

Graphical abstracts

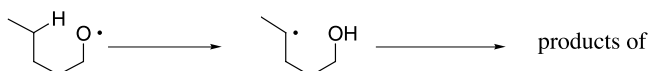
Reactions of δ -carbon radicals generated by 1,5-hydrogen transfer to alkoxy radicals

Tetrahedron 59 (2003) 8073

Živorad Čeković

Faculty of Chemistry, University of Belgrade, Studentski trg 16, P.O. Box 158, 11000 Belgrade, Serbia&Montenegro

Free radical reactions on the non-activated δ -carbon atom. The report contains 72 references.



[-atom or group transfer]
 -addition
 -cyclisation
 -electron transfer
 -ligand transfer
 -coupling reaction
 -reaction with CO

A convergent synthesis of (17*R*,5*Z*,8*Z*,11*Z*,14*Z*)-17-hydroxy-eicosa-5,8,11,14-tetraenoic acid analogues and their tritiated derivatives

Tetrahedron 59 (2003) 8091

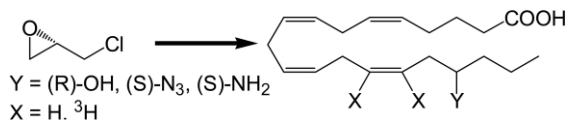
Igor V. Ivanov,^{a,b,*} Stepan G. Romanov,^a Valery P. Shevchenko,^c Elena A. Rozhkova,^d Mikhail A. Maslov,^a Nataliya V. Groza,^a Nikolai F. Myasoedov,^c Hartmut Kuhn^b and Galina I. Myagkova^a

^aM.V. Lomonosov State Academy of Fine Chemical Technology, Chemistry and Technology of Fine Organic Compounds, Vernadskogo Pr. 86, Moscow 119571, Russian Federation

^bInstitute of Biochemistry, University Clinics Charité, Humboldt University, Berlin D-10117, Germany

^cInstitute of Molecular Genetics, Kurchatov Square 2, Moscow 123182, Russian Federation

^dDepartment of Chemistry, Princeton University, Princeton, NJ 08544, USA



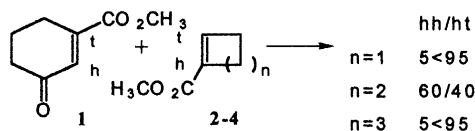
Transition state analysis on regioselectivity in [2+2] photocycloaddition reactions of substituted 2-cyclohexenone with cycloalkenecarboxylates

Tetrahedron 59 (2003) 8099

Huda Izzat Omar,^a Yuka Odo,^a Yasuhiro Shigemitsu,^b Tetsuro Shimo^a and Kenichi Somekawa^{a,*}

^aDepartment of Applied Chemistry and Chemical Engineering, Faculty of Engineering, Kagoshima University, 1-21-40 Kagoshima, Korimoto, Kagoshima 890-0065, Japan

^bIndustrial Technology Center of Nagasaki, Ikeda, Omura, Nagasaki 856-0026, Japan



An in depth study of the formation of new tetrathiafulvalene derivatives from 1,8-diketones

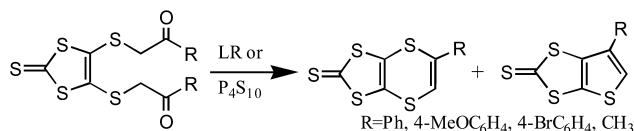
Tetrahedron 59 (2003) 8107

Figen Turksoy,^a John D. Wallis,^b Umit Tunca^a and Turan Ozturk^{c,*}

^aDepartment of Chemistry, Art and Science Faculty, Istanbul Technical University, Maslak, Istanbul, Turkey

^bDepartment of Chemistry, The Nottingham Trent University, Clifton Lane, Nottingham NG11 8NS, UK

^cDepartment of Chemistry, Organic Chemistry, Middle East Technical University, Ankara, Turkey



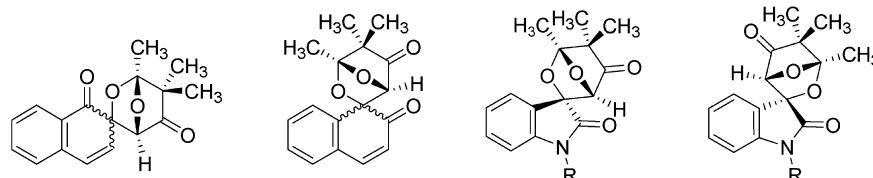
A facile regioselective construction of spiro epoxy-bridged tetrahydropyranone frameworks

Tetrahedron 59 (2003) 8117

S. Muthusamy,^{a,*} S. Arulananda Babu^a and M. Nethaji^b

^aDepartment of Organic Chemistry, Central Salt and Marine Chemicals Research Institute, GB Marg, Bhavnagar 364 002, India

^bDepartment of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore 560 012, India

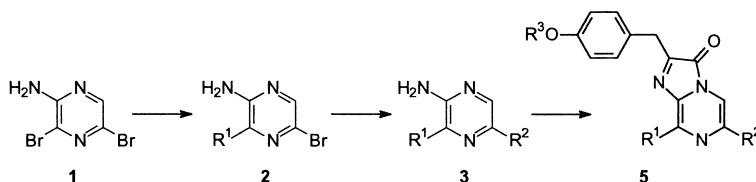


Synthesis of 3,7-dihydroimidazo[1,2a]pyrazine-3-ones and their chemiluminescent properties

Tetrahedron 59 (2003) 8129

Maciej Adamczyk,* Srinivasa Rao Akireddy, Donald D. Johnson, Phillip G. Mattingly, You Pan and Rajarathnam E. Reddy

Department of Chemistry (09MD, Bldg AP20), Diagnostics Division, Abbott Laboratories, 100 Abbott Park Road, Abbott Park, IL 60064-6016, USA



Regioselective and diastereoselective synthesis of highly substituted cyclopentanes

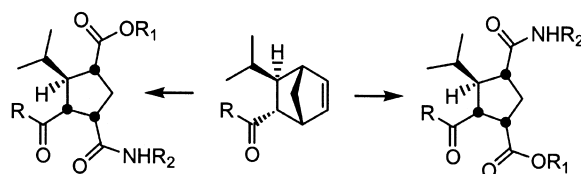
Tetrahedron 59 (2003) 8143

Robert D. Hubbard^a and Benjamin L. Miller^{b,c,*}

^aDepartment of Chemistry, University of Rochester, Rochester, NY 14627, USA

^bDepartment of Dermatology, University of Rochester, Rochester, NY 14642, USA

^cCenter for Future Health, University of Rochester, Rochester, NY 14642, USA

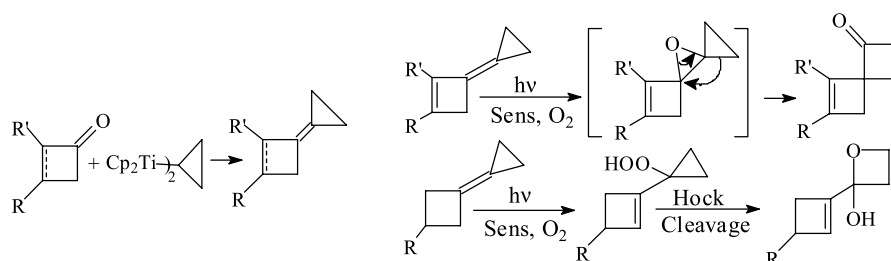


Synthesis and photosensitized oxygenation of cyclopropylidenecyclobutenes

Tetrahedron 59 (2003) 8153

Ofer Sharon and Aryeh A. Frimer*

Department of Chemistry,
Bar-Ilan University, Ramat Gan 52900,
Israel

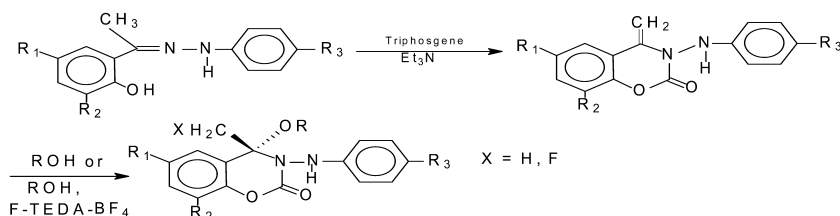


Synthesis of 4-alkoxy-4-methyl- and 4-alkoxy-4-fluoromethyl-1,3-benzoxazinones

Hamad Z. Alkhatlan

Department of Chemistry, King Saud University, P.O. Box 2455, Riyadh 11451, Saudi Arabia

Tetrahedron 59 (2003) 8163

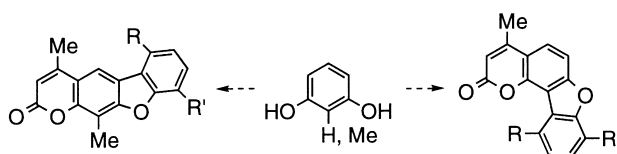


Synthesis and convenient functionalisation of pyridazino-furocoumarins: nitrogenated isosters of potent DNA inhibitors

José Carlos González-Gómez, Lourdes Santana and Eugenio Uriarte*

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

Tetrahedron 59 (2003) 8171



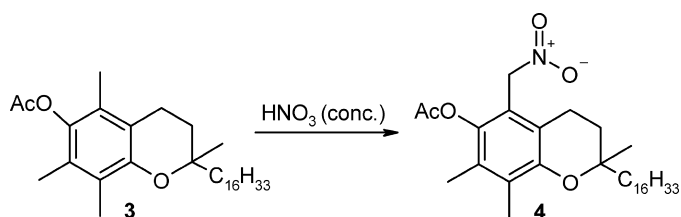
Novel tocopheryl compounds. Part 16: Nitration of α -tocopheryl acetate—a mechanistic study

Christian Adewöhler, Thomas Rosenau* and Paul Kosma

Institute of Chemistry, University of Agricultural Sciences, Muthgasse 18, A-1190 Vienna, Austria

The nitration of α -tocopheryl acetate (**3**) affords 5-nitromethyl- γ -tocopheryl acetate (**4**) in a non-radical reaction via a benzylic cation (**8**) that is stabilized by the acetyl group, which remains bound to the tocopheryl moiety throughout the reaction.

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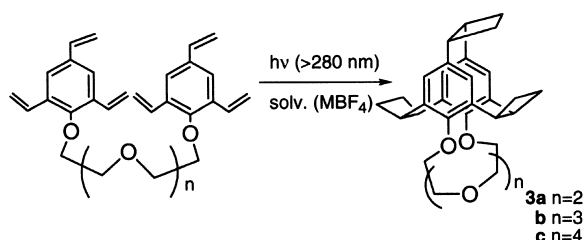


Synthesis and complexing property of four-bridged crownpaddlanes

Seiichi Inokuma, Tomohiro Sakaizawa, Takashi Funaki, Tomomi Yonekura, Hiroko Satoh, Shin-ichi Kondo, Yosuke Nakamura and Jun Nishimura*

Department of Nano-material Systems, Graduate School of Engineering, Gunma University, 1-5-1 Tenjin-cho, Kiryu 376-8515, Japan

Tetrahedron 59 (2003) 8183



Synthesis of 2-aminoazulene derivatives. Nucleophilic and palladium-catalyzed amination of 2-substituted azulene

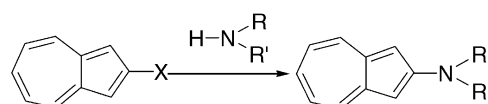
Tetrahedron 59 (2003) 8191

Ryuji Yokoyama,^a Shunji Ito,^a Tetsuo Okujima,^a Takahiro Kubo,^a Masafumi Yasunami,^b Akio Tajiri^c and Noboru Morita^{a,*}

^aDepartment of Chemistry, Graduate School of Science, Tohoku University, Aramaki Aza Aoba, Sendai 980-8578, Japan

^bDepartment of Materials Science and Engineering, College of Engineering, Nihon University, Koriyama 963-1165, Japan

^cDepartment of Materials Science, Faculty of Science and Technology, Hirosaki University, Hirosaki 036-8561, Japan



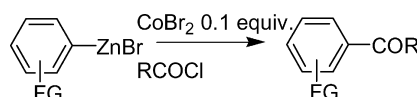
X=OH, OMs, OTs, OTf, Br

A convenient method for the preparation of aromatic ketones from acyl chlorides and arylzinc bromides using a cobalt catalysis

Tetrahedron 59 (2003) 8199

Hyacinthe Fillon, Corinne Gosmini* and Jacques Périchon

Laboratoire d'Electrochimie, Catalyse et Synthèse Organique, UMR 7582, Université Paris 12-C.N.R.S, 2, Rue Henri Dunant, F-94320 Thiais, France

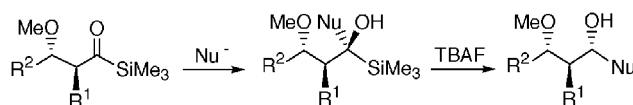


Diastereoselective alkylation and reduction of β -alkoxyacylsilanes: stereoselective construction of three contiguous stereogenic centers

Tetrahedron 59 (2003) 8203

Mitsunori Honda,* Naoto Ohkura, Shin-ichi Saisyō, Masahito Segi and Tadashi Nakajima

Department of Chemistry and Chemical Engineering, Faculty of Engineering, Kanazawa University, 2-40-20 Kodatsuno, Kanazawa 920-8667, Japan



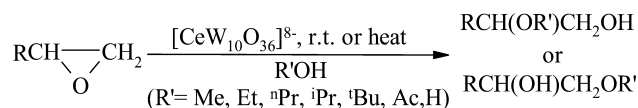
Efficient regio- and stereoselective ring opening of epoxides with alcohols, acetic acid and water catalyzed by ammonium decatungstocerate(IV)

Tetrahedron 59 (2003) 8213

Valiollah Mirkhani,^{a,*} Shahrām Tangestaninejad,^a Bahram Yadollahi^b and Ladan Alipanah^a

^aChemistry Department, Isfahan University, Isfahan 81746-73441, Iran

^bInstitute for Advanced Studies in Basic Sciences (IASBS), Gava Zang, Zanjan 45138-79368, Iran



Chiral base promoted enantioselective rearrangement of organophosphorus epoxides

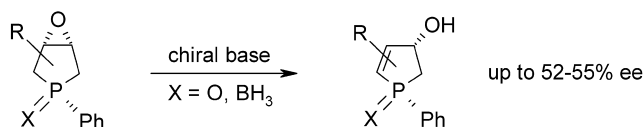
Tetrahedron 59 (2003) 8219

Zbigniew Pakulski,^a Marek Koprowski^b and K. Michał Pietrusiewicz^{a,c,*}

^aInstitute of Organic Chemistry, Polish Academy of Sciences, Kasprzaka 44/52, 01-224 Warszawa, Poland

^bCentre of Molecular and Macromolecular Studies, Polish Academy of Sciences, Sienkiewicza 112, 90-363 Łódź, Poland

^cDepartment of Organic Chemistry, Maria Curie-Skłodowska University, Gliniana 33, 20-614 Lublin, Poland



Three novel nortriterpenoids from *Notochaete hamosa* Benth. (Labiatae)

Tetrahedron 59 (2003) 8227

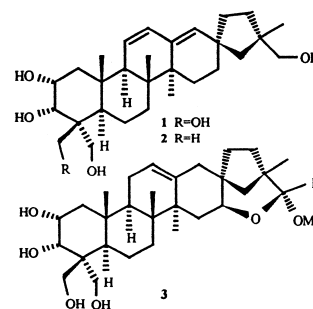
Yinggang Luo,^{a,b} Chun Feng,^c Yajuan Tian,^a Bogang Li^a and Guolin Zhang^{a,*}

^aChengdu Institute of Biology, The Chinese Academy of Sciences, Chengdu 610041, People's Republic of China

^bChengdu Institute of Organic Chemistry, The Chinese Academy of Sciences, Chengdu 610041, People's Republic of China

^cAnalyzing and Testing Center, Sichuan Normal University, Chengdu 610066, People's Republic of China

Three novel nortriterpenoids, notohamosin A (**1**), B (**2**) and C (**3**), and eight known compounds were isolated from the ethanol extract of the whole plants of *Notochaete hamosa* Benth. (Labiatae). Their structures were elucidated on the basis of spectral evidence.



Total synthesis of a novel 2-thiabicyclo[3.2.0]heptan-6-one analogue of penicillin N

Tetrahedron 59 (2003) 8233

Amanda C. Ferguson,^a Robert M. Adlington,^a Dominic H. Martyres,^b Peter J. Rutledge,^c Andrew Cowley^d and Jack E. Baldwin^{a,*}

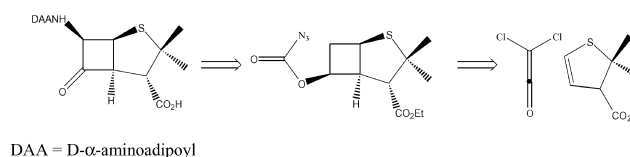
^aThe Dyson Perrins Laboratory, University of Oxford, South Parks Road, Oxford OX1 3QY, UK

^bBoehringer-Ingelheim Pharma, Biberach, Germany

^cDepartment of Chemistry, The Centre for Synthesis and Chemical Biology, University College Dublin, Belfield, Dublin 4, Ireland

^dChemical Crystallography Laboratory, University of Oxford, South Parks Road, Oxford OX1 3QY, UK

The novel cyclobutanone (**1**) has been synthesised via a [2+2] ketene cycloaddition and *o*-acyl nitrene insertion. This compound is a hydrolytically stable analogue of penicillin N required as a mechanistic probe of cephalosporin biosynthesis.



