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REPORT

Recent advances in the application of supercritical fluids for carbon–carbon bond formation in organic synthesis

pp 815–833

Dipak Prajapati* and Mukut Gohain

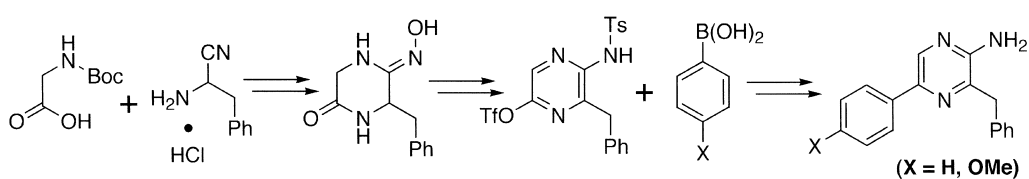
The application of supercritical fluids as an alternative media in the carbon–carbon bond formation of various organic reactions and their recent developments are reviewed. The review contains 135 references.

ARTICLES

Novel synthetic route of aryl-aminopyrazine

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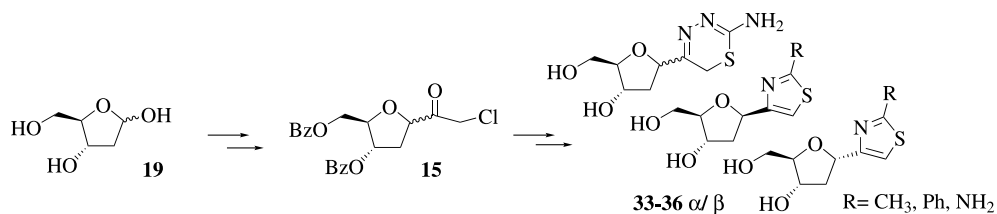
Masaki Kuse, Nobuhiro Kondo, Yuki Ohyabu and Minoru Isobe*



A parallel synthesis approach towards a family of C-nucleosides

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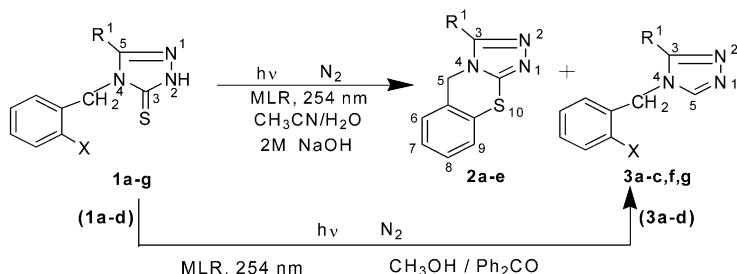
Mauro F. A. Adamo,* Robert M. Adlington, Jack E. Baldwin and Anna L. Day



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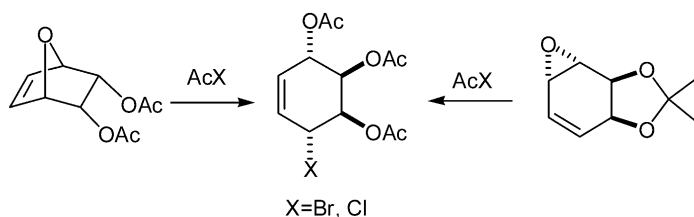
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Stereoselective ring-opening reactions with AcBr and AcCl. A new method for preparation of some haloconduritols

