

## JOURNAL OF THE CHEMICAL SOCIETY

## Perkin Transactions 1

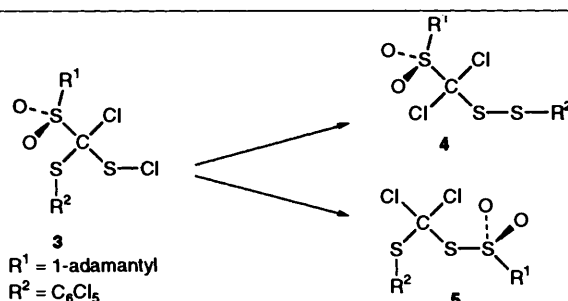
## Organic and Bio-organic Chemistry

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## Perkin Communications

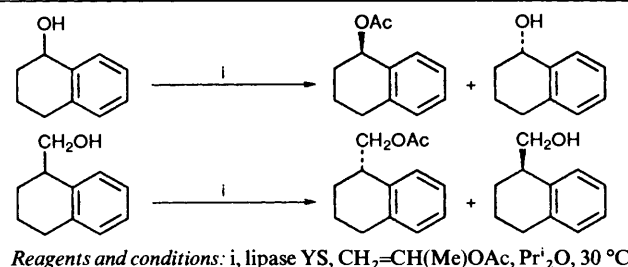
- 1251 Chlorotropic rearrangements of an  $\alpha$ -sulfanyl- $\alpha$ -sulfonylalkanesulfonyl chloride to an  $\alpha$ -chloroalkyl disulfide and an *S*-( $\alpha$ -chloroalkyl) thiosulfonate

Ibrahim El-Sayed, Vitaly K. Belsky, Valery E. Zavodnik, Karl Anker Jørgensen and Alexander Senning



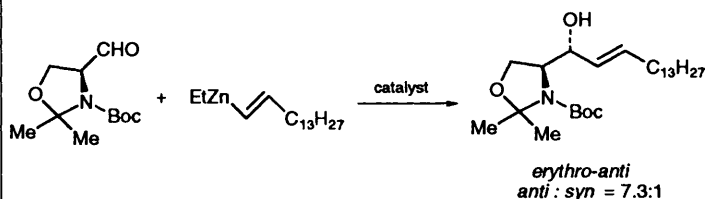
- 1253 Lipase YS-catalysed acylation of alcohols: a predictive active site model for lipase YS to identify which enantiomer of a primary or a secondary alcohol reacts faster in this acylation

Koichiro Naemura, Ritsuko Fukuda, Masayoshi Konishi, Keiji Hirose and Yoshito Tobe



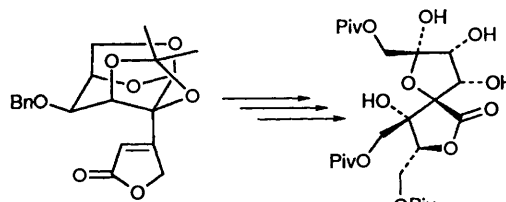
- 1257 Asymmetric alkenylation of chiral and prochiral aldehydes catalysed by chiral or achiral amino alcohols: catalytic diastereoselective synthesis of protected *erythro*-sphingosine and enantioselective synthesis of chiral diallyl alcohols

Kenso Soai and Kuniyoshi Takahashi



- 1259 Synthesis of a novel spirocyclic lactone in a potential route to squalestatin 1

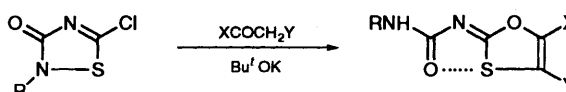
Hesham Abdel-Rahman, Joseph P. Adams, Alastair L. Boyes, Mike J. Kelly, R. Brian Lamont, Darren J. Mansfield, Panayiotis A. Procopiou, Stanley M. Roberts, Deborah H. Slee and Nigel S. Watson



The synthesis of a late stage intermediate on a potential route to squalestatin 1 is described:

- 1263 Chlorine displacement of heterocyclic halides by enolate-oxygen: synthesis of 1,3-oxathiol-2-imines from 5-chloro-1,2,4-thiadiazol-3(2*H*)-ones and active methylene ketones and esters