Novel design of a pentacyclic scaffold as structural mimic of saframycin A

Tetrahedron 59 (2003) 8245

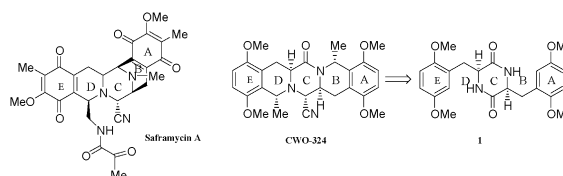
Chi Wi Ong,^{a,*} Yu An Chang,^b Jing-Yun Wu^a and Chien-Chung Cheng^c

^aDepartment of Chemistry, National Sun Yat Sen University, Kaoshiung 804, Taiwan, ROC

^bChung Chou Institute of Technology, Chang-Hwa 501, Taiwan, ROC

^cDepartment of Chemistry, Tamkang University, Tamsui 251, Taiwan, ROC

The design, synthesis and evaluation of a novel pentacyclic scaffold, CWO-324 as saframycin A mimic is described.

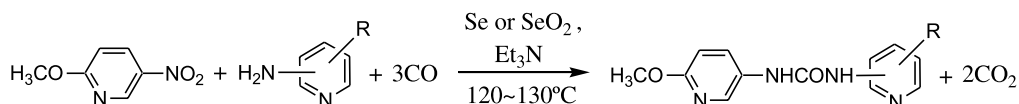


Synthesis of new unsymmetric N,N' -dipyridylurea derivatives by selenium and selenium dioxide-catalyzed reductive carbonylation of substituted nitropyridines

Tetrahedron 59 (2003) 8251

Jinzhu Chen, Gang Ling and Shiwei Lu*

National Engineering Research Center for Catalysis, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, 161 Zhongshan Road, Dalian, Liaoning 116011, People's Republic of China



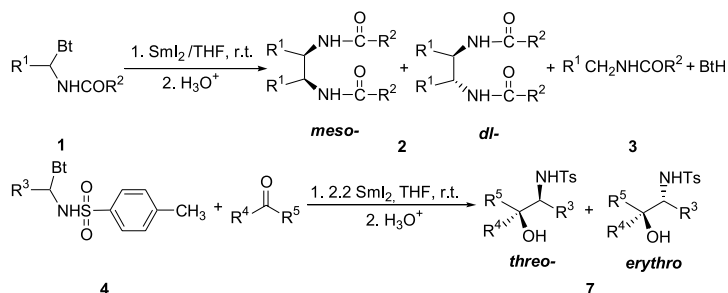
Elimination of benzotriazolyl group in N -(α -benzotriazol-1-ylalkyl)amides and N -(α -benzotriazol-1-ylalkyl)-sulfonamides: their self-coupling and cross-coupling reactions with carbonyl compounds

Tetrahedron 59 (2003) 8257

Xiaoxia Wang,^a Yongjun Liu^a and Yongmin Zhang^{a,b,*}

^aDepartment of Chemistry, Zhejiang University (Campus Xixi), Hangzhou 310028, People's Republic of China

^bState Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, Shanghai 200032, People's Republic of China

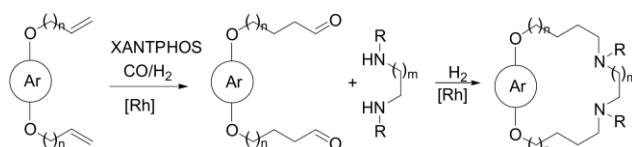


Synthesis of hydroquinone-, biphenol-, and binaphthol-containing aza macroheterocycles via regioselective hydroformylation and reductive amination

Tetrahedron 59 (2003) 8265

Goran Angelovski and Peter Eilbracht*

Fachbereich Chemie, Organische Chemie I, Universität Dortmund, Otto-Hahn-Strasse 6, 44221 Dortmund, Germany



Metalation in hydrocarbon solvents: the mechanistic aspects of substrate-promoted *ortho*-metalations

Tetrahedron 59 (2003) 8275

D. W. Slocum,* Seth Dumbris, Scott Brown, Gina Jackson, Roslyn LaMastus, Elwood Mullins, Jonathan Ray, Phillip Shelton, Amy Walstrom, J. Micah Wilcox and R. W. Holman*

Laboratory of Covalent Chemistry, Department of Chemistry, Western Kentucky University, Bowling Green, KY 42101, USA