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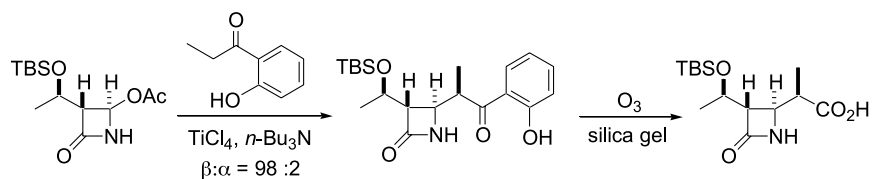
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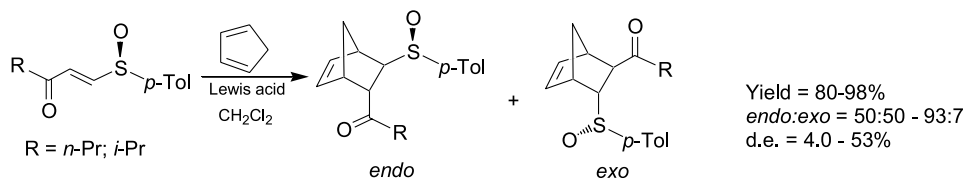
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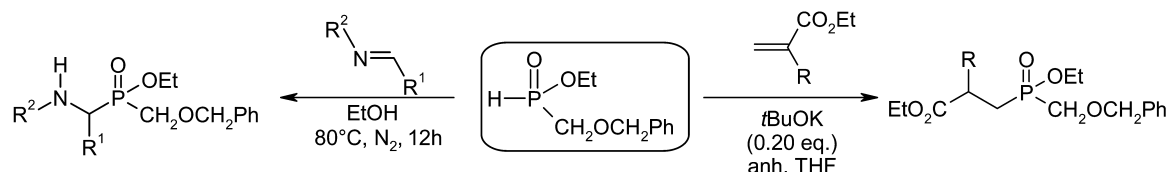
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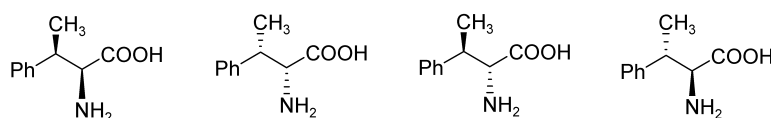
Henri-Jean Cristau,* Agnès Hervé and David Virieux*

An efficient and stereodivergent synthesis of *threo*- and *erythro*- β -methylphenylalanine.

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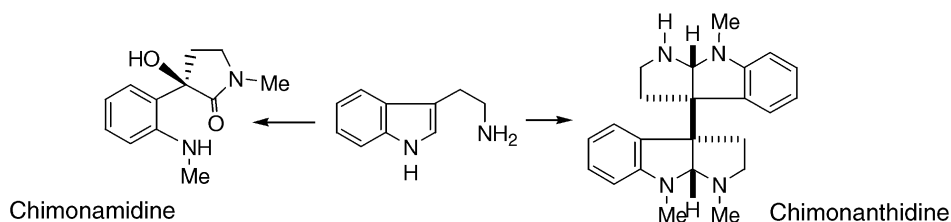
Resolution of each racemic pair by semipreparative HPLC

Miriam Alías, María Pilar López and Carlos Cativiela*

Isolation, structure elucidation, and total synthesis of two new *Chimonanthus* alkaloids, chimonamidine and chimonanthidine

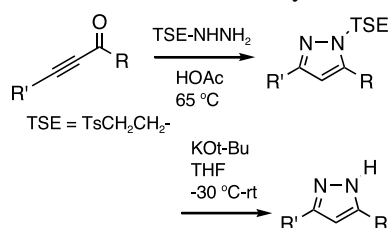
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Hiromitsu Takayama,* Yohei Matsuda, Kyohei Masubuchi, Atsushi Ishida, Mariko Kitajima and Norio Aimi

Synthesis of β -tosylethylhydrazine and its use in preparation of N-protected pyrazoles and 5-aminopyrazoles

pp 901–906

David M. Dastrup, Amy H. Yap, Steven M. Weinreb,* James R. Henry* and Andrew J. Lechleiter

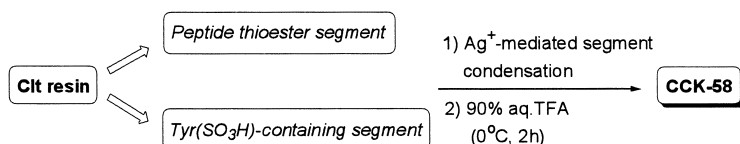


β -Tosylethylhydrazine, prepared from *p*-tolyl vinyl sulfone and hydrazine hydrate, reacts with both 1,3-diketones and conjugated ynone to provide N-tosylethyl-protected (TSE) pyrazoles in good yields. The TSE group can be removed from the pyrazoles using potassium *t*-butoxide in THF.