Gerrit L'abbé, Johan Buelens, Wim Dehaen, Suzanne Toppet and Luc Van Meervelt

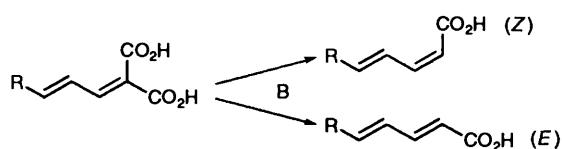


The title reaction is discussed on the basis of spectroscopic evidence, X-ray analysis and mechanistic considerations

## Articles

- 1267 Stereochemistry of thermolytic base-catalysed decarboxylation to form conjugated diene-acids: synthesis using ethylidenemalonate ester condensation

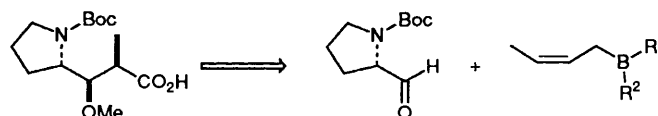
Leslie Crombie and W. Mary L. Crombie



Conditions and mechanisms giving (*Z*)- and (*E*)-forms

- 1275 Substrate-controlled crotylboration from *N*-(*tert*-butoxycarbonyl)amino aldehydes

Gilles Niel, Florence Roux, Ysadora Maisonnasse, Isabelle Maugras, Joël Poncet and Patrick Jouin

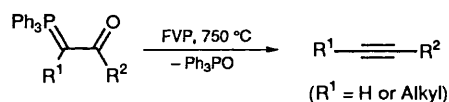


dolaprine

The high diastereofacial selectivity, observed during addition of (*Z*)-crotylorganoboron compounds to *N*-(*tert*-butoxycarbonyl)proline, is used to produce dolaprine

- 1281 Flash vacuum pyrolysis of stabilised phosphorus ylides. Part 1. Preparation of aliphatic and terminal alkynes

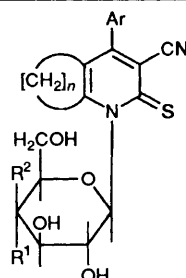
R. Alan Aitken and J. Ian Atherton



(*R*<sup>1</sup> = H or Alkyl)

- 1285 Nucleotides and nucleosides: direct route to condensed pyridinethione carbocyclic nucleosides related to 3-deazauridine

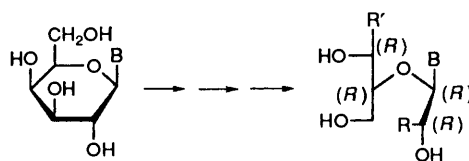
Galal E. H. Elgemeie, Adel M. E. Attia, Dalia S. Farag and Sherif M. Sherif



A novel synthesis of condensed pyridinethione carbocyclic glycosides utilizing pyridine-2(*1*H**)-thiones and  $\alpha$ -halogeno sugars as starting components is described

- 1289 **New acyclic nucleoside analogues. Stereospecific synthesis of purines and pyrimidines substituted with chiral chains by sugar-ring opening of  $\beta$ -D-galactopyranosyl nucleosides**

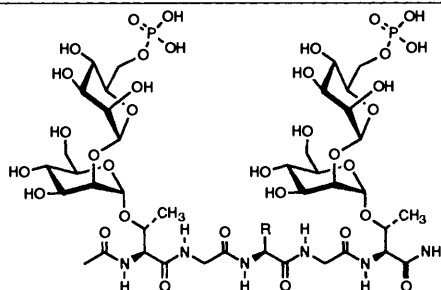
Yahya El-Kattan, Gilles Gosselin and Jean-Louis Imbach



B = adenin-9-yl, guanin-9-yl, thymine-1-yl, uracil-1-yl or cytosin-1-yl  
R = H, R' = CH<sub>2</sub>OH or R = CH<sub>2</sub>OH, R' = H

- 1299 **Synthesis of glycosylated peptide templates containing 6'-O-phosphorylated mannose disaccharides and their binding to the cation-independent mannose 6-phosphate receptor**

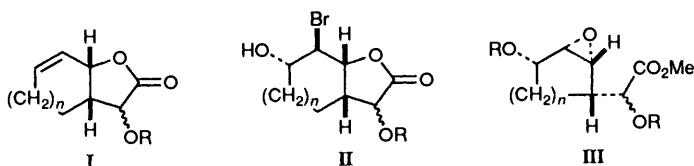
Mette K. Christensen, Morten Meldal, Klaus Bock, Henriette Cordes, Søren Mouritsen and Henrik Elsner



R : Fluorescence probe

- 1311 **Formation of bromohydrins and epoxides from 4-hydroxy-2-oxabicyclo[3.3.0]oct-7-en-3-one and 9-hydroxy-7-oxabicyclo[4.3.0]non-4-en-8-one**

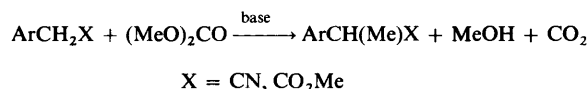
Antonio Garofalo, Michael B. Hursthouse, K. M. Abdul Malik, Horacio F. Olivo, Stanley M. Roberts and Vladimir Sik



The conversions of bicyclic lactones of type I into halohydrins of type II and also epoxides, including those of type III, are described

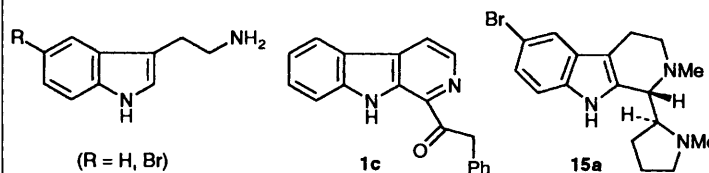
- 1323 **Selective mono-methylation of arylacetonitriles and methyl arylacetates by dimethyl carbonate**

Maurizio Selva, Carlos Alberto Marques and Pietro Tundo



- 1329 **Diastereoselective Pictet–Spengler reactions of L-(Boc)phenylalaninal and L-(Boc)prolinal: biomimetic syntheses of eudistomin T and (–)-woodinine**

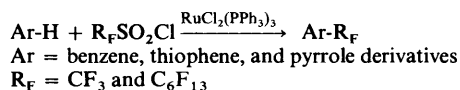
James McNulty and Ian W. J. Still



The syntheses of (–)-woodinine **15a** and eudistomin T **1c** from tryptamine precursors by a Pictet–Spengler-based strategy are described

- 1339 **Direct perfluoroalkylation of aromatic and heteroaromatic compounds with perfluoroalkanesulfonyl chlorides catalysed by a ruthenium(II) phosphine complex**

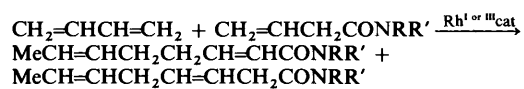
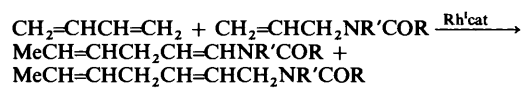
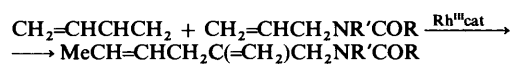
Nobumasa Kamigata, Takeshi Ohtsuka, Takamasa Fukushima, Masato Yoshida and Toshio Shimizu



The perfluoroalkylation of aromatic and heteroaromatic compounds by perfluoroalkanesulfonyl chlorides proceeds regioselectively in the presence of a ruthenium(II) catalyst

1347 **Control of regioselectivity by chelating substrates in some rhodium(I) and rhodium(III)-catalysed reactions of butadiene**

Gabriele Bocelli, Gian Paolo Chiusoli,  
Mirco Costa and Michela Michelotti



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## Forthcoming Articles in *Perkin Transactions 1*

Synthesis and Cell Adhesion Properties of Cyclo[-Arg-Gly-Asp-Ser-Lys-], a Constrained Analogue of the Active Domain of Fibronectin **J.S. Davies, C. Enjalbal, C.J. Wise, S.E. Webb and G.E. Jones**

Synthesis of Partially Hydrogenated BINAP Ligands and their Application to Catalytic Asymmetric Hydrogenation **H. Takaya, X. Zhang, K. Mashima, K. Koyano, N. Sayo, H. Kumobayaashi and S. Akutagawa**

The Pyrolysis of 1,3,4,5,6,7,8-Heptafluoro-2-naphthyl Propynoate: Remarkable Products obtained *via* an Internal Diels-Alder Reaction **G.M. Brooke, A.S. Batsanov, C.J. Drury, J.A.K. Howard and C. Lehmann**

