

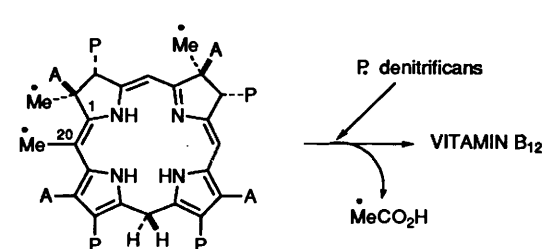
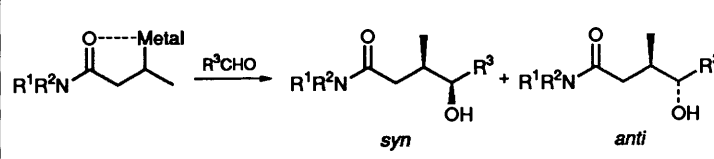
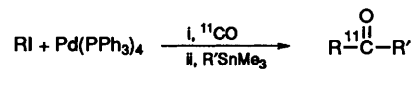
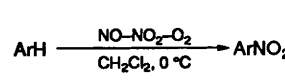
JOURNAL OF THE CHEMICAL SOCIETY

Perkin Transactions 1

Organic and Bio-organic Chemistry

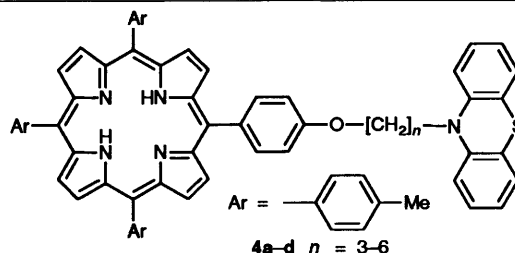
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<p>285 Diastereocontrol in the reaction of amide-homoenolates with aromatic aldehydes</p> <p>Satoshi Sakami, Takashi Houkawa, Morio Asaoka and Hisashi Takei</p>	
<p>287 Synthesis of ¹¹C-labelled ketones via carbonylative coupling reactions using [¹¹C]carbon monoxide</p> <p>Yvonne Andersson and Bengt Långström</p>	
<p>291 Nitration of nonactivated arenes with a ternary system NO-NO₂-O₂. Mechanistic implications of the kyodai-nitration</p> <p>Hitomi Suzuki and Tadashi Mori</p>	 <p>A ternary system NO-NO₂-O₂ was more effective than the binary one NO₂-O₂ for nitrating nonactivated arenes</p>

- 295 'Porphyrin–phenothiazine' hybrid molecules: marked dependence of light induced nuclease activity on the linker moiety

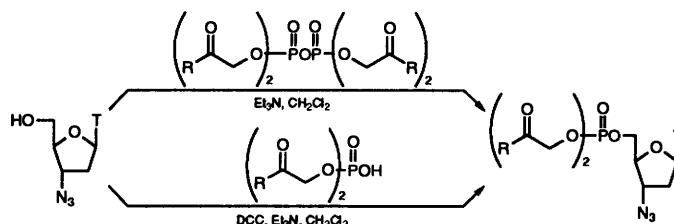
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- 299 Synthesis and anti-HIV-1 activity of bis-ketol AZT monophosphates

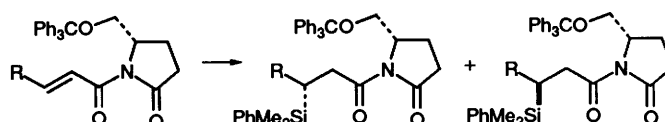
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- 303 Diastereoselectivity in the preparation of β -silyl esters from $\alpha\beta$ -unsaturated esters and amides attached to chiral auxiliaries

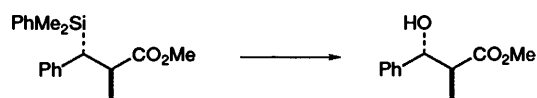
Ian Fleming and Nicholas D. Kindon



Koga's chiral auxiliary attached to an $\alpha\beta$ -unsaturated acid gives good asymmetric induction in the introduction of a phenyldimethylsilyl group

- 317 The phenyldimethylsilyl group as a masked hydroxy group

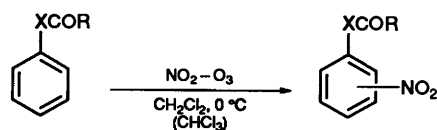
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- 339 Ozone-mediated reaction of anilides and phenyl esters with nitrogen dioxide: enhanced *ortho*-reactivity and mechanistic implications

