

## JOURNAL OF THE CHEMICAL SOCIETY

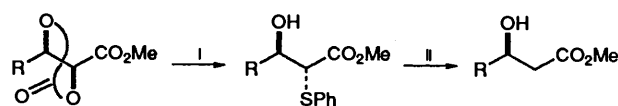
## Perkin Transactions 1

## Organic and Bio-organic Chemistry

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## Perkin Communications

- 3513 **Highly regioselective nucleophilic substitution of cyclic carbonates of *threo*-2,3-dihydroxy esters: synthesis of optically pure  $\beta$ -hydroxy esters**

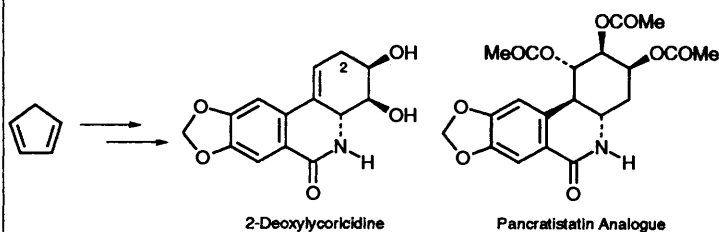


R = Me, Ph

Reagents and conditions: i, PhSH-Et<sub>3</sub>N, THF, 0 °C; ii, Raney nickel, EtOH, room temp.

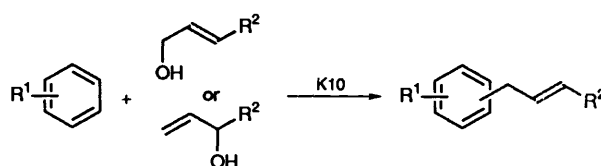
Suk-Ku Kang, Dong-Chul Park, Ho-Sik Rho, Seung-Hyun Yoon and Joon-Seob Shin

- 3515 **Lycoricidine and pancratistatin analogues from cyclopentadiene**



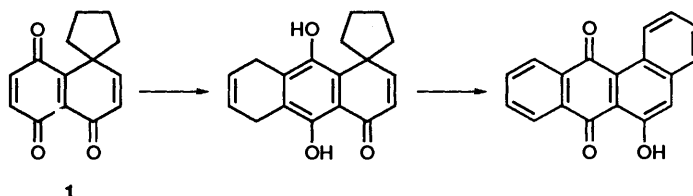
Martin G. Banwell, Cameron J. Cowden and Robert W. Gable

- 3519 **Synthesis of 1-arylalk-2-enes and 1-arylalkanes via Friedel-Crafts alkylation with allylic alcohols catalysed by an acidic clay**



Keith Smith and Guy M. Pollaud

- 3521 **Reaction of spiroanthracenones with DDQ: a one-pot synthesis of benz[*a*]anthraquinones**



1

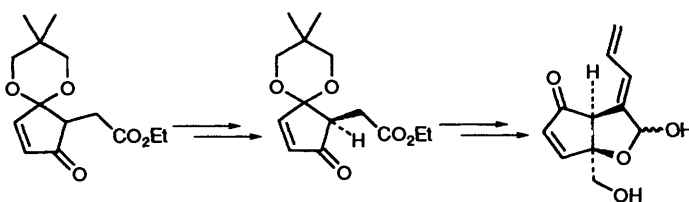
A variety of naphthalenones, prepared *via* the cycloaddition of compound 1 with various 1,3-dienes, were converted into the corresponding angular tetracyclic quinones by treatment with DDQ

Jaime A. Valderrama, C. David Pessoa-Mahana and Ricardo Tapia

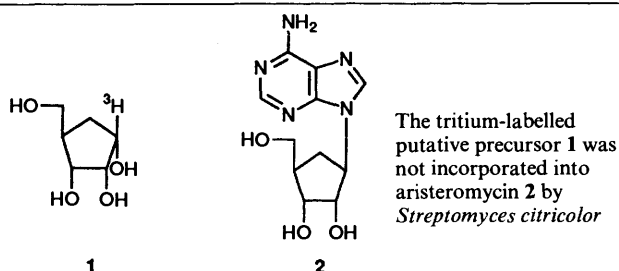
## Articles

3525 **Enantiopure didemnenones via kinetic resolution**

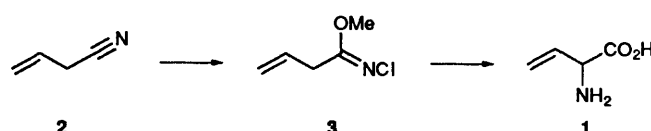
Markus Göres and Ekkehard Winterfeldt

3533 **Biosynthesis of aristeromycin: the role of (1*R*,2*R*,3*S*,4*S*)-1-hydroxymethylcyclopentane-2,3,4-triol**

