

Graphical abstracts

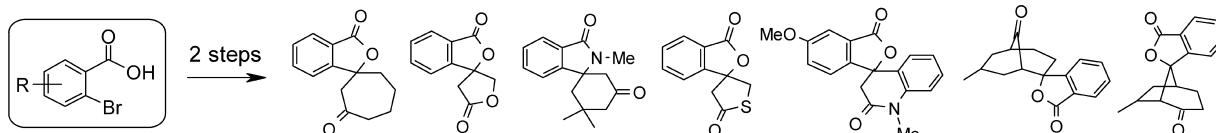
Free radical reactions for heterocycle synthesis. Part 7: 2-Bromobenzoic acids as building blocks in the construction of spirobenzolactones and spirobenzotactams

Wei Zhang* and Georgia Pugh

Lead Discovery, DuPont Crop Protection, Stine-Haskell Research Center, Newark, DE 19714, USA

A general method to construct spirobenzolactones and spirobenzotactams by intramolecular free radical conjugate addition of 2-bromobenzoic acid derivatives is described.

Tetrahedron 59 (2003) 4237

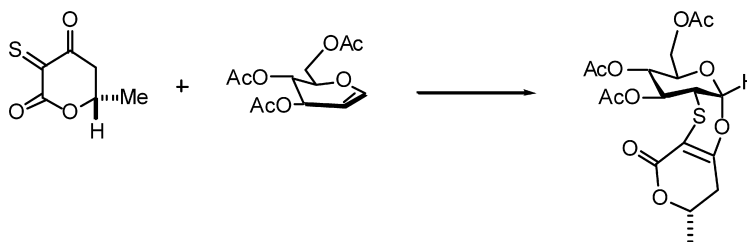


The cycloaddition way to novel deoxy disaccharide analogs

Maria M. Tamarez, Richard W. Franck* and Aloma Geer

Department of Chemistry, Hunter College of CUNY, 695 Park Avenue, New York, NY 10021, USA

A novel heterocycloaddition merges 2-thiono-3-ketolactones with carbohydrate glycols to afford materials which resemble disaccharides with an *O*-glycosidic linkage at the anomeric center and a thioether linking both C-2 and C-2', thus creating a third heterocyclic ring. Upon desulfurization, these novel cycloadducts afford materials which are models for 2-deoxydisaccharides. Studies with two keto lactones and seven glycols are described.



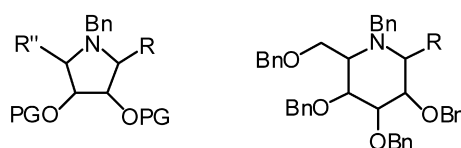
Tetrahedron 59 (2003) 4249

A convenient synthesis of iminosugar-C-glycosides via organometallic addition to *N*-benzyl-*N*- glycosylhydroxylamines

Alessandro Dondoni* and Daniela Perrone

Laboratorio di Chimica Organica, Dipartimento di Chimica, Università di Ferrara, Via L. Borsari 46, 44100 Ferrara, Italy

Tetrahedron 59 (2003) 4261

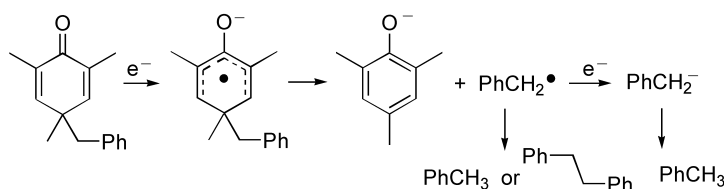


Electron transfer induced dissociations of 2- and 4-alkyl cyclohexadienones

Andrew J. McCarroll, Joe A. Crayston and John C. Walton*

School of Chemistry, University of St. Andrews, North Haugh, St. Andrews, Fife KY16 9ST, UK

Tetrahedron 59 (2003) 4275

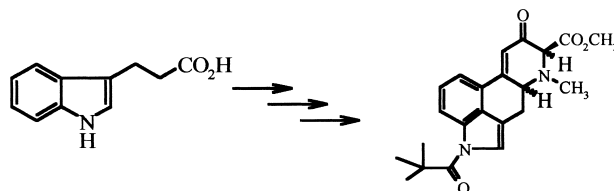


Chemistry of indoles carrying a basic function. Part 8: A new approach to the ergoline skeleton

Tetrahedron 59 (2003) 4281

Mária Incze, István Moldvai, Eszter Temesvári-Major, Gábor Dörnyei, Mária Kajtár-Peredy and Csaba Szántay*

