

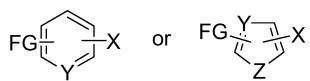
## Graphical abstracts

### Recent synthetic uses of functionalised aromatic and heteroaromatic organolithium reagents prepared by non-deprotonating methods

*Tetrahedron* 59 (2003) 9255

Carmen Nájera, José M. Sansano and Miguel Yus\*

Departamento de Química Orgánica, Facultad de Ciencias, Instituto de Síntesis Orgánica (ISO), Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain



[ Y = CH, N; Z = O, S, NR  
FG = R, benzo, Hal', OR, NR<sub>2</sub>, ... ]

X = Hal → X = Li → X = E

The generation of aromatic and heteroaromatic organolithium compounds, mainly by halogen-lithium exchange, and their reactivity towards electrophiles is reviewed, paying special attention to their synthetic applications in organic synthesis

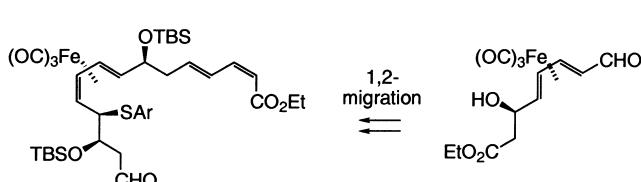
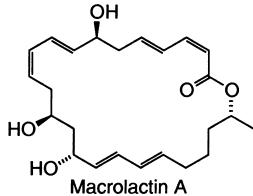
### Synthetic studies on macrolactin A by using a (diene)Fe(CO)<sub>3</sub> complex

*Tetrahedron* 59 (2003) 9305

Akihiro Fukuda,<sup>a</sup> Yusuke Kobayashi,<sup>a</sup> Tetsutaro Kimachi<sup>b</sup> and Yoshiji Takemoto<sup>a,\*</sup>

<sup>a</sup>Graduate School of Pharmaceutical Sciences, Kyoto University, Yoshida, Sakyo-ku, Kyoto 606-8501, Japan

<sup>b</sup>Faculty of Pharmaceutical Sciences, Mukogawa Women's University, 11-68 Koshien Kyuban-cho, Nishinomiya 663-8179, Japan



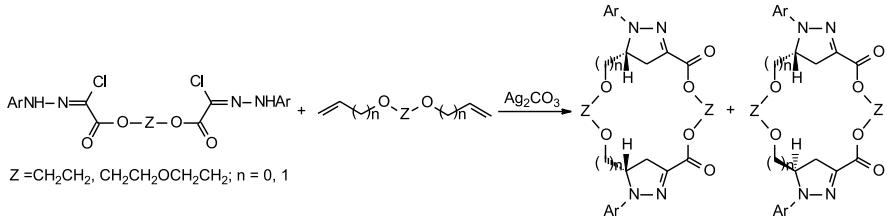
### Synthesis of bis-(3,5)pyrazolophanes via double cycloadditive macrocyclisation

*Tetrahedron* 59 (2003) 9315

Giorgio Molteni,<sup>a,\*</sup> Tullio Pilati<sup>b</sup> and Alessandro Ponti<sup>b</sup>

<sup>a</sup>Università degli Studi di Milano, Dipartimento di Chimica Organica e Industriale, Via Golgi 19, 20133 Milano, Italy

<sup>b</sup>Consiglio Nazionale delle Ricerche, Istituto di Scienze e Tecnologie Molecolari, Via Golgi 19, 20133 Milano, Italy

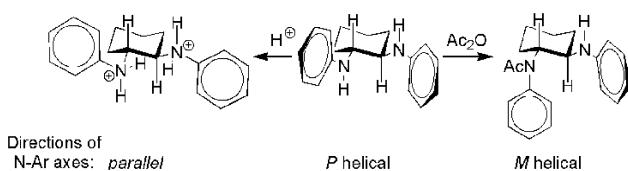


### Helicity of *N,N'*- diaryl-*trans*-1,2-diaminocyclohexane derivatives. Implications for molecular helicity manipulations

*Tetrahedron* 59 (2003) 9323

M. Kwit and J. Gawronski\*

Department of Chemistry, A. Mickiewicz University, Grunwaldzka 6, 60 780 Poznań, Poland



