

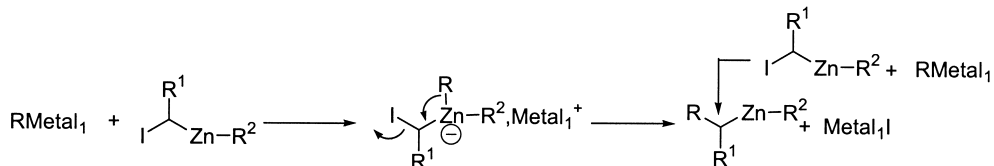
## Graphical abstracts

### Sp<sup>3</sup> organozinc carbenoid homologation in organic synthesis

*Tetrahedron 58 (2002) 9463*

Ilan Marek

*Department of Chemistry and Institute of Catalysis Science and Technology, Technion-Israel Institute of Technology, Technion City, 32000 Haifa, Israel*



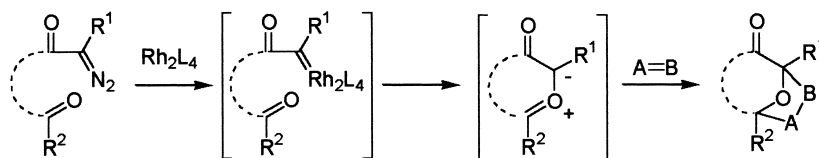
### Tandem cyclization–cycloaddition reactions of rhodium generated carbenoids from $\alpha$ -diazo carbonyl compounds

*Tetrahedron 58 (2002) 9477*

Goverdhan Mehta<sup>a,\*</sup> and Sengodagounder Muthusamy<sup>b,\*</sup>

<sup>a</sup>*Department of Organic Chemistry, Indian Institute of Science, Bangalore 500 012, India*

<sup>b</sup>*Central Salt and Marine Chemicals Research Institute, Bhavnagar 364 002, India*



### Synthesis and spectrokinetic studies of spiro[thioxanthene-naphthopyrans]

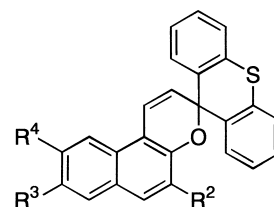
*Tetrahedron 58 (2002) 9505*

Paulo J. Coelho,<sup>a,\*</sup> Luis M. Carvalho,<sup>a</sup> Sofia Abrantes,<sup>a</sup> M. Manuel Oliveira,<sup>a</sup> Ana M. F. Oliveira-Campos,<sup>b</sup> Andre Samat<sup>c</sup> and Robert Guglielmetti<sup>c</sup>

<sup>a</sup>*Departamento de Química, Universidade de Trás-os-Montes e Alto Douro, 5001-911 Vila Real, Portugal*

<sup>b</sup>*Centro de Química, IBQF, Universidade do Minho, 4710 Braga, Portugal*

<sup>c</sup>*LCMOM, UMR 6114 CNRS, Université de la Méditerranée, 13288 Marseille Cedex 9, France*

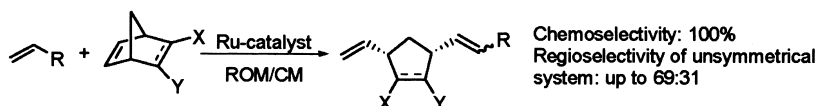


### Ring-opening metathesis–cross-metathesis reactions (ROM–CM) of substituted norbornadienes and norbornenes

*Tetrahedron 58 (2002) 9513*

Peter Mayo and William Tam<sup>\*</sup>

*Department of Chemistry and Biochemistry, Guelph-Waterloo Centre for Graduate Work in Chemistry and Biochemistry, University of Guelph, Guelph, Ont., Canada N1G 2W1*

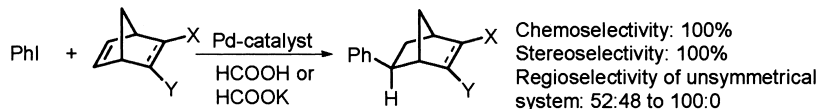


## Palladium-catalyzed hydrophenylation of bicyclic alkenes

Tetrahedron 58 (2002) 9527

Peter Mayo and William Tam\*

Department of Chemistry and Biochemistry, Guelph-Waterloo Centre for Graduate Work in Chemistry and Biochemistry, University of Guelph, Guelph, Ont., Canada N1G 2W1

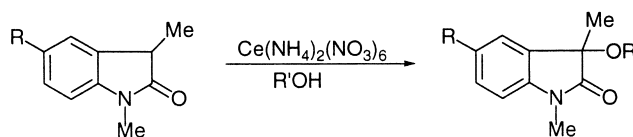


## Reaction of indolin-2-ones with cerium(IV) ammonium nitrate

Tetrahedron 58 (2002) 9541

Carmen Escolano, Lluís Vallverdú and Keith Jones\*

School of Chemical and Pharmaceutical Sciences, Kingston University, Penrhyn Road, Kingston-upon-Thames, Surrey KT1 2EE, UK

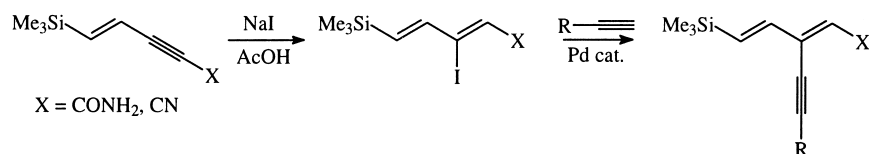


## A convenient synthesis of amides and nitriles with a branched and conjugated dienyne structure

Tetrahedron 58 (2002) 9547

Vito Fiandanese,\* Francesco Babudri, Giuseppe Marchese and Angela Punzi

Dipartimento di Chimica, C.N.R. ICCOM, Università di Bari, via Orabona 4, 70126 Bari, Italy



## EPR observation of cathodically-generated radical anions of colchicidic and isocolchicidic, and a comparison with the radical anions of troponoids. A general rationalization of the spin-density distribution in these systems

Tetrahedron 58 (2002) 9553

Marino Cavazza,<sup>a,\*</sup> Calogero Pinzino,<sup>b</sup> Lucio Pardi,<sup>c</sup> Lamberto Nucci,<sup>a</sup> Francesco Pergola<sup>a</sup> and Francesco Pietra<sup>d</sup>

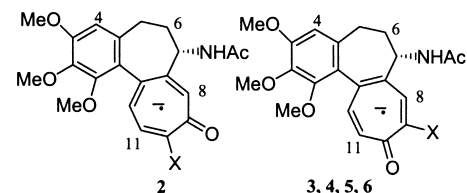
<sup>a</sup>Dipartimento di Chimica e Chimica Industriale, Università di Pisa, via Risorgimento 35, I-56100 Pisa, Italy

<sup>b</sup>Istituto per i Processi Chimico-Fisici (IPCF-CNR), via Moruzzi 1, I-56124 Pisa, Italy

<sup>c</sup>INFN and Dipartimento di Fisica, Università di Pisa, Piazza Torricelli, I-56100 Pisa, Italy

<sup>d</sup>Via della Fratta 9, I-55100 Lucca, Italy

EPR spectra of radical anions of colchicidic (**2**, X=SEt), and isocolchicidic (**3**, X=OEt, **4**, X=SMe, **5**, X=S-n-Bu, **6**, X=SPh) are reported and rationalized.



### Stereoelectronic control of oxazolidine ring-opening: structural and chemical evidences

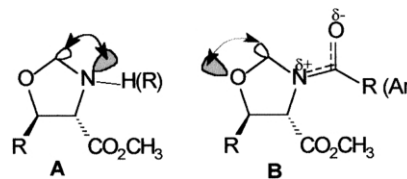
*Tetrahedron* 58 (2002) 9559

Jimmy Sélambarom,<sup>a</sup> Sophie Monge,<sup>a</sup> Francis Carré,<sup>b</sup> Jean Pierre Roque<sup>a</sup> and André A. Pavia<sup>a,\*</sup>

<sup>a</sup>Laboratoire de Chimie Organique Physique, Université de Montpellier II, CC020, Place Eugène Bataillon, F-34095 Montpellier Cedex 05, France

<sup>b</sup>Laboratoire de Chimie Moléculaire et Organisation du Solide, UMR-CNRS 5073, Université de Montpellier II, CC07, Place Eugène Bataillon, F-34095 Montpellier Cedex 05, France

In **A**, *endo*-anomeric effect favours ring-opening, whereas in **B** reverse motion of electrons makes ring-opening considerably more difficult.



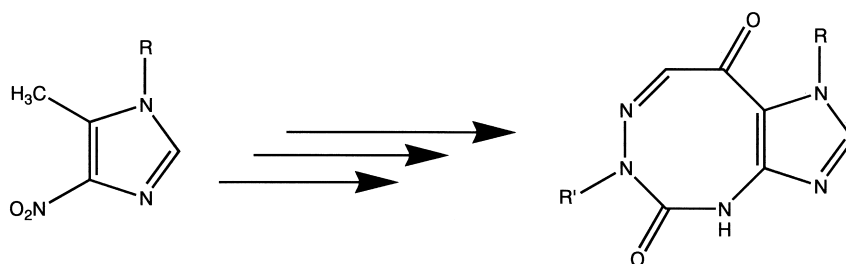
### Synthesis of a novel ring-expanded purine analogue containing a 5:8-fused imidazo[4,5-*e*][1,2,4]triazocine ring system amidst opportunistic rearrangements and ring transformations

*Tetrahedron* 58 (2002) 9567

Friedrick N. Burnett  
and Ramachandra S. Hosmane\*

Laboratory for Drug Design and Synthesis,  
Department of Chemistry and Biochemistry,  
University of Maryland UMBC,  
1000 Hilltop circle, Baltimore County,  
Baltimore, MD 21250, USA

The synthesis of a 5:8-fused imidazo[4,5-*e*][1,2,4]triazocine has been reported.



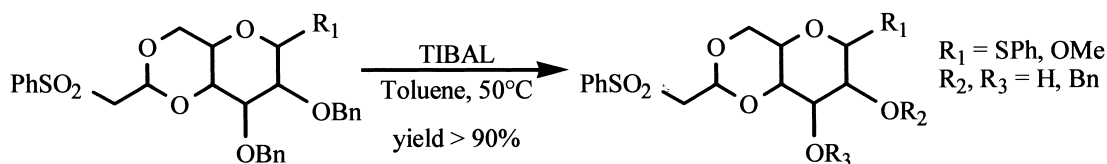
### Regioselective de-*O*-benzylation of phenylsulfonylethylidene (PSE) acetals-containing benzylated monosaccharides using triisobutylaluminum (TIBAL)

*Tetrahedron* 58 (2002) 9579

Béregère Chevalier-du Roizel,<sup>a</sup> Elena Cabianca,<sup>b</sup> Patrick Rollin<sup>b</sup> and Pierre Sinay<sup>a,\*</sup>

<sup>a</sup>Ecole Normale Supérieure, Département de Chimie, associé au CNRS, 24 rue Lhomond, 75231 Paris Cedex 05, France

<sup>b</sup>ICOA-UMR 6005, Université d'Orléans, B.P. 6759, F-45067 Orléans Cedex 02, France



### Gagunins, highly oxygenated diterpenoids from the sponge *Phorbasp. sp.*

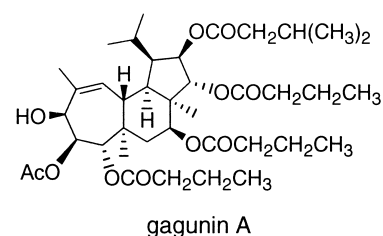
*Tetrahedron* 58 (2002) 9585

Jung-Rae Rho,<sup>a</sup> Hyi-Seung Lee,<sup>a</sup> Chung J. Sim<sup>b</sup> and Jongheon Shin<sup>a,\*</sup>

<sup>a</sup>Marine Natural Products Laboratory, Korea Ocean Research & Development Institute, Ansan P.O. Box 29, Seoul 425-600, South Korea

<sup>b</sup>Department of Biology, Hannam University, Taejeon 300-791, South Korea

Gagunins A–G, seven new diterpenoids of the 10,13-bis-*epi*-homoverrucosane class have been isolated. These compounds exhibited significant cytotoxicity toward the human leukemia cell-line K562.



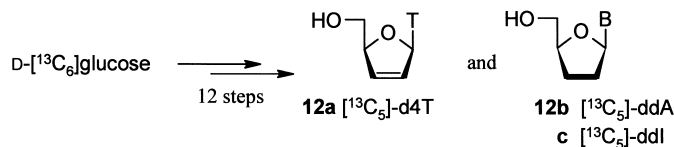
## Chemical synthesis of $^{13}\text{C}$ labeled anti-HIV nucleosides as mass-internal standards

Tetrahedron 58 (2002) 9593

Yoshio Saito,<sup>a</sup> Thomas A. Zevaco<sup>b</sup> and Luigi A. Agrofoglio<sup>a,\*</sup>

<sup>a</sup>Institut de Chimie Organique et Analytique, CNRS UMR 6005, Université d'Orléans, BP 6759, 45100 Orléans, France

<sup>b</sup>Forschungszentrum Karlsruhe GmbH, Inst. Techn. Chemie, Bereich Chemisch-Physikalische Verfahren, D-7601 Karlsruhe, Germany



## Hydroxylation of various molecules including heterocyclic aromatics using recombinant *Escherichia coli* cells expressing modified biphenyl dioxygenase genes

Tetrahedron 58 (2002) 9605

Norihiko Misawa,<sup>a,b,\*</sup> Kazutoshi Shindo,<sup>c</sup> Haruko Takahashi,<sup>d</sup>

Hikaru Suenaga,<sup>c</sup> Kazuo Iguchi,<sup>d</sup> Hiroshi Okazaki,<sup>a</sup> Shigeaki Harayama<sup>b</sup> and Kensuke Furukawa<sup>e</sup>

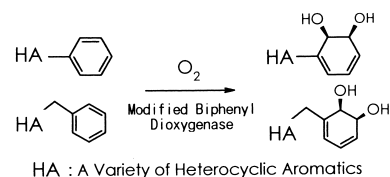
<sup>a</sup>Central Laboratories for Key Technology, Kirin Brewery Co. Ltd., 1-13-5, Fukuura, Kanazawa-ku, Yokohama 236-0004, Japan

<sup>b</sup>Marine Biotechnology Institute, 3-75-1, Heita, Kamaishi-shi 026-0001, Japan

<sup>c</sup>Department of Food and Nutrition, Japan Women's University, 2-8-1, Mejirodai, Bunkyo-ku, Tokyo 112-8681, Japan

<sup>d</sup>Tokyo University of Pharmacy and Life Science, 1432-1, Horinouchi, Hachioji, Tokyo 192-0392, Japan

<sup>e</sup>Graduate School of Bioresource and Bioenvironmental Sciences, Kyushu University, 6-10-1, Hakozaki, Fukuoka 812-8581, Japan



## Enantioselective preparation of 3,4,5-trisubstituted 4,5-dihydroisoxazoles and their stereoselective elaboration of 5-side chain

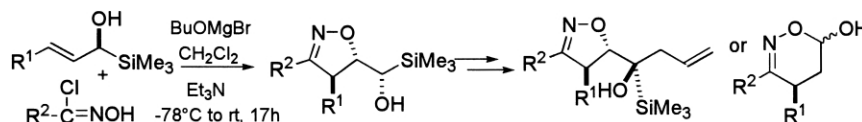
Tetrahedron 58 (2002) 9613

Akio Kamimura,<sup>a,\*</sup> Yukio Kaneko,<sup>a</sup> Ayaki Ohta,<sup>a</sup> Kenji Matsuura,<sup>a</sup> Yasuo Fujimoto,<sup>a</sup> Akikazu Kakehi<sup>b</sup> and Shuji Kanemasa<sup>c</sup>

<sup>a</sup>Department of Applied Chemistry, Faculty of Engineering, Yamaguchi University, Ube 755-8611, Japan

<sup>b</sup>Department of Chemistry and Material Engineering, Faculty of Engineering, Shinshu University, Nagano 380-8553, Japan

<sup>c</sup>Institute of Advanced Material Study, Kyushu University, Kasuga 816, Japan



## Reversal of diastereofacial selectivity in the nucleophilic addition reaction to chiral *N*-sulfinimine and application to the synthesis of indrizidine 223AB

Tetrahedron 58 (2002) 9621

Yuji Koriyama, Akihiro Nozawa, Ryuichiro Hayakawa and Makoto Shimizu<sup>\*</sup>

Department of Chemistry for Materials, Mie University, Tsu, Mie 514-8507, Japan

Diastereoselective addition reaction of ester enolates and Grignard reagents to chiral *N*-sulfinimines was examined. Reversal of the diastereofacial selectivity was observed using the appropriate metal species, solvents, and additives. Application to the synthesis of indrizidine alkaloids was also described.

