

Graphical abstracts

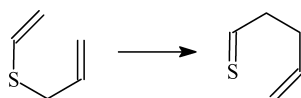
The thio-Claisen rearrangement 1980–2001

Krishna C. Majumdar,* Subhojit Ghosh and Manish Ghosh

Department of Chemistry, University of Kalyani, Kalyani, West Bengal 741 235, India

Various aspects of the thio-Claisen rearrangement along with its synthetic utility are reviewed. The report contains 85 references.

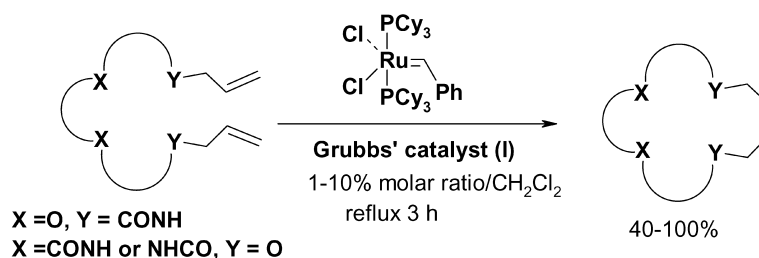
Tetrahedron 59 (2003) 7251



Efficient synthesis of 16–28 membered macrocyclic crown amides via ring closing metathesis

Yehia A. Ibrahim,* Haider Behbehani, Maher R. Ibrahim and Rana N. Malhas

Department of Chemistry, Faculty of Science, Kuwait University, PO Box 5969, Safat 13060, Kuwait

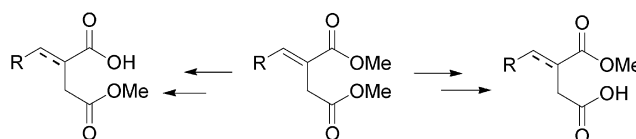


Tetrahedron 59 (2003) 7273

Conjugate addition of nitroalkanes to dimethyl maleate. Regioselective formation of both monoesters of 2-alkylsuccinic acids

Roberto Ballini,* Giovanna Bosica, Alessandro Palmieri Marino Petrini* and Claudio Pierantozzi

Dipartimento di Scienze Chimiche, Università di Camerino, via S. Agostino, 1. I-62032 Camerino, Italy

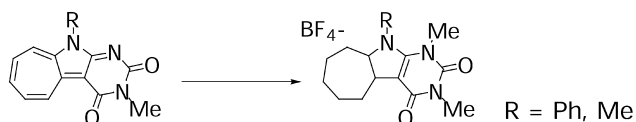


Tetrahedron 59 (2003) 7283

Synthesis, properties, and oxidizing function of 6-substituted 7,9-dimethylcyclohepta[b]pyrimido[5,4-d]pyrrole-8(7H),10(9H)-dionylum tetrafluoroborates

Shin-ichi Naya and Makoto Nitta*

Department of Chemistry, School of Science and Engineering, Waseda University, Shinjuku-ku, Tokyo 169-8555, Japan



Tetrahedron 59 (2003) 7291

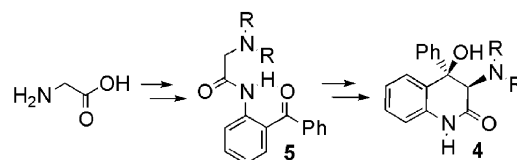
Highly diastereoselective synthesis of new, carbostyryl-based type of conformationally-constrained β -phenylserines

Tetrahedron 59 (2003) 7301

Hisanori Ueki, Trevor K. Ellis, Masood A. Khan and Vadim A. Soloshonok*

Department of Chemistry and Biochemistry, University of Oklahoma, 620 Parrington Oval, Room 208, Norman, OK 73019, USA

Readily available compounds **5** under basic conditions easily undergo highly diastereoselective cyclization, affording practical access to the conformationally constrained phenylserine derivatives **4**. High chemical yields, robust, virtually complete diastereoselectivity combined with the operational convenience of the experimental procedures render this method worth immediate use for preparation of these distereomerically pure derivatives.

