

## JOURNAL OF THE CHEMICAL SOCIETY

**Perkin Transactions 1**

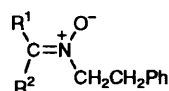
Organic and Bio-organic Chemistry

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## Perkin Communications

**3353 Synthesis and separation of the *E* and *Z* isomers of simple aldonitrones**

Shanmugaperumal Sivasubramanian,  
Ponnusamy Mohan, Muniappan  
Thirumalaikumar and Shanmugan  
Muthusubramanian

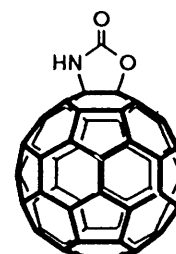
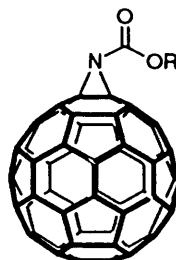


*E* R<sup>1</sup> = H, R<sup>2</sup> = Ar  
*Z* R<sup>1</sup> = Ar, R<sup>2</sup> = H

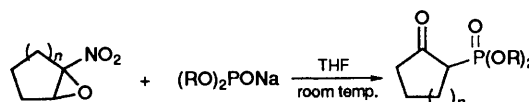
The uncommon *E*-isomer of simple aldonitrones has been obtained quantitatively for the first time

**3355 Oxazolidinofullerene**

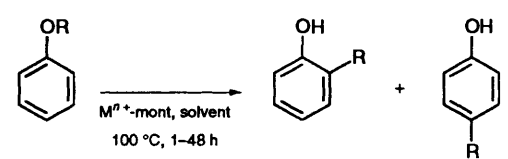
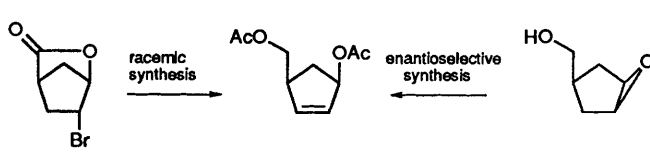
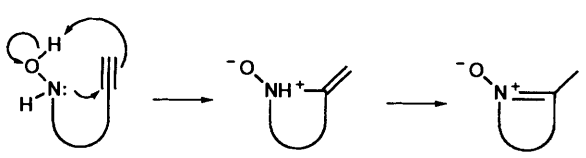
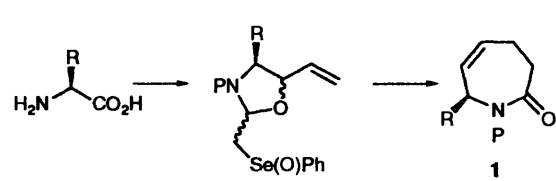
Lung-Lin Shiu, Kuo-Ming Chien, Tsang-Yu  
Liu, Tsung-I Lin, Guor-Rong Her, Shou-Ling  
Huang and Tien-Yau Luh

**3359 A new synthesis of cyclic  $\beta$ -keto phosphonates from  $\alpha$ -nitro epoxides and a dialkyl phosphite**

Dae Young Kim and Myeon Sik Kong

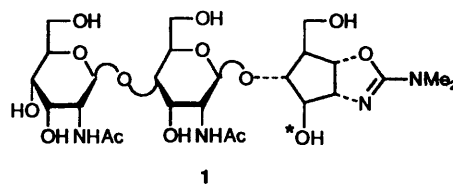


## Articles

<p>3361 <b>Preparation of diorganolead dicarboxylates from aryllead triacetates: an investigation of ligand coupling in some diorganolead(IV) compounds</b></p> <p>Jacqueline Morgan, Christopher J. Parkinson and John T. Pinhey</p>	$\text{Ar}^1\text{Pb}(\text{OAc})_3 + \text{Ar}^2\text{B}(\text{OH})_2 \longrightarrow \text{Ar}^1(\text{Ar}^2)\text{Pb}(\text{OAc})_2$ $\text{ArPb}(\text{OAc})_3 + \text{RCH}=\text{CHB}(\text{OH})_2 \longrightarrow \text{Ar}(\text{RCH}=\text{CH})\text{Pb}(\text{OAc})_2$ $\text{R}_2\text{Pb}(\text{OAc})_2 \xrightarrow{\text{CuCl}} \text{R}-\text{R} + \text{Pb}(\text{OAc})_2$ <p>[R = Ar or (E)-vinyl]</p>
<p>3367 <b>Rearrangement of alkyl phenyl ethers to alkylphenols in the presence of cation-exchanged montmorillonite (<math>\text{M}^{n+}</math>-mont)</b></p> <p>Jun-ichi Tateiwa, Takahiro Nishimura, Hiroki Horiuchi and Sakae Uemura</p>	
<p>3373 <b>Concise racemic and highly enantioselective approaches to key intermediates for the syntheses of carbocyclic nucleosides and pseudo-ribofuranoses: formal syntheses of carbovir</b></p> <p>David M. Hodgson, Jason Witherington and Brian A. Moloney</p>	
<p>3379 <b>N-Alkenyl nitron dipolar cycloaddition routes to piperidines and indolizidines. Part 7. Hydroxylamine-alkyne cyclisations. Formation of cyclic nitrones and application to the synthesis of the proposed structure for (±)-acacialactam</b></p> <p>Martin E. Fox, Andrew B. Holmes, Ian T. Forbes and Mervyn Thompson</p>	
<p>3397 <b>New synthetic methodology for the synthesis of 7-substituted tetrahydroazepin-2-ones</b></p> <p>P. Andrew Evans, Andrew B. Holmes and Keith Russell</p>	

## 3411 Syntheses of the fungicide/insecticide allosamidin and a structural isomer

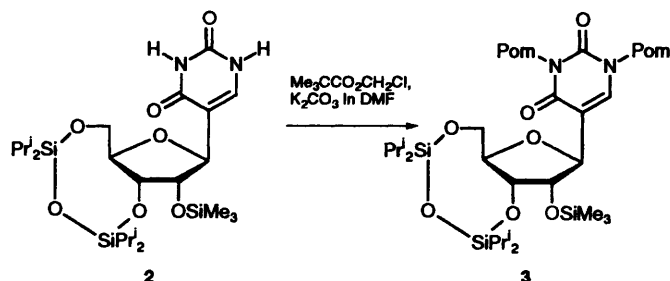
Regine Blattner, Richard H. Furneaux,  
Timothy Kemmitt, Peter C. Tyler, Robert J  
Ferrier and Anna-Karin Tidén



The synthesis of **1** and the isomer linked *via* \*O

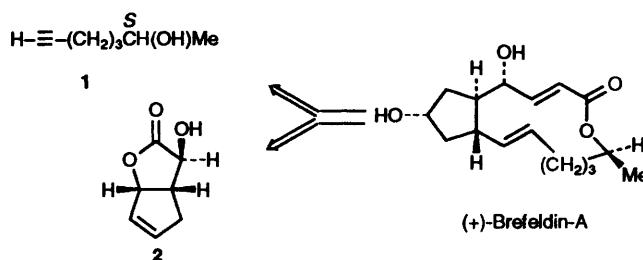
## 3423 New and convenient protection system for pseudouridine, highly suitable for solid-phase oligoribonucleotide synthesis

Uwe Piele, Barbro Beijer, Kerstin Bohmann,  
Susan Weston, Samantha O'Loughlin,  
Viviane Adam and Brian S. Sproat



## 3431 Synthesis of (+)-brefeldin-A

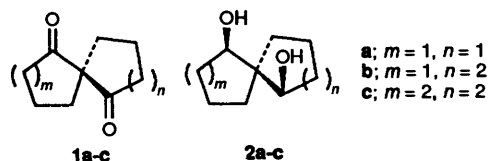
Andrew J. Carnell, Guy Casy, Gilles Gorins,  
Arefeh Kompany-Saeid, Ray McCague,  
Horacio F. Olivo, Stanley M. Roberts and  
Andrew J. Willetts



Enzyme-catalysed reactions provide the starting materials **1** and **2** for an efficient synthesis of brefeldin-A

## 3441 Enantio- and diastereo-selective synthesis of spirocyclic compounds

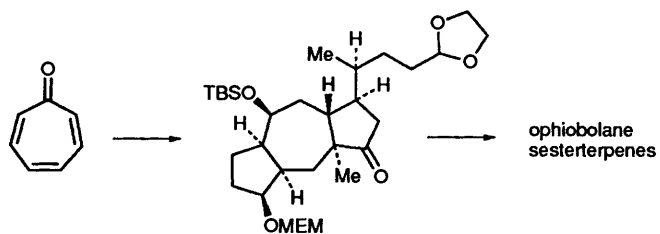
Hiroshi Suemune, Kazunori Maeda,  
Keisuke Kato and Kiyoshi Sakai



Compounds **1a-c** and **2a-c** have been enantio- and diastereo-selectively synthesized with cycloalkane-1,2-diols as a chiral auxiliary

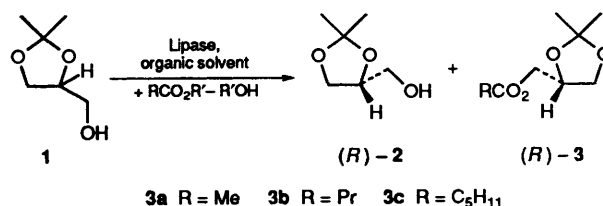
## 3449 Synthetic studies on the ophiobolane sesterterpenes: construction of an optically pure, advanced tricyclic intermediate for the synthesis of ceroplasteric acid

James H. Rigby, Timothy McGuire,  
Chrisantha Senanayake and Kishan Khemani



## 3459 Lipase-catalysed transesterification in the preparation of optically active solketal

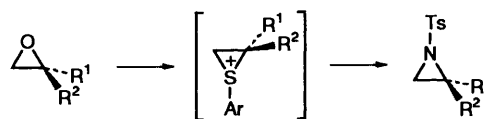
Eero Vanttinen and Liisa T. Kanerva



A biocatalytic method for a 100 gram scale preparation of (*R*)- (ee 99%) and (*S*)-solketal (ee 94%) is described

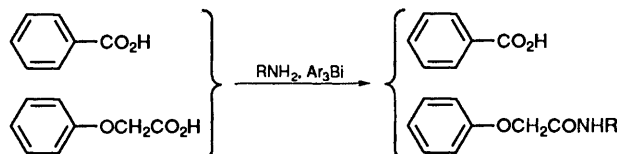
- 3465 **Conversion of chiral oxiranes into chiral aziridines with retention of configuration by way of chiral episulfonium ions and reactions of the aziridines with Grignard reagents**

Akio Toshimitsu, Hideyuki Abe, Chitaru Hirosawa and Kohei Tamao



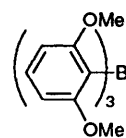
- 3473 **Selective activation of primary carboxylic acids by electron-rich triarylbi-muthanes. Application to amide and ester synthesis under neutral conditions**

Takuji Ogawa, Tetsuya Hikasa, Tohru Ikegami, Noboru Ono and Hitomi Suzuki



- 3479 **Enhanced nucleophilicity of tris-(2,6-dimethoxyphenyl)bismuthane as studied by X-ray crystallography,  $^{17}\text{O}$  NMR spectroscopy and theoretical calculations. X-ray molecular structure of tris-(2,6-dimethoxyphenyl)-bismuthane and of trimesitylbismuthane**

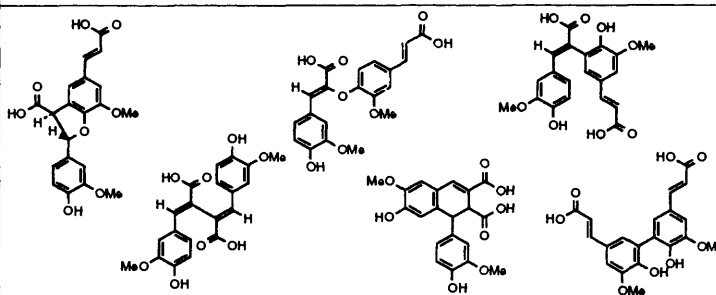
Takuji Ogawa, Tohru Ikegami, Tetsuya Hikasa, Noboru Ono and Hitomi Suzuki



On the basis of X-ray crystallographic,  $^{17}\text{O}$  NMR and theoretical considerations, the origin of the strong nucleophilicity of the title compound has been attributed to the interaction between the bismuth and oxygen atoms

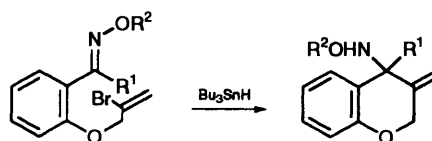
- 3485 **Identification and synthesis of new ferulic acid dehydromers present in grass cell walls**

John Ralph, Stéphane Quideau, John H. Grabber and Ronald D. Hatfield



- 3499 **Intramolecular addition of vinyl and aryl radicals to oxime ethers in the synthesis of five-, six- and seven-membered ring systems**

Susan E. Booth, Paul R. Jenkins, Christopher J. Swain and Joseph B. Sweeney



- 3509 **Preparation of chlorofluoroacetic acid derivatives for the analysis of chiral alcohols**

Ludvik Streinz, Aleš Svatoš, Jan Vrkoč and Jerrold Meinwald



R = (*R,S*)-oct-1-en-3-yl, (*R*)-(-)-octan-2-yl, (+)-isomenthyl, (*R*)-(+)-1-phenylethyl, (*S*)-(-)-1-phenyldecyl, (*R*)-(-)-2,2,2-trifluoro-1-(9-anthryl)ethyl

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NOTE: An asterisk in the heading of each paper indicates the author who is to receive any correspondence.