Chemical Research Center, Institute of Chemistry, Hungarian Academy of Sciences, H-1025 Budapest II, Pusztaszeri út 59-67, Hungary



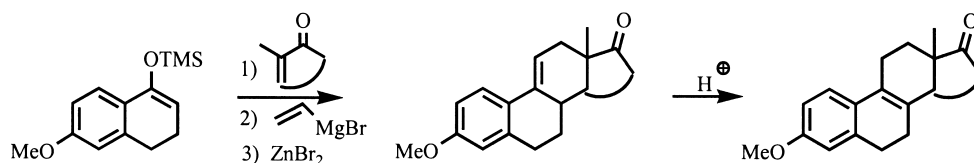
A new approach toward the synthesis of C,D-cis coupled steroid and C,D-cis coupled D-homosteroid skeletons

Tetrahedron 59 (2003) 4287

Svetlana Dratch,^{a,b} Tanya Charnikhova,^{a,b} Florence C. E. Sarabère,^a Ben J. M. Jansen^a and Aede de Groot^{a,*}

^aLaboratory of Organic Chemistry, Wageningen University, Dreijenplein 8, 6703 HB Wageningen, The Netherlands

^bInstitute of Bioorganic Chemistry, National Academy of Sciences of Belarus, Kuprevich str. 5/2, 220141 Minsk, Belarus



Chemical reactivity of [1,2,3]triazolo[1,5-a]- and [1,5-c]-pyrimidinium salts

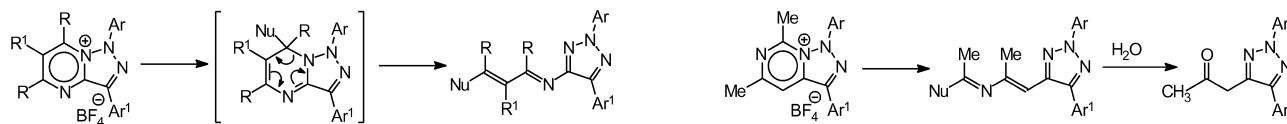
Tetrahedron 59 (2003) 4297

Sándor Bátori,^{a,b,*} Eszter Gács-Baitz,^b Sándor Bokotey^a and András Messmer^b

^aChinoin Pharmaceutical and Chemical Works Co, Ltd., P.O. Box 110, H-1325 Budapest, Hungary

^bChemical Research Center, Institute of Chemistry, Hungarian Academy of Sciences, P.O. Box 17, H-1525 Budapest, Hungary

The chemical reactivity of the [1,2,3]triazolo[1,5-a]- and [1,5-c]-pyrimidinium salts towards nucleophiles was studied.

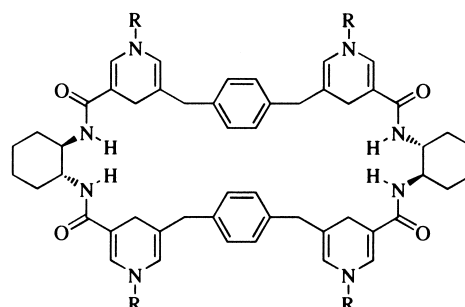


Synthesis of a new and versatile macrocyclic NADH model

Tetrahedron 59 (2003) 4303

Ulrik Gran

AstraZeneca R&D Molndal, Medicinal Chemistry, S-431 83 Molndal, Sweden

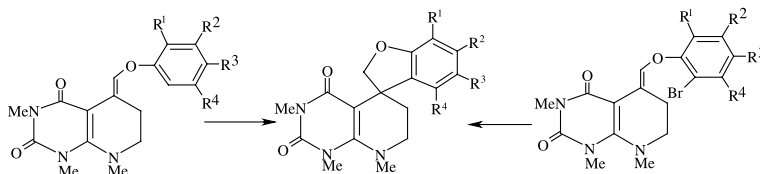


Studies in pyrimidine-annulated heterocycles: unusual formation of spiroheterocyclic compounds from acid catalyzed reaction of enol ether

Tetrahedron 59 (2003) 4309

K. C. Majumdar,* S. Sarkar and T. Bhattacharyya

Department of Chemistry, University of Kalyani, Kalyani 741 235 W.B., India

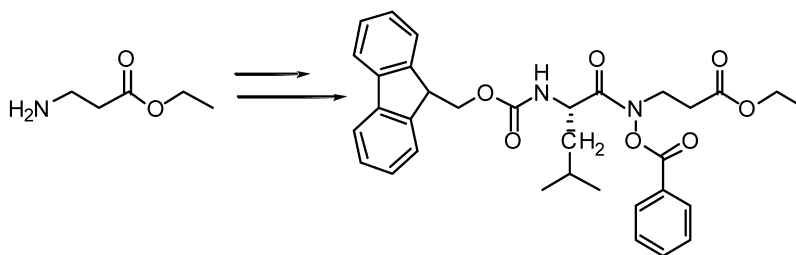


N-(Benzyloxy)amines: an investigation of their thermal stability, synthesis, and incorporation into novel peptide constructs