Jane Hanrahan, Hana Navratilova, Karoline A. Shoberu, David H. G. Crout, (the late) David W. Hutchinson, Stanley M. Roberts and Elizabeth M. H. Wellington

3537 **Simple synthesis of L- and D-vinylglycine (2-aminobut-3-enoic acid) and related amino acids**

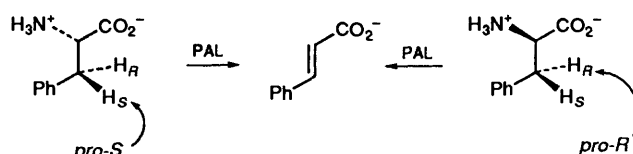
Keith O. Hallinan, David H. G. Crout and William Errington



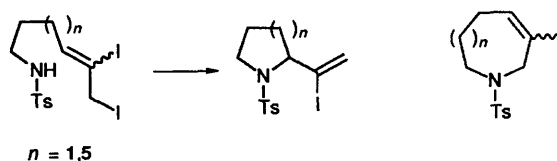
(±)-Vinylglycine **1**, prepared from but-3-enitrile **2** by Neber rearrangement of the corresponding *N*-chloro imidate **3**, was resolved *via* papain-catalysed esterification of the Boc derivative

3545 **Synthesis of each stereoisomer of [3-<sup>2</sup>H<sub>1</sub>]-phenylalanine and evaluation of the stereochemical course of the reaction of (*R*)-phenylalanine with (*S*)-phenylalanine ammonia-lyase**

Christopher J. Easton and Craig A. Hutton

3549 **Allene-based electrophile-mediated cyclisations: efficient synthesis of medium ring azacycles**

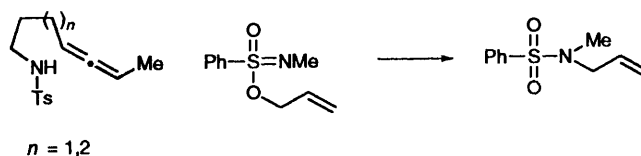
Robert W. Shaw and Timothy Gallagher



Addition of  $I_2$  to allenic sulfonamides gives allylic iodides that cyclise in the presence of NaH leading predominantly to the larger of the two possible heterocyclic products

3557 **Synthesis of medium ring azacycles via allene-based cyclisations: evaluation of possible mechanistic pathways**

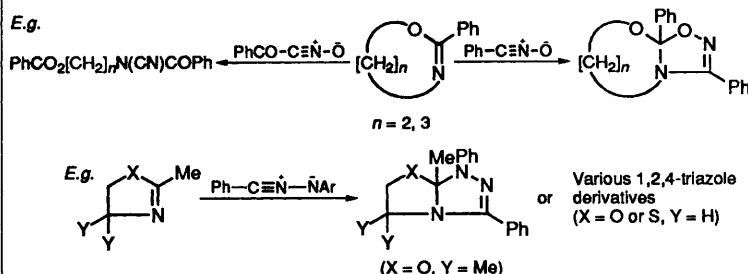
Ian W. Davies, Robert W. Shaw, Richard Wisedale and Timothy Gallagher



Influence of steric factors and a role for O- to N- rearrangement of allylic sulfonimidates have been evaluated

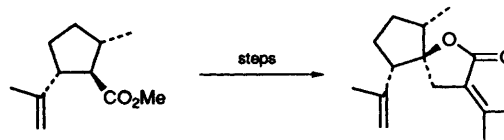
3563 **Reactions of nitrile oxides and nitrile imines with derivatives of 4,5-dihydrooxazole and 4,5-dihydrothiazole and with related compounds**

Peter D. Kennewell, David J. Miller, Richard M. Scowston and Robert Westwood



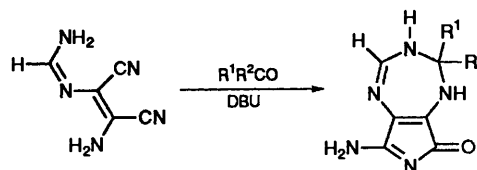
3567 **Enantiospecific synthesis of a spiro-lactonic sesquiterpene, curcumanolide A**

Toshio Honda and Hirohide Ishige



3571 **Synthesis of 4-substituted 8-amino-4,5-dihydro-3H-pyrrolo[3,4-f]-1,3,5-triazepin-6-ones and 5-amino-2-aryl-4-(1-aryl-5-alkylideneaminoimidazol-4-yl)-1,3-oxazoles**

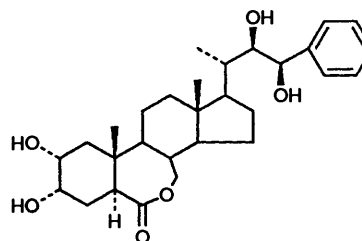
M. José Alves, Omar Kh. Al-Duaij, Brian L. Booth, Alice Carvalho, Paul R. Eastwood and M. Fernanda J. R. P. Proença



The title compounds can be obtained in one step from (Z)-N<sup>2</sup>-(2-amino-1,2-dicyanovinyl)formimidamide

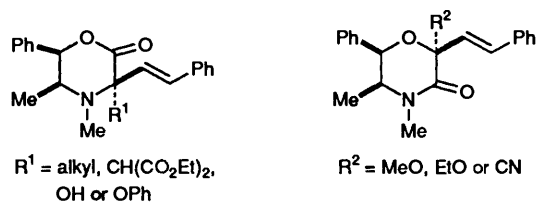
3579 **Studies on steroidal plant-growth regulators. Part 33. Novel method for construction of the side-chain of 23-arylbrassinosteroids via Heck arylation and asymmetric dihydroxylation as key steps**

Liang-Fu Huang and Wei-Shan Zhou



3587 **Synthesis, structure and reactions of chiral oxazinones derived from L-ephedrine**

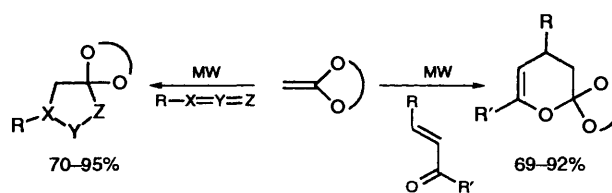
Chih-Jung Chang, Jim-Min Fang, Gene-Hsian Lee and Yu Wang



Substitutions and rearrangements of various perhydro-1,4-oxazinones are described

3595 **Cycloadditions of ketene acetals under microwave irradiation in solvent-free conditions**

Angel Diaz-Ortiz, Enrique Díez-Barra,  
Antonio de la Hoz, Pilar Prieto and  
Andrés Moreno



## Corregenda

- 3599 **Synthesis of 12-oxophytodienoic acid (12-oxoPDA) and the compounds of its enzymic degradation cascade in plants, OPC-8:0, -6:0, -4:0 and -2:0 (*epi*-jasmonic acid), as their methyl esters** Leslie Crombie and Kamlesh M. Mistry
- 3599 **Unexpected formation and crystal structure of a spiro[indene-1,7'(6'*H*)-pyrrolo[3,4-*b*]pyridin]-5'-one** Abood A. Bahajaj, Gregory J. Hitchings, Madeleine H. Moore and John M. Vernon
- 3599 **Palladium-catalysed carbocyclization of organophosphorus compounds: A novel and effective method for the synthesis of cyclic organophosphorus compounds including the phosphorus analogues of  $\alpha$ -methylene lactones** Feng Hong, Jiazhi Xia and Yuanyao Xu
- 3600 **Pheromone synthesis. Part 166. Synthesis of (2*E*,5*R*,6*E*,8*E*)-5,7-dimethyldeca-2,6,8-trien-4-one, the major components of the sex pheromone of the Israeli pine bast scale, and its antipode** Kenji Mori and Masayasu Amaike
- 3600 **Stereochemistry of the baker's yeast mediated reduction of the C=C bond of (*Z*)- and (*E*)-5-benzoyloxyhex-3-en-2-one** Giovanni Fronza, Claudio Fuganti, Piero Grasselli, Simonetta Lanati, Roberta Rallo and Susanna Tchilibon

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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*

Antitumour Imidazotetrazines. Part 31. The Synthesis of Isotopically Labelled Temozolomide and a Multinuclear ( $^1\text{H}$ ,  $^{13}\text{C}$ ,  $^{15}\text{N}$ ) Magnetic Resonance Investigation of Temozolomide and Mitozolomide

