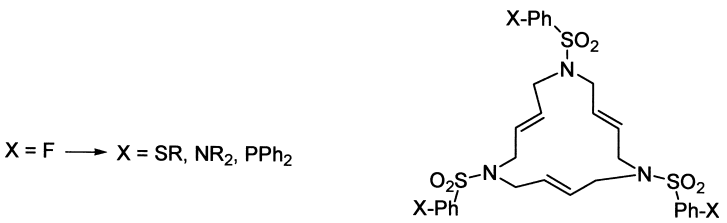
Graphical abstracts

15 and 30-Membered polyolefinic macrocycles. Periphery modification by aromatic nucleophilic substitution of fluorine

Tetrahedron 58 (2002) 7769

Marcial Moreno-Mañas* and Jan Spengler

Department of Chemistry, Universitat Autònoma de Barcelona, Cerdanyola, 08193 Barcelona, Spain



Preparation of (*Z*)-α-chloro-α,β-unsaturated ketones with total or high diastereoselectivity

Tetrahedron 58 (2002) 7775

José M. Concellón* and Mónica Huerta

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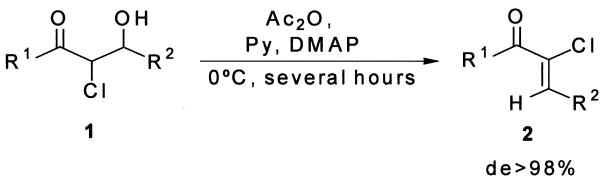


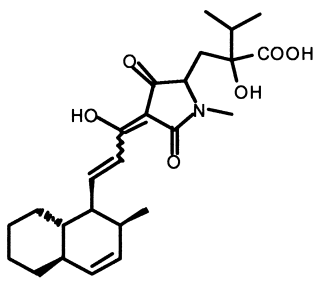
Zopfiellamides A and B, antimicrobial pyrrolidinone derivatives from the marine fungus *Zopfiella latipes*

Tetrahedron 58 (2002) 7781

Michael Daferner,[a] Timm Anke[a] and Olov Sterner[b,*]

[a]*Lehrbereich Biotechnologie der Universität, Paul-Ehrlich-Str. 23, D-67663 Kaiserslautern, Germany*
[b]*Department of Organic and Bioorganic Chemistry, Lund University, P.O. Box 124, S-221 00 Lund, Sweden*

The two antimicrobial metabolites zopfiellamides A and B were isolated from fermentations of the facultative marine fungus *Zopfiella latipes*.



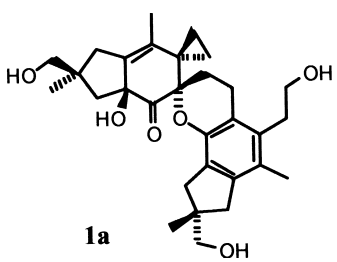
Terpenoids from *Bovista* sp. 96042

Tetrahedron 58 (2002) 7785

Falk Rasser,[a] Timm Anke[a] and Olov Sterner[b,*]

[a]*Lehrbereich Biotechnologie der Universität, Paul-Ehrlich-Straße 23, D-67663 Kaiserslautern, Germany*
[b]*Department of Organic and Bioorganic Chemistry, Lund University, P.O. Box 124, SE-221 00 Lund, Sweden*

The hexacyclic illudane—illudalane bis-sesquiterpene bovistol (**1a**), formed by a heteroatom Diels–Alder reaction, was obtained from the basidiomycete *Bovista* sp. 96042 together with several new sesquiterpenes.



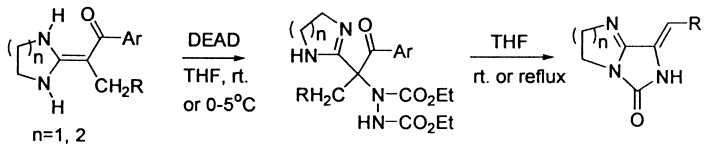
1a

Tetrahedron 58 (2002) 7791

Reaction of *C*-alkylated heterocyclic ketene aminals with diethyl azodicarboxylate: synthesis of polyfunctionalized quaternary carbon derivatives and their thermal fragmentation

Mei-Xin Zhao,[a] Zhe-Ming Wang,[b] Mei-Xiang Wang,[a] Chun-Hua Yan[b] and Zhi-Tang Huang[a,*]

[a]*Center for Molecular Science, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100080, People's Republic of China*
[b]*State Key Laboratory of Rare Earth Materials Chemistry and Application, College of Chemistry and Molecular Engineering, Peking University, Beijing 100871, People's Republic of China*



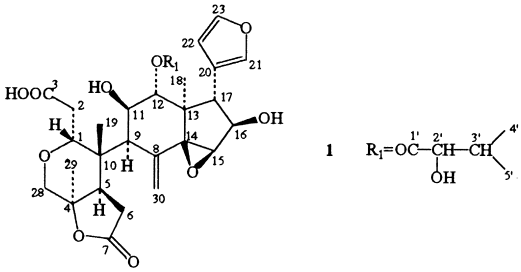
Tetrahedron 58 (2002) 7797

Novel antifeeding limonoids from *Dysoxylum hainanense*

Xiao-Dong Luo,* Shao-Hua Wu, Da-Gang Wu, Yun-Bao Ma and Shu-Hua Qi

State Key Laboratory of Phytochemistry and Plant Resources in West China, Kunming Institute of Botany, The Chinese Academy of Sciences, Kunming 650204, Yunnan, People's Republic of China

Seven novel limonoids were isolated from the bark of *Dysoxylum hainanense* Merr. All of them exhibited antifeeding activity against *Pieris rapae* L.



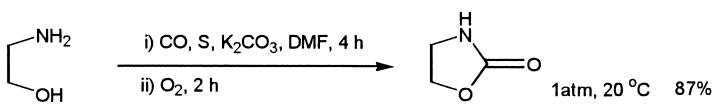
Tetrahedron 58 (2002) 7805

Synthesis of 2-oxazolidones by sulfur-assisted thiocarboxylation with carbon monoxide and oxidative cyclization with molecular oxygen under mild conditions

Takumi Mizuno,[a,*] Junko Takahashi[b] and Akiya Ogawa[b]

[a]*Osaka Municipal Technical Research Institute, 1-6-50, Morinomiya, Joto-ku, Osaka 536-8553, Japan*
[b]*Department of Chemistry, Faculty of Science, Nara Women's University, Kitauoyanishi-machi, Nara 630-8506, Japan*

2-Aminoethanols were easily subjected to the thiocarboxylation with carbon monoxide promoted by elemental sulfur, followed by the oxidative cyclization with molecular oxygen under 1 atm at rt, to give 2-oxazolidones in good yields.



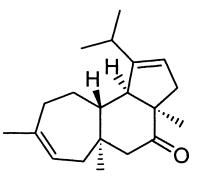
Tetrahedron 58 (2002) 7809

The new bioactive diterpenes cyanthiwigins E–AA from the Jamaican sponge *Myrmekioderma styx*

Jiangnan Peng,[a] Kelly Walsh,[a] Valarie Weedman,[a] Jennifer D. Bergthold,[b] John Lynch,[b] Kuo L. Lieu,[b] Irwin A. Braude,[b] Michelle Kelly[c] and Mark T. Hamann[a,*]

[a]*Department of Pharmacognosy and National Center for Natural Products Research, School of Pharmacy, University of Mississippi, P.O. Box 1848, University, Mississippi 38677, USA*
[b]*Cellpath Corporation, 130 Fifth Avenue North, Seattle, WA 98109, USA*
[c]*National Institute of Water and Atmospheric Research Ltd, Auckland, New Zealand*

Twenty-three new diterpenes, Cyanthiwigin E–AA, were isolated from the Jamaican sponge *Myrmekioderma styx*. Their activities against cancer, tuberculosis, HIV-1 and HBV are reported here.



cyanthiwigin F

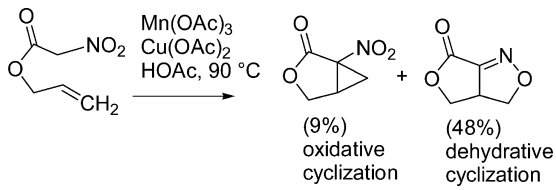
Oxidative and dehydrative cyclizations of nitroacetate esters with $Mn(OAc)_3$

Tetrahedron 58 (2002) 7821

Barry B. Snider* and Qinglin Che

Department of Chemistry MS015, Brandeis University, Waltham, MA 02454-9110, USA

α-Unsubstituted nitroacetates undergo dehydration to nitrile oxides as well as radical formation on treatment with $Mn(OAc)_3$.



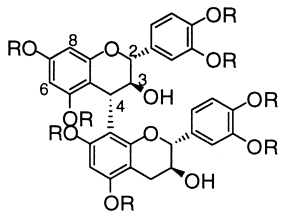
Synthetic studies of proanthocyanidins. Part 2: Stereoselective gram-scale synthesis of procyanidin-B3

Tetrahedron 58 (2002) 7829

Akiko Saito,[a] Noriyuki Nakajima,[b] Akira Tanaka[c] and Makoto Ubukata[b,*]

[a]*Japan Society for the Promotion of Science, Toyama Prefectural University, Kosugi, Toyama 939-0398, Japan*
[b]*Biotechnology Research Center, Toyama Prefectural University, Kosugi, Toyama 939-0398, Japan*
[c]*College of Technology, Toyama Prefectural University, Kosugi, Toyama 939-0398, Japan*

Condensation of *O*-protected catechin with a (2*R*,3*S*,4*S*)-3-acetoxy-5,7,3′,4′-tetrabenzyloxy-4-(2″-ethoxyethoxy)flavan as an electrophile in the presence of TMSOTf at −78°C led to procyanidin-B3 stereoselectively.

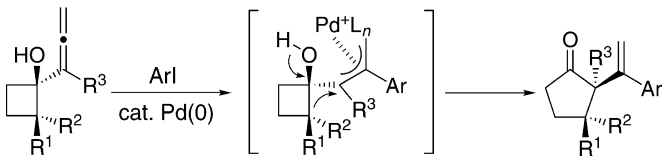


Stereoselective synthesis of α-disubstituted cyclopentanones by palladium-catalyzed rearrangement of allenylcyclobutanols with aryl halides

Tetrahedron 58 (2002) 7839

Masahiro Yoshida,* Kenji Sugimoto and Masataka Ihara*

Department of Organic Chemistry, Graduate School of Pharmaceutical Sciences, Tohoku University, Aobayama, Sendai 980-8578, Japan

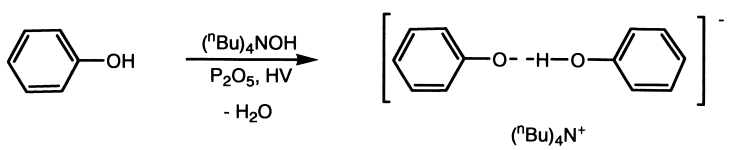


Cation–anion CH···O^- interactions in the metal-free phenolate, tetra-*n*-butylammonium phenol-phenolate

Tetrahedron 58 (2002) 7847

Richard Goddard, H. Martin Herzog and Manfred T. Reetz*

Max-Planck-Institut für Kohlenforschung, Kaiser-Wilhelm-Platz 1, D-45470 Mülheim an der Ruhr, Germany



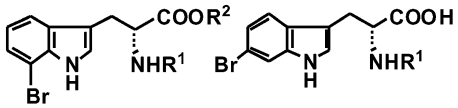
Convenient synthesis of 7′ and 6′-bromo-D-tryptophan and their derivatives by enzymatic optical resolution using D-aminoacylase

Tetrahedron 58 (2002) 7851

Yaeko Konda-Yamada,* Chiharu Okada, Kiminari Yoshida, Yasuyuki Umeda, Shiho Arima, Noriko Sato, Toshitsugu Kai, Hiroaki Takayanagi and Yoshihiro Harigaya

School of Pharmaceutical Sciences, Kitasato University, 9-1 Shirokane 5 chome, Minato-ku, Tokyo 108-8641, Japan

Compounds 7′ and 6′-bromo-D-tryptophan (**1** and **4**) and their *N*-Cbz derivatives (**2**, **3**, **5**) were conveniently synthesized enantiospecifically by optical resolution using D-aminoacylase from *N*-acetyl 7′ and 6′-bromo-DL-tryptophan in short steps.



1: R^1=H, R^2=H
2: R^1=Cbz, R^2=H
3: R^1=Cbz, R^2=*t*-butyl
4: R^1=H
5: R^1=Cbz

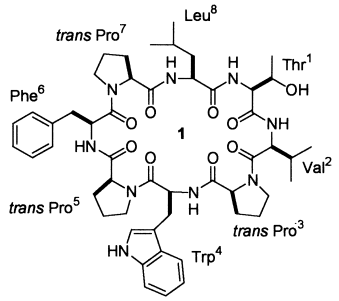
Axinellin C, a proline-rich cyclic octapeptide isolated from the Fijian marine sponge *Stylotella aurantium*

Tetrahedron 58 (2002) 7863

Jioji N. Tabudravu,[a] Linda A. Morris,[a] J. Jantina Kettenes-van den Bosch[b] and Marcel Jaspars[a,*]

[a]*Marine Natural Products Laboratory, Department of Chemistry, University of Aberdeen, Old Aberdeen, AB24 3UE Scotland, UK*
[b]*Department of Biomolecular Mass Spectrometry, Utrecht Institute for Pharmaceutical Sciences (UIPS) and Bijvoet Center for Biomolecular Research, Utrecht University, Sorbonnelaan 16, 3584 CA Utrecht, The Netherlands*

The cyclic octapeptide axinellin C (**1**) was isolated from a Fijian marine sponge. Its structure was elucidated by spectroscopic methods and its solution state conformation determined by NOE-restrained molecular dynamics calculations.

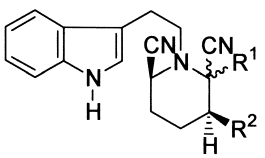


1,4-Dihydropyridine equivalents: a novel approach to 2,6-dicyanopiperidine derivatives

Tetrahedron 58 (2002) 7869

Tiina Putkonen, Emmi Valkonen, Arto Tolvanen and Reija Jokela*

Laboratory of Organic Chemistry, Helsinki University of Technology, P.O. Box 6100, FIN-02015 HUT Espoo, Finland



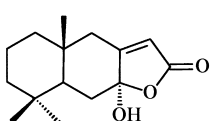
a R^1R^2=CH_2-$(CH_2)_2$-CH_2
b R^1=R^2=H
c R^1=R^2=CH_3
d R^1=H, R^2=CO_2CH_3

A cytotoxic sesquiterpene and unprecedented sesquiterpene-bisbibenzyl compounds from the liverwort *Schistochila glaucescens*

Tetrahedron 58 (2002) 7875

Jochen M. Scher,[a] Elaine J. Burgess,[b] Stephen D. Lorimer[b] and Nigel B. Perry[b,*]

[a]*Pharmakognosie und Analytische Phytochemie, Universität des Saarlandes, Im Stadtwald, Gebäude 32, D-66041 Saarbrücken, Germany*
[b]*Plant Extracts Research Unit, Department of Chemistry, New Zealand Institute for Crop & Food Research Limited, University of Otago, P.O. Box 56, Dunedin, New Zealand*



2-(*N*-Methylanilino)-3-formylchromone—a versatile synthon for incorporation of chromone moiety in a variety of heterocyclic systems and macrocycles through reactions with bifunctional nucleophiles

Tetrahedron 58 (2002) 7883

Gurmit Singh, Lakhwinder Singh and M. P. S. Ishar*

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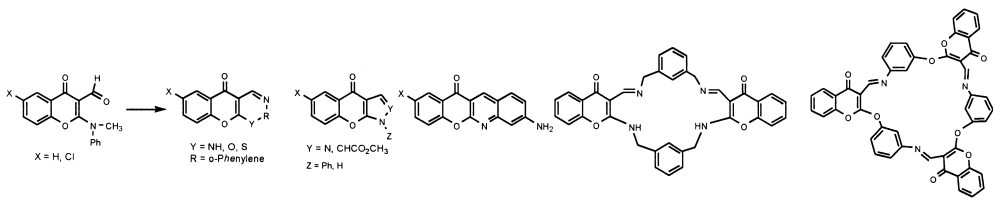
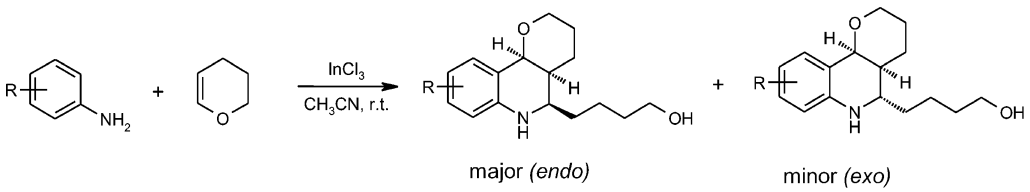


$InCl_3$-Catalyzed hetero-Diels–Alder reaction: an expeditious synthesis of pyranoquinolines

Tetrahedron 58 (2002) 7891

J. S. Yadav,[a,*] B. V. S. Reddy,[a] R. Srinivasa Rao,[a] S. Kiran Kumar[b] and Ajit C. Kunwar[b]

[a]*Division of Organic Chemistry, Indian Institute of Chemical Technology, Hyderabad 500 007, India*
[b]*Centre for Nuclear Magnetic Resonance, Indian Institute of Chemical Technology, Hyderabad 500 007, India*

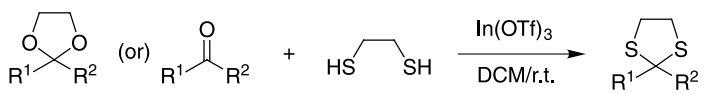


Indium triflate: a mild Lewis acid catalyst for thioacetalization and transthioacetalization

Tetrahedron 58 (2002) 7897

Sengodagounder Muthusamy,* Srinivasarao Arulananda Babu and Chidambaram Gunanathan

Silicates and Catalysis Discipline, Central Salt and Marine Chemicals Research Institute, Bhavnagar 364 002, India

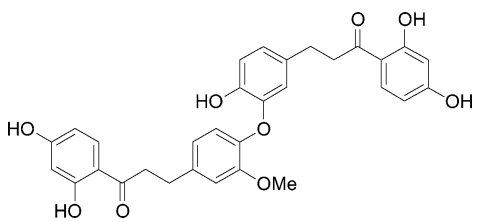


Utilization of a copper-catalyzed diaryl ether synthesis for the preparation of verbenachalcone

Tetrahedron 58 (2002) 7903

Xuechao Xing, Deepa Padmanaban, Li-An Yeh and Gregory D. Cuny*

Laboratory for Drug Discovery in Neurodegeneration, Harvard Center for Neurodegeneration and Repair, 65 Landsdowne Street, Cambridge, MA 02139, USA

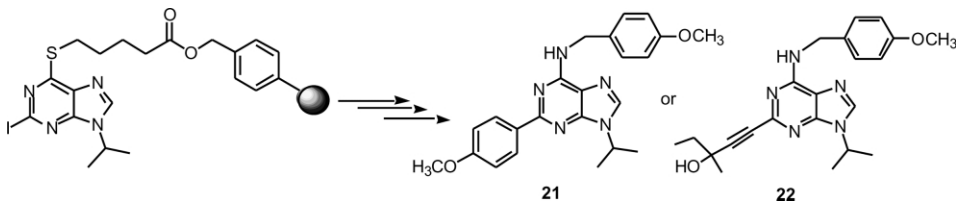


Traceless solid-phase synthesis of 2,6,9-trisubstituted purines from resin bound 6-thiopurines

Tetrahedron 58 (2002) 7911

Virginie Brun, Michel Legraverend* and David S. Grierson

Section de biologie, Institut Curie, Centre Universitaire, UMR 176 CNRS, Bâtiment 110-112, 91405 Orsay Cedex, France



1,2-Reduction of α,β-unsaturated hydrazones using dimethylamine–borane/*p*-toluenesulfonic acid: an easy route to allyl hydrazines

Tetrahedron 58 (2002) 7925

Maria E. Casarini,[a] Franco Ghelfi,[a,*] Emanuela Libertini,[a] Ugo M. Pagnoni[a] and Andrew F. Parsons[b]

[a]*Dipartimento di Chimica, Università degli Studi di Modena e Reggio Emilia, via Campi 183, 41100 Modena, Italy*
[b]*Department of Chemistry, University of York, Heslington, York YO10 5DD, UK*

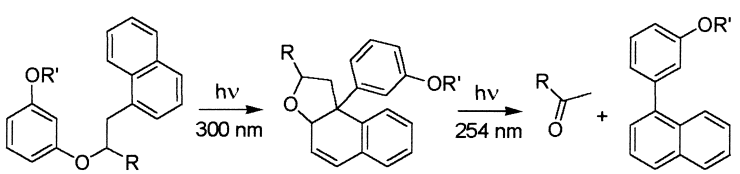
Conversion of α,β-unsaturated hydrazones into allyl hydrazines by reaction with the couple dimethylamine–borane/*p*-toluenesulfonic acid was smoothly achieved under mild conditions. Competitive conjugate reduction was sometimes observed, the regioselectivity being determined by steric and/or electronic factors.

New photochemical rearrangements and extrusion reactions of aromatic compounds induced by an intramolecular [2+2] photocycloaddition between a naphthalene and a resorcinol moiety

Tetrahedron 58 (2002) 7933

Norbert Hoffmann

Laboratoire des Réactions Sélectives et Applications, UMR 6519, CNRS et Université de Reims Champagne-Ardenne, UFR Sciences B.P. 1039, F-51687 Reims cedex 2, France

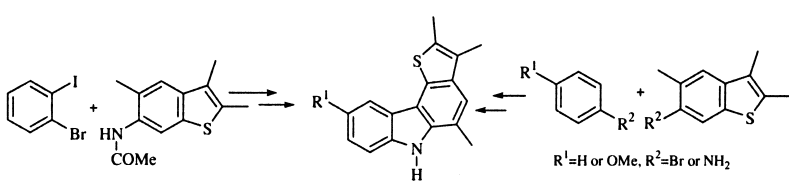


Novel synthetic routes to thienocarbazoles via palladium or copper catalyzed amination or amidation of arylhalides and intramolecular cyclization

Tetrahedron 58 (2002) 7943

Isabel C. F. R. Ferreira,[a] Maria-João R. P. Queiroz[a,*] and Gilbert Kirsch[b]

[a]*Departamento de Química, Universidade do Minho, 4710-057 Braga, Portugal*
[b]*Laboratoire d'Ingénierie Moleculaire et Biochimie Pharmacologique, Université de Metz, Faculté des Sciences, Ile du Saulcy, 57045 Metz, France*

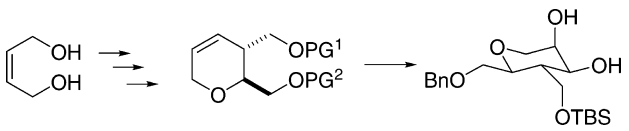


Tetrahedron 58 (2002) 7951

Di- and tetrahydropyrans with orthogonally protected hydroxymethyl side chains: a synthetic route and the structure elucidation of an unexpected acetal cleavage product

Bernd Schmidt,[a,*] Michael Pohler[a] and Burkhard Costisella[b]

[a]*Fachbereich Chemie der Universität Dortmund, Organische Chemie, Fachbereich Chemie der Universität Dortmund, Organische Chemie, Otto-Hahn-Straße 6, D-44227 Dortmund, Germany*
[b]*Gemeinsame Einrichtungen—NMR-Spektroskopie, Otto-Hahn-Straße 6, D-44227 Dortmund, Germany*

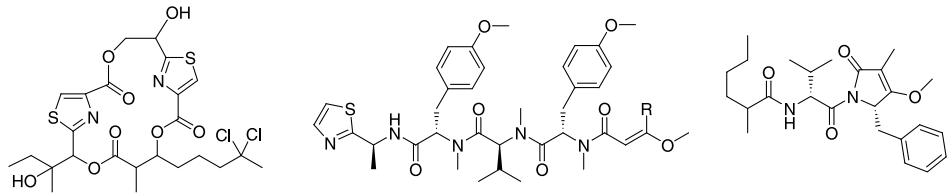


Tetrahedron 58 (2002) 7959

Structurally diverse new alkaloids from Palauan collections of the apratoxin-producing marine cyanobacterium *Lyngbya* sp.

Hendrik Luesch,[a] Wesley Y. Yoshida,[a] Richard E. Moore[a,*] and Valerie J. Paul[b]

[a]*Department of Chemistry, University of Hawaii at Manoa, 2545 The Mall Honolulu, Honolulu, HI 96822 2275, USA*
[b]*University of Guam Marine Laboratory, UOG Station, Mangilao, GU 96913, USA*

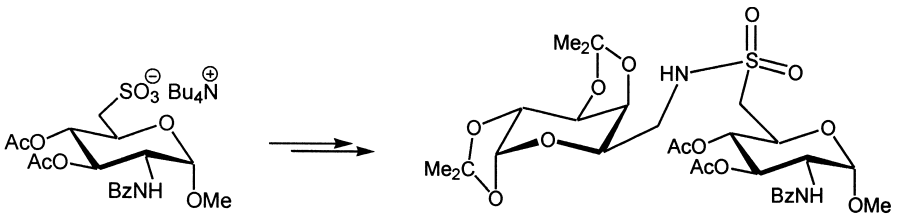


Tetrahedron 58 (2002) 7967

New *N*-alkylsulfonamides and alkyl sulfonates derived from 6-*C*-sulfosugars

Víctor Ulgar, Inés Maya, José Fuentes and José G. Fernández-Bolaños*

Departamento Química Orgánica, Facultad Química, Universidad Sevilla, Apartado 553, E-41071 Seville, Spain

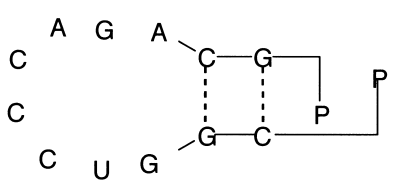


Tetrahedron 58 (2002) 7975

New ligand combinations for the efficient stabilization of short nucleic acid hairpins

Justine Michel,[a] Katell Bathany,[b] Jean-Marie Schmitter,[b] Jean-Pierre Monti[c] and Serge Moreau[a,*]

[a]*IFR Pathologies Infectieuses, INSERM U-386, Bat 3a, Université Victor Segalen Bordeaux 2,146 rue Léo Saignat, 33076 Bordeaux, France*
[b]*Institut Européen de Chimie et Biologie, FRE CNRS 2247, 16, avenue Pey Berland, 33607 Pessac, France*
[c]*UFR Sciences Pharmaceutiques EA 491, Université Victor Segalen, 146 rue Léo Saignat, 33076 Bordeaux, France*



An intramolecular Michael reaction strategy for the synthesis of 2,6-disubstituted-3-piperidinols

Tetrahedron 58 (2002) 7983

Saumitra Sengupta* and Somnath Mondal

Department of Chemistry, Jadavpur University, Kolkata 700 032, India