Tetrahedron 59 (2003) 4315

Anne Nemchik, Valentina Badescu and Otto Phanstiel, IV*

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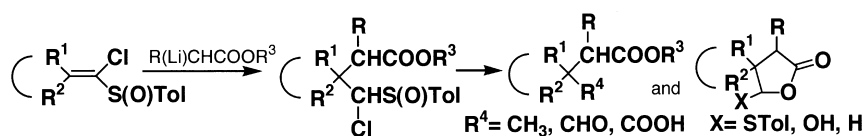


Conjugate addition of lithium ester enolates to 1-chlorovinyl p-tolyl sulfoxides: a novel synthesis of functionalized esters and lactones having a tertiary or a quaternary carbon at the β -position

Tetrahedron 59 (2003) 4327

Tsuyoshi Satoh,* Shimpei Sugiyama, Yuhki Kamide and Hiroyuki Ota

Department of Chemistry, Faculty of Science, Tokyo University of Science, Kagurazaka, Shinjuku-ku, Tokyo 162-8601, Japan

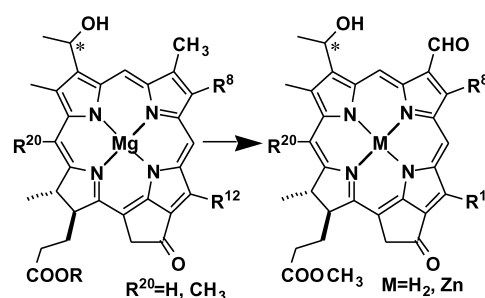


Synthesis of homologically pure bacteriochlorophyll-*e* and *f* analogues from BChls-*c/d* via transformation of the 7-methyl to formyl group and self-aggregation of synthetic zinc methyl bacteriopheophorbides-*c/d/e/f* in non-polar organic solvent

Tetrahedron 59 (2003) 4337

Hitoshi Tamiaki,* Miki Omoda, Yoshitaka Saga and Hidetada Morishita

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



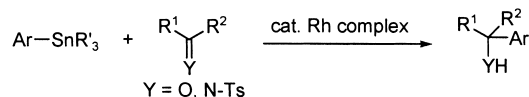
Rhodium-catalyzed addition of arylstannanes to carbon-heteroatom double bond

Tetrahedron 59 (2003) 4351

Shuichi Oi,* Mitsutoshi Moro, Hiroe Fukuhara, Takanori Kawanishi and Yoshio Inoue*

Department of Materials Chemistry, Graduate School of Engineering, Tohoku University, 04 Aramaki-Aoba Aoba-ku, Sendai 980-8579, Japan

Additions of arylstannanes to aldehydes, α -dicarbonyl compounds, and *N*-substituted aldimines were catalyzed by a rhodium complex to give corresponding alcohols, α -hydroxy carbonyl compounds, and amines, respectively.



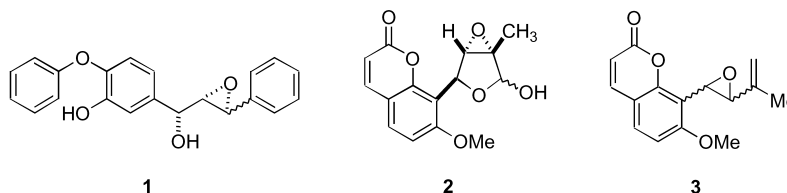
A route to the structure proposed for puetuberosanol and approaches to the natural products marshrin and phebalosin

Tetrahedron 59 (2003) 4363

Adam Gillmore, Christelle Lauret* and Stanley M. Roberts

Department of Chemistry, Liverpool University, Liverpool L69 7ZD, UK

Synthesis of the structure claimed for puetuberosanol (**1**) showed that the natural product was a different material. A route to marshrin (**2**) was explored and (\pm)-phebalosin (**3**) was prepared.