**R.T. Wheelhouse, D.E.V. Wilman, W. Thomson and M.F.G. Stevens**

The Biosynthesis of Hyoscyamine: the Process by which Littorine Rearranges to Hyoscyamine

**R.J. Robins, N.C.J.E. Chesters, D. O'Hagan, A.J. Parr, N.J. Walton and J.G. Woolley**

Quinolinone Cycloaddition as a Potential Synthetic Route to Dimeric Quinoline Alkaloids

**S.A. Barr, C.F. Neville, M.F. Grundon, D.R. Boyd, J.F. Malone and T.A. Evans**

Synthesis of Water-soluble Derivatives of Combretastatin A-4

**R.T. Brown, B.W. Fox, J.A. Hadfield, A.T. McGown, S.P. Mayalarp, G.R. Pettit and J.A. Woods**

Synthetic Reactions of 2-(2-Amino-3-cyano-4*H*-[1]benzopyran-4-yl)propane-1,3-dinitrile with Reactive Methylidene Compounds

**C.N. O'Callaghan, T.B.H. McMurry and J.E. O'Brien**

Structure and Relative Stereochemistry of a New Polycyclic Alkaloid Asparagamine A, showing an Anti-oxytocin Activity, Isolated from *Asparagus racemosus*

**F. Ikegami, T. Sekine, N. Fukasawa, Y. Kashiwagi, T. Aizawa, Y. Fuji, N. Ruangrunsi and I. Murakoshi**

The Synthesis of a Derivative of Triangulene; the First Non-Kekule Polynuclear Aromatic

**R.J. Bushby, G. Allinson, J.-L. Paillaud and M. Thornton-Pett**

Photochemical Isomerization of *O*-Prop-2-enyl and *O*-But-3-enyl Thiocarbamates

**M. Sakamoto, M. Yoshiaki, M. Takahashi, T. Fujita and S. Watanabe**

Synthesis based on Cyclohexadienes. Part 17. Total Synthesis of the Sesquiterpenes of *Eremophila georgei* Diels

**G.S.R. Subba Rao, N. Selvakumar, S.N. Janaki and K. Pramod**

Helically Chiral Sulfanyl and Diselanyl Quinquephenylophanes **K. Rissanen, K. Airola and S. Bartram**

The Synthesis of Precisely Structured Polyurethanes Part 1: Monomer Synthesis

**D.A. Widdowson, A.A. Denholra, M.H. George, H.C. Hailes and P.J. Tiffin**

Synthesis and Characterization of Isomeric  $\alpha,\alpha$ -Bithienyls with  $\beta$ -Methylsulfanyl Substituents

**U. Folli, D. Iarossi, M. Montorsi, A. Mucci and L. Schenetti**

Synthesis and Characterization of Models for the Bilin Catabolites of Chlorophylls using Metallo- $\beta$ -oxochlorins and -benzo[*a*]chlorins - Comparison of Macrocyclic Cleavage *versus meso*-Oxochlorin Formation

**K.M. Smith, M. Isaac and M.O. Senge**

Mechanistic Studies of the Palladium(II)-Copper(II)-mediated Demercuration of Cycloalkyl and Cycloalkylmethyl Systems

**A.P. Wells and W. Kitching**

Development of a Synthesis of Lankacidins: Stereoselective Synthesis of the  $\delta$ -Lactone Fragment

**E.J. Thomas and A.C. Williams**

Development of a Synthesis of Lankacidins: Synthesis of the C(14)-C(6) Fragment and Introduction of the C(10)-C(13) Diene

**J.M. Roe and E.J. Thomas**

Studies of Chromenes. Part 11. 3-Substitution of 7-Methoxy-2,2-dimethylchroman-4-one without Ring Opening *via* 3-Bromination **R.K. Akuamoah, P.E. Brown, W.Y. Marcus and J.E. Steele**

Synthesis of Alkyl and Aryl Substituted Buta-1,2,3-trienes **H.-F. Chow, X.-P. Cao and M.-K. Leung**

The use of Bis(2-trialkylsilylethyl) *N,N*-Dialkylphosphoramidites for the Synthesis of Phosphate Monoesters

**K.C. Ross, D.L. Rathbone, W. Thomson and S. Freeman**

The Dithiasuccinoyl (Dts) Amino Protecting Group used in Syntheses of 1,2-*trans* Amino Sugar Glycosides

**M. Meldal, E. Meinjohanns, H. Paulsen and K. Bock**