

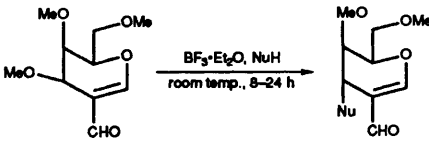
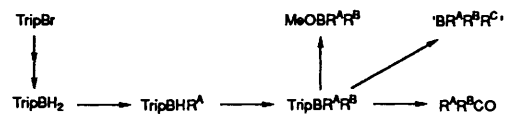
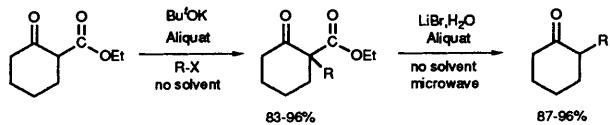
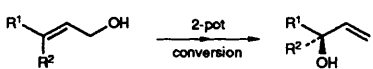
JOURNAL OF THE CHEMICAL SOCIETY

Perkin Transactions 1

Organic and Bio-organic Chemistry

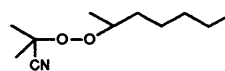
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Perkin Communications

<p>393 Stereoselective C-3 substitution of 1,5-anhydro-2-deoxy-2-formyl-3,4,6-tri-<i>O</i>-methylhex-1-enitols: entry to <i>ribo</i> and <i>xylo</i> series</p> <p>Cannan Booma and Kalpattu Kuppaswamy Balasubramanian</p>	 <p style="text-align: center;">Nu = OMe, OEt, OBz, SPh, OH</p> <p>Stereo- and regio-selective substitution in 2-formyl-<i>lyxo</i> and -<i>arabino</i> hex-1-enitols leading to 2-formyl-<i>xylo</i> and -<i>ribo</i> hex-1-enitols under Lewis acid catalysis is reported</p>
<p>395 Hindered organoboron groups in organic chemistry. Part 22. Some interesting properties of 2,4,6-triisopropylphenylborane (tripylborane, TripBH₂), a new useful monoarylborene</p> <p>Keith Smith, Andrew Pelter and Zhao Jin</p>	 <p style="text-align: center;">R^A, R^B = primary or secondary alkyl, R^A may equal R^B R^C = alkyl or aryl</p>
<p>397 Synthesis of 2-alkylcyclohexanones using solvent-free conditions and microwave technology</p> <p>Jean Pierre Barnier, Andre Loupy, Philippe Pigeon, Mohamed Ramdani and Patrick Jacquault</p>	
<p>399 Larger scale preparation of optically-active allylic alcohols</p> <p>Ethnie Balmer, Andrew Germain, William P. Jackson and Barry Lygo</p>	

401 Heptyl 2-cyanopropan-2-yl peroxides from the AIBN-initiated autoxidation of heptane

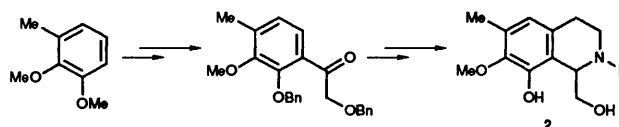
André Goosen, Cedric W. McClelland, David H. Morgan, Johannes S. O'Connell and Audrey Ramplin



AIBN functions as an initiator as well as a radical trap which consumes oxygen in autoxidation reactions to produce isomeric mixed peroxides

403 Studies on the natural β -adrenergic receptor antagonist MY336-a: synthesis of a 3-dehydroxymethyl analogue

Teodoro S. Kaufman



The tetrahydroisoquinoline **2** is a 3-dehydroxymethyl analogue of MY336-a, a natural β -adrenergic receptor antagonist

Articles

405 Regioselectivity of radical-induced bond cleavages in epoxides

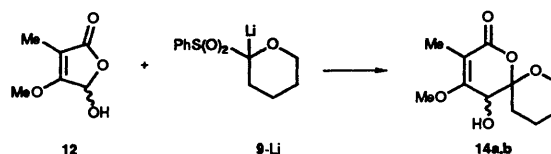
John A. Murphy and Christopher W. Patterson



Radical-induced bond cleavage in ring-fused epoxides has been studied.