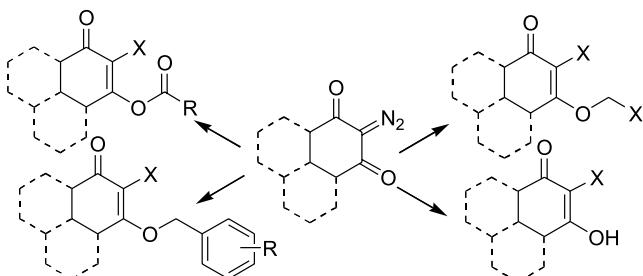
## A convenient and efficient preparation of $\beta$ -substituted $\alpha$ -haloenones from diazodicarbonyl compounds

Tetrahedron 59 (2003) 9333

Yong Rok Lee,\* Bang Sub Cho and Hyuk Jin Kwon

School of Chemical Engineering and Technology,  
College of Engineering, Yeungnam University, Kyongsan 712-749,  
South Korea

Rhodium(II)-catalyzed reactions of cyclic diazodicarbonyl compounds with a variety of halides have been examined. These reactions provide a useful and rapid entry to  $\beta$ -substituted  $\alpha$ -haloenones in good yields.



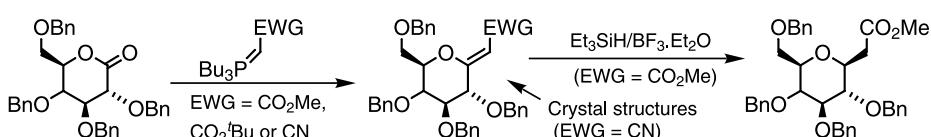
## C-Glycosylidene derivatives (*exo*-glycals): their synthesis by reaction of protected sugar lactones with tributylphosphonium ylids, conformational analysis and stereoselective reduction

Tetrahedron 59 (2003) 9349

Miguel Gascón-López,<sup>a</sup> Majid Motevalli,<sup>a</sup> George Paloumbis,<sup>a</sup> Peter Bladon<sup>b</sup> and Peter B. Wyatt<sup>a,\*</sup>

<sup>a</sup>Department of Chemistry, Queen Mary, University of London, Mile End Road, E1 4NS, London, UK

<sup>b</sup>Interprobe Chemical Services, Gallowhill House, Lenzie, Scotland G66 4HX, UK



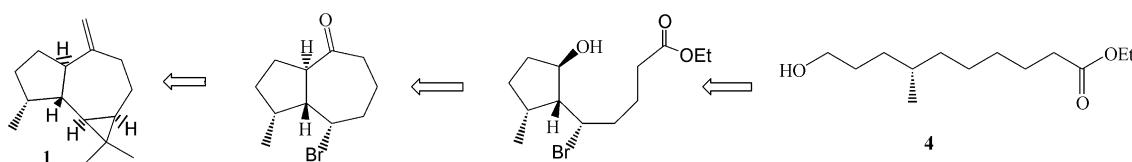
## Synthesis of chiral methyl-branched linear pheromones starting from (+)-aromadendrene. Part 7

Tetrahedron 59 (2003) 9361

Yvonne M. A. W. Lamers,<sup>a</sup> Ghena Rusu,<sup>b</sup> Joannes B. P. A. Wijnberg<sup>a</sup> and Aede de Groot<sup>a,\*</sup>

<sup>a</sup>Laboratory of Organic Chemistry, Wageningen University, Dreijenplein 8, 6703 HB Wageningen, The Netherlands

<sup>b</sup>Institute of Chemistry, Moldovian Academy of Sciences, str. Academiei 3, MD-2028 Kishinev, Republic of Moldova



## Synthesis and X-ray crystallographic studies of novel proton-ionizable nitro- and halogen-substituted acridono-18-crown-6 chromo- and fluorogenic ionophores

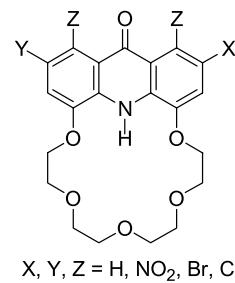
Tetrahedron 59 (2003) 9371

Péter Huszthy,<sup>a,\*</sup> Borbála Vermes,<sup>a</sup> Nikoletta Báthori<sup>b</sup> and Mátyás Czugler<sup>b</sup>

<sup>a</sup>Institute for Organic Chemistry, Budapest University of Technology and Economics, H-1521 Budapest, Hungary

<sup>b</sup>Institute of Chemistry, Chemical Research Center, Hungarian Academy of Sciences, H-1525 Budapest, Hungary

Seven new proton-ionizable chromo- and fluorogenic ionophores ( $X=NO_2$ ,  $Y=Z=H$ ;  $X=Y=NO_2$ ,  $Z=H$ ;  $X=NO_2$ ,  $Y=Br$ ,  $Z=H$ ;  $X=Y=Br$ ,  $Z=H$ ;  $X=Y=Br$ ,  $Z=NO_2$ ;  $X=Y=Cl$ ,  $Z=H$ ;  $X=Y=Cl$ ,  $Z=NO_2$ ) were prepared from the parent acridono-18-crown-6 ligand ( $X=Y=Z=H$ ) by electrophilic substitution. Five of the above ligands ( $X=Y=Z=H$ ;  $X=NO_2$ ,  $Y=Z=H$ ;  $X=Y=NO_2$ ,  $Z=H$ ;  $X=Y=Br$ ,  $Z=NO_2$ ;  $X=Y=Cl$ ,  $Z=NO_2$ ) were also studied by X-ray crystallography.



$X, Y, Z = H, NO_2, Br, Cl$

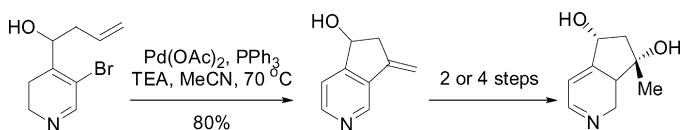
**Novel total syntheses of ( $\pm$ )-oxerine by intramolecular Heck reaction**

Tetrahedron 59 (2003) 9379

Jingrui Zhao,<sup>a,b</sup> Xiaoxia Yang,<sup>a</sup> Xueshun Jia,<sup>b</sup> Shengjun Luo<sup>a</sup> and Hongbin Zhai<sup>a,\*</sup>

<sup>a</sup>Laboratory of Modern Synthetic Organic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, China

<sup>b</sup>Department of Chemistry, Shanghai University, Shanghai 200436, China



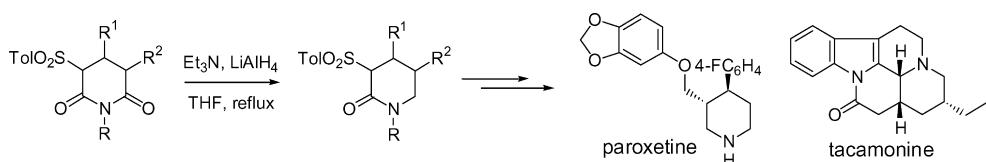
**Regioselective reduction of *N*-alkyl-3-sulfonyl glutarimides to  $\delta$ -lactams. Formal synthesis of ( $\pm$ )-paroxetine and ( $\pm$ )-tacamonine**

Tetrahedron 59 (2003) 9383

Chung-Yi Chen,<sup>a</sup> Bo-Rui Chang,<sup>a</sup> Min-Ruei Tsai,<sup>a</sup> Meng-Yang Chang<sup>b,\*</sup> and Nein-Chen Chang<sup>a,\*</sup>

<sup>a</sup>Department of Chemistry, National Sun Yat-Sen University, Kaohsiung 804, Taiwan, ROC

<sup>b</sup>Department of Applied Chemistry, National University of Kaohsiung, Kaohsiung 811, Taiwan, ROC

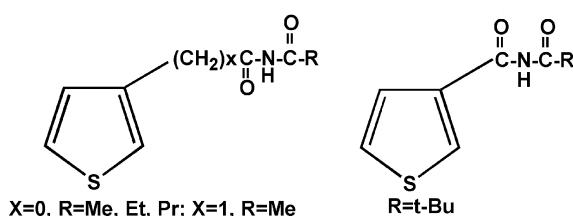


**Synthesis and structural characterization of 3-thienyl alkyl imides**

Tetrahedron 59 (2003) 9389

Jian Dai, Cynthia S. Day and Ronald E. Noftle\*

Department of Chemistry, Wake Forest University, Winston-Salem, NC 27109 USA

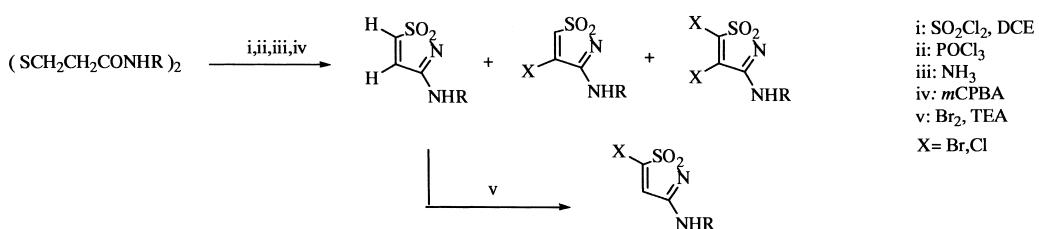


**Iothiazoles. Part 14: New 3-amino-substituted isothiazole dioxides and their mono- and dihalogeno derivatives**

Tetrahedron 59 (2003) 9399

Francesca Clerici,\* Alessandro Contini, Maria Luisa Gelmi and Donato Pocar

Istituto di Chimica Organica 'A. Marchesini', Facoltà di Farmacia e Centro Interuniversitario di Ricerca sulle Reazioni Pericicliche e Sintesi di Sistemi Etero e Carbociclici, Università di Milano, Via Venezian 21, 20133 Milano, Italy