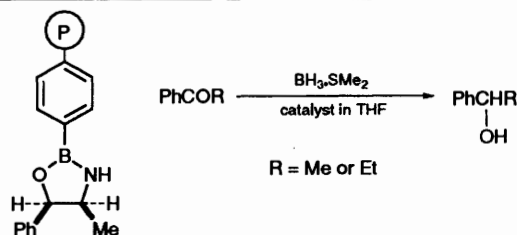
Hitomi Suzuki, Atsuo Tatsumi, Taro Ishibashi and Tadashi Mori



$o : p = 1.2 - 4.4$ ($X = \text{NH}$)
 $1.1 - 1.5$ ($X = \text{O}$)

- 345 Some enantioselective borane reductions of prochiral ketones catalysed by polymer-supported oxazaborolidines bound *via* the boron atom

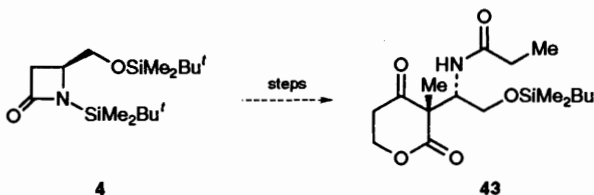
Claude Caze, Nouredine El Moualij, Philip Hodge, Christopher J. Lock and Jianbiao Ma



The crosslinked polymer shown catalyses the above reductions to give almost the same ees as the non-polymeric analogues

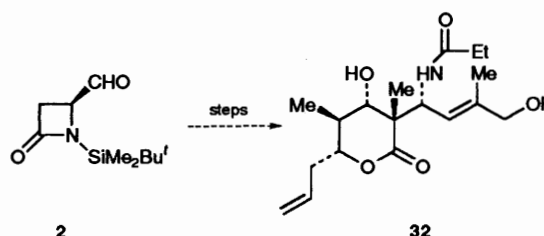
- 351 Development of a synthesis of lankacidins: stereoselective synthesis of the δ -lactone fragment

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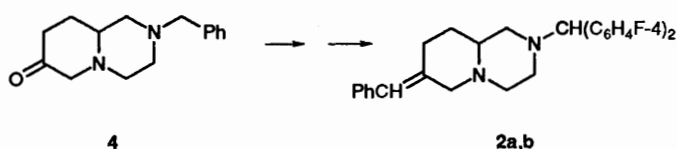
- 359 Development of a synthesis of lankacidins: synthesis of the C(14)–C(6) fragment and introduction of the C(10)–C(13) diene

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- 369 Synthesis of 7-benzylideneoctahydro-2H-pyrido[1,2-a]pyrazines, bicyclic analogues of the calcium antagonist flunarizine

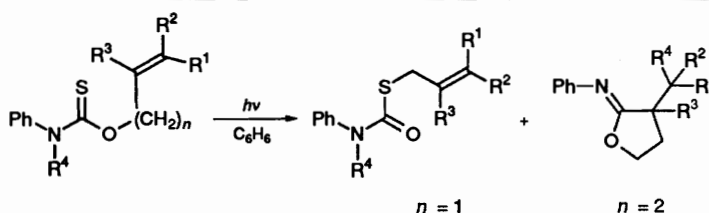
M. Ashty Saleh, Frans Compennolle, Suzanne Toppet and Georges J. Hoornaert



Conversion of ketone 4 into the target compounds 2a and 2b proceeded *via* an improved procedure for olefination using 1,3-dimethylimidazolidin-2-one as a solvent

- 373 Photochemical isomerization of *O*-allyl and *O*-but-3-enyl thiocarbamates

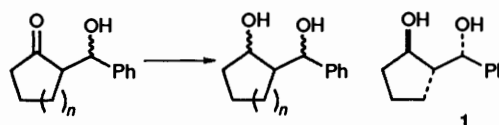
Masami Sakamoto, Mitsuru Yoshiaki, Masaki Takahashi, Tsutomu Fujita and Shoji Watanabe



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- 379 Hydroxyl-directed reduction of β -hydroxycycloalkanones as a stereoselective route to 1,3-diols: X-ray crystal structure and structural features of (1*R**,2*R**,6*S**)-2-[hydroxy(phenyl)methyl]cyclopentanol

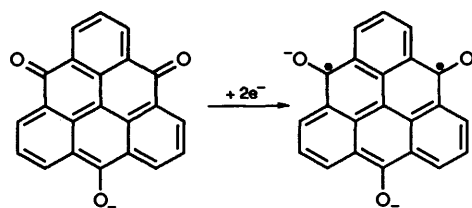
Stephen H. J. Thompson, Mary F. Mahon, Kieran C. Molloy, Michael S. Hadley and Timothy Gallagher



syn- and *anti*- β -Hydroxycycloalkanones undergo diastereoselective reduction using $\text{NaBH}(\text{OAc})_3$ to give 1,3-diols while NaBH_4 is less selective. The diol 1 packs (X-ray crystallographic analysis) as columnar stacks of independent hexamers with a central (OH)₆ core

