Graphical abstracts

Cycloaddition reactions of vinyl oxocarbenium ions

Tetrahedron 59 (2003) 2371

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Dynamic thermodynamic resolution of N-methylpseudo-ephedrine α -bromo esters for asymmetric syntheses of α -hydroxy carboxylic acid derivatives

Tetrahedron 59 (2003) 2397

Jiyoun Nam, Sang-kuk Lee and Yong Sun Park*

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$$A^*O_2C \longrightarrow Br$$

$$R$$

$$(\alpha R)$$

$$O \cdot C$$

$$A^* = (S,S)-N-\text{methylpseudoephedrine}$$

$$PMP = p-\text{methoxyphenyl}$$

$$R$$

$$1. \text{ PMPO}^-\text{Na}^+$$

$$R$$

$$2. \text{ Et}_3\text{N}, \text{MeOH}$$

$$2. \text{ Et}_3\text{N}, \text{MeOH}$$

$$2. \text{ Et}_3\text{N}, \text{MeOH}$$

$$99:1 \text{ er}$$

Intramolecular hydrogen bonding effect on metal ion complexation of homooxacalix[4]arene bearing tetraamides

Kwanghyun No,^{a,*} Jeong Hyeon Lee,^a Seung Hwan Yang,^b Kwan Ho Noh,^b Soon W. Lee^c and Jong Seung Kim^{d,*}

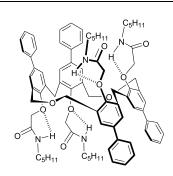
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Tetrahedron 59 (2003) 2403



Calixarene-based metalloporphyrins: molecular tweezers for complexation of DABCO

Tetrahedron 59 (2003) 2409

Miroslav Dudič, a Pavel Lhoták, a,* Hana Petříčková, Ivan Stibor, Kamil Langc,* and Jan Sýkorad

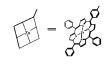
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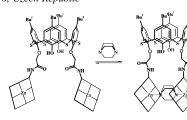
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The formation of host—guest complexes between zinc porphyrins covalently attached to (thia)calixarenes and a small bidentate ligand (DABCO) was investigated. Complexation strictly depends on the calixarene (thia vs classical) used as a scaffold in the receptors.





Catalysis by an ionic liquid: efficient conjugate addition of thiols to electron deficient alkenes catalyzed by molten tetrabutylammonium bromide under solvent-free conditions

Tetrahedron 59 (2003) 2417

Brindaban C. Ranu,* Suvendu S. Dey and Alakananda Hajra

Department of Organic Chemistry, Indian Association for the Cultivation of Science, Jadavpur, Calcutta 700032, India

RSH +
$$\sqrt{\frac{n_{-}Bu_{4}NBr}{100 - 105^{0}C}}$$
 Y = CN, CO₂R, NO₂

Synthesis of bridged sugar amino acids: a new entry into conformationally locked δ - and ϵ -amino acids

Tetrahedron 59 (2003) 2423

Renate M. van Well, Marlies E. A. Meijer, Herman S. Overkleeft, Jacques H. van Boom, Gijsbert A. van der Marel* and Mark Overhand*

Gorlaeus Laboratories, Leiden Institute of Chemistry, Leiden University, P.O. Box 9502, 2300 RA Leiden, The Netherlands

Calcium trifluoromethanesulfonate-catalysed aminolysis of epoxides

Tetrahedron 59 (2003) 2435

Ivica Cepanec, a,* Mladen Litvić, a Hrvoje Mikuldaš, a Anamarija Bartolinčića and Vladimir Vinkovićb

^aDepartment for Development of Chemical Synthesis, BELUPO Pharmaceuticals and Cosmetics Ltd, Radnicka c. 224, 10000 Zagreb, Croatia ^bInstitute Ruđer Bošković, Bijenicka c. 54, 10000 Zagreb, Croatia

The novel method for aminolysis of epoxides catalysed by calcium trifluoromethanesulfonate was described (20 examples; yields 37–99%).