411 Synthesis of 5-hydroxy-1,7-dioxaspiro[5.5]undec-3-en-2-ones from 2-benzenesulfonyltetrahydropyrans and 5-hydroxybutenolides: X-ray crystal structure determination for (5*R*,6*SR*)-5-acetoxy-4-methoxy-3-methyl-1,7-dioxaspiro[5.5]undec-3-en-2-one

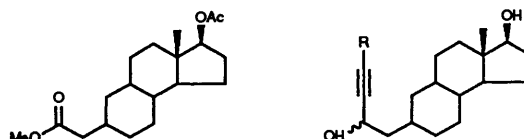
Alison M. Baylis, Madeleine Helliwell, Andrew C. Regan and Eric J. Thomas



Spiroacetals are obtained directly from lithiated X-sulfonyl ethers and hydroxybutenolides, e.g. **14a, b** were obtained from **9-Li** and **12**

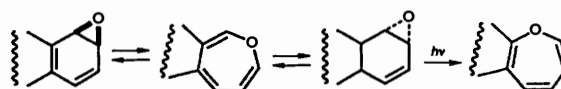
417 Synthesis of 1,10-*seco*-5 α -estr-1-ynes: potential mechanism-based inhibitors of 3 α - and 3 β -hydroxysteroid dehydrogenases

Yuefei Hu and Douglas F. Covey



423 **Synthesis and spontaneous racemization of benz[*a*]anthracene 3,4-oxide: photochemical oxygen-walk rearrangements of arene oxides of benz[*a*]anthracene and triphenylene to yield oxepines**

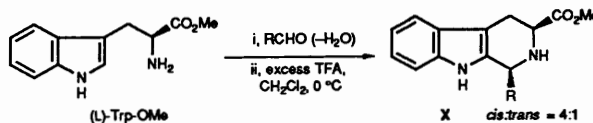
Derek R. Boyd, Narain D. Sharma, Shiv K. Agarwal, Guru S. Gadaginamath, Gerard A. O'Kane, W. Brian Jennings, Haruhiko Yagi and Donald M. Jerina



Synthesis, spontaneous racemization and photoisomerization of arene oxides to oxepines in the benz[*a*]anthracene and triphenylene series is reported

431 **Diastereo- and enantio-selectivity in the Pictet–Spengler reaction**

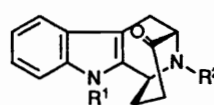
Patrick D. Bailey, Sean P. Hollinshead, Neil R. McLay, Keith Morgan, Sarah J. Palmer, Stephen N. Prince, Colin D. Reynolds and Stephen D. Wood



A mechanistic investigation into the Pictet–Spengler reaction led to conditions in which optically pure *cis*-tetrahydro- β -carbolines X could be prepared

441 **Use of the kinetically controlled Pictet–Spengler reaction in the asymmetric synthesis of indole alkaloids: formal syntheses of (–)-ajmaline, (–)-koumine, (–)-taberpsychine, (–)-koumidine and (–)-suavoline**

Patrick D. Bailey and Neil R. McLay

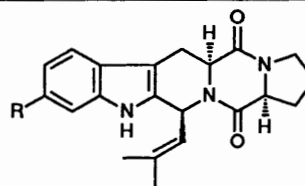


7a R¹ = Me, R² = CH₂Ph
7b R¹ = CH₂Ph, R² = H
7c R¹ = Me, R² = CO₂CH₂Ph
7d R¹ = Me, R² = H

Optically pure bridged ketones 7a–d have been prepared from (L)-Trp-OMe; these compounds are intermediates for the synthesis of a range of indole alkaloids

451 **An asymmetric route to the demethoxy-fumitremorgins**

Patrick D. Bailey, Sean P. Hollinshead, Neil R. McLay, Judith H. Everett, Colin D. Reynolds, Stephen D. Wood and Federico Giordano

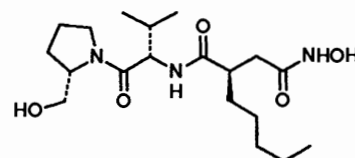


1a R = OMe
1b R = H

Optically pure demethoxy-fumitremorgin C 1b has been synthesised from (L)-Trp and (L)-Pro, and its NMR data closely matched that of the natural product 1a

459 **Asymmetric synthesis of (–)-actinonin and (–)-*epi*-actinonin**

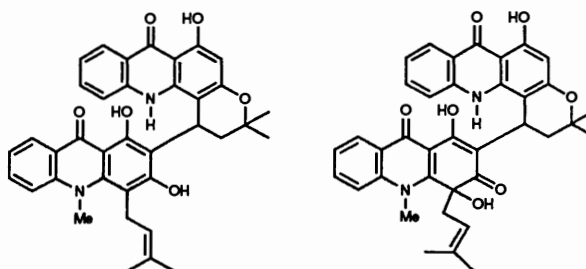
George Bashiardes, Graham J. Bodwell and Stephen G. Davies



(*S,S,R*)-(-)-Actinonin

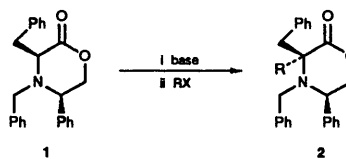
471 **Spectroscopic elucidation of glycobismines, first naturally occurring binary acridone alkaloids containing a carbon–carbon linkage**

Hiroshi Furukawa, Chihiro Ito, Tomohisa Ono, Tian-Shung Wu and Chang-Sheng Kuoh



- 477 **Synthesis of α -alkyl- α -benzyl amino acid derivatives, via the diastereoselective alkylation of (3*S*,5*R*)-*N*,3-dibenzyl-3,4,5,6-tetrahydro-5-phenyl-1,4-oxazin-2-one**

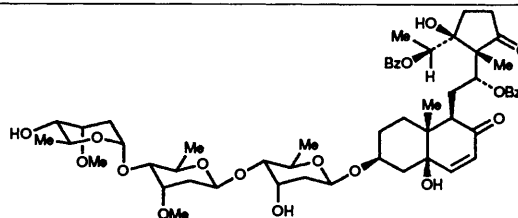
Andrew N. Boa, Amanda L. Guest, Paul R. Jenkins, John Fawcett, David R. Russell and David Waterson



The (1*S*)-phenylalanine-derived oxazinone **1** is stereoselectively alkylated to give α -alkyl-phenylalanine derivatives **2**

- 483 **Toxic constituents of the Asclepiadaceae. Structure elucidation of sarcovimiside A–C, pregnane glycosides of *Sarcostemma viminale***

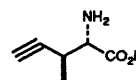
Robert Vlegaar, Fanie R. van Heerden, Lourens A. P. Anderson and Gerdinand L. Erasmus



Oxidative cleavage of the C(8)–C(14) bond in a precursor results in formation of the sarcovimiside **B** aglycone

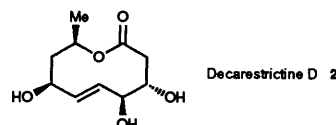
- 489 **Synthesis of (2*S*,3*S*)-2-amino-3-methylpent-4-ynoic acid, a precursor amino acid for the preparation of tritium- or deuterium-labelled peptide in the isoleucine residue**

Hiroshi Hasegawa, Shinichi Arai, Yoshihiko Shinohara and Shigeo Baba



- 495 **Biosynthetic studies on the decarestrictine family**

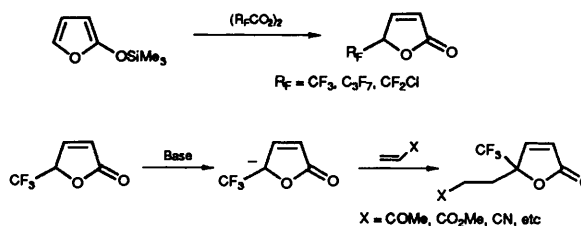
Marion Mayer and Ralf Thiericke



The biosynthesis and biosynthetic relationships of the decarestrictines, which arise from a common pentaketide precursor are presented

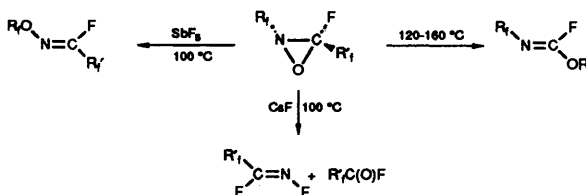
- 501 **Convenient preparations and Michael reactions of 4-fluoroalkylated but-2-en-4-olides**

