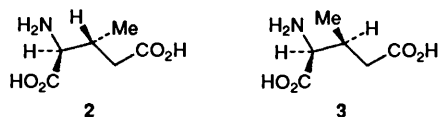
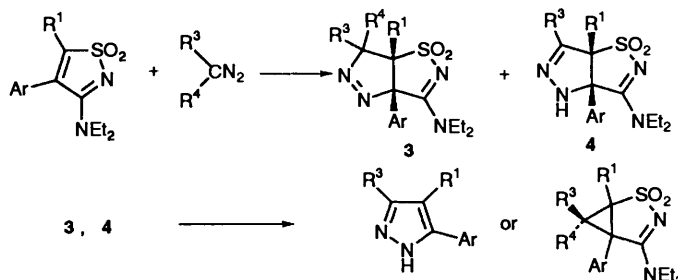


Articles

2525 Syntheses of (2*S*,3*R*)- and (2*S*,3*S*)-3-methylglutamic acid

(2*S*,3*R*)-3-Methylglutamic acid **2** and (2*S*,3*S*)-3-methylglutamic acid **3** have been prepared in good yield *via* the conjugate addition of the lithiated anion of the bis-lactim ether of *cyclo*-(*R*-Val-Gly) to appropriate butenoate esters; compound **2** was also prepared by Arndt-Eistert homologation of suitably protected (2*S*,3*S*)-3-methylaspartic acid

Basil Hartzoulakis and David Gani

2533 Isothiazoles. Part 3. Cycloadditions of diazoalkanes to 3-dialkylaminoisothiazole 1,1-dioxides. Competitive ring cleavage in 3a,4-dihydro-6a*H*-pyrazolo[3,4-*d*]isothiazole 1,1-dioxides: formation of 2-thia-3-azabicyclo[3.1.0]hex-3-ene 2,2-dioxides and/or pyrazoles

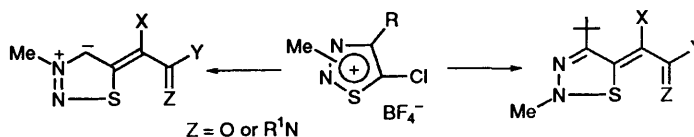
Francesca Clerici, Tiziano Ferrario, Maria Luisa Gelmi and Roberto Marelli

2537 Biological Baeyer–Villiger oxidation of some monocyclic and bicyclic ketones using monooxygenases from *Acinetobacter calcoaceticus* NCIMB 9871 and *Pseudomonas putida* NCIMB 10007

Rene Gagnon, Gideon Grogan, Melissa S. Levitt, Stanley M. Roberts, Peter W. H. Wan and Andrew J. Willetts

A wide variety of monocyclic and bicyclic ketones have been oxidized using monooxygenase enzymes either in whole-cell systems or as isolated enzymes with appropriate co-factor recycling

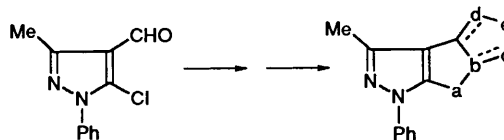
2545 Reactions of 5-chloro-1,2,3-thiadiazolium salts with activated methylene compounds



Gerrit L'abbé, Lieve Bastin, Wim Dehaen, Suzanne Toppet, Pieter Delbeke, Dominique Vlieghe and Luc Van Meervelt

5-Chloro-1,2,3-thiadiazolium salts react with activated methylene ketones, esters and azoles to give derivatives with short intramolecular S...O and/or S...N contacts

2553 5-Chloropyrazole-4-carbaldehydes as synthons for intramolecular 1,3-dipolar cycloadditions

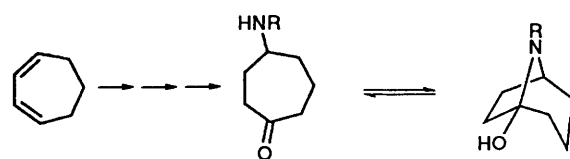


Gerrit L'abbé, Sabine Emmers, Wim Dehaen and Leonard K. Dyall

Tricyclic heterocycles are readily obtained from the title compounds, by substituting the chlorine atom by an unsaturated nucleophile and modifying the aldehyde function into a 1,3-dipole

