

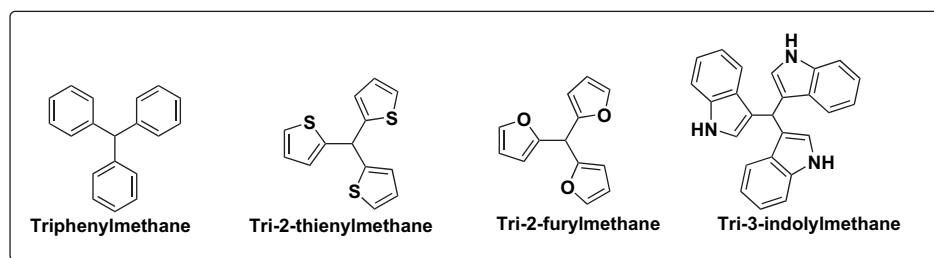
Contents

REPORT

Recent advances in the chemistry of triaryl- and triheteroarylmethanes

pp 6731–6747

Vijay Nair,* Siji Thomas, Smitha C. Mathew and K. G. Abhilash



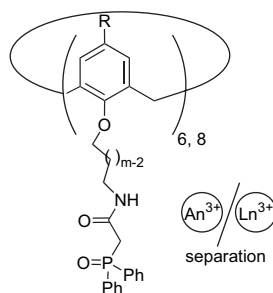
The major developments in the synthesis, reactions, and applications of triaryl- and triheteroarylmethanes are described.

ARTICLES

CMPO-substituted calix[6]- and calix[8]arene extractants for the separation of An^{3+}/Ln^{3+} from radioactive waste

pp 6749–6753

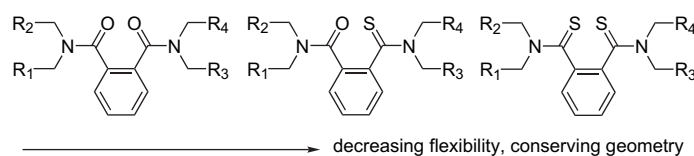
Francesco Sansone, Marco Fontanella, Alessandro Casnati,* Rocco Ungaro, Volker Böhmer,* Mohamed Saadioui, Karine Liger and Jean-François Dozol



A way to manage the thermal flexibility of ligand candidates for bioassays

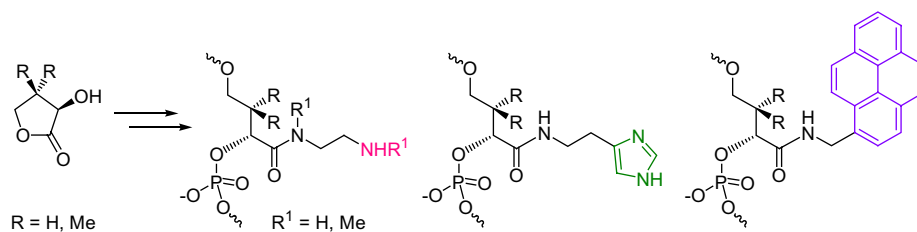
pp 6754–6761

Maria Altamura, Giuseppe Balacco, Francesco Cuda, Annalisa Guerri, Antonio Guidi,* Stefania Meini, Stefano Menichetti, Cristina Nativi and Franco Pasqui

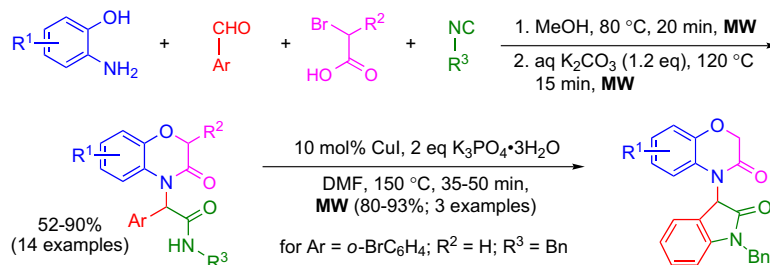


Phosphoramidites and solid supports based on *N*-substituted 2,4-dihydroxybutyramides: universal reagents for synthesis of modified oligonucleotides pp 6762–6773

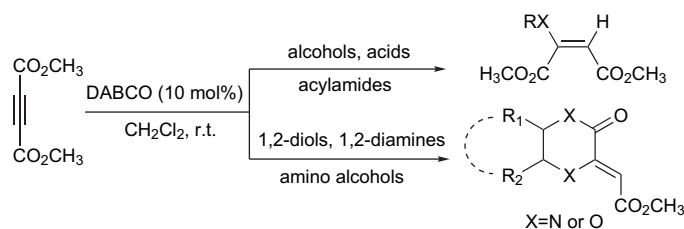
Natalia N. Dioubankova, Andrei D. Malakhov, Dmitry A. Stetsenko, Michael J. Gait and Vladimir A. Korshun*


Microwave-assisted one-pot U-4CR and intramolecular O-alkylation toward heterocyclic scaffolds pp 6774–6781

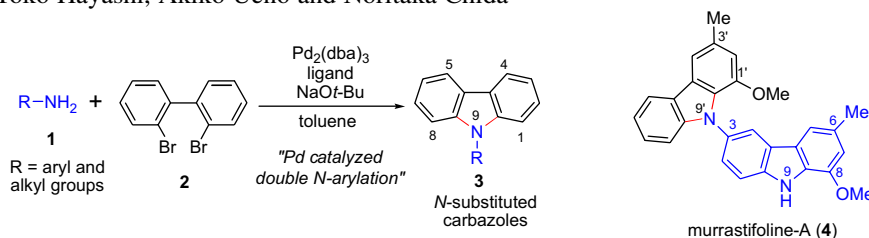
Xinglong Xing, Jinlong Wu, Gaofeng Feng and Wei-Min Dai*


DABCO catalyzed reaction of various nucleophiles with activated alkynes leading to the formation of alkenoic acid esters, 1,4-dioxane, morpholine, and piperazinone derivatives pp 6782–6791

Ming-Jin Fan, Gao-Qiang Li and Yong-Min Liang*


One-step construction of carbazoles by way of the palladium-catalyzed double N-arylation reaction and its application to the total synthesis of murrastifoline-A pp 6792–6801

Takafumi Kitawaki, Yoko Hayashi, Akiko Ueno and Noritaka Chida*

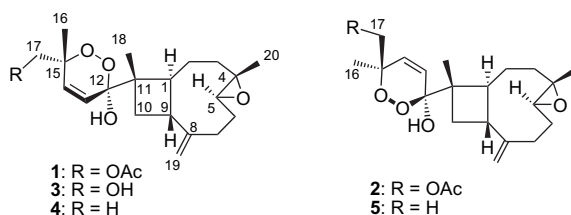


Aryl and aliphatic amines including *tert*-butylamine and a protected glucopyranosylamine were effectively transformed into the corresponding *N*-substituted carbazoles by way of the Pd-catalyzed double *N*-arylation. The first total synthesis of murrastifoline-A, a biscarbazole alkaloid, based on this methodology was also accomplished.

Sinugibberosides A–E, new terpenoids with cyclic peroxyhemiketal from the soft coral *Sinularia gibberosa*

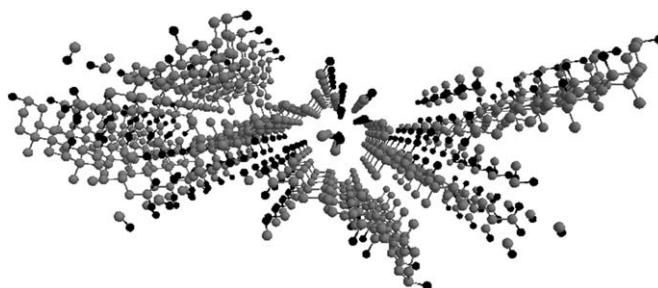
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Shin-Pin Chen, Atallah F. Ahmed, Chang-Feng Dai, Chung-Kuang Lu, Wan-Ping Hu, Jeh-Jeng Wang and Jyh-Horng Sheu*

**High guest inclusion in 3 β -amino-7 α ,12 α -dihydroxycholestan-24-oic acid enabled by charge-assisted hydrogen bonds**

pp 6808–6813

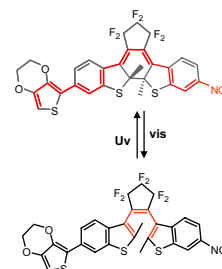
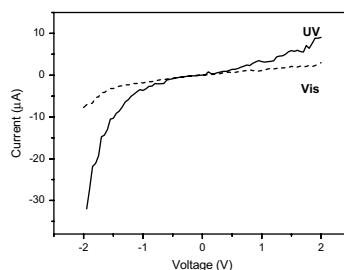
Eui-Hyun Ryu, Arkady Ellern and Yan Zhao*

**Diarylethenes with intramolecular donor–acceptor structures for photo-induced electrochemical change**

pp 6814–6821

Eunkyong Kim,* Miyoung Kim and Kyongtae Kim

Diarylethenes with donor–acceptor groups showed reversible electrochemical change by a UV and visible light source, to result in conductivity switching between 2.5×10^{-8} and $3 \times 10^{-9} \text{ S cm}^{-1}$ when it was doped in PS polymer.

**Leishmanicidal activity of withajardins and acnistins. An experimental and computational study**

pp 6822–6829

Diana Cardona, Winston Quiñones, Fernando Torres, Sara Robledo, Iván Darío Vélez, Víctor Cruz, Rafael Notario and Fernando Echeverri*

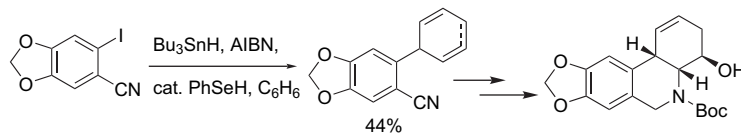


Several acnistins and withajardins showed leishmanicidal activity. The 3D-QSAR models predict the same affects for both leishmanicidal and toxicity activities.

Radical dearomatization of benzene leading to phenanthridine and phenanthridinone derivatives related to (±)-pancratistatin

pp 6830–6840

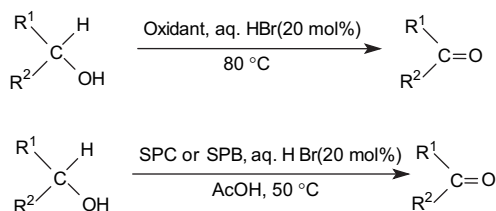
David Crich* and Venkataramanan Krishnamurthy



Highly efficient and selective oxidation of secondary alcohols to ketones under organic solvent and transition metal free conditions

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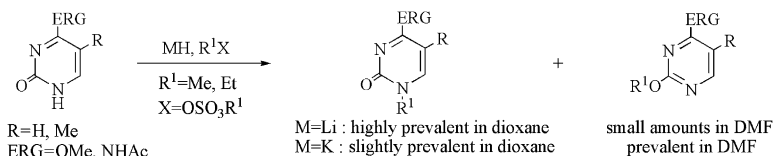
Suman L. Jain, Vishal B. Sharma and Bir Sain*



HSAB-driven chemoselective N¹-alkylation of pyrimidine bases and their 4-methoxy- or 4-acetylamino-derivatives

pp 6848–6854

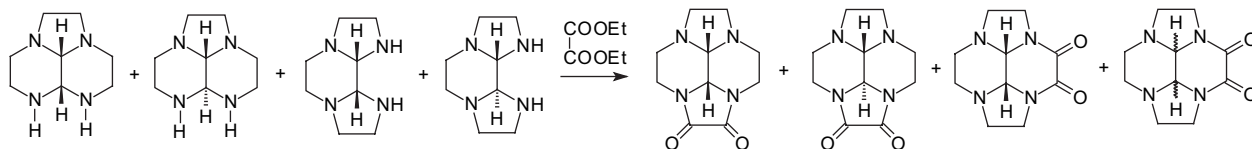
Augusto Gambacorta,* Daniela Tofani, Maria Antonietta Loreto, Tecla Gasperi and Roberta Bernini



Stereochemistry of the intermediates in the synthesis of 1,4,7,10-tetraazacyclododecane from triethylenetetramine, glyoxal and diethyl oxalate

