.2M / TEA 2 \text{ eq. / DCE}}{2 \times 10 \text{ min}}$$
Fmoc-Lys(H) 
$$\frac{2 \times 10 \text{ min}}{2 - MeOH}$$

### Efficient one-pot synthesis of anti HIV and antitumor compounds: harman and substituted harmans

Tetrahedron Letters 44 (2003) 4761

Radhika S. Kusurkar,\* Shailesh K. Goswami and Sandhya M. Vyas

Department of Chemistry, University of Pune, Pune 411 007 India

### A convenient synthesis of methyl *N*-acetyl-α-D-lividosaminide from D-glucal

Tetrahedron Letters 44 (2003) 4765

B. Gopal Reddy and Yashwant D. Vankar\*

Department of Chemistry, Indian Institute of Technology Kanpur 208016, India

## Catalytic and chemoselective deprotection of S,S- and S,O-acetals and ketals in the presence of their O,O-analogs with electrophilic halogens under neutral conditions

Tetrahedron Letters 44 (2003) 4769

Nasser Iranpoor,\* Habib Firouzabadi\* and Hamid Reza Shaterian

Chemistry Department, College of Sciences, Shiraz University, Shiraz 7146713565, Iran

Catalyst = NBS, TABCO, Br<sub>2</sub> (0.1-0.2 mmol) R, R' = H, Aryl and alkyl carrying no enolizable hydrogen R"= Ph, Alkyl, –(CH<sub>2</sub>)<sub>n</sub>– [n=2, 3]

## An efficient enzymatic method for the separation of stereoisomeric cis and trans-glycidic esters synthesised via Darzen's condensation reactions

Tetrahedron Letters 44 (2003) 4775

Manouchehr Mamaghani,\* Khalil Tabatabaeian, Ali Ghanadzadeh and Fatemeh Habibi

Department of Chemistry, Faculty of Sciences, Guilan University, PO Box 41335-1914, Rasht, Iran

Pig's liver esterase (PLE) was used efficiently in a completely stereoselective reaction in a phosphate buffer for the separation of stereoisomeric mixtures of cis/trans-ethyl arylglycidates, produced via Darzen's condensation reactions.

R:  $C_6H_5$ , p-Me- $C_6H_5$ , p-MeO- $C_6H_5$ , p-NO<sub>2</sub>- $C_6H_5$ , m-NO<sub>2</sub>- $C_6H_5$  R': H, Me,  $C_6H_5$ 

#### Reusable resin plug-bound palladium catalysts for organic synthesis

Tetrahedron Letters 44 (2003) 4779

Butrus Atrash,<sup>a</sup> John Reader<sup>b</sup> and Mark Bradley<sup>a,\*</sup>

<sup>a</sup>Combinatorial Centre of Excellence, Department of Chemistry, University of Southampton, Southampton SO17 1BJ, UK <sup>b</sup>Millennium Pharmaceuticals, Granta Park, Great Abington, Cambridge CB1 6ET, UK

Resin plugs, a unique and conveniently handled form of resin, prepared by sintering HDPE with Merrifield resin, were derivatised and loaded with palladium(0). Catalysts were used to prepare, in solution, a Suzuki bis-aryl based library with high efficiency.

[Pd]····PPh<sub>2</sub>

Catalyst "Plug"

### Chemoenzymatic synthesis of duloxetine and its enantiomer: lipase-catalyzed resolution of 3-hydroxy-3-(2-thienyl) propanenitrile

Tetrahedron Letters 44 (2003) 4783

Ahmed Kamal,\* G. B. Ramesh Khanna, R. Ramu and T. Krishnaji

Biotransformation Laboratory, Division of Organic Chemistry, Indian Institute of Chemical Technology, Hyderabad 500 007, India

$$S$$
 $OR$ 
 $R = H, Ac$ 
 $S$ 
 $NHCH_3$ 

#### Tuning saccharide selectivity in modular fluorescent sensors

Susumu Arimori, Giuseppe A. Consiglio, Marcus D. Phillips and Tony D. James\*

Department of Chemistry, University of Bath, Bath BA2 7AY, UK

#### Solid-phase synthesis of Mannich-base hybridized cyclopeptides

Tetrahedron Letters 44 (2003) 4793

De-Xin Wang,\* Hong-Qiang Liu, Hao Lin and Gui-Jie Tian

Institute of Materia Medica Chinese Academy of Medical Sciences, Beijing 100050, China

$$\begin{array}{c} H_2N \\ \\ HO \end{array} \begin{array}{c} H_2N \\ \\ H-Tyr-O \end{array} \begin{array}{c} COOH \\ \\ H-Tyr-O \end{array}$$

#### Synthesis of gem-diamino derivatives on solid support

Tetrahedron Letters 44 (2003) 4797

Sonia Cantel, Damien Boeglin, Marc Rolland, Jean Martinez and Jean-Alain Fehrentz\*

Laboratoire des Aminoacides, Peptides et Protéines (LAPP), UMR 5810 CNRS Universités Montpellier I et II, Faculté de Pharmacie, 15 Avenue Charles Flahault, BP 14491, 34093 Montpellier Cédex 5, France

$$\longrightarrow \bigvee_{H}^{R_1} \bigvee_{O}^{NH_2} \longrightarrow \bigvee_{H}^{R_1} \bigvee_{H}^{N} \bigvee_{R_2}^{R_2}$$

#### Steroidal nitrone inhibitors of 5α-reductase

Tetrahedron Letters 44 (2003) 4801

Andrea J. Robinson, a,b,\* Indawati DeLucca, b Spencer Drummond and George A. Boswellb

<sup>a</sup>School of Chemistry, Monash University, Victoria, Australia

<sup>b</sup>DuPont Pharmaceuticals Company, Experimental Station, Wilmington, DE, USA

Steroidal nitrone (7) was designed as a transition state mimic of the postulated enolate intermediate (6) involved in the enzymatic conversion of testosterone to dihydrotestosterone.