2559 **Synthesis of physoperuvine (8-methyl-8-azabicyclo[3.2.1]octan-1-ol), norphysoperuvine and dehydro-derivatives**

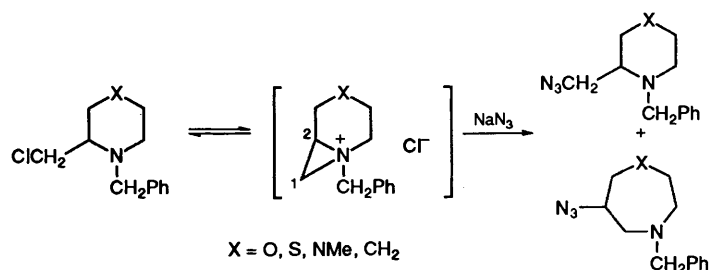
David E. Justice and John R. Malpass



R = Me, H, CH₂Ph, CO₂CH₂Ph
6,7-dehydro: R = Me, CH₂Ph, CO₂CH₂Ph

2565 **Ring expansion of nitrogen-containing chloromethylheteroalicycles via aziridinium intermediates**

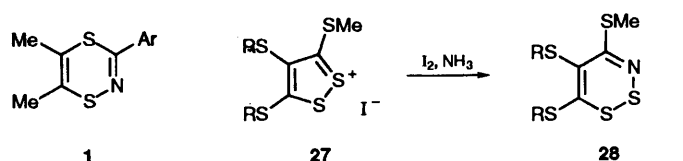
Toshiya Morie, Shiro Kato, Hiroshi Harada, Iwao Fujiwara, Kazuo Watanabe and Jun-ichi Matsumoto



X = O, S, NMe, CH₂

2571 **Synthesis and reactions of 1,4,2-dithiazines, bis(1,4,2-dithiazines) and 1,2,3-dithiazines by ring expansion of 1,3- or 1,2-dithiolium cations**

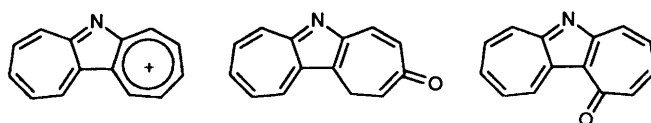
Martin R. Bryce, Gordon R. Davison and (in part) Susan Gough



Thermal and photochemical reactions of 1,4,2-dithiazine derivatives **1** are reported. Ring expansion of 1,2-dithiolium cations **27** yields 1,2,3-dithiazine derivatives **28**

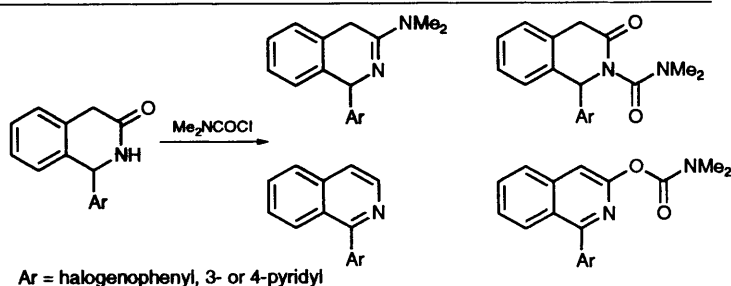
2579 **On the reactions of (vinylimino)phosphoranes and related compounds. Part 28. Synthesis and chemical properties of dicyclohepta[*b,d*]pyrrole ring system**

Yukio Iino and Makoto Nitta



2585 **The reaction of 1-aryl- and 1-pyridyl-1,2,3,4-tetrahydroisoquinolin-3-ones with dimethylcarbamoyl chloride: the preparation of amidines, isoquinolines and *N*-carbamoylated products**

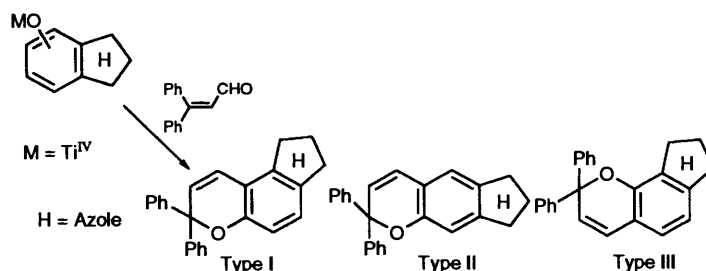
David J. Hunter, Roger E. Markwell, Stephen A. Smith and Paul A. Wyman