385 **Synthesis of a derivative of triangulene; the first non-Kekulé polynuclear aromatic**

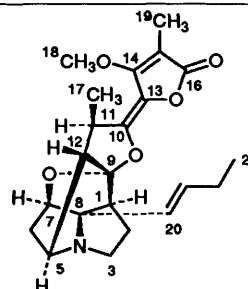
Graeme Allinson, Richard J. Bushby, Jean-Louis Paillaud and Mark Thornton-Pett



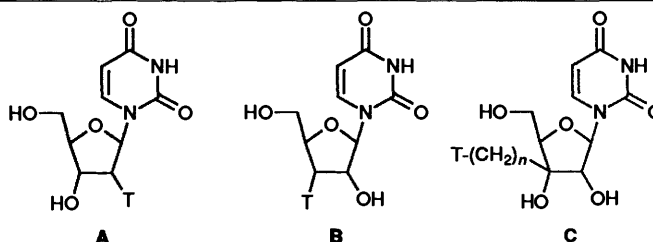
The trioxy derivative of the non-Kekulé polynuclear aromatic compound triangulene produced by this two-electron reduction is a symmetric, thermally stable ground-state triplet

391 **Structure and relative stereochemistry of a new polycyclic alkaloid, asparagine A, showing anti-oxytocin activity, isolated from *Asparagus racemosus***

Toshikazu Sekine, Fumio Ikegami, Nobuaki Fukasawa, Yumi Kashiwagi, Tatsuo Aizawa, Yuichi Fujii, Nijisiri Ruangrunsi and Isamu Murakoshi

395 **Synthesis of uridine derivatives containing strategically placed radical traps as potential inhibitors of ribonucleotide reductase**

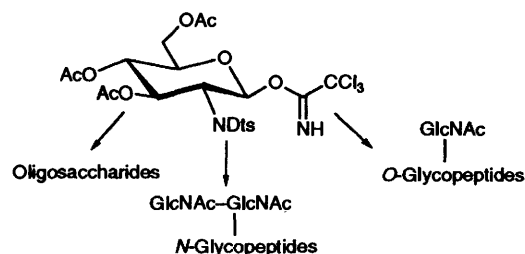
Sandra P. Auguste and Douglas W. Young



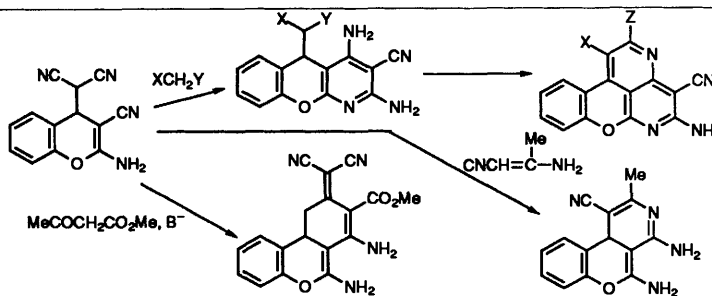
Molecules of the type A, B and C, where T is a radical trap, have been synthesised as potential inhibitors of ribonucleotide reductase

405 **Dithiasuccinoyl (Dts) amino-protecting group used in syntheses of 1,2-*trans*-amino sugar glycosides**

Ernst Meinjohanns, Morten Meldal, Hans Paulsen and Klaus Bock

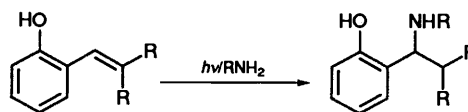
417 **Synthetic reactions of 2-(2-amino-3-cyano-4*H*-[1]benzopyran-4-yl)propane-1,3-dinitrile with reactive methylene compounds**

