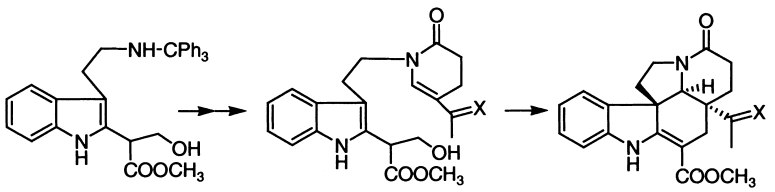
Graphical abstracts

Synthesis of vinca alkaloids and related compounds. Part 101: A new convergent synthetic pathway to build up the aspidospermane skeleton. Simple synthesis of 3-oxovincadifformine and 3-oxominovincine. Attempts to produce 15β-hydroxyvincadifformine

Tetrahedron 58 (2002) 8921

János Éles,[a,b] György Kalaus,[a,*] István Greiner,[b] Mária Kajtár-Peredy,[c] Pál Szabó,[c] Lajos Szabó[a] and Csaba Szántay[a,c,*]

[a]*Department for Organic Chemistry, Budapest University of Technology and Economics, Gellért tér 4, H-1111 Budapest, Hungary*
[b]*Chemical Works of Gedeon Richter Ltd, Gyömrői út 19-21, H-1103 Budapest, Hungary*
[c]*Chemical Research Center, Institute of Chemistry, Hungarian Academy of Sciences, Pusztaszeri út 59-67, H-1025 Budapest, Hungary*

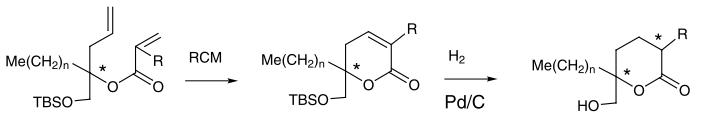


Enantioselective total synthesis of δ-lactonic marine natural products, (+)-tanikolide and (−)-malyngolide, via RCM reaction

Tetrahedron 58 (2002) 8929

Hirotake Mizutani, Masayuki Watanabe and Toshio Honda*

Faculty of Pharmaceutical Sciences, Hoshi University, Ebara 2-4-41, Shinagawa-ku, Tokyo 142-8501, Japan



n = 10 or 8
R = H or Me

n = 10, R = H; Tanikolide
n = 8, R = Me; Malyngolide

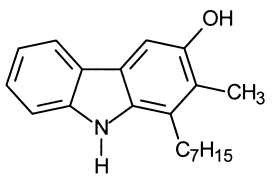
Transition metal complexes in organic synthesis. Part 65: Iron-mediated synthesis of carazostatin, a free radical scavenger from *Streptomyces chromofuscus*, and *O*-methylcarazostatin

Tetrahedron 58 (2002) 8937

Hans-Joachim Knölker* and Thomas Hopfmann

Institut für Organische Chemie, Technische Universität Dresden, Bergstrasse 66, 01069 Dresden, Germany

Highly efficient syntheses of the free radical scavenger carazostatin and its *O*-methyl derivative are described using cyclohexa-1,3-diene and 2-heptyl-4-methoxy-3-methylaniline as starting materials and iron-mediated oxidative cyclizations as key-steps.



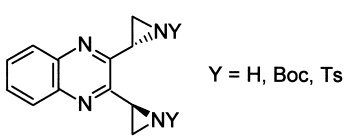
Carazostatin

Synthesis and nucleophilic opening of a new C_2 symmetric bis-aziridine. First synthesis of aziridines using polymer-supported triphenylphosphine

Tetrahedron 58 (2002) 8947

Isabelle McCort,* Stéphanie Ballereau, Annie Duréault and Jean-Claude Depezay

Laboratoire de Chimie et Biochimie Pharmacologiques et Toxicologiques associé au CNRS, Université René Descartes, 45 rue des Saints-Pères, 75270 Paris, France



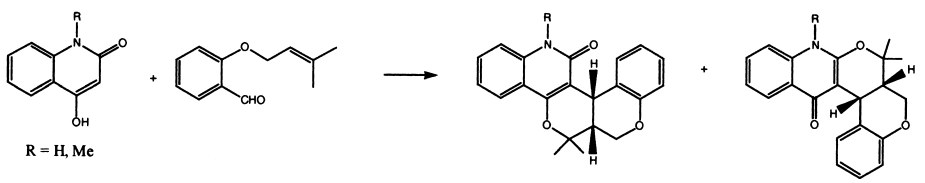
Y = H, Boc, Ts

Tetrahedron 58 (2002) 8957

Competition between two intramolecular domino Knoevenagel hetero Diels–Alder reactions: a new entry into novel pyranoquinolinone derivatives

S. Manikandan, M. Shanmugasundaram and R. Raghunathan*

Department of Organic Chemistry, University of Madras, A.C. College Campus, Guindy, Chennai 600 025, India

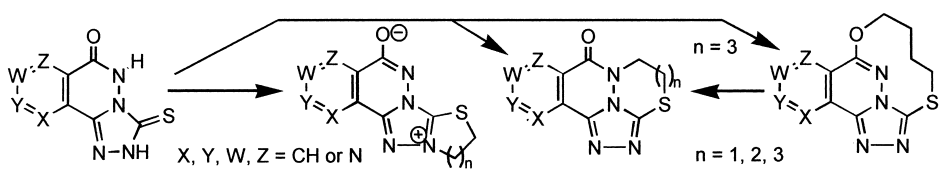


Tetrahedron 58 (2002) 8963

Preparative and theoretical study on chain length-dependence and substrate selectivity in the cycloalkylation of condensed [1,2,4]triazolo[4,3-*b*]pyridazine-6(5*H*)-one-3(2*H*)-thiones

Antal Csámpai,* Mónika Simó, Zoltán Szlávik, András Kotschy, Gábor Magyarfalvi and György Túrós

Institute of Chemistry, Eötvös Loránd University, P.O. Box 32, Budapest 112, H-1518, Hungary



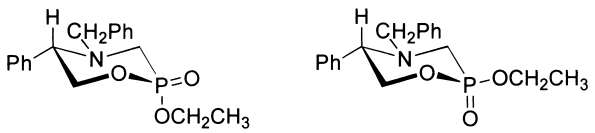
Tetrahedron 58 (2002) 8973

NMR and X-ray crystallographic studies of axial and equatorial 2-ethoxy-2-oxo-1,4,2-oxazaphosphinane

Irma Linzaga,[a,b] Jaime Escalante,[b] Miguel Muñoz[b] and Eusebio Juaristi[a,*]

[a]*Departamento de Química, Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional, Apartado Postal 14-740, 07000 México, DF, Mexico*

[b]*Centro de Investigaciones Químicas, Universidad Autónoma del Estado de Morelos, Av. Universidad 1001, Col. Chamilpa, 62210 Cuernavaca, Mor., Mexico*



Tetrahedron 58 (2002) 8979

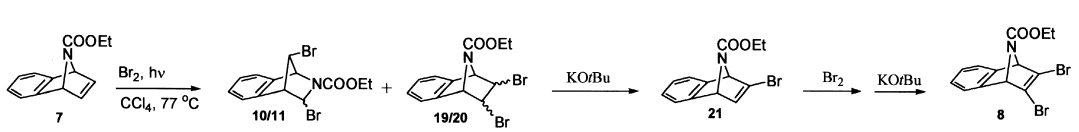
Bromination of an *N*-carbethoxy-7-aza-2,3-benzonorbornadiene and synthesis of *N*-carbethoxy-7-aza-2,3-dibromo-5,6-benzonorbornadiene: high temperature bromination. Part 14

Ahmet Tutar[a,b] and Metin Balci[b,*]

[a]*Department of Chemistry, Faculty of Science, Gaziosmanpasa University, 60240 Tokat, Turkey*

[b]*Department of Chemistry, Middle East Technical University, 06531 Ankara, Turkey*

Low and high temperature bromination of **7** in carbon tetrachloride at 0 and 77°C gave the rearranged (**10/11**) and non-rearranged products (**19/20**). Elimination of non-rearranged products **19/20** followed by bromination and further elimination resulted in the formation of the target compound **8**.

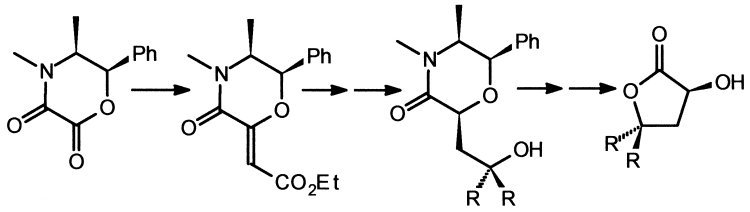


Enantioselective synthesis of α-hydroxy γ-butyrolactones from an ephedrine-derived morpholine-dione

Tetrahedron 58 (2002) 8985

Sunil V. Pansare,* Bidhan A. Shinkre and Annyt Bhattacharyya

Division of Organic Chemistry (Synthesis), National Chemical Laboratory, Pune 411 008, India



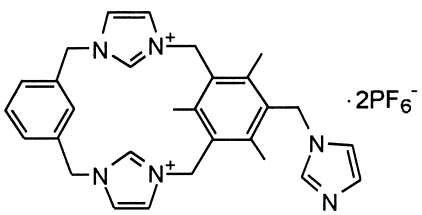
Synthesis and selective anion recognition of imidazolium cyclophanes

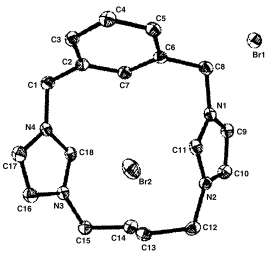
Tetrahedron 58 (2002) 8993

Yi Yuan,[a] Ge Gao,[a] Zong-Lin Jiang,[a] Jin-Song You,[a] Zhong-Yuan Zhou,[b] De-Qi Yuan[a] and Ru-Gang Xie[a,*]

[a]*Department of Chemistry, Sichuan University, Chengdu 610064, People's Republic of China*
[b]*Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University, Hong Kong, People's Republic of China*

The anion recognition abilities of imidazolium cyclophanes were investigated by UV spectroscopic titration, X-ray analysis and ^{1}H NMR study.



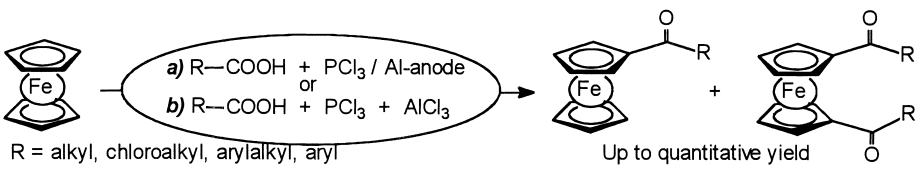


Acylation of ferrocene: a new approach

Tetrahedron 58 (2002) 9001

Mirjana D. Vukićević,[a] Zoran R. Ratković,[a] Aleksandar V. Teodorović,[a] Gordana S. Stojanović[b] and Rastko D. Vukićević[a,*]

[a]*Department of Chemistry, Faculty of Science, University of Kragujevac, R. Domanovića 12, P.O. Box 60, YU-34000 Kragujevac, Serbia, Yugoslavia*
[b]*Department of Chemistry, Faculty of Natural Sciences and Mathematics, University of Niš, Ćirila i Metodija 2, YU-18000 Niš, Serbia, Yugoslavia*

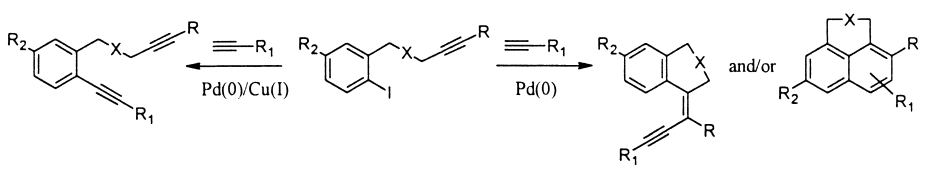


Transition metal control in the reaction of alkyne-substituted phenyl iodides with terminal alkynes: Sonogashira coupling vs cyclic carbopalladation

Tetrahedron 58 (2002) 9007

Filip Teplý, Irena G. Stará,* Ivo Starý,* Adrian Kollárovič, David Šaman and Pavel Fiedler

Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic, Flemingovo n. 2, 166 10 Prague 6, Czech Republic



Synthesis and binding studies of multiple calix[4]arenes

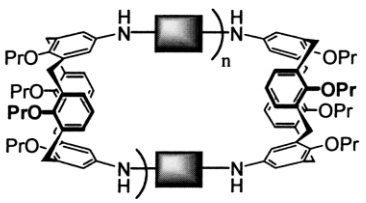
Tetrahedron 58 (2002) 9019

Gil Tae Hwang and Byeang Hyean Kim*

National Research Laboratory, Department of Chemistry, Center for Integrated Molecular Systems, Division of Molecular Life Science, Pohang University of Science and Technology, Pohang 790-784, South Korea

Double and Quadruple Calix[4]arenes

(n = 1 or 3)

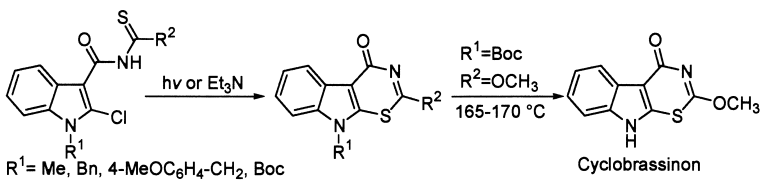


A new approach to the synthesis of rare thiazino[6,5-*b*]indol-4-one derivatives. First total synthesis of the indole phytoalexin cyclobrassinon

Tetrahedron 58 (2002) 9029

Peter Kutschy,[a,*] Mojmír Suchý,[a] Aldo Andreani,[b] Milan Dzurilla,[a] Vladimír Kováčik,[c] Juraj Alföldi,[c] Maddalena Rossi[b] and Mária Gramatová[a]

[a]*Faculty of Science, Institute of Chemical Sciences, P.J. Šafárik University, Moyzesova 11, 041 67 Košice, Slovak Republic*
[b]*Department of Pharmaceutical Sciences, University of Bologna, Via Belmeloro 6, I-40126 Bologna, Italy*
[c]*Institute of Chemistry, Slovak Academy of Sciences, Dúbravská cesta 9, 842 38 Bratislava, Slovak Republic*



R^1= Me, Bn, 4-MeOC_6H_4-CH_2, Boc
R^2= OMe, OEt, O*i*-Pr, NHMe, 4-tolylNH, 1-piperidyl

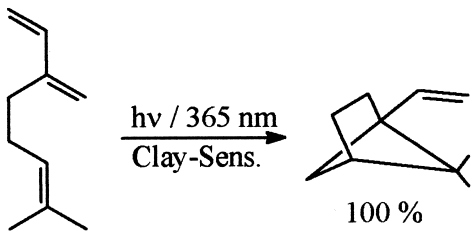
Efficient triplet–triplet energy transfer using clay-bound ionic sensitizers

Tetrahedron 58 (2002) 9041

D. Madhavan and K. Pitchumani*

Department of Organic Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai 625 021, India

Both cationic and anionic clays, with sensitizers anchored onto their interlayer by ionic linkage, are found to be useful 'microreactors' to achieve triplet state reactivity of myrcene in an experimentally simple, inexpensive and clean reaction.

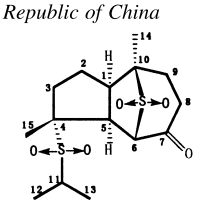


Structure of orientanone from *Alisma orientalis*, a novel sesquiterpene originating from guaiane-type carbon skeleton by isopropyl shift

Tetrahedron 58 (2002) 9045

Guo-Ping Peng,[a,*] Feng-Chang Lou,[b] Xian-Feng Huang[a] and Gang Tian[a]

[a]*Nanjing University of Traditional Chinese Medicine, Nanjing 210029, People's Republic of China*
[b]*China Pharmaceutical University, Nanjing 210029, People's Republic of China*



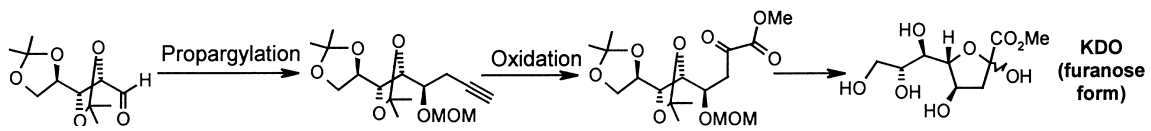
Orientanone (1)

Synthesis of 3-deoxy-2-ulosonic acid KDO and 4-*epi*-KDN, a highly efficient approach of 3-C homologation by propargylation and oxidation

Tetrahedron 58 (2002) 9049

Lian-Sheng Li and Yu-Lin Wu*

State Key Laboratory of Bio-organic and Natural Products Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Road, Shanghai 200032, People's Republic of China



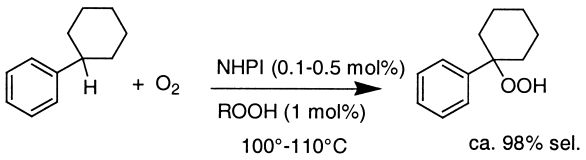
Selective catalytic oxidation of cyclohexylbenzene to cyclohexylbenzene-1-hydroperoxide: a coproduct-free route to phenol

Tetrahedron 58 (2002) 9055

Isabel W. C. E. Arends,[a] Manickam Sasidharan,[a] Adolf Kühnle,[b] Mark Duda,[b] Carsten Jost[b] and Roger A. Sheldon[a,*]

[a]*Laboratory for Biocatalysis and Organic Chemistry, Department of Biotechnology, Delft University of Technology, Julianalaan 136, 2628 BL Delft, The Netherlands*

[b]*CREAVIS Gesellschaft für Technologie und Innovation mbH, D-45764 Marl, Germany*

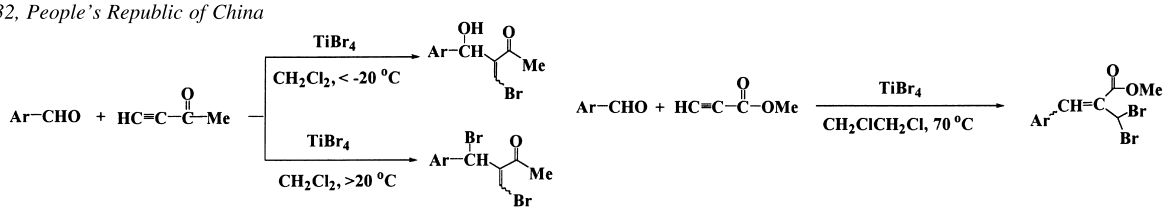


Titanium(IV) bromide and boron(III) tribromide promoted reactions of arylaldehydes with 3-butyn-2-one, methyl propiolate and propynenitrile

Tetrahedron 58 (2002) 9063

Min Shi* and Chun-Jiang Wang

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



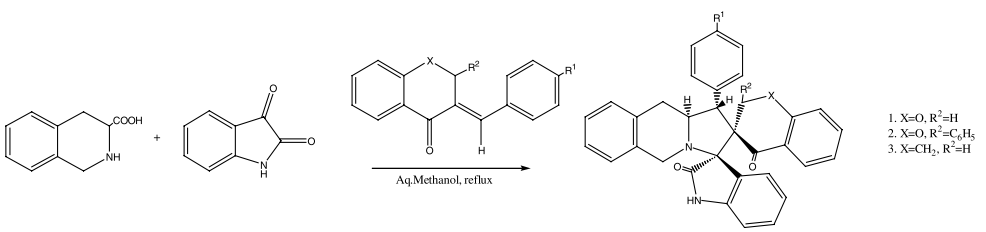
A facile entry into a new class of spiroheterocycles: synthesis of dispiro[oxindolechromanone/flavanone/tetralone]pyrroloisoquinoline ring systems

Tetrahedron 58 (2002) 9075

G. Subramaniyan,[a] R. Raghunathan[a,*] and M. Nethaji[b]

[a]*Department of Organic Chemistry, University of Madras, Guindy Campus, Chennai 600 025, India*

[b]*Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore 560 012, India*

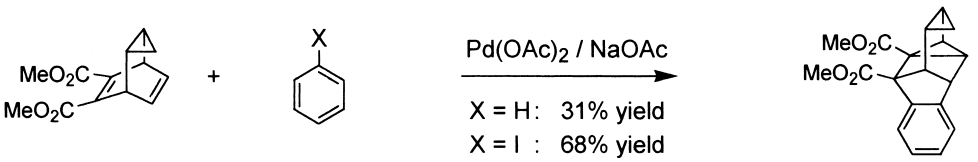


ortho-Disubstitution reactions of aromatic rings with homo-conjugated bicyclo[2.2.2]octa-2,5-diene derivatives in the presence of palladium(II) acetate

Tetrahedron 58 (2002) 9081

Katsuhiro Saito,[a,*] Katsuhiko Ono,[a] Toshifumi Takeda,[a] Shingo Kiso,[a] Kazuya Uenishi[a] and Masatoshi Kozaki[b]

[a]*Department of Applied Chemistry, Nagoya Institute of Technology, Gokiso-cho, Showa-ku, Nagoya 466-8555, Japan*
[b]*Graduate School of Science, Osaka City University, 3-3-138 Sugimoto, Sumiyoshi-ku, Osaka 558-8585, Japan*

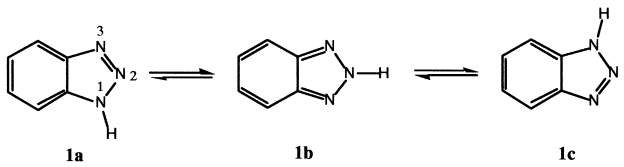


An experimental (NMR) and theoretical (GIAO) study of the tautomerism of benzotriazole in solution

Tetrahedron 58 (2002) 9089

Nadine Jagerovic,[a] María Luisa Jimeno,[a] Ibon Alkorta,[a] José Elguero[a,*] and Rosa María Claramunt[b]

[a]*Instituto de Química Médica, CSIC, Juan de la Cierva 3, E-28006 Madrid, Spain*
[b]*Departamento de Química Orgánica y Biología, Facultad de Ciencias, UNED, Senda del Rey 9, E-28040 Madrid, Spain*

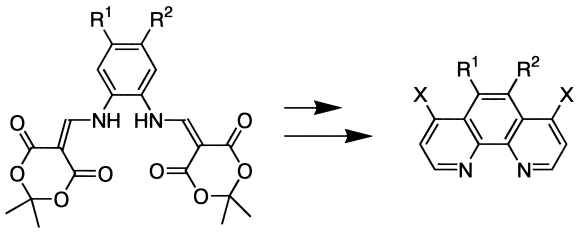


The synthesis of aromatic diazatricycles from phenylenediamine-bis(methylene Meldrum's acid) derivatives

Tetrahedron 58 (2002) 9095

Gabriele Ina Graf,[a] Daniel Hastreiter,[a] Luiz Everson da Silva,[a] Ricardo Andrade Rebelo,[a,*] Antonio Garrido Montalban[b,*] and Alexander McKillop[c]

[a]*Department of Chemistry, Universidade Regional de Blumenau, Victor Konder, Blumenau, P.O. Box 1507, Santa Catarina, Brazil*
[b]*Department of Chemistry, Imperial College of Science, Technology and Medicine, South Kensington, London SW7 2AY, UK*
[c]*School of Chemical Sciences, University of East Anglia, Norwich NR4 7TJ, UK*



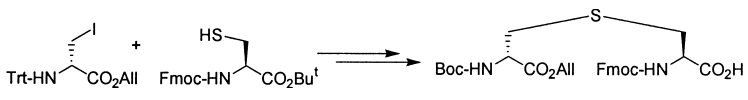
The stereospecific synthesis of 'orthogonally' protected lanthionines

Tetrahedron 58 (2002) 9101

Vinay Swali,[a] Mizio Matteucci,[a] Richard Elliot[b] and Mark Bradley[a,*]

[a]*Department of Chemistry, University of Southampton, Southampton SO17 1BJ, UK*
[b]*GSK, Medicines Research Centre, Gunnels Wood Road, Stevenage SG1 2NY, UK*

An efficient stereo-specific route to orthogonally protected lanthionine is described.

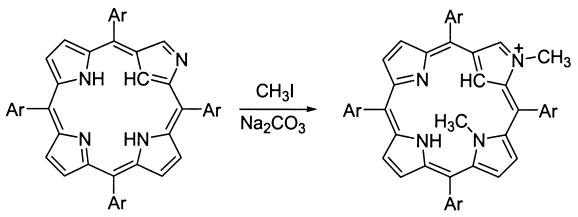


Facile synthesis of *N*,*N*′-dimethylated *N*-confused porphyrins

Tetrahedron 58 (2002) 9111

Ziwei Xiao and David Dolphin*

Department of Chemistry, University of British Columbia, 2036 Main Mall, Vancouver, BC, Canada V6T 1Z1



Preparation and reactions of 3,4-bisstannyl-2(5*H*)furanones

Tetrahedron 58 (2002) 9117

Neil B. Carter, Ross Mabon, Alexandre M. E. Richecœur and J. B. Sweeney*

Department of Chemistry, University of Reading, Whiteknights, Reading RG6 6AD, UK

Conditions: (i) see Table 1; (ii) TFA/H_2O, EtOH