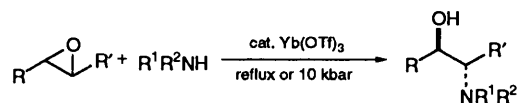
Ar = halogenophenyl, 3- or 4-pyridyl

2591 **A convenient synthesis of azolo-fused 2*H*-[1]benzopyrans**

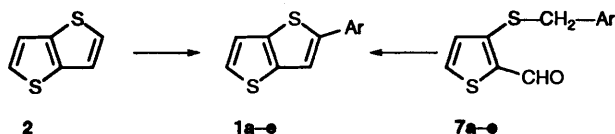
Jean-Luc Pozzo, Vladimir A. Lokshin and Robert Guglielmetti



2597 Ytterbium triflate and high pressure-mediated ring opening of epoxides with amines

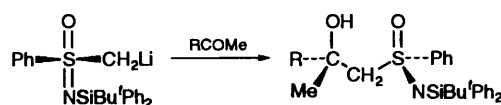


Masaki Meguro, Naoki Asao and Yoshinori Yamamoto

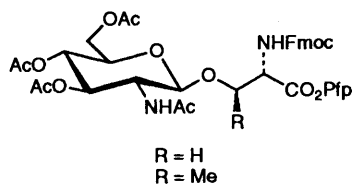
2603 Synthesis of new 2-arylthieno[3,2-*b*]thiophenes

Damien Prim and Gilbert Kirsch

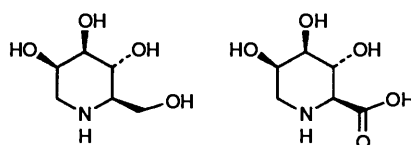
Different routes to 2-arylthieno[3,2-*b*]thiophenes are described

2607 Chiral sulfur compounds. Part 25. Diastereoselective 1,2-additions of lithiated (+)-(*S*)-*N*-*tert*-butyldiphenylsilyl-*S*-methyl-*S*-phenylsulfoximine to ketones

Stephen G. Pyne, Zemin Dong, Brian W. Skelton and Allan H. White

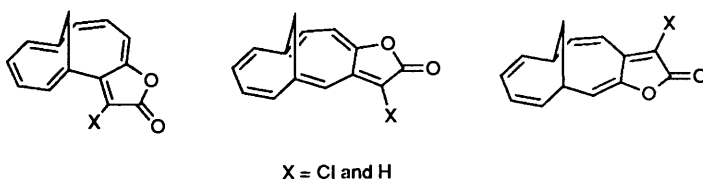
2615 Convenient synthesis of *O*-(2-acetamido-2-deoxy- β -D-glucopyranosyl)-serine and -threonine building blocks for solid-phase glycopeptide assembly

Antonio Vargas-Berenguel, Morten Meldal, Hans Paulsen and Klaus Bock

2621 Simple synthesis of (–)-deoxymannojirimycin and (2*S*,3*R*,4*R*,5*R*)-3,4,5-trihydroxypipicolinic acid via regioselective hydrolysis

Ki Hun Park, Yong Jin Yoon and Sang Gyeong Lee

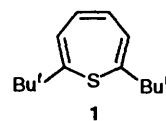
Key transformations include selective hydrolysis of a terminal isopropylidene group with Dowex 50W-X8

2625 Cycloadditions of methano[11]annulenes with dichloro- and chloro-ketenes. Preparation of 2*H*-methanocycloundeca[*b*]furan-2-one ring systems

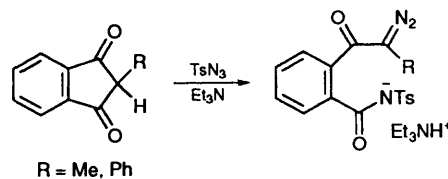
Makoto Nitta, Hiroki Tomioka, Akira Akaogi, Kensuke Takahashi, Katsuhiro Saito and Kazuaki Ito