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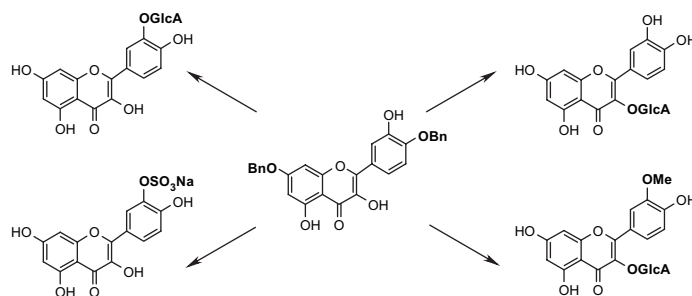
Maria Argese,* Marino Brocchetta, Mario De Miranda, Paola Paoli, Fiorenza Perego and Patrizia Rossi



Convenient syntheses of metabolically important quercetin glucuronides and sulfates

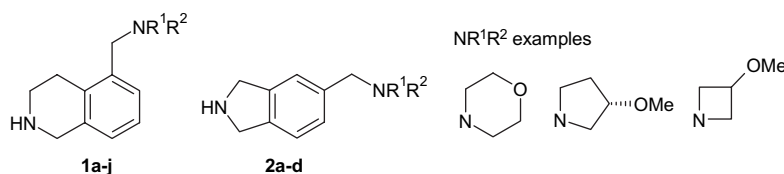
pp 6862–6868

Paul W. Needs* and Paul A. Kroon

**Synthesis of substituted 5-aminomethyl tetrahydro-isoquinolines and dihydro-isoindoles**

pp 6869–6875

M. Jonathan Fray,* Paul Allen, Paul R. Bradley, Clare E. Challenger, Michael Closier, Tim J. Evans, Mark L. Lewis, John P. Mathias, Carly L. Nichols, Yvonne M. Po-Ba, Hayley Snow, Mark H. Stefaniak and Hannah V. Vuong

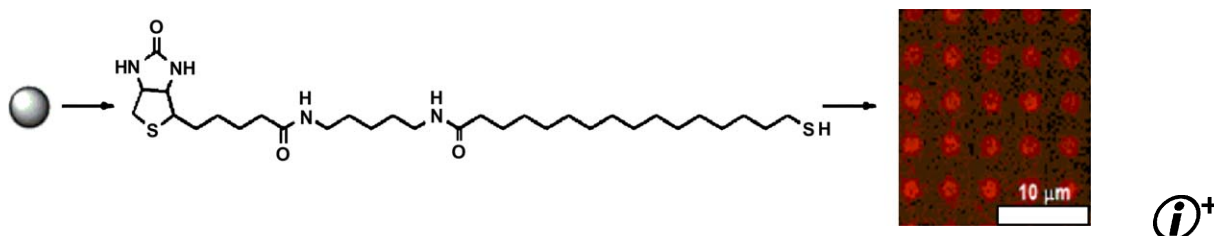


The synthesis of 10 substituted aminomethylene tetrahydro-isoquinolines **1a–j** (eight steps from 5-hydroxyisoquinoline) and four similarly substituted dihydro-isoindoles **2a–d** is described.

Facile solid-phase synthesis of biotinylated alkyl thiols

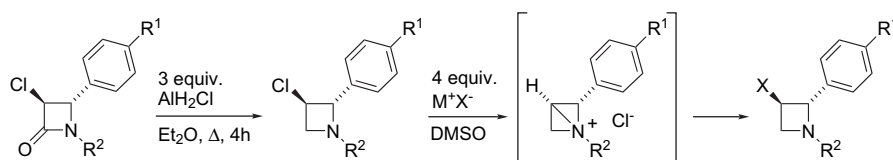
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Elisabet Prats-Alfonso, Fayna García-Martín, Nuria Bayo, Luis J. Cruz, Mateu Pla-Roca,* Josep Samitier, Abdelhamid Errachid* and Fernando Albericio*

**Synthesis and reactivity of *trans*-2-aryl-3-chloroazetidines**

pp 6882–6892

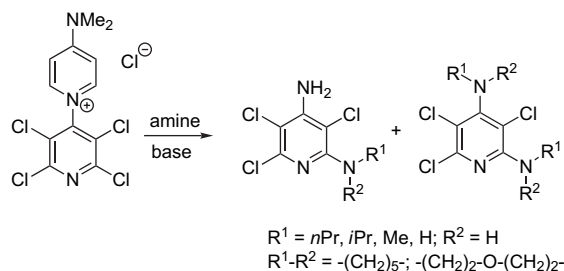
Berten Van Driessche, Willem Van Brabandt, Matthias D'hooghe, Yves Dejaegher and Norbert De Kimpe*



Reactions of 4-(dimethylamino)pyridinium activated pentachloropyridine with nitrogen nucleophiles and hydride

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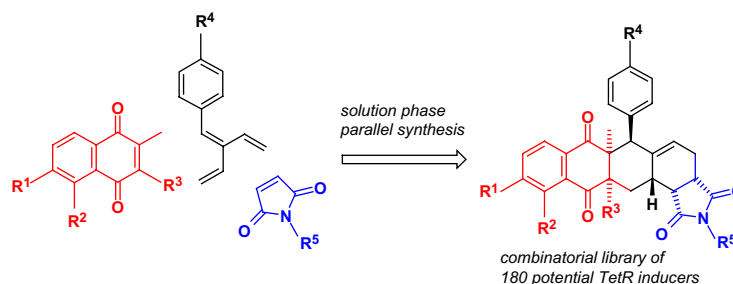
Andreas Schmidt,* Jan Christoph Namyslo and Thorsten Mordhorst



A consecutive Diels–Alder approach toward a Tet repressor directed combinatorial library

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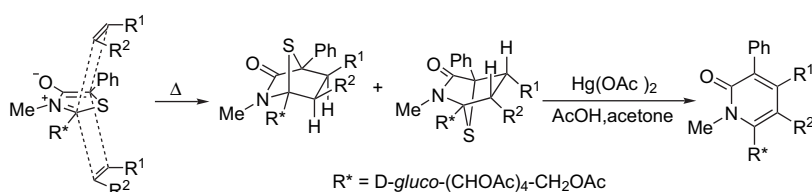
Christian Kormann, Frank W. Heinemann and Peter Gmeiner*



Construction of C-nucleosides diversified by [3 + 2] cycloaddition from a sugar-based mesoionic ring

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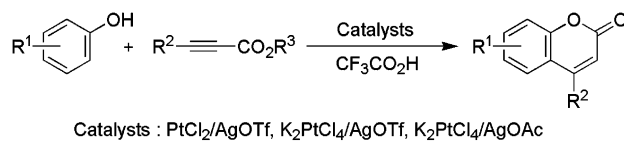
María J. Arévalo,* Martín Ávalos, Reyes Babiano, Pedro Cintas, José L. Jiménez, Mark E. Light and Juan C. Palacios



Synthesis of coumarins by Pt-catalyzed hydroarylation of propiolic acids with phenols

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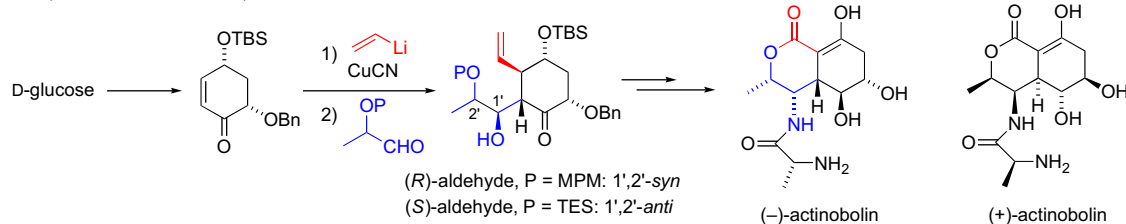
Juzo Oyamada and Tsugio Kitamura*



Total synthesis of actinobolin from D-glucose by way of the stereoselective three-component coupling reaction

pp 6926–6944

Satoshi Imuta, Hiroki Tanimoto, Miho K. Momose and Noritaka Chida*

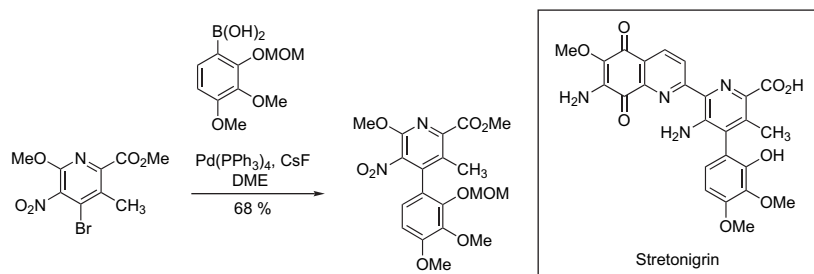


Total synthesis of (-)-actinobolin starting from D-glucose is described. Stereocontrolled three-component coupling reactions of a cyclohexenone derived from D-glucose by way of Ferrier's carbocyclization, with vinyl cuprate and 2-alkoxypropanal effectively constructed the carbon framework of actinobolin. The formal synthesis of (+)-actinobolin starting from D-glucose was also accomplished.

Synthesis of the CD-ring of the anticancer agent streptonigrin: studies of aryl–aryl coupling methodologies

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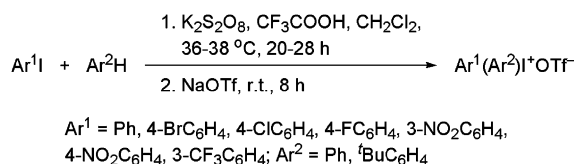
William T. McElroy and Philip DeShong*



Reaction of iodoarenes with potassium peroxodisulfate/trifluoroacetic acid in the presence of aromatics. Direct preparation of diaryliodonium triflates from iodoarenes

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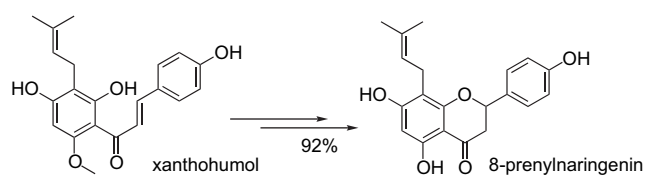
Md. Delwar Hossain and Tsugio Kitamura*



An efficient synthesis of the phytoestrogen 8-prenylnaringenin from xanthohumol by a novel demethylation process

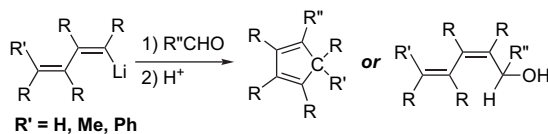
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Heike Wilhelm and Ludger A. Wessjohann*



Reaction of 4-methyl, 4-phenyl, and 4-hydrogen substituted 1-lithio-1,3-butadienes with aldehydes: preparation of multiply substituted cyclopentadienes pp 6967–6972

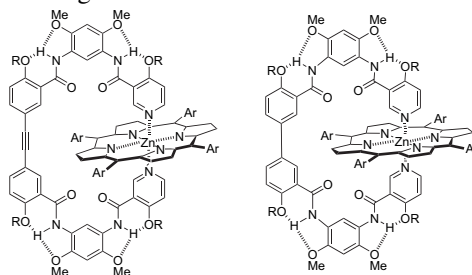
Zhihui Wang, Hongyun Fang and Zhenfeng Xi*



‘Two-point’-bound supramolecular complexes from semi-rigidified dipyrindine receptors and zinc porphyrins

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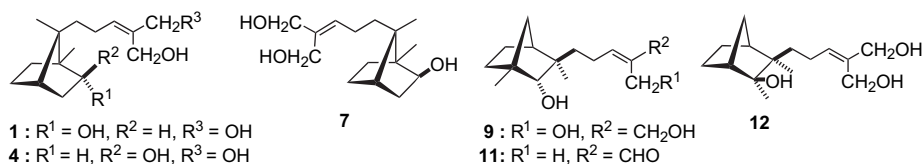
Chang-Zhi Li, Jiang Zhu, Zong-Quan Wu, Jun-Li Hou, Chuang Li, Xue-Bin Shao, Xi-Kui Jiang, Zhan-Ting Li,* Xiang Gao and Quan-Rui Wang*



New antitumor sesquiterpenoids from *Santalum album* of Indian origin

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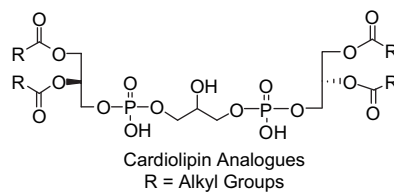
Tae Hoon Kim, Hideyuki Ito,* Tsutomu Hatano, Junko Takayasu, Harukuni Tokuda, Hoyoku Nishino, Takahisa Machiguchi and Takashi Yoshida



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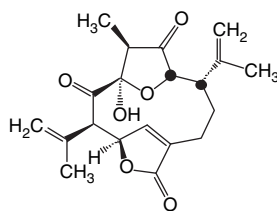
Shoukath M. Ali, Moghis U. Ahmad, Peter Koslosky, Krishnudu Kasireddy, U. Murali Krishna and Imran Ahmad*



New diterpenes of the pseudopterane class from two closely related *Pseudopterogorgia* species: isolation, structural elucidation, and biological evaluation

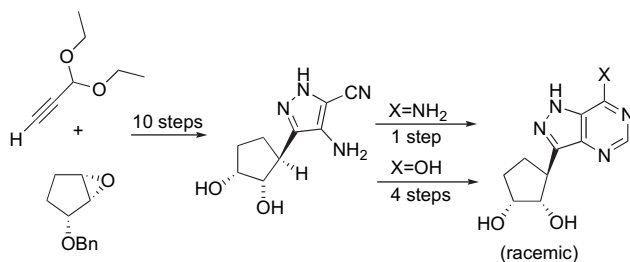
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**C-4' Truncated carbocyclic formycin derivatives**

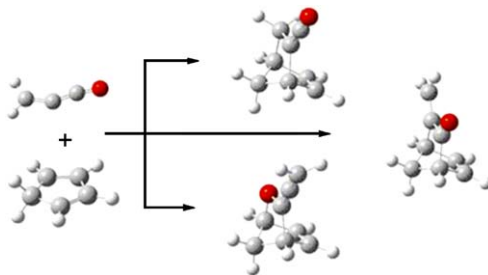
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Jian Zhou, Minmin Yang, Akin Akdag and Stewart W. Schneller*

**Theoretical study of the regioselectivity of the cycloaddition reaction between cyclopentadiene and methyleneketene**

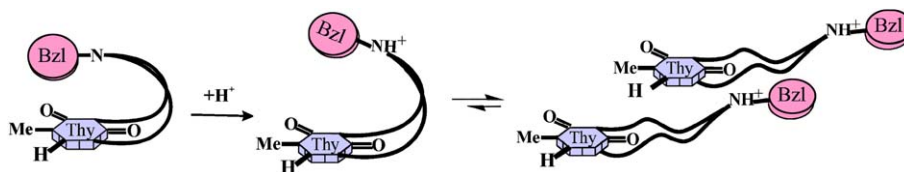
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Yinghong Sheng and Jerzy Leszczynski*

i⁺**Structure of pyrimidinocyclophanes in solution by NMR**

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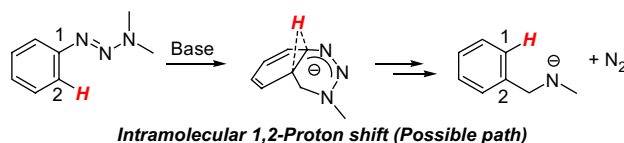
Leisan Galiullina, Anton Nikolaev, Vyacheslav Semenov, Vladimir Reznik and Shamil Latypov*

i⁺

Formation of benzylamines from triazene compounds via a 1,2-proton shift

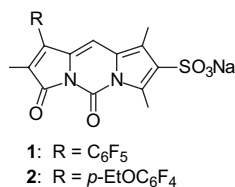
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Keiji Nishiwaki,* Takashi Ogawa, Kazumi Shigeta, Koichi Takahashi and Keizo Matsuo*

**Synthesis, properties, and hepatic metabolism of strongly fluorescent fluorodipyrrinones**

pp 7043–7055

Stefan E. Boiadjev, Zachary R. Woydziak, Antony F. McDonagh and David A. Lightner*

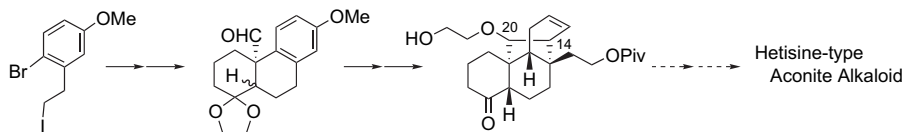


Fluorinated *N,N'*-carbonyl-bridged dipyrinones, synthesized and found to be highly fluorescent (ϕ_F 0.4–0.6) are potential ¹⁹F MRI and fluorescence imaging agents for probing hepatic metabolism.

Synthetic study of hetisine-type aconite alkaloids. Part 1: Preparation of tetracyclic intermediate containing the C14–C20 bond

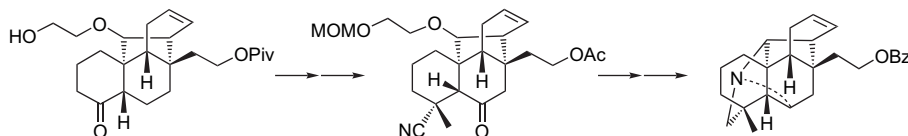
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Hideaki Muratake* and Mitsutaka Natsume*

**Synthetic study of hetisine-type aconite alkaloids. Part 2: Preparation of hexacyclic compound lacking the C-ring of the hetisan skeleton**

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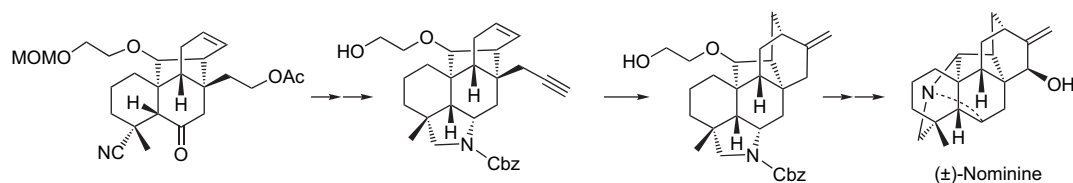
Hideaki Muratake* and Mitsutaka Natsume*



Synthetic study of hetisine-type aconite alkaloids. Part 3: Total synthesis of (±)-nominine

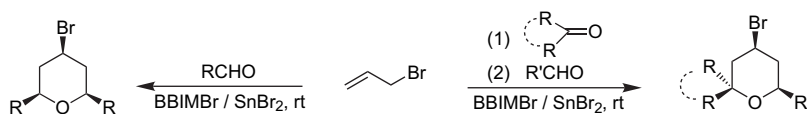
pp 7093–7112

Hideaki Muratake,* Mitsutaka Natsume* and Hiroshi Nakai

**Direct synthesis of tetrahydropyrans via one-pot Babier–Prins cyclization of allylbromide with carbonyl compounds promoted by RTILs BPyX/SnX₂ or BBIMBr/SnBr₂**

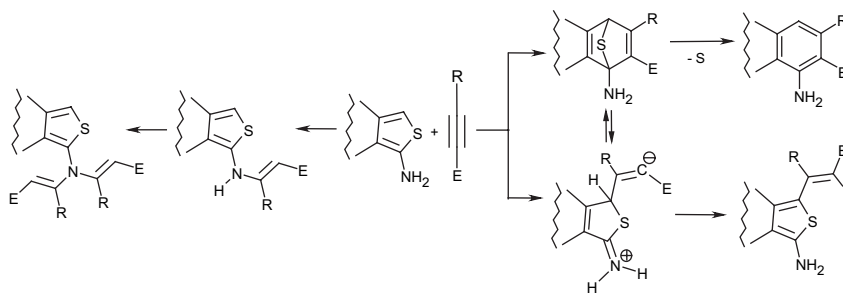
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Xian-Liang Zhao, Li Liu,* Yong-Jun Chen and Dong Wang*

**Reactions of some anellated 2-aminothiophenes with electron poor acetylenes**

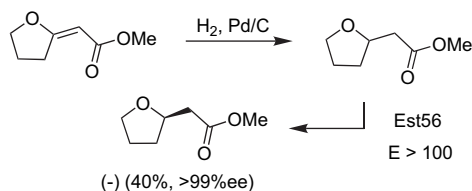
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Emmanuel Sopbué Fondjo,* Dietrich Döpp and Gerald Henkel

**Synthesis of (tetrahydrofuran-2-yl)acetates based on a ‘cyclization/hydrogenation/enzymatic kinetic resolution’ strategy**

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Esen Bellur, Ilia Freifeld, Dominique Böttcher, Uwe T. Bornscheuer and Peter Langer*



*Corresponding author

 Supplementary data available via ScienceDirect



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