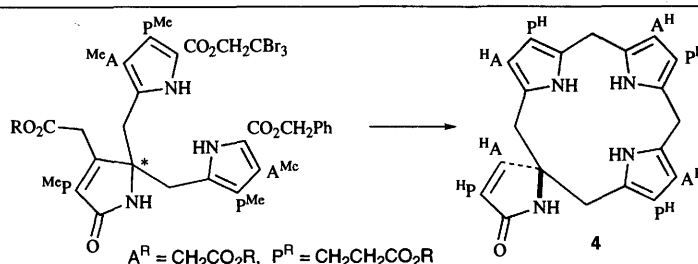


## Articles

- 2079 **Biosynthesis of porphyrins and related macrocycles. Part 44. Synthetic and stereochemical studies on the proposed spiro intermediate for biosynthesis of the natural porphyrins**

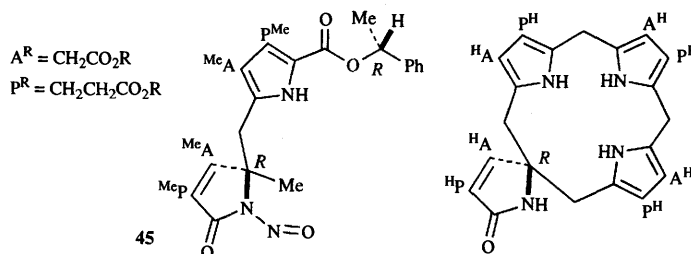
Mark A. Cassidy, Nigel Crockett, Finian J. Leeper and Alan R. Battersby



One enantiomer of spiro lactam **4** is twenty times more potent an inhibitor of uro'gen III synthase (cosynthetase) than the other

- 2091 **Biosynthesis of porphyrins and related macrocycles. Part 45. Determination by a novel X-ray method of the absolute configuration of the spiro lactam which inhibits uroporphyrinogen III synthase (cosynthetase)**

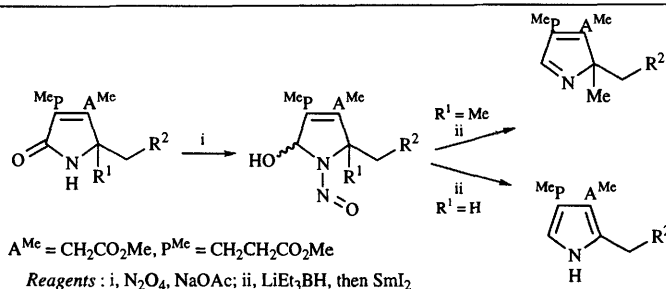
Alan C. Spivey, Alfredo Capretta, Christopher S. Frampton, Finian J. Leeper and Alan R. Battersby



The crystal structure of *racemic* **45** allowed the configuration of the spiro lactam which inhibits cosynthetase to be determined as *R*

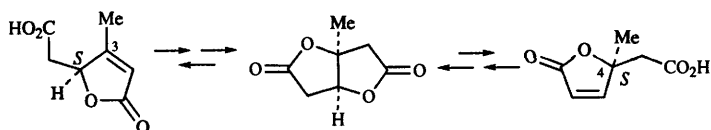
- 2103 **A new procedure for the reduction of  $\alpha,\beta$ -unsaturated pyrrolidinones to *2H*-pyrroles and *1H*-pyrroles based on initial activation by *N*-nitrosation**

Alan C. Spivey, Christopher S. Frampton and Alan R. Battersby



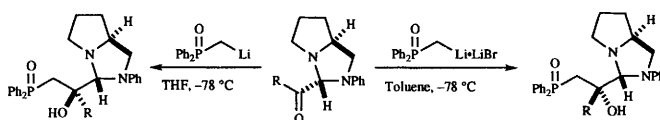
- 2111 **Synthesis and absolute configurations of the naturally occurring 3- and 4-methylmuconolactones: X-ray structures of (*S*)-1-phenylethylammonium salts and an 8-bromo-1-methylmuconodilactone**

Andrew A. Freer, Gordon W. Kirby,  
Ghanakota V. Rao and Ronald B. Cain



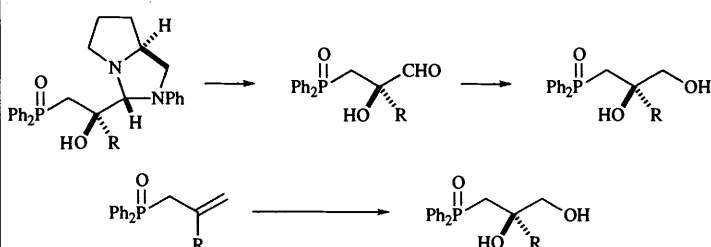
- 2117 **Stereocontrolled route to some optically active  $\beta$ -hydroxy phosphine oxides using the stereoselective addition of metallated phosphine oxides to proline-derived keto aminals**

Peter O'Brien and Stuart Warren



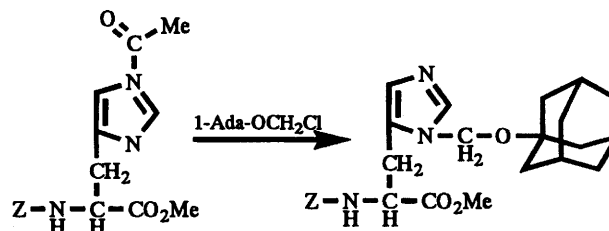
- 2129 **Synthesis of (*R*)- or (*S*)-diphenylphosphinoyl hydroxy aldehydes and 1,2-diols using Mukaiyama's bicyclic aminal methodology and Sharpless asymmetric dihydroxylation**

Peter O'Brien and Stuart Warren



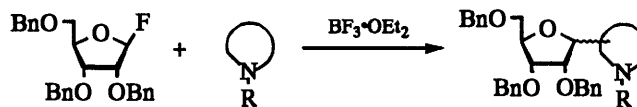
- 2139 **Amino acids and peptides. Part 45. Development of a new  $N^{\epsilon}$ -protecting group of histidine,  $N^{\epsilon}$ -(1-adamantylloxymethyl)histidine, and its evaluation for peptide synthesis**

Yoshio Okada, Jidong Wang, Takeshi Yamamoto, Yu Mu and Toshio Yokoi



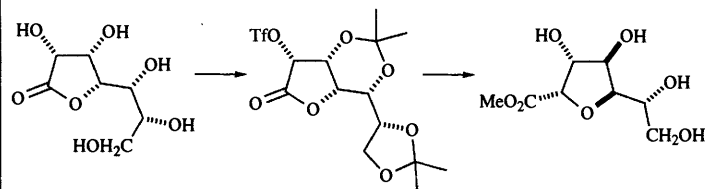
- 2145 **Coupling of ribofuranosyl fluoride and indoles**

Masataka Yokoyama, Mitsuru Nomura,  
Hideo Togo and Hiroko Seki



- 2151 **Complex tetrahydrofurans from carbohydrate lactones: easy access to epimeric *C*-glycosides of glucofuranose from *D*-glycero-*D*-guloheptono-1,4-lactone**

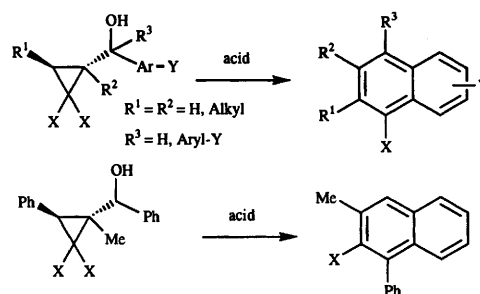
Claire J. F. Bichard, Tilmann W. Brandstetter, Juan C. Estevez, George W. J. Fleet, David J. Hughes and Joseph R. Wheatley



*C*-Glucofuranosides may be efficiently prepared from glucoheptonolactone

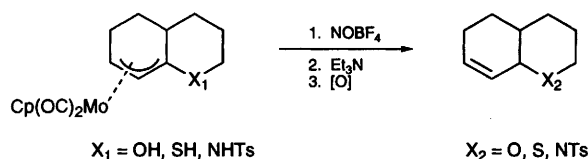
- 2157 **Novel method for the synthesis of  $\alpha$ - and  $\beta$ -halogenonaphthalenes by regioselective benzannulation of aryl(*gem*-dihalogenocyclopropyl)methanols: application to the total synthesis of the lignan lactones, justicidin E and taiwanin C**

Yoo Tanabe, Shinzo Seko, Yoshinori Nishii, Taichi Yoshida, Naoka Utsumi and Gohfu Suzukamo



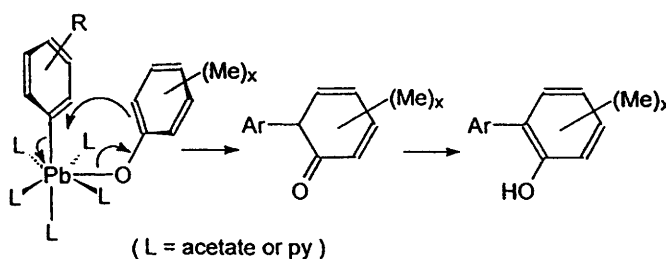
- 2167 **Molybdenum-mediated diastereoselective synthesis of 2-heterobicyclo[4.4.0]decene derivatives**