Stereochemistry of Conversion of the Suicide Substrates D- $\beta$ -Chloroalanine and D- and L-Serine *O*-Sulfates to Pyruvate by D-Amino Acid Aminotransferase and by L-Aspartate Aminotransferase **D.W. Young, P.A. Spencer, A. Saeed, S. Lee, H.G. Floss and B.S. Azelsson**

Microbial Oxidation of Aromatics in Enantiocontrolled Synthesis. Part 1. Expedient and General Asymmetric Synthesis of Inositols and Carbohydrates *via* an Unusual Oxidation of a Polarized Diene with Potassium Permanganate **T. Hudlicky, M. Mandel, J. Rouden, R.S. Lee, B. Bachmann, T. Dudding, K.J. Yost and J.S. Merola**

Circular Dichroism Spectra of Tricarbonyliron  $\pi$ -Complexes **P.W. Howard and G.R. Stephenson**

Synthesis and Properties of Tetramethyloctadecylo- $[26]$ -,  $-[28]$ -,  $-[30]$ -,  $-[32]$ - and  $-[34]$ -annulenediones **J. Ojima, Y. Watanabe, S. Kondo, H. Higuchi and G. Yamamoto**

An Investigation into the Synthesis of Pyrrolidinones *via* Free-radical Cyclisations: Potential Application to the Kainoids **A.F. Parsons and R.J.K. Taylor**

Reactions of  $\alpha$ -Alkyl- or  $\alpha$ -Halogeno-alkoxycarbonylmethylene(triphenyl)phosphoranes with Phenanthrene-9,10-quinone. Synthesis of Phenanthro[9,10-*b*]furan Derivatives **D.N. Nicolaides, K.E. Litinas, D.A. Lefkadtis, S.G. Adamopoulos, C.P. Raptopoulou and A. Terzis**

Diels-Alder and Ene Reactions of New Transient Thionitrosoarenes (Ar-N=S) and Thionitrosoheteroarenes (Het-N=S) Generated from *N*-(Arylaminothio)- and *N*-(Heteroarylaminothio)-phthalimides: Synthesis of Cyclic and Acyclic Sulfenamides **M.R. Bryce, J.N. Heaton, P.C. Taylor and M. Anderson**

Enantioselective Synthesis of Indolizidine Alkaloids: A Formal Synthesis of (-)-Swainsonine and (+)-Pumiliotoxin 251D **T. Honda, M. Hoshi, K. Kanai and M. Tsubuki**

Synthesis of [ $^{15}\text{N}$ ]Guanosines and [ $^{15}\text{N}$ ]Deoxyguanosines from 5-Amino-1 $\beta$ -D-ribofuranosyl-4-imidazolecarboxamide ('AICA-riboside') **B.T. Golding, C. Bleasdale, S.B. Ellwood, P.K. Slaich, O.J. Taylor and W.P. Watson**

Acylation of 2-Methoxynaphthalene with Acyl Chlorides in the Presence of a Catalytic Amount of Lewis Acids **M. Miura, S. Pivsa-Art, K. Okuro, S. Murata and M. Nomura**

Isolation, Structure and Reaction of Selenobenzophenones **K. Okuma, K. Kojima, I. Kaneko, Y. Tsujimoto, H. Ohta and Y. Yokomuri**

Competition Among 1,2- and 1,3-Acyl Shifts, and Reduction Reactions, in the UV Irradiation of Cyclopent-2-en-1-ones bearing a C-3 Terminal-alkyne Chain **F. Pietra, G. Guella, M. Cavazza and I. Mancini**

Synthesis and Biological Activity of Pentaatomic Heterocycles **P. Seneci, M. Caspani, F. Ripamunti and R. Ciabatti**

Secondary Mould Metabolites: Part 47. Isolation and Structure Elucidation of Clavilactones A-C, New Metabolites from the Fungus *Clitocybe Clavipes* **G. Nasini, A. Arnone, R. Cardillo, S.V. Meille and M. Tolazzi**

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Design and Synthesis of Transition State Analogues for a Cationic Cyclisation **F.J. Leeper, C. Abell and I.M. Bell**

Direct Conversion of 13 $\beta$ -Alkylgonatetraenes into 13 $\beta$ -Alkylgona-4-en-3-ones **G.S.R. Subba Rao, U. Ramachandran and P. Bijoy**