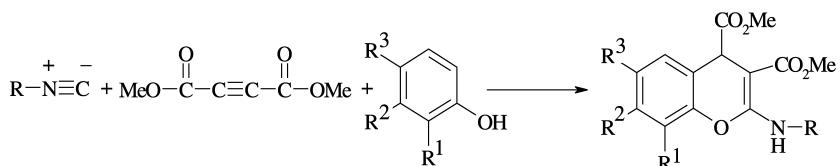


**Reaction between alkyl isocyanides and dimethyl acetylenedicarboxylate in the presence of polyhydroxybenzenes. Synthesis of 4H-chromene derivatives**

Tetrahedron 59 (2003) 9409

Issa Yavari,\* Hoorieh Djahanian and Farough Nasiri

Department of Chemistry, University of Tarbiat Modarres, P.O. Box 14115-175, Tehran, Iran



**Improved synthesis of 1,4-dideoxy-1,4-imino-D-galactitol, an inhibitor of *E. coli* K12 UDP-Gal mutase and mycobacterial galactan biosynthesis**

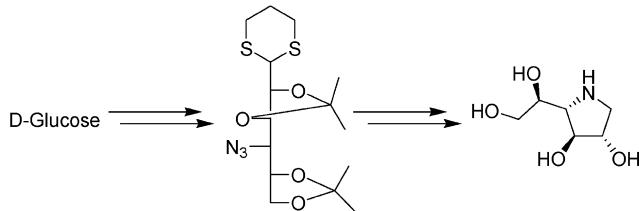
Tetrahedron 59 (2003) 9413

Duy-Phong Pham-Huu,<sup>a</sup> Yonas Gizaw,<sup>a,b</sup> James N. BeMiller<sup>a,\*</sup> and Ladislav Petruš<sup>c</sup>

<sup>a</sup>The Whistler Center for Carbohydrate Research, Purdue University, West Lafayette, IN 47907-2009, USA

<sup>b</sup>Miami Valley Laboratories, Procter and Gamble Company, Cincinnati, OH 45253, USA

<sup>c</sup>Institute of Chemistry, Slovak Academy of Sciences, SK 84238 Bratislava, Slovakia

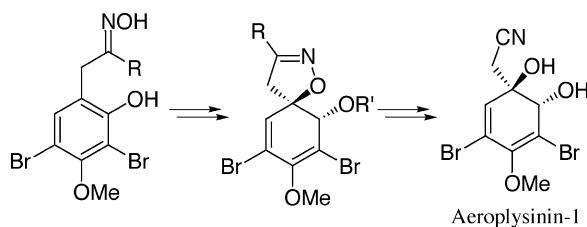


**A new ring-opening access to aeroplysinin-1, a secondary metabolite of *Verongia aerophoba***

Tetrahedron 59 (2003) 9419

Takahisa Ogamino and Shigeru Nishiyama\*

Department of Chemistry, Faculty of Science and Technology, Keio University, Hiyoshi 3-14-1, Kohoku-ku, Yokohama 223-8522, Japan

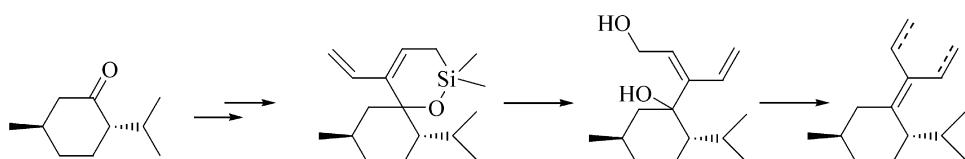


**Synthesis of new terpene derivatives via ruthenium catalysis: rearrangement of silylated enynes derived from terpenoids**

Tetrahedron 59 (2003) 9425

Jérôme Le Nôtre, Ana Acosta Martinez, Pierre H. Dixneuf and Christian Bruneau\*

Institut de Chimie, UMR 6509, Organométalliques et Catalyse, Université de Rennes 1 Campus de Beaulieu-35042 Rennes Cedex, France