Ming-Chang P. Yeh and Chong-Nan Chaung



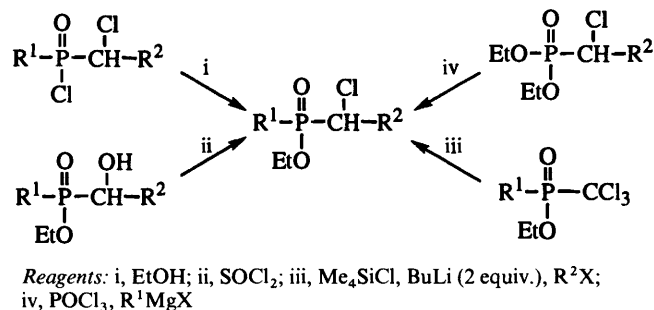
- 2173 **Mechanism of arylation of nucleophiles by aryllead triacetates. Part 3. Concerning their reaction with phenols and X-ray molecular structure of *p*-methoxyphenyllead triacetate**

Jacqueline Morgan, Trevor W. Hambley and John T. Pinhey



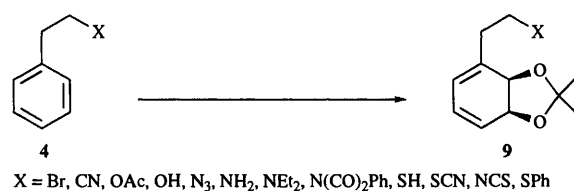
- 2179 **New syntheses of 1-chloroalkylphosphinates**

Xavier Morise, Philippe Savignac and Jean-Marc Denis



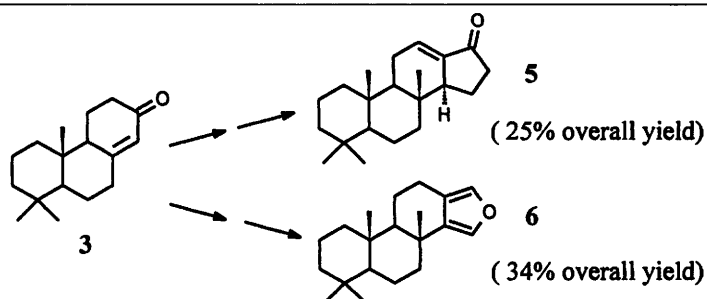
- 2187 **Nucleophilic substitution of protected  $\beta$ -bromoethyl cyclohexadiene-*cis*-diol as an alternative to direct microbial oxidation of  $\beta$ -functionalized phenethyl substrates**

Tomas Hudlicky, Mary Ann A. Endoma and Gabor Butora



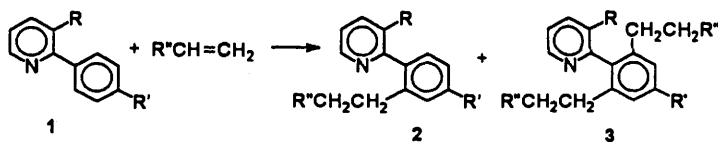
- 2193 **Podocarpane-to-spongian skeleton conversion. Synthesis of (+)-isoagatholactone and (-)-spongia-13(16),14-diene**

Antonio Abad, Consuelo Agulló, Manuel Arnó, M. Luisa Marin and Ramón J. Zaragoza



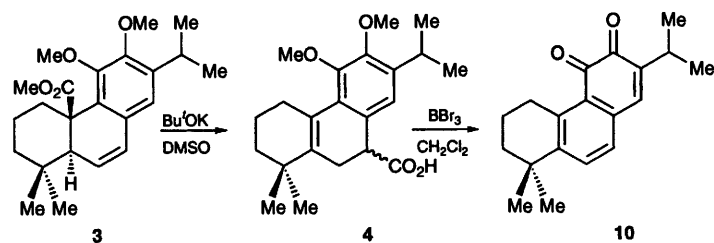
2201 Regioselective alkylation of 2-phenylpyridines with terminal alkenes *via* C–H bond activation by a rhodium catalyst

Yeong-Gweon Lim, Jung-Bu Kang and Yong Hae Kim



2207 Rearrangement of methyl 11,12-di-*O*-methyl-6,7-didehydrocarnosate in basic medium. Easy hemisynthesis of miltirone

Javier G. Luis, Lucía S. Andrés, Winston Q. Fletcher, El Hassane Lahlou and Aurea Perales



2213 Pinacolization and reduction of aromatic carbonyls with aluminium–KOH

Jitender M. Khurana, Arti Sehgal, Amita Gogia, (Late) Aparna Manian and Golak C. Maikap



A simple and rapid procedure for pinacolization of aromatic aldehydes and reduction of hindered ketones with inexpensive Al and KOH in methanol at ambient temperature has been reported

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### Submission of chemical structure diagrams

The range of file formats accepted by the Royal Society of Chemistry now includes ISIS/Draw (exported as .tgf) as well as ChemDraw and ChemWindow (exported as .chm). Authors should supply structure diagrams on disk in one of these formats if at all possible.

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

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

Formation of 1,2,3,4-dibenzocyclo[2.2.3]azines by a novel consecutive 1,3-dipolar cycloaddition of pyridinium dicyanomethylides to benzyne

**K. Matsumoto, H. Katsura, T. Uchida, K. Aoyama and T. Machiguchi**

Synthesis of some substituted quinoxalines and polycyclic systems containing the quinoxaline nucleus

**A.R. Ahmad, L.K. Mehta and J. Parrick**

Heterocyclic  $\beta$ -hydroxy- $\alpha$ -amino acids as substrates for a novel aldolase from *Streptomyces amakusaensis*: preparation of (2*R*,3*R*)-3-(2'-thiophenyl)serine and (2*R*,3*R*)-3-(2'-furanyl)serine from racemic *threo*-material

**M. Bycroft, R.B. Herbert and G.J. Ellames**

Synthesis, conformation and tropicity of dimethano-bridged tetrahydrothia[21]-, -[23]- and -[25]annulenes

**J. Ojima, N. Hiraiwa, H. Higuchi, I. Kobayashi, K. Yamamoto, T. Yoshida, T. Adachi, H. Matsubara and G. Yamamoto**

Preparation of carbocyclic analogues of 2'-deoxyribonucleotides possessing a phosphonate moiety at the 5'-position

**A.F. Drake, A. Garofalo, J.M.L. Hillman, V. Merlo, R. McCague and S.M. Roberts**

Synthesis of analogues of porphobilinogen

**F.J. Leeper, M. Rock and D. Appleton**

Interaction of analogues of porphobilinogen with porphobilinogen deaminase

**F.J. Leeper and M. Rock**

Reactivity of 3-benzylidene and 3-ethylidene-2,3-dihydro-2-methyl-1,2-benzothiazin-4-one 1,1-dioxide towards alkylidene phosphoranes

**P. Dalla Croce and C. La Rosa**

Characterization of lanthanide-mediated DNA cleavage by intercalator-linked hydroxamic acids. Comparison with transition systems

**S. Hashimoto and Y. Nakamura**

Enantiodivergent synthesis of both enantiomers of the macrocyclic lactone lasiodiplodin

**F. Bracher and B. Schulte**

Aziridination reaction of *N*-sulfonylimines with a stabilized sulfonium ylide: facile preparation of *N*-sulfonyl 2-[(*E*)-2-(alkoxycarbonyl)ethenyl]aziridines

**A.-H. Li, L.-X. Dai and X.-L. Hou**

Synthesis and biological evaluation of sulfur isosteres of the potent influenza virus sialidase inhibitors 4-amino-4-deoxy- and 4-deoxy-4-guanidino-Neu5Ac2en

**G.B. Kok, M. Campbell, B. Mackey and M. von Itzstein**

Magnesium methoxide complexation in the control of chemical reactions

**S.R. Baker, M.L.F. Cadman, L. Crombie, D.A.V. Edwards and J. Mistry**

Reactions of fused and unfused  $\alpha$ -pyrones with magnesium alkoxide, sodium alkoxide and water as the nucleophile: effects of chelation

**L. Crombie, D.E. Games and A.W.G. James**

Synthesis of sulfoxides by the oxidation of sulfides with sodium chlorite catalysed by manganese(III) acetylacetonate in acetone in the presence of alumina

**M. Hirano, S. Yakabe, J.H. Clark and T. Morimoto**

Synthesis of neoflavones by Suzuki arylation of 4-substituted coumarins

**J.-P. Finet, G.M. Boland, D.M.X. Donnelly and M.D. Rea**

Synthesis of sibutramine, a novel cyclobutylalkylamine useful in the treatment of obesity, and its major human metabolites

**J.E. Jeffery, F. Kerrigan, T.K. Miller, G.J. Smith and G. Tometzki**

Synthesis of C-4 disubstituted analogues of *N*-acetylneuraminic acid

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A reactivity study of  $[\eta^6\text{-}(tert\text{-butylsulfonyl)benzene}]tricarbonyl\text{-chromium}(0)$

**S.E. Gibson, N. Guillo, A.J.P. White and D.J. Williams**