Addition of silyloxydienes to 2,6-dibromo-1,4-benzoquinone: an approach to highly oxygenated bromonaphthoquinones for the synthesis of thysanone

Tetrahedron 59 (2003) 2441

David Barker, a Margaret A. Brimble, b,* Peter Doa and Peter Turnera

^aSchool of Chemistry, F11, University of Sydney, Camperdown, NSW 2006, Australia ^bDepartment of Chemistry, University of Auckland, 23 Symonds St., Auckland, New Zealand

$$\begin{array}{c} \text{Me}_3\text{SiO} \\ \text{Me}_3\text{SiO} \\ \end{array} \\ \begin{array}{c} \text{Me}_3\text{SiO} \\ \end{array} \\ \begin{array}{c} \text{HO} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OH} \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{OMe} \\ \end{array} \\ \end{array}$$

Highly diastereoselective intramolecular Diels-Alder reaction of chiral silatrienes

Tetrahedron 59 (2003) 2451

Paulo J. Coelho* and Luis Blanco

Laboratoire des Carbocyles (Associé au CNRS), Institut de Chimie Moléculaire d'Orsay, Bât 420, Université de Paris-Sud, 91405 Orsay France

$$\begin{array}{c|c} R \\ Si \\ O \\ \hline \\ CH_2Cl_2 \end{array} \begin{array}{c} R \\ Me - Si \\ O \\ H_{4aI} \\ H_{8a} \\ \end{array}$$

Efficient synthesis of (R)- and (S)-3-octanol, (R)-2-dodecanol, (R)-2-methyl-4-heptanol and (R)-2-methyl-4-octanol:

Tetrahedron 59 (2003) 2457

the pheromones of Myrmica scabrinodis, Crematogaster castanea, C. liengmei, C. auberti and Metamasius hemipterus

Byung Tae Cho* and Dong Jun Kim

Department of Chemistry, Hallym University, Chunchon 200702, South Korea

 $R = n-C_5H_{11}$, $n-C_{10}H_{21}$ or *i*-Bu R' = H. Me or Et

Preparation of macrocyclic and 'C-clamp' dicarboxylate compounds

Tetrahedron 59 (2003) 2463

Joshua R. Farrell, Dylan Stiles, Weiming Bu and Stephen J. Lippard* Department of Chemistry, Massachusetts Institute of Technology, Room 18-498, Cambridge, MA 02139, USA

Pestacin: a 1,3-dihydro isobenzofuran from *Pestalotiopsis microspora* possessing antioxidant and antimycotic activities

Tetrahedron 59 (2003) 2471

James K. Harper, Atta M. Arif, Eugene J. Ford, Gary A. Strobel, John A. Porco, Jr., David P. Tomer, Kim L. Oneill, Elizabeth M. Heider and David M. Grant Heider

^aDepartment of Chemistry, University of Utah, 315 S. 1400 E., Salt Lake City, UT 84112, USA,

^bDepartment of Plant Sciences, Montana State University,

Bozeman, MT 59717, USA

^cDepartment of Chemistry and Center for Streamlined Synthesis, Boston University, 590 Commonwealth Avenue, Boston, MA 02215, USA

^dDepartment of Microbiology, Brigham Young University, Provo, UT 84602, USA

^eDepartment of Physics and Astronomy, Tufts University, Medford, MA 02155, USA

Pyridazine derivatives. Part 33: Sonogashira approaches in the synthesis of 5-substituted-6-phenyl-3(2H)-pyridazinones

Tetrahedron 59 (2003) 2477

Tetrahedron 59 (2003) 2485

Alberto Coelho, Eddy Sotelo and Enrique Raviña*

Departamento de Química Orgánica, Laboratorio de Química Farmacéutica, Facultad de Farmacia, Universidad de Santiago de Compostela, Santiago de Compostela 15782, Spain

Several 6-phenyl-3(2*H*)-pyridazinones bearing different alkynyl groups at position 5 have been prepared by a palladium-catalysed Sonogashira cross-coupling reaction. An interesting base-promoted electronically permitted isomerization has been observed during the coupling of 1-phenyl-2-propyn-1-ol. This rearrangement afforded the *E*-chalcone 6 in excellent yield.