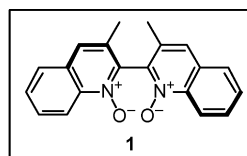
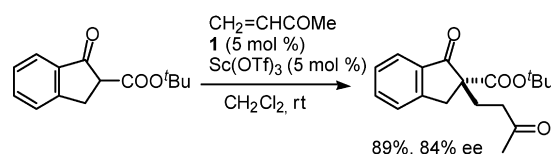


Enantioselective Michael additions of β -keto esters to α,β -unsaturated carbonyl compounds catalyzed by a chiral biquinoline N,N' -dioxide–scandium trifluoromethanesulfonate complex

Tetrahedron 59 (2003) 7307

Makoto Nakajima,* Satoshi Yamamoto, Yukiko Yamaguchi, Seiichi Nakamura and Shunichi Hashimoto

Graduate School of Pharmaceutical Sciences, Hokkaido University, Kita-12 Nishi-6, Kita-ku, Sapporo 060-0812, Japan



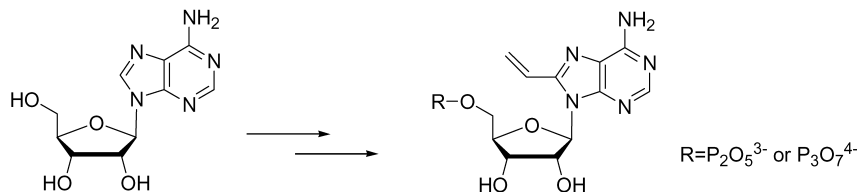
Synthesis of 8-vinyladenosine 5'-di- and 5'-triphosphate: evaluation of the diphosphate compound on ribonucleotide reductase

Tetrahedron 59 (2003) 7315

Pascal Lang,^a Catherine Gerez,^b Denis Tritsch,^a Marc Fontecave,^b Jean-François Biellmann^a and Alain Burger^{a,*}

^aLaboratoire de Chimie Organique Biologique associé au CNRS (UMR 7509), Faculté de Chimie, Université Louis Pasteur, 1 rue Blaise Pascal, 67008 Strasbourg, France

^bLaboratoire de Chimie et de Biochimie des Centres Redox Biologiques, DRDC-CB, CEA/CNRS/Université Joseph Fourier, (UMR 5047), 17 rue des Martyrs, 38054 Grenoble Cedex 09, France

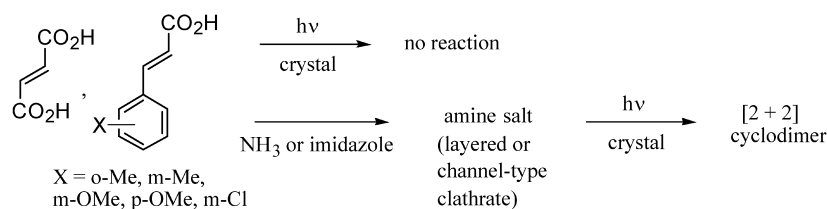


Coerced photodimerization reaction in the solid state through amine salt formation

Tetrahedron 59 (2003) 7323

Yoshikatsu Ito* Tetsuya Kitada and Masahiro Horiguchi

Department of Synthetic Chemistry and Biological Chemistry, Graduate School of Engineering, Kyoto University, Katsura, Kyoto 6158510, Japan

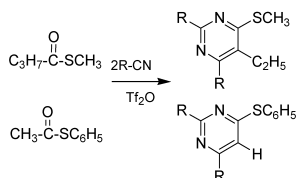


The reaction of thioesters with nitriles. A new synthetic approach to the preparation of substituted 4-alkylthio- and 4-arylthiopyrimidine derivatives