Conor N. O'Callaghan, T. Brian H. McMurry and John E. O'Brien



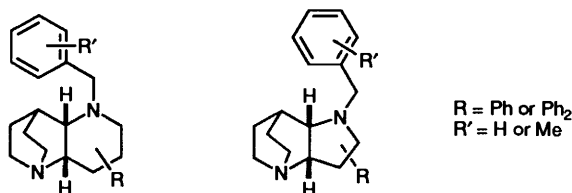
<p>421 Use of bis[2-(trialkylsilyl)ethyl] <i>N,N</i>-dialkylphosphoramidites for the synthesis of phosphate monoesters</p> <p>Kenneth C. Ross, Daniel L. Rathbone, William Thomson and Sally Freeman</p>	<div style="display: flex; justify-content: space-around;"><div style="text-align: center;"><p>6</p></div><div style="text-align: center;"><p>7</p></div></div> <p>The phosphoramidites 6 and 7 ($R = Pr^i$ and Et) were used to phosphorylate a range of alcohols. Deprotection to yield the phosphate monoester was achieved by the use of hydrofluoric acid–acetonitrile</p>
<p>427 Asymmetric reduction of prochiral aromatic ketones by borane–amine complexes in the presence of chiral amine–BF_3 catalysts</p> <p>Mariappan Periasamy, J. V. Bhaskar Kanth and Ch. Kishan Reddy</p>	<div style="text-align: center;"></div> <p>51% ee</p>
<p>431 Rearrangement of <i>S</i>-methylbenzylsulfonium <i>S</i>-alkylides in non-basic media</p> <p>Tohru Tanzawa, Miyuki Ichioka, Naohiro Shirai and Yoshiro Sato</p>	<div style="text-align: center;"></div>
<p>437 Modification of cyclodextrins by insertion of a heterogeneous sugar unit into their skeletons. Synthesis of 2-amino-2-deoxy-β-cyclodextrin from α-cyclodextrin</p> <p>Nobuo Sakairi, Lai-Xi Wang and Hiroyoshi Kuzuhara</p>	<div style="text-align: center;"></div>
<p>445 Quinolinone cycloaddition as a potential synthetic route to dimeric quinoline alkaloids</p> <p>Stephen A. Barr, Charles F. Neville, Michael F. Grundon, Derek R. Boyd, John F. Malone and Timothy A. Evans</p>	<div style="text-align: center;"></div> <p>Synthesis of a novel dimeric quinolinone of the parensidimerin type</p>
<p>453 Selective electrophilic additions of mixed bifunctionalized trimethylenemethane dianion synthons</p> <p>George Majetich, Hisaya Nishidie and Yong Zhang</p>	<div style="text-align: center;"></div>

459 Photochemical reactions of *o*-alkenylphenols and 1-alkenyl-2-naphthol with alkylamines: amination *via* photoinduced proton transfer



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465 Synthesis of perhydro-1,4-ethano-1,5-naphthyridine and perhydro-4,7-ethanopyrrolo-[3,2-*b*]pyridine derivatives: potential NK₁-receptor antagonists. X-Ray molecular structures of (4*aR*^{*},8*S*^{*},8*aR*^{*})-6-oxo-8-phenylperhydro-1,4-ethano-1,5-naphthyridine and (4*aR*^{*},7*R*^{*},8*R*^{*},8*aR*^{*})-7,8-diphenylperhydro-1,4-ethano-1,5-naphthyridine

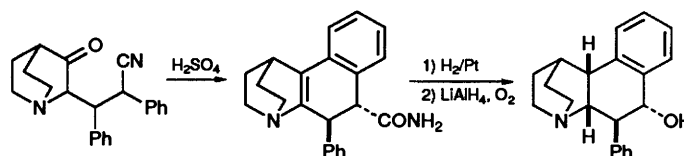


R = Ph or Ph₂
R' = H or Me

Yevgeny Besidsky, Kristina Luthman, Alf Claesson, Christopher J. Fowler, Ingeborg Csöreg and Uli Hacksell

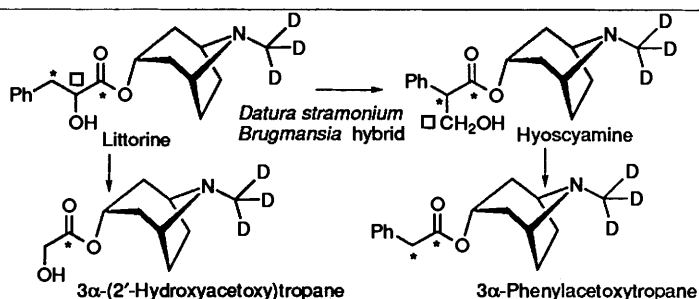
Conformationally constrained derivatives of CP-96,345 have been synthesized and evaluated for their affinity to human NK₁-receptors

475 Synthesis and reactivity of 6-carbamoyl-5-phenyl-2,3,5,6-tetrahydro-1*H*-1,4-ethanobenzo[*f*]quinoline. X-Ray molecular structure of (4*aR*^{*},5*S*^{*},6*R*^{*},10*bR*^{*})-5-phenyl-2,3,4*a*,5,6,10*b*-hexahydro-1*H*-1,4-ethanobenzo[*f*]quinolin-6-yl acetate