Radical cyclization; towards the syntheses of tetranor metabolites of 15- F_{2t} -isoprostane

Thierry Durand,* Olivier Henry, Alexandre Guy, Arlène Roland, Jean-Pierre Vidal and Jean-Claude Rossi

Faculté de Pharmacie, Université de Montpellier I., UMR CNRS 5074, 15, Av. Charles Flahault, BP 14491, F34093 Montpellier cedex 05, France

HO OH OH HO CO₂Me

HO CO₂Me

HO CO₂Me

$$CO_2$$
Me

 CO_2 Me

 CO_2 Me

 CO_2 Me

Improved and new syntheses of potential molecular electronics devices

Tetrahedron 59 (2003) 2497

David W. Price, Jr., Shawn M. Dirk, Francisco Maya and James M. Tour*

Department of Chemistry and Center for Nanoscale Science and Technology, MS 222, Rice University, 6100 Main St., Houston, TX 77005, USA

$$SAC$$
 $TBAF$
 $THF, 73\%$
 SAC

Practical and convenient modifications of the A,C-secondary hydroxyl face of cyclodextrins

Tetrahedron 59 (2003) 2519

Katsunori Teranishi

Faculty of Bioresources, Mie University, Kamihama 1515, Tsu, Mie 514-8507, Japan

Synthesis of new calix[4] arenes containing nucleoside bases

Tetrahedron 59 (2003) 2539

Cheng-Chu Zeng, Qi-Yu Zheng, Ya-Ling Tang and Zhi-Tang Huang*

Center for Molecular Science, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100080, People's Republic of China

A family of novel calix[4] arene derivatives containing nucleoside base A or T were synthesized.

7-Polyfluoroalkylnorkhellins: synthesis and reactions with alkyl mercaptoacetates

Tetrahedron 59 (2003) 2549

Vyacheslav Ya. Sosnovskikh, a,* Boris I. Usacheva and Ivan I. Vorontsovb

^aDepartment of Chemistry, Ural State University, Lenina 51, 620083 Ekaterinburg, Russian Federation

^bA. N. Nesmeyanov Institute of Organoelement Compounds, Russian Academy of Sciences, 117813 Moscow, Russian Federation

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ &$$

Synthesis of polyfluoroalkyl-γ-lactones from polyfluoroalkyl halides and 4-pentenoic acids

Tetrahedron 59 (2003) 2555

Xiaowei Zou, a Fanhong Wu, a.* Yongjia Shen, a Sheng Xu and Weiyuan Huang b

^aCollege of Chemistry and Pharmaceutics, East China University of Science and Technology, Shanghai 200237, People's Republic of China ^bShanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, People's Republic of China

$$R_{F}I$$
 + R^{3} R^{4} R^{2} R^{4} R^{2} R^{4} R^{3} R^{1} R^{2} R^{4} R^{3} R^{1} R^{2} R^{4} R^{3} R^{4} R^{3} R^{4} R^{3} R^{4} R^{5} R^{5} R^{6} R^{7} R

A quantum chemical study of tricyclo[$3.2.0.0^{1,3}$]heptane: a new hypothetical molecule with unusual spatial structure.

Tetrahedron 59 (2003) 2561

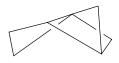
Similarities and differences with syn- and anti-tricyclo[3.2.0.0^{2,4}]heptanes

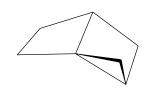
H. Dodziuk, a,* G. Dolgonosa and J. Leszczynskib*

^aInstitute of Physical Chemistry, Polish Academy of Sciences, Kasprzaka 44, 01-224 Warsaw, Poland

bComputational Center for Molecular Structure and Interactions, Department of Chemistry, Jackson State University, Jackson, MS 39217, USA

According to MP2/cc-pVTZ calculations, hypothetical tricyclo[3.2.0.0^{1,3}]heptane has a carbon atom with configuration intermediate between tetrahedral and pyramidal. The comparison of its energy with that of the known syn- and anti-tricyclo[3.2.0.0^{2,4}]heptanes indicates that it should be a plausible synthetic target.





Synthesis and photochromic behaviour of new methyl

Tetrahedron 59 (2003) 2567

induced linear and angular thieno-2*H***-chromenes**Maria-João R. P. Queiroz, ^{a,*} Paula M. S. Plasencia, ^a Roger Dubest, ^b Jean Aubard and Robert Guglielmetti^c

^aDepartamento de Química, Universidade do Minho, 4710-057 Braga, Portugal ^bITODYS, UMR 7086 CNRS, Université Denis Diderot Paris 7, 75005 Paris, France

^cLCMOM, UMR 6114 CNRS, Université de la Méditerranée, 13288 Marseille Cedex 9, France

$$R^{1} = H \text{ or OMe}$$

$$R^{1} = H \text{ or Me}$$

$$R^{2} = H \text{ or Me}$$

$$R^{1}$$