2631 **Chemical transformations of 2,7-di-tert-butylthiepine**

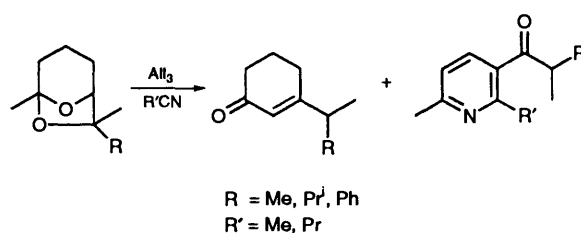
Shoko Yamazaki, Akira Isokawa, Kagetoshi Yamamoto and Ichiro Murata

Oxidation, S-methylation, bromination and cycloaddition of the thiepine **1** were examined2637 ***o*-N-Tosylcarbamoyl-substituted α -diazoacetophenones: their preparation and decomposition**

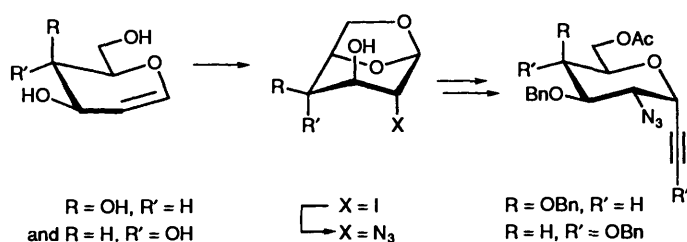
Luisa Benati, Gianluca Calestani, Pier Carlo Montecvecchi and Piero Spagnolo

2643 **A novel ketal fragmentation with aluminium iodide**

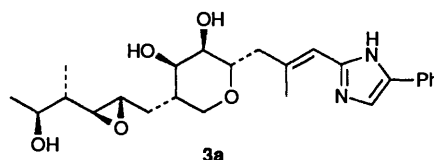
Jong-Gab Jun, Tae Hee Ha, Bradford P. Mundy, Karen E. Bartelt, Roger S. Bain and John H. Cardellina II

2647 **Synthesis of α -C-glycopyranosides of D-galactosamine and D-glucosamine via iodocyclization of corresponding glycals and silver tetrafluoroborate-promoted alkylation at the anomeric centre**

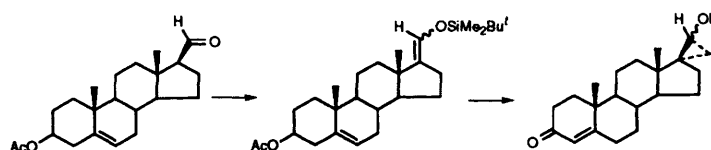
Christine Leteux and Alain Veyrières

2657 **The chemistry of pseudomonic acid. Part 12. Preparation of diazole and triazole derivatives**

Andrew K. Forrest, Peter J. O'Hanlon and Graham Walker

A range of diazole and triazole derivatives of monic acid, for example imidazole **3a**, have been prepared, 1,3-dipoles being intermediates in most cases2667 **Synthesis of 20-hydroxy-17,21-cyclopregnane derivatives: potential C-20 oxo steroid oxidoreductase inhibitors**

James C. Orr, John F. Templeton, Helena Majgier-Baranowska and Kirk Marat



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

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Structural Studies on Bioactive Compounds. Part 25. Synthesis and Properties of Potential Metabolites of the Diaminopyrimidine Antifolate 2,4-Diamino-5-(3-azido-4-chlorophenyl)-6-ethylpyrimidine (MZPES)

R.J. Griffin and M.F.G. Stevens

The Photocatalysed Addition of Alcohols to 5-Substituted Furan-2(5*H*)-ones: A Novel Synthesis of 2',3'-Dideoxy-3'- α -hydroxymethyl Nucleosides **J. Mann and A.C. Weymouth-Wilson**

Synthesis and Transformations of 3-Vinylcephalosporins. Part 6. Reactions of Cephalosporin Phosphoranones with Bifunctional Carbonyl Compounds **J. Pitlik, T.E. Gunda, G. Batta and J. Jeko**

N-Alkenyl Nitrene Dipolar Cycloaddition Routes to Piperidines and Indolizidines. Part 7. Hydroxylamine-Alkyne Cyclisation Reactions. Formation of Cyclic Nitrenes and Application to the Synthesis of the Proposed Structure for (+)-Acacialactam **A.B. Holmes, M.E. Fox, I.T. Forbes and M. Thompson**

Preparation of Chlorofluoroacetic Acid Derivatives for the Analysis of Chiral Alcohols

L. Streinz, A. Svatoš, J. Vrkoč and J. Meinwald

Intramolecular Addition of Vinyl and Aryl Radicals to Oxime Ethers in the Synthesis of Five, Six and Seven Membered Ring Systems **P.R. Jenkins, S.E. Booth, C.J. Swain and J.B. Sweeney**

Identification and Synthesis of New Ferulic Acid Dehydrodimers Present in Grass Cell Walls

J. Ralph, S. Quideau, J.H. Grabber and R.D. Hatfield

Synthesis of Glycosyl Tyrosine Building Blocks for Solid Phase Glycopeptide Assembly: Use of Aryl *tert*-Butyl Ethers as Glycosyl Acceptors in Aromatic Glycosylations **M. Meldal, A. Vargas-Berenguel, H. Paulsen, K.J. Jensen and K. Bock**

Synthesis of (+)-Brefeldin-A

S.M. Roberts, A.J. Carnell, G. Casy, G. Gorins, A. Kompany-Saeid, R. McCague and H.F. Olivo

Reactions Involving Fluoride Ion. Part 38. New Fluorinated Dienes by Defluorination

R.D. Chambers, M.W. Briscoe, S.J. Mullins, T. Nakamura, J.F.S. Vaughan and F.G. Drakesmith

Reactions Involving Fluoride Ion. Part 39. Reactions of Perfluorinated Dienes with Oxygen and Sulfur Nucleophiles

R.D. Chambers, M.W. Briscoe, S.J. Mullins, T. Nakamura and J.F.S. Vaughan

Mechanisms and Stereochemistry of the Activation of (2*S*)- and (2*R*)-Serine *O*-Sulfate Inhibitors for *Escherichia coli* Glutamic Acid Decarboxylase **D. Gani, J.E. Rose and P.D. Leeson**

The Stereochemical Course of Decarboxylation, Transamination and Elimination Reactions Catalysed by *Escherichia coli* Glutamic Acid Decarboxylase **D. Gani, M. Akhtar and K. Tilley**

Intermediates for the Synthesis of Linear Chains or 1,2:4,5-Fused Cyclohexa-1,4-diene Rings and Beltenes by Repeated Diels-Alder Reactions **R.W. Alder, P.R. Allen, L.S. Edwards, G.I. Fray, K.E. Fuller, P.M. Gore, N.M. Hext, M.H. Perry, A.R. Thomas and K.S. Turner**

Stereospecificity in the Rearrangement Reactions of an *N*-Phosphinoyl-*O*-sulfonylhydroxylamine with Methylamine and *tert*-Butylamine: Retention of Configuration at Phosphorus as Evidence for the Initial Formation of a Phosphonamidic-Sulfonic Mixed Anhydride **M.J.P. Harger and R. Sreedharan-Menon**

Formal Synthesis of the Juglomycins **M.A. Brimble and E. Ireland**

Boron Halide Catalysed Regioselective *ortho*-Claisen Rearrangements of 4-Allyloxycoumaric Acid Derivatives: Total Synthesis of Demethylsuberosin **N. Cairns, L.M. Harwood, D.P. Astles and A. Orr**

Tandem Thermal Claisen-Cope Rearrangements of Coumarate Ester Derivatives. Total Syntheses of the Naturally Occurring Coumarins: Suberosin, Demethylsuberosin, Ostruthin, Balsamiferone and Graveliferone

N. Cairns, L.M. Harwood and D.P. Astles

Synthesis of the Fungicide/Insecticide Allosamidin and a Structural Isomer **R.J. Ferrier, A.-K. Tiden, R. Blattner, R.H. Fumeaux, T. Kemmitt and P.C. Tyler**