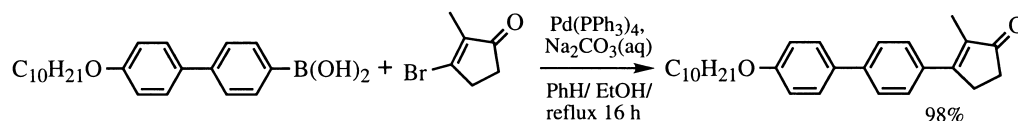
Highly efficient syntheses of 3-aryl-2-cycloalken-1-ones and an evaluation of their liquid crystalline properties

Tetrahedron 59 (2003) 4377

C. M. Marson,* L. D. Farrand, R. Brettell and D. A. Dunmur

Department of Chemistry, University of Sheffield, Sheffield S3 7HF, UK

Palladium(0) catalysed couplings using 3-bromo-2-cycloalken-1-ones provide liquid crystalline 3-aryl-2-cycloalken-1-ones.

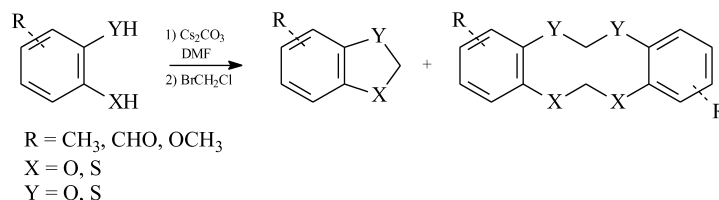


A re-examination of the methylenation reaction

Tetrahedron 59 (2003) 4383

Maria Grazia Cabiddu, Enzo Cadoni, Stefania De Montis, Claudia Fattuoni, Stefania Melis* and Michele Usai

Dipartimento di Scienze Chimiche, Cittadella Universitaria di Monserrato, SS 554 Bivio per Sestu, I-09042 Monserrato (CA), Italy

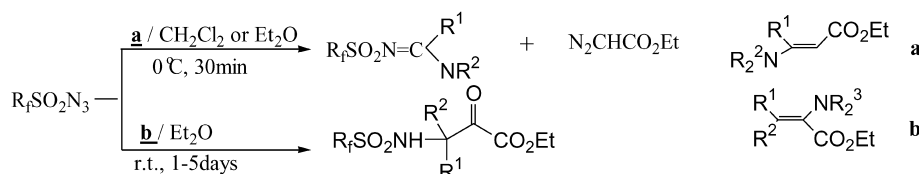


A new method for the synthesis of *N*-protected β -amino- α -keto esters from fluoroalkanesulfonylazides and α -keto esters

Shizheng Zhu,* Guifang Jin and Yong Xu

Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, China

Tetrahedron 59 (2003) 4389

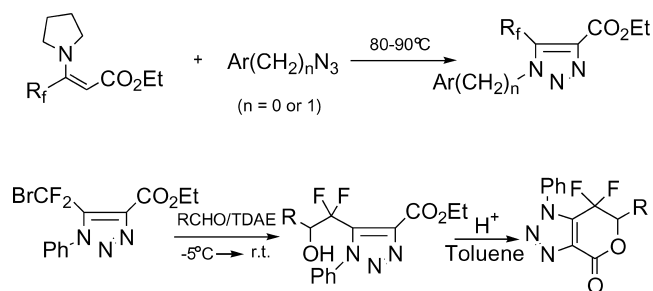


Efficient synthesis of 5-fluoroalkylated 1*H*-1,2,3-triazoles and application of the bromodifluoromethylated triazole to the synthesis of novel bicyclic *gem*-difluorinated 1*H*-pyrano[3,4-*d*][1,2,3]-triazol-4-one compounds

Weimin Peng and Shizheng Zhu*

Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, People's Republic of China

Tetrahedron 59 (2003) 4395

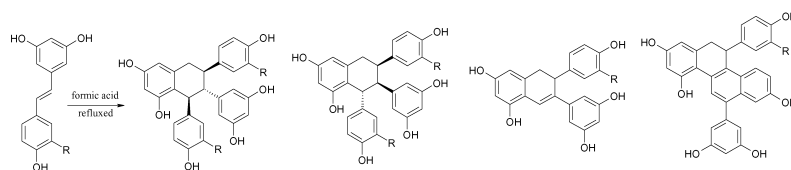


Studies on formic acid-catalyzed dimerization of isorhapontigenin and of resveratrol to tetralins

Xiao-Mei Li, Kai-Sheng Huang, Mao Lin* and Li-Xin Zhou

Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, 1 Xian Nong Tan Street, Beijing 100050, People's Republic of China