## **Forthcoming Articles in *Perkin Transactions 1***

Palladium Complex Catalysed Carbocyclization-distannylation, -disilylation and -silystannylation of Bis-dienes using Distannanes, Disilanes and Silylstannanes

**Y. Tsuji, Y. Obora, T. Kakehi, M. Kobayashi, Y. Shinkai, M. Ebihara and T. Kawamura**

The Acylation of Aldo 1-Pyrroline 1-Oxides and the Oxidation of the Resulting 3-Acyloxy-1-Pyrrolines

**N.J. Gibson and A.R. Forrester**

The Preparation and the Acid and Base Catalysed Isomerisation of 5,5-Dimethyl-3-phenyl-1-pyrroline 1-Oxide. Unprecedented Acid Catalysed 1,3-Oxygen Migration

**N.J. Gibson and A.R. Forrester**

The Preparation and Benzoylation of 2,3,5,5-Tetramethyl-3-hydroxy-1-pyrroline 1-Oxide

**A.R. Forrester, N.J. Gibson and C. Brown**

Preparation of *N*-Hydroxyazoles by Oxidation of Azoles

**M. Begtrup and P. Vedso**

The Structure of Conocephalenol, a Sesquiterpenoid Alcohol from the European Liverwort *Conocephalum conicum*. Determination of the Absolute Configuration by Total Synthesis

**M. Tori, K. Nakashima, Y. Asakawa, J.D. Connolly, L.J. Harrison, D.S. Rycroft, J. Singh and N. Woods**

Synthesis of 5,8-Ethanoperhydronaphthyridine and 4,7-Ethanoperhydropyrrolo[3,2-*b*]pyridine Derivatives: Potential NK<sub>1</sub>-receptor Antagonists

**K. Luthman, Y. Besidsky, A. Claesson, C.J. Fowler, I. Csoregh and U. Hacksell**

Synthesis and Reactivity of 6-Carbamoyl-1,4-ethano-5-phenyl-1,2,3,4,5,6-hexahydrobenzo[*f*]quinoline

**K. Luthman, Y. Besidsky, A. Claesson, I. Csoregh and U. Hacksell**

Selective Electrophilic Additions of Mixed Bifunctionalised Trimethylenemethane Dianion Synthons

**G. Majetich, H. Nishidie and Y. Zhang**

Modification of Cyclodextrins by Insertion of a Heterogeneous Sugar Unit into their Skeletons. Synthesis of 2-Amino-2-deoxy- $\beta$ -cyclodextrin from  $\alpha$ -Cyclodextrin

**N. Sakairi, L.-X. Wang and H. Kuzuhara**

Rearrangement of *S*-Methylbenzylsulfonium *S*-Alkylides in Non-basic Media

**Y. Sato, T. Tanzawa, M. Ichioka and N. Shirai**

Changes of Enantioselectivity with Substrate Ratio for the Addition of Diethylzinc to Aldehydes Using a Polymer Enlarged Catalyst

**C. Wandrey, C. Dreisbach, G. Wischniewski and U. Kragl**

Asymmetric Reduction of Prochiral Aromatic Ketones by Borane-Amine Complexes in the Presence of Chiral Amine-BF<sub>3</sub> Catalysts

**M. Periasamy, J.V.B. Kanth and Ch.K. Reddy**

Synthesis and Diels-Alder Reactions of Thioisobenzofurans

**A.J. Pratt, J.H. Bailey, C.V. Coulter and W.T. Robinson**

Excitatory Amino Acids. Synthesis of (*RS*)-2-Amino-3-(5-cyclopropyl-3-hydroxyisoxazol-4-yl)propionic Acid, a New Potent and Specific AMPA Receptor Agonist

**P. Krogsgaard-Larsen, N. Skjaerbaek, B. Ebert, E. Falch and L. Brehm**

The Synthesis of Cyclic Acylated Enaminoester Dipeptide Analogues Derived from Phenylalanine

**A.D. Abell, M.D. Oldham and J.M. Taylor**

Diastereoselectivity in the Preparation of  $\beta$ -Silylestere from Unsaturated Esters and Amides Attached to Chiral Auxiliaries

**I. Fleming and N.D. Kinson**

The Phenyltrimethylsilyl Group as a Masked Hydroxy Group

**I. Fleming, R. Henning, D.C. Parker, H.E. Plaut and P.E.J. Sanderson**

Azoniaazulenes. Part 7. Functionalisation of 10*H*-Azepino[1,2-*a*]indoles

**G. Jones, M.W. Kempa, M.B. Hursthouse and K.A. Malik**

Synthesis of 4-Hydroxy-15-oxaandrost-4-en-3-one and other Potential Aromatase Inhibitors from Sandaracopimaric Acid

**M.B. Martin, A.F. Mateos and R.B. Gonzalez**