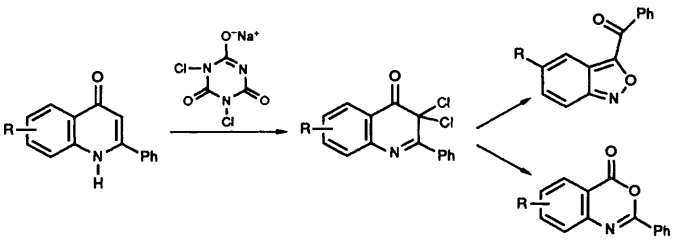
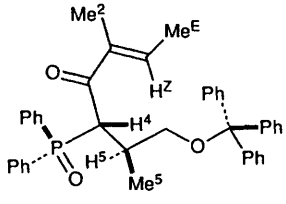
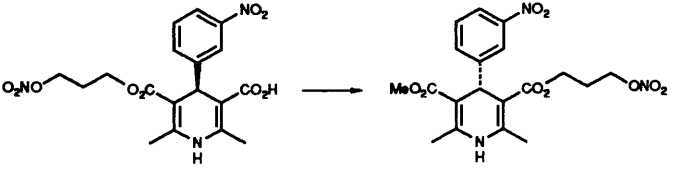
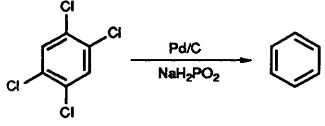
Masato Yoshida, Rihoko Imai, Yuji Komatsu, Yoshihiro Morinaga, Nobumasa Kamigata and Masahiko Iyoda



- 505 **Some novel reactions of perfluoro-2,3-dialkyloxaziridines**

Viacheslav A. Petrov and Darryl D. DesMarteau



<p>511 Production of 3-benzoyl-2,1-benzisoxazoles, 2-phenyl-4<i>H</i>-3,1-benzoxazin-4-ones, and novel quinolinone derivatives from 2-phenylquinolin-4(1<i>H</i>)-ones and sodium dichloroisocyanurate</p> <p>Benjamin Staskun and Theodorus van Es</p>	
<p>517 Structure and conformation of α'-diphenylphosphinoyl enones: X-ray structure of <i>E</i>-(5<i>SR</i>,6<i>SR</i>)-3,6-dimethyl-5-diphenylphosphinoyl-7-triphenylmethoxyhept-2-en-4-one</p> <p>Michael J. Doyle, David Hall, Paul R. Raithby, Nicholas Skelton and Stuart Warren</p>	
<p>525 Synthesis and configurational assignment of methyl 3-nitrooxypropyl 1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)pyridine-3,5-dicarboxylate</p> <p>Toshihisa Ogawa, Keita Matsumoto, Chihiro Yokoo, Katsuo Hatayama and Kunihiro Kitamura</p>	 <p>Enantiomeric (+)-1 was synthesised by esterification of the optically active monocarboxylic acid (+)-6. The absolute configuration of key intermediate (S)-(+)-6 was unambiguously determined</p>
<p>529 Hydrodehalogenation of polychlorinated aromatic halides by hypophosphite with Pd/C catalyst under multiphase conditions</p> <p>Carlos Alberto Marques, Maurizio Selva and Pietro Tundo</p>	 <p>The reduction of polyhalogenated benzenes at 50 °C in the presence of a Pd/C catalyst with sodium hypophosphite in a multi-phase system consisting of a hydrocarbon solvent, a strong alkaline solution and a quaternary onium salt, allows the rapid and progressive displacement of all of the chlorine atoms</p>

Corrigenda

- 535 **Acid-mediated rearrangements of 14,17-ethenoestra-1,3,5(10)-trien-17-ols: synthesis of 14,16-ethano-19-norsteroids** James R. Bull, Karl Bischofberger, Russell I. Thomson, Jan L. M. Dillen and Petrus H. van Rooyen
- 535 **Biocatalysis as the strategy of choice in the exhaustive enantiomerically controlled synthesis of conduritols** Tomas Hudlicky, Hector Luna, Horacio F. Olivo, Catherine Andersen, Thomas Nugent and John D. Price
- vii Conference Diary

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