Tetrahedron 59 (2003) 4405

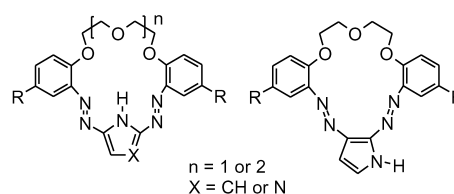


Chromogenic macrocyclic derivatives of azoles—synthesis and properties

Ewa Wagner-Wysiecka, Elżbieta Luboch, Marzena Kowalczyk and Jan F. Biernat*

Department of Chemical Technology, Technical University of Gdańsk, ul. Narutowicza 11/12, 80-952 Gdańsk, Poland

The synthesis of macrocyclic chromogenic derivatives of pyrrole and imidazole has been described. Complexing properties of these compounds with metal cations were investigated spectrophotometrically in acetonitrile. The synthesized crown ethers were also tested as ion carriers in ion-selective membrane electrodes. The X-ray structure of one isomer of 18-membered pyrrole crown ether is reported.



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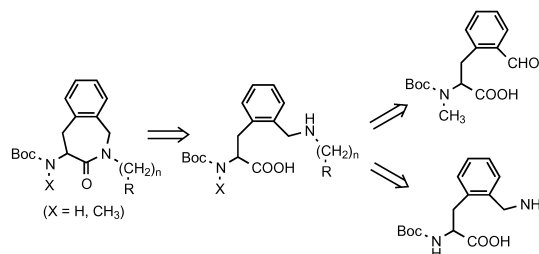
A versatile synthesis of 2-substituted 4-amino-1,2,4,5-tetrahydro-2-benzazepine-3-ones

Tetrahedron 59 (2003) 4421

Karolien Van Rompaey,^a Isabelle Van den Eynde,^a Norbert De Kimpe^b and Dirk Tourwé^{a,*}

^aDepartment of Organic Chemistry (ORGC), Vrije Universiteit Brussel, Pleinlaan 2, B-1050 Brussels, Belgium

^bDepartment of Organic Chemistry, Faculty of Agricultural and Applied Biological Sciences, Ghent University, Coupure Links 653, B-9000 Ghent, Belgium



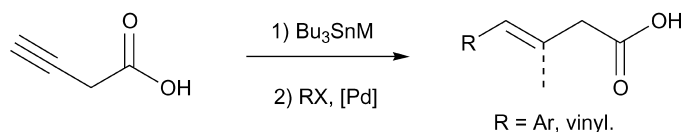
Stereoselective access to functionalized β - γ unsaturated acids

Tetrahedron 59 (2003) 4433

Jérôme Thibonnet,^{a,b} Mohamed Abarbri,^a Jean-Luc Parrain^b and Alain Duchêne^{a,*}

^aLaboratoire de Physicochimie des Interfaces et des Milieux Réactionnels, EA 2098-LRC-MO2, Faculté des Sciences et Techniques de Tours, Parc de Grandmont, 37200 Tours, France

^bLaboratoire de Synthèse Organique associé au CNRS, UMR 6009, Faculté des Sciences et Techniques de Saint Jérôme, Avenue Escadrille Normandie-Niemen, 13397 Marseille Cedex 20, France



Helical primary structures of four-membered rings: (*M*)-trispiro[3.0.0.3.2.2]tridecane

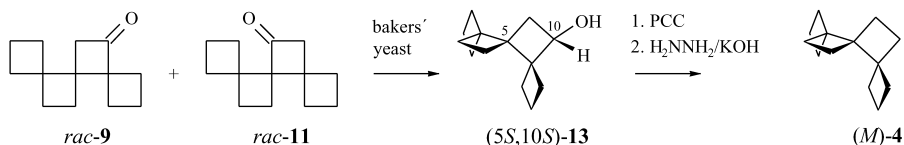
Tetrahedron 59 (2003) 4443

Lutz Fitjer,^{a,*} Ralf Gerke,^a Jörg Weiser,^a Gabor Bunkoczi^b and Judit E. Debreczeni^b

^aInstitut für Organische Chemie der Universität Göttingen, Tammannstrasse 2, D-37077 Göttingen, Germany

^bInstitut für Anorganische Chemie der Universität Göttingen, Tammannstrasse 4, D-37077 Göttingen, Germany

The title compound (*M*)-**4** was synthesized via an enzymatic reduction of a 2:1 mixture of cyclobutanones **9** and **11**.



Sequential azomethine imine cycloaddition–palladium catalysed cyclisation processes

Tetrahedron 59 (2003) 4451

Colin. W. G. Fishwick, Ronald Grigg,^{*} Visuvanathar Sridharan and Julia Virica

Molecular Innovation, Diversity and Automated Synthesis (MIDAS) Centre, School of Chemistry, University of Leeds, Leeds LS2 9JT, UK