**Stereospecific palladium(0)-catalyzed reduction of  
2-cyclobutylidenepropyl esters. A versatile preparation of  
diastereomeric monoterpenoids: ( $\pm$ )-fragranol and ( $\pm$ )-grandisol**

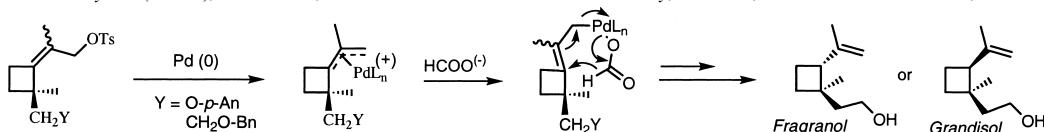
Tetrahedron 59 (2003) 9433

Angela M. Bernard,<sup>a</sup> Angelo Frongia,<sup>a</sup> Francesco Secci,<sup>a</sup> Giovanna Delogu,<sup>b</sup> Jean Ollivier,<sup>c</sup> Pier P. Piras<sup>a,\*</sup> and Jacques Salaün<sup>c,\*</sup>

<sup>a</sup>Dipartimento di Scienze Chimiche, Università di Cagliari, Complesso Universitario di Monserrato, S.S. 554, Bivio per Sestu, I-09042 Monserrato, Cagliari, Italy

<sup>b</sup>Istituto di Chimica Biomolecolare, Sez. Sassari, CNR, Traversa La Crucca 3, reg. Baldinca, Li Punti, 07040 Sassari, Italy

<sup>c</sup>Laboratoire des Carbocycles (CNRS), UMR 8615, Institut de Chimie Moléculaire d'Orsay, Bât. 420, Université de Paris-Sud, 91405 Orsay, France



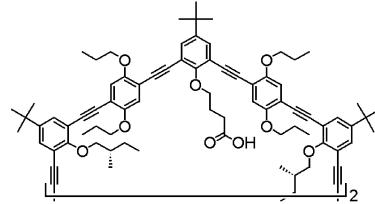
**Synthesis of a shape-persistent macrocycle with intraannular  
carboxylic acid groups**

Tetrahedron 59 (2003) 9441

Matthias Fischer and Sigurd Höger\*

Max Planck Institute for Polymer Research, Ackermannweg 10, D-55128 Mainz, Germany

Flexible intraannular alkyl chains ensure the solubility of the macrocyclic diacid.

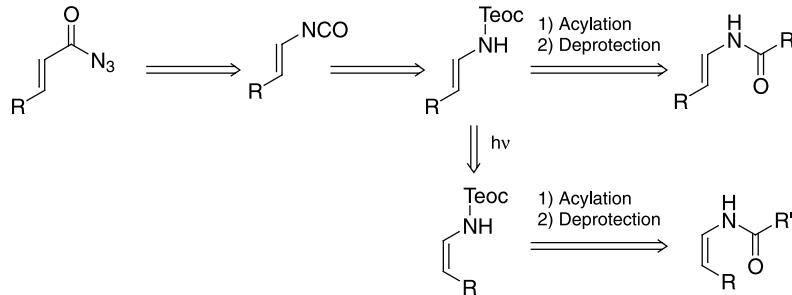


**Synthetic study on indolic enamides**

Tetrahedron 59 (2003) 9447

Kouji Kuramochi, Yuko Osada and Takeshi Kitahara\*

Department of Applied Biological Chemistry,  
The University of Tokyo, 1-1-1 Yayoi, Bunkyo-ku,  
Tokyo 113-8657, Japan



**Gas-phase thermolysis of benzotriazole derivatives. Part 2:**

Tetrahedron 59 (2003) 9455

**Synthesis of benzimidazo[1,2-*b*]cinnolines, a novel heterocyclic ring system, by pyrolysis of benzotriazole derivatives. Kinetic and mechanistic study**

Hicham H. Dib, Nouria A. Al-Awadi,\* Yehia A. Ibrahim and Osman M. E. El-Dusouqui

Department of Chemistry, Kuwait University,  
P.O. Box 5969, Safat 13060, Kuwait

Substitution of (ArNHN=) group into benzotriazol-1-yl ketones led to ca. 10<sup>3</sup>-fold increase in rate of gas-phase pyrolysis, and provided a novel synthetic route to benzimidazole and benzimidazo[1,2-*b*]cinnoline heterocycles.