Total chemical synthesis of large CCK isoforms using a thioester segment condensation approach

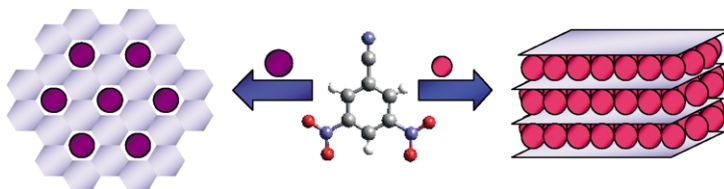
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Kouki Kitagawa,* Hiroshi Adachi, Yumi Sekigawa, Takeshi Yagami, Shiroh Futaki, Yuan Jun Gu and Kazutomo Inoue


Host–guest complexes of 3,5-dinitrobenzonitrile: channels and sandwich supramolecular architectures

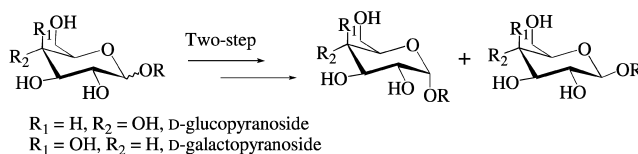
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Kapildev K. Arora and V. R. Pedireddi*


Regioselective acylation of carbohydrate derivatives using lipases leading to a facile two-step procedure for the separation of some α - and β -glucopyranosides and galactopyranosides

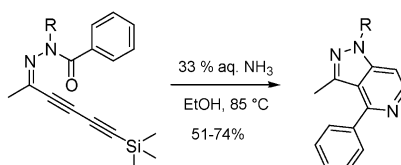
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Pedro M. L. Gonçalves, Stanley M. Roberts* and Peter W. H. Wan


New access to the 1H-pyrazolo[4,3-c]pyridine core from bis-acetylenic-N-benzoylhydrazones

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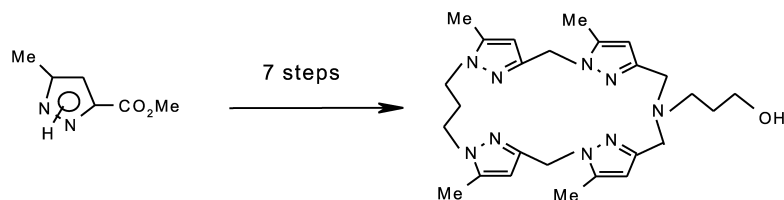
Laurent Commeiras, Samuel C. Woodcock, Jack E. Baldwin,* Robert M. Adlington, Andrew R. Cowley and Peter J. Wilkinson



New tetrapyrzolic macrocycle. Synthesis and preliminary use in metal ion extraction

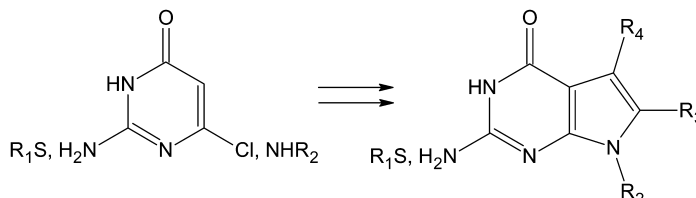
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Smaail Radi,* Abdelkrim Ramdani, Yahya Lekchiri, Michel Morcellet, Grégorio Crini and Ludovic Janus

Li⁺, Na⁺, K⁺, Cs⁺, Ca²⁺, Cd²⁺, Pb²⁺ and Hg²⁺**The synthesis of 7-deazaguanines as potential inhibitors of guanosine triphosphate cyclohydrolase I**

pp 943–959

Colin L. Gibson, Salvatore La Rosa, Kyuji Ohta, Peter H. Boyle, Fabien Leurquin, Alexandra Lemaçon and Colin J. Suckling*

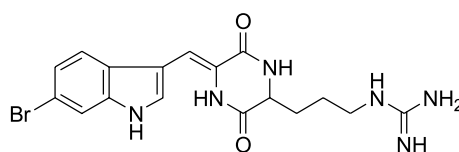


Substituted 7-deazaguanines are of interest as inhibitors of GTP cyclohydrolase I, the first enzyme in the biosynthetic pathway leading to dihydrofolate and tetrahydrobiopterin. Methods are described for the synthesis of 7-deazaguanines substituted at positions 2, 6 and 9 (purine numbering) such that a wide diversity of compounds can be prepared. Several compounds show inhibitory activity with respect to GTP cyclohydrolase I, and some show evidence for chemical transformation by that enzyme.

Synthesis of baretin

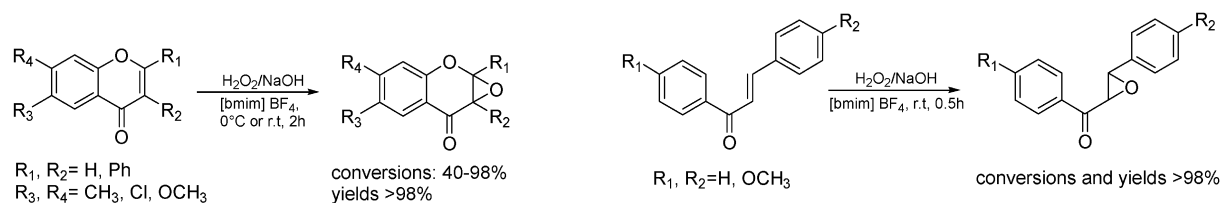
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Ann-Louise Johnson, Jan Bergman,* Martin Sjögren and Lars Bohlin

**Epoxidation of chromones and flavonoids in ionic liquids**

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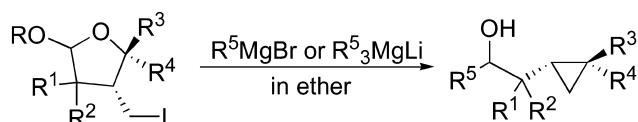
Roberta Bernini,* Enrico Mincione, Antonietta Coratti, Giancarlo Fabrizi* and Gianfranco Battistuzzi



Synthesis of cyclopropanes via iodine–magnesium exchange between 3-iodomethyl-1-oxacyclopentanes and organomagnesium reagents

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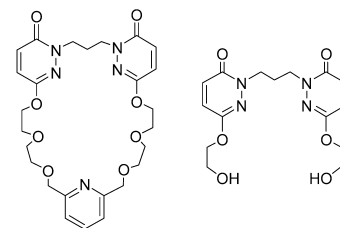
Takashi Tsuji, Tomoaki Nakamura, Hideki Yorimitsu, Hiroshi Shinokubo and Koichiro Oshima*


A new series of heteroaromatic receptors containing the 1,3-bis(6-oxopyridazin-1-yl)propane unit: their selective transport ability towards NH_4^+ in relation to Na^+ , K^+ and Ca^{2+}

pp 979–986

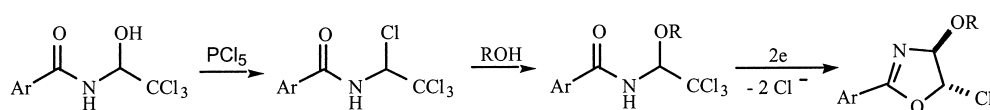
Lucrecia Campayo, Mercedes Pardo,* Ana Cotillas, Oscar Jaúregui, Maria J. R. Yunta, Carmen Cano, Fernando Gomez-Contreras, Pilar Navarro and Ana M. Sanz

The synthesis and transport ability of a new series of heteroaromatic receptors containing the 1,3-bis(6-oxopyridazin-1-yl)propane unit are described, and the complexation mode of the most selective ammonium carriers discussed with the help of molecular modelling techniques.


Stereoselective electrogeneration of (*E*)-4-alkoxy-2-phenyl-5-chloro-2-oxazolines by cathodic reduction of *N*-(1-alkoxy-2,2,2-trichloroethyl)benzamides

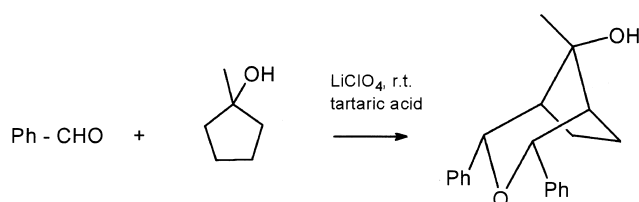
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Antonio Guirado,* Raquel Andreu, Bruno Martiz and Jesús Gálvez


 LiClO_4 -Activated stereo- and regioselective alkylation of aldehydes

pp 993–999

M. Markert, I. Buchem, H. Krüger and R. Mahrwald*

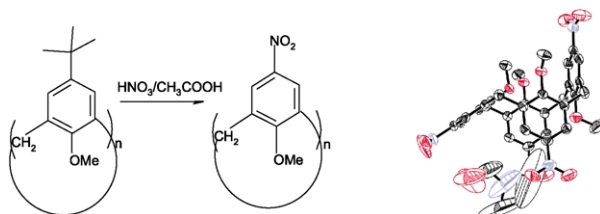


An example of unusual and mild alkylation of aldehydes by LiClO_4 -activation in the presence of acids.

Preparation of *p*-nitrocalix[*n*]arene methyl ethers via *ipso*-nitration and crystal structure of tetramethoxytetra-*p*-nitrocalix[4]arene

pp 1001–1005

Satish Kumar, R. Varadarajan, H. M. Chawla,* Geeta Hundal and M. S. Hundal



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*Corresponding author

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