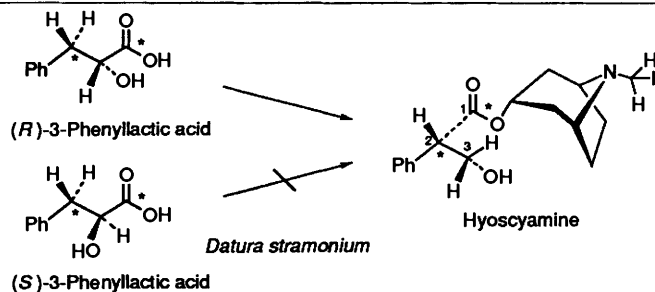
Yevgeny Besidsky, Kristina Luthman, Alf Claesson, Ingeborg Csöreg and Uli Hacksell

481 The biosynthesis of hyoscyamine: the process by which littorine rearranges to hyoscyamine



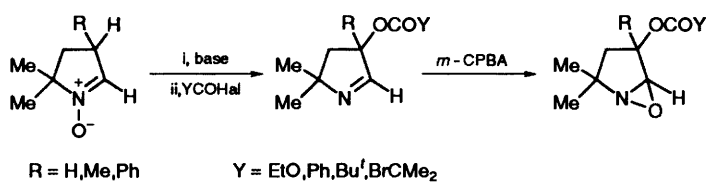
Richard J. Robins, Nicola C. J. E. Chesters, David O'Hagan, Adrian J. Parr, Nicholas J. Walton and Jack G. Woolley

487 The biosynthesis of tropic acid. Part 6. Enantioselective, intact incorporation of (*R*)-(+)-3-phenyllactic acid into the tropic acid ester alkaloids of *Datura*



Morteza Ansarin and Jack G. Woolley

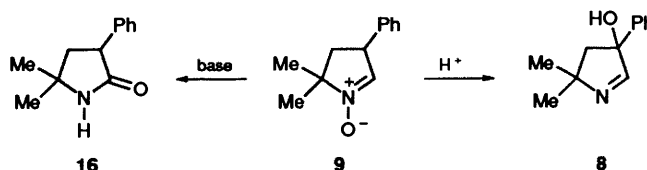
- 491 Acylation of aldo 1-pyrroline 1-oxides (4,5-dihydro-3*H*-pyrrole 1-oxides) and the oxidation of the resulting 3-acyloxy-1-pyrrolines (3-acyloxy-4,5-dihydro-3*H*-pyrroles)



The reaction of 3-substituted aldo 1-pyrroline 1-oxides with chloroformates and acid halides afforded 3-acyloxy-1-pyrrolines which were oxidised to give the corresponding oxaziridines

Neil J. Gibson and Alexander R. Forrester

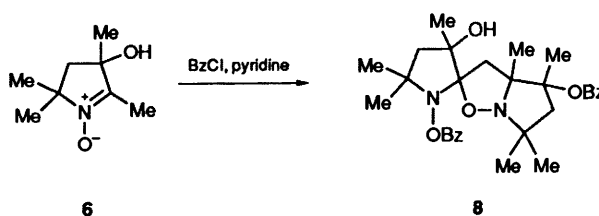
- 501 Preparation and the acid- and base-catalysed isomerisation of 5,5-dimethyl-3-phenyl-1-pyrroline 1-oxide (5,5-dimethyl-3-phenyl-4,5-dihydro-3*H*-pyrrole 1-oxide): unprecedented acid-catalysed 1,3-oxygen migration



The nitronium **9** undergoes an unprecedented acid-catalysed 1,3-oxygen migration to give the 1-pyrroline **8** and also a base-catalysed 1,2-oxygen migration to give the pyrrolidin-2-one **16**

Neil J. Gibson and Alexander R. Forrester

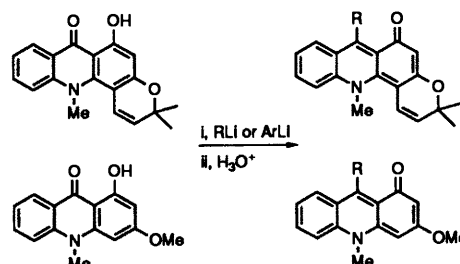
- 507 Preparation and benzylation of 3-hydroxy-2,3,5,5-tetramethyl-1-pyrroline 1-oxide (3-hydroxy-2,3,5,5-tetramethyl-4,5-dihydro-3*H*-pyrrole 1-oxide)



When benzoylated under Schotten-Bauman conditions the 1-pyrroline 1-oxide **6** underwent an unprecedented dimerