



## Tetrahedron Vol. 65, Issue 38, 2009

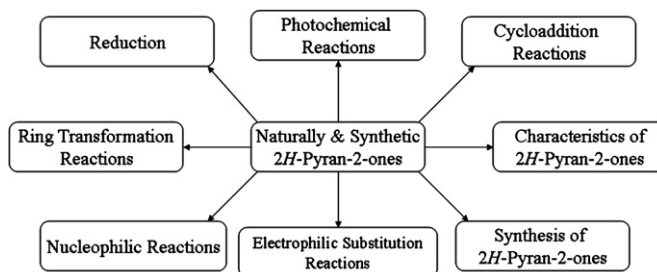
## Contents

## REPORT

Natural and synthetic 2*H*-pyran-2-ones and their versatility in organic synthesis

Atul Goel, Vishnu J. Ram\*

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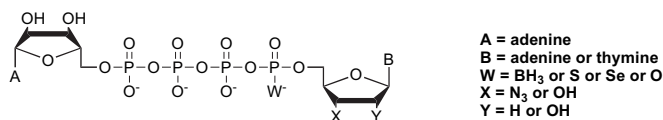
An overview of the natural presence and development of the chemistry of the 2*H*-pyran-2-one ring system is delineated. The report contains 363 references.

## ARTICLES

Synthesis of boranoate, selenoate, and thioate analogs of AZTp<sub>4</sub>A and Ap<sub>4</sub>A

Qianwei Han, Stefan G. Sarafianos, Eddy Arnold, Michael A. Parniak, Barbara L. Gaffney, Roger A. Jones\*

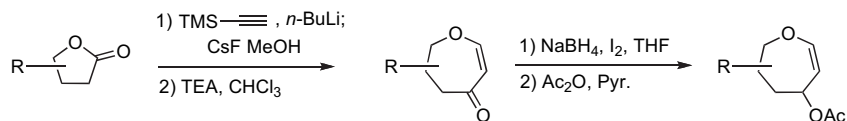
pp 7915–7920



**An oxepinone route to carbohydrate based oxepines**

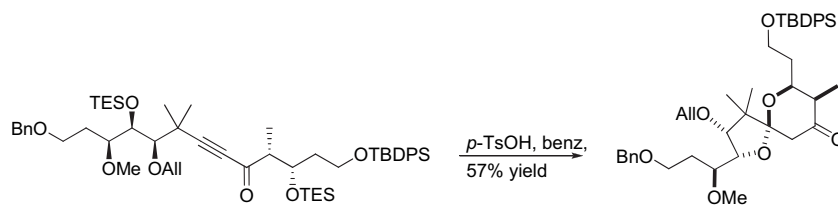
Steve Castro, Courtney S. Johnson, Bikash Surana, Mark W. Pecuh\*

pp 7921–7926

**Towards the total synthesis of Calyculin C: preparation of the C<sub>13</sub>–C<sub>25</sub> spirocyclic core**

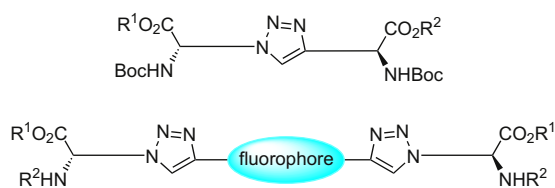
Damien Habrant, Alan J.W. Stewart, Ari M.P. Koskinen\*

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**Synthesis of crosslinking amino acids by click chemistry**

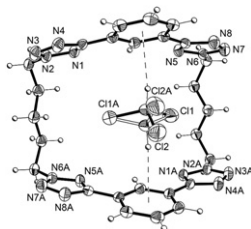
Chun Li, Jie Tang, Juan Xie\*

pp 7935–7941

**First X-ray structural characterisation of host-guest interactions in tetra-tetrazole macrocycles**

Andrew D. Bond, Adrienne Fleming, Jackie Gaire, Fintan Kelleher, John McGinley\*, Vickie McKee

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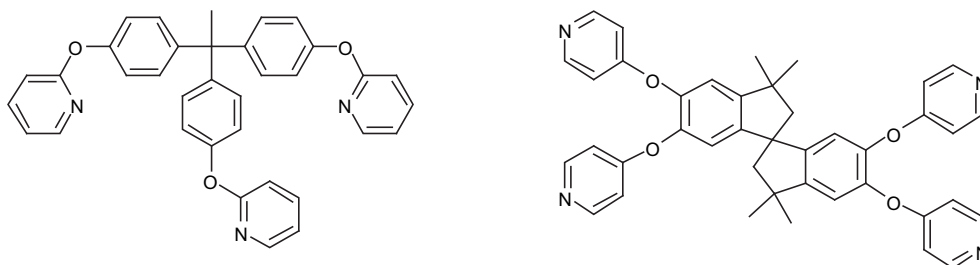


The syntheses of tetra-tetrazole macrocycles, containing two 1,3-bis(tetrazole)benzene units linked by a variety of *n*-alkyl ( $n=3, 5, 7$  or  $9$  carbon atoms) chain lengths, are described. A tetra-tetrazole macrocycle has also been structurally characterised and contains an unexpected 'host-guest' interaction through binding of a chloroform solvent molecule.

**New three- and four-armed flexible bridging ligands for use in metallosupramolecular chemistry: syntheses and X-ray structures**

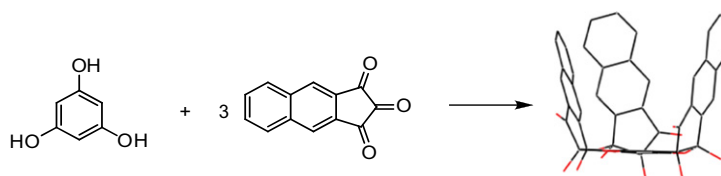
pp 7948–7953

Justine R.A. Cottam, Peter J. Steel\*

**The reaction between phloroglucinol and vic polycarbonyl compounds: extension and mechanistic elucidation of Kim's synthesis for bipolarofacial bowl-shaped compounds**

pp 7954–7962

Joseph Almog\*, Rinat Rozin, Asne Klein, Genyia Shamuilov-Levinton, Shmuel Cohen

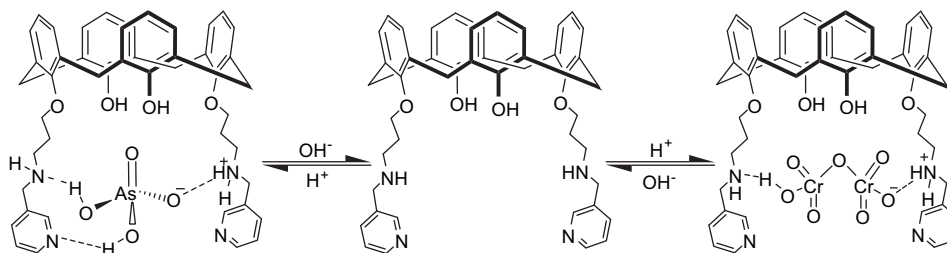


Kim's synthesis of bowl-shaped compounds from phloroglucinol and ninhydrin was extended to produce deeper and lower-symmetry cavitands. The reaction involves cyclic hemiketal formation followed by ring-openings and rearrangements.

**Synthesis of di-substituted calix[4]arene-based receptors for extraction of chromate and arsenate anions**

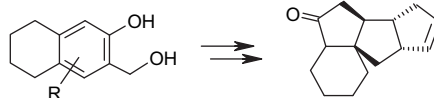
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Mevlüt Bayrakçı, Şeref Ertul, Mustafa Yılmaz\*

**Cycloaddition of annulated cyclohexa-2,4-dienones and novel reduction of halogen at bridgehead: an expedient route to tetracyclo[6.5.2.0<sup>2,7</sup>.0<sup>9,13</sup>]pentadec-2(7),11-dien-14-one and framework of conidiogenol and conidiogenone**

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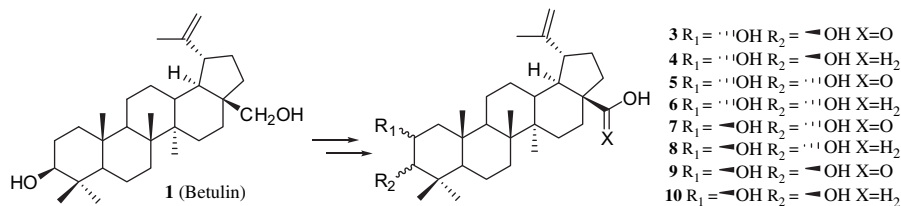
Vishwakarma Singh\*, Raj Bahadur Singh, Shaikh M. Mobin



**Efficient access to isomeric 2,3-dihydroxy lupanes: first synthesis of alplitolic acid**

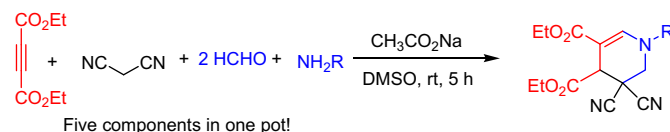
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Jia Hao, Xueli Zhang, Pu Zhang, Jun Liu, Luyong Zhang, Hongbin Sun\*

**Hydroalkylation leading to heterocyclic compounds (Part 2): practical synthesis of polysubstituted 1,2,3,4-tetrahydropyridines through multicomponent reactions (MCRs)**

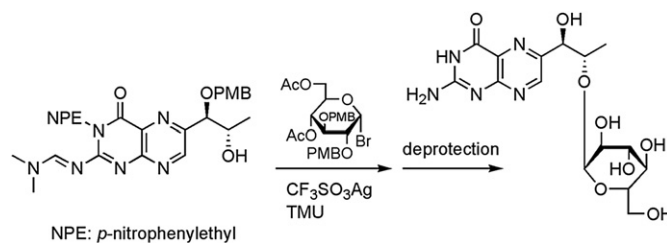
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Wei-Bing Liu, Huan-Feng Jiang\*, Shi-Fa Zhu, Wei Wang

**Synthetic studies on pterin glycosides: the first synthesis of 2'-O-(α-D-glucopyranosyl)biopterin**

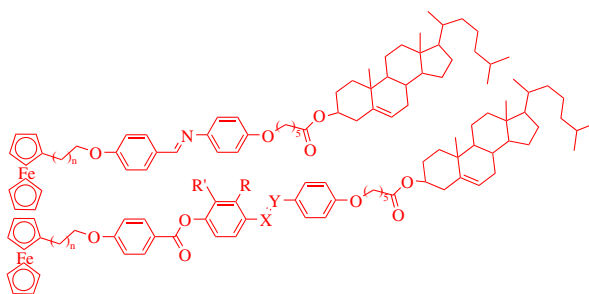
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Tadashi Hanaya\*, Hiroki Baba, Hiroki Toyota, Hiroshi Yamamoto

**Synthesis and characterization of cholesterol-based nonsymmetric dimers terminated with ferrocenyl core**

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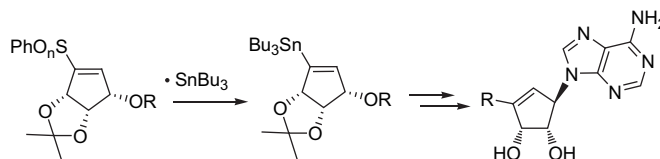
K.C. Majumdar\*, Santanu Chakravorty, Nilashish Pal, Randhir K. Sinha



**Radical-mediated stannylation of vinyl sulfones: access to novel 4'-modified neplanocin A analogues**

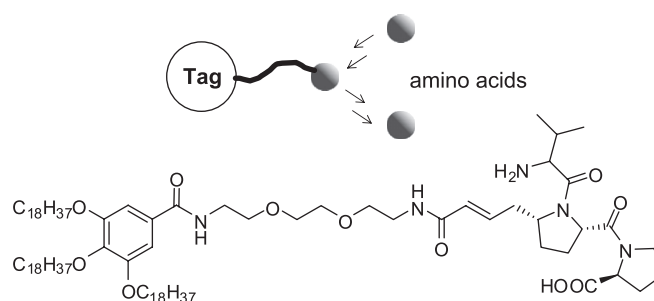
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Hiroki Kumamoto\*, Kazuki Deguchi, Tadashi Wagata, Yuu Furuya, Yuki Odanaka, Yukio Kitade, Hiromichi Tanaka

**Synthesis of hydrophobic phase-tagged prolyl peptides featuring rapid reaction/separation**

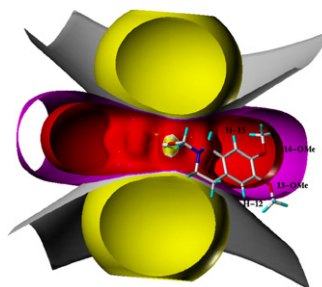
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Kazuhiro Chiba\*, Mari Sugihara, Kazumi Yoshida, Yuzuru Mikami, Shokaku Kim

**Visualization and quantification of anisotropic effects on the <sup>1</sup>H NMR spectra of 1,3-oxazino[4,3-a]isoquinolines—indirect estimates of steric compression**

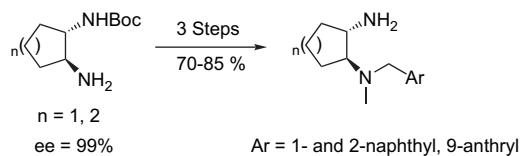
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Erich Kleinpeter\*, István Szatmári, László Lázár, Andreas Koch, Matthias Heydenreich, Ferenc Fülöp

**An efficient chemoenzymatic method to prepare optically active primary–tertiary *trans*-cycloalkane-1,2-diamines**

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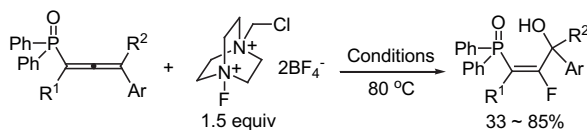
F. Javier Quijada, Javier González-Sabín, Francisca Rebolledo\*, Vicente Gotor\*



**Studies on highly regio- and stereoselective fluorohydroxylation reaction of 3-aryl-1,2-allenyl phosphine oxides with Selectfluor**

pp 8035–8042

Guangke He, Chunling Fu\*, Shengming Ma\*



Conditions A: MeCN  
 Conditions B: N<sub>2</sub>, anhydrous MeCN, 7 equiv H<sub>2</sub>O  
 Conditions C: MeNO<sub>2</sub>/H<sub>2</sub>O = 10/1


**OTHER CONTENT**
**Erratum**

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\*Corresponding author

Supplementary data available via ScienceDirect



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