Tetrahedron 59 (2003) 7331

Antonio Herrera, Roberto Martínez-Alvarez* and Pedro Ramiro

Departamento de Química Orgánica, Facultad de Ciencias Químicas, Universidad Complutense, E-28040 Madrid, Spain



Five novel norcembranoids from *Sinularia leptoclados* and *S. parva*

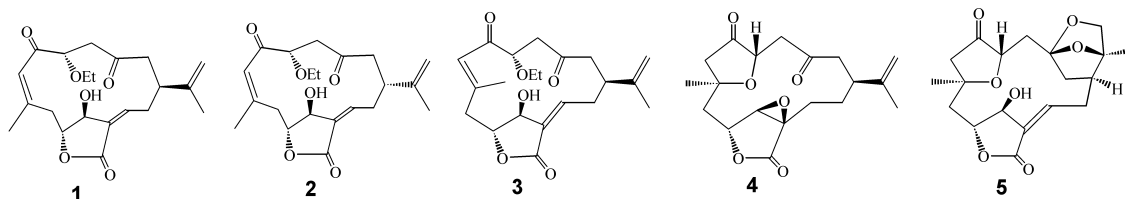
Tetrahedron 59 (2003) 7337

Atallah F. Ahmed,^{a,b} Ru-Ting Shiue,^a Guey-Horng Wang,^a Chang-Feng Dai,^c Yao-Haur Kuo^d and Jyh-Horng Sheu^{a,*}

^aDepartment of Marine Resources, National Sun Yat-Sen University, Kaohsiung 804, Taiwan, ROC

^bDepartment of Pharmacognosy, Faculty of Pharmacy, Mansoura University, Mansoura 35516, Egypt

^cInstitute of Oceanography, National Taiwan University, Taipei 106, Taiwan, ROC

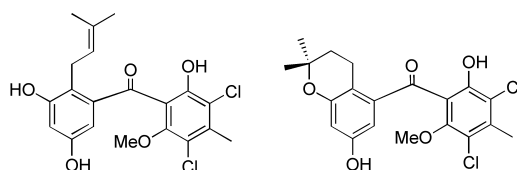


Synthetic analogues of the antibiotic pestalone

Tetrahedron 59 (2003) 7345

Florian Kaiser and Hans-Günther Schmalz*

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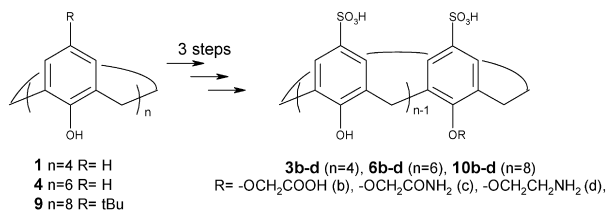


Synthesis and complexation properties towards amino acids of mono-substituted *p*-sulphonato-calix-[*n*]-arenes

Tetrahedron 59 (2003) 7357

Eric Da Silva and Anthony W. Coleman*

Institut de Biologie et Chimie des Proteines, CNRS UMR5086, 7 Passage du Vercors, Lyon F69367, France



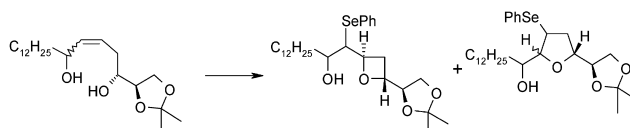
Electrophilic selenocyclization in 2-ene-1,5-diol systems: unexpected oxetane vs. tetrahydrofuran formation

Tetrahedron 59 (2003) 7365

Pierre Van de Weghe, Stéphane Bourg and Jacques Eustache*

Laboratoire de Chimie Organique et Bioorganique associé au CNRS, Université de Haute-Alsace, Ecole Nationale Supérieure de Chimie de Mulhouse 3, rue Alfred Werner, F-68093 Mulhouse Cedex, France

Electrophile-induced cyclization of (*E*)- and (*Z*)-2-ene-1,5-diols to tetrahydrofurans and oxetanes is described. Significant differences between the present report and previous work have been noted. A tentative model is proposed.



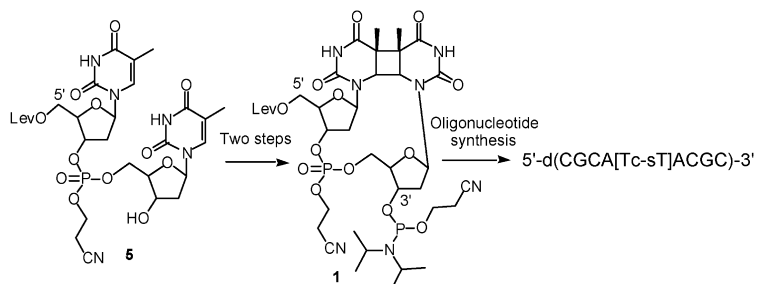
Facile synthesis of a *cis-syn* thymine dimer building block and its incorporation into oligodeoxynucleotides

Tetrahedron 59 (2003) 7377

Javier Ulises Ortiz Mayo,^a Martial Thomas,^a
Carole Saintomé^b and Pascale Clivio^{a,*}

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^b*Laboratoire de Photobiologie Moléculaire, Institut Jacques Monod, CNRS, Université Paris 6 et Paris 7, 2 Place Jussieu, 75251 Paris Cedex 05, France*

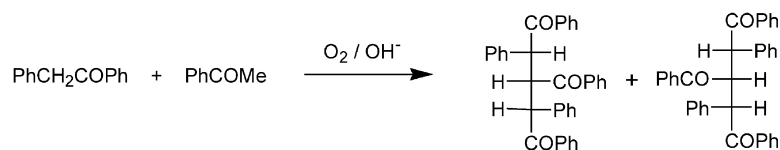


3-Benzoyl-1,2,4,5-tetraphenylpentane-1.5-dione. A molecular paddlewheel

Tetrahedron 59 (2003) 7385

Brian W. Freer, R. Alan Howie, Oliver C. Musgrave* and Janet M. S. Skakle

Chemistry Department, The University, Old Aberdeen, Scotland AB24 3UE, UK



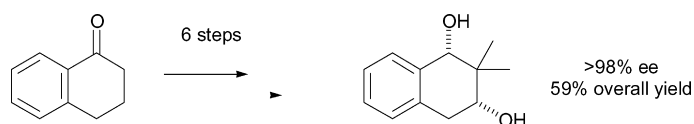
A new chiral diol derived from tetralone for the complexation of Lewis acids

Tetrahedron 59 (2003) 7389

Michael P. Coogan,^a Robert Haigh,^a Adrian Hall,^b Lisa D. Harris,^a David E. Hibbs,^a Robert L. Jenkins,^a Claire L. Jones^a and Nicholas C. O. Tomkinson^{a,*}

^a*Department of Chemistry, Cardiff University, PO Box 912, Cardiff, CF10 3TB, Wales, UK*

^b*Neurology Medicinal Chemistry III, GlaxoSmithKline R&D, The Frythe, Welwyn, Hertfordshire, AL6 9AR, UK*

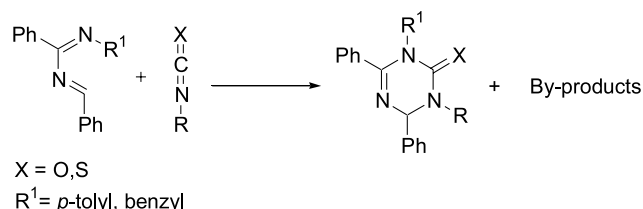


Cycloaddition reactions of 2,4-diphenyl-1,3-diazabuta-1,3-dienes with isocyanates and isothiocyanates

Giorgio Abbiati*, Alessandro Cirrincione de Carvalho and Elisabetta Rossi

Istituto di Chimica Organica "Alessandro Marchesini", Università degli Studi di Milano, Via Venezian 21, I-20133 Milan, Italy

Tetrahedron 59 (2003) 7397



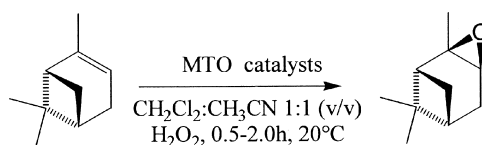
Selective epoxidation of monoterpenes with H₂O₂ and polymer-supported methylrheniumtrioxide systems

Raffaele Saladino,^{a,b,*} Veronica Neri,^a Anna Rita Pelliccia^a and Enrico Mincione^a

^aDipartimento di Agrobiologia ed Agrochimica, Università della Tuscia, Via S. Camillo de Lellis s.n.c., 01100 Viterbo, Italy

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Tetrahedron 59 (2003) 7403



Synthesis of novel taxoid analogue containing sulfur group on C-13 side-chain: 2'-deoxy-2'-*epi*-mercaptopaclitaxel

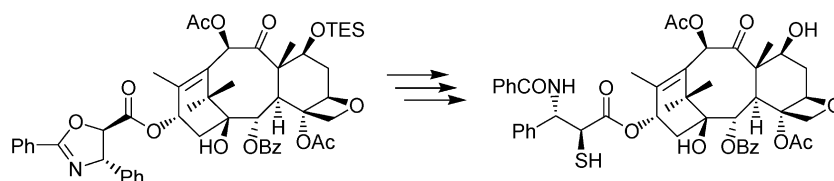
Xin Qi,^{a,b} Sang-Hyeup Lee,^b Juyoung Yoon^{c,*} and Yoon-Sik Lee^{b,*}

^aSchool of Chemical Engineering, Dalian University of Technology, Dalian 116012, People's Republic of China

^bSchool of Chemical Engineering, Seoul National University, Seoul 151-742, South Korea

^cDepartment of Chemistry, Ewha Womans University, 11-1 Daehyun-Dong, Seodaemun-Ku, Seoul 120-750, South Korea

Tetrahedron 59 (2003) 7409

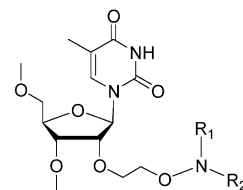


Synthesis of 2'-O-[2-[(*N,N*-dialkylamino)oxy]ethyl]-modified oligonucleotides: hybridization affinity, resistance to nuclease, and protein binding characteristics

Thazha P. Prakash, Andrew M. Kawasaki, Elena A. Lesnik, Namir Sioufi and Muthiah Manoharan*

Department of Medicinal Chemistry, Isis Pharmaceuticals, Inc., 2280 Faraday Ave, Carlsbad, CA 92008, USA

Tetrahedron 59 (2003) 7413



2'-O-AOE: R₁, R₂ = -H
2'-O-DMAOE: R₁, R₂ = -CH₃
2'-O-DEAOE: R₁, R₂ = -CH₂-CH₃
2'-O-IPMAOE: R₁ = -CH₃, R₂ = -CH(CH₃)₂
2'-O-AEMAOE: R₁ = -CH₃, R₂ = -CH₂CH₂NH₂

Self-aggregation of synthetic zinc 2¹-hydroxy-12¹/13¹-oxo-porphyrins

Hitoshi Tamiaki,* Satoshi Kimura and Tadashi Kimura

Department of Bioscience and Biotechnology, Faculty of Science and Engineering, Ritsumeikan University, Kusatsu, Shiga 525-8577, Japan

One regioisomer of synthetic homologs ($R^1=R^2=H$) self-aggregated in 1–100% (v/v) CH_2Cl_2 and hexane to form large oligomers with red-shifted and broadened visible absorption bands.

Tetrahedron 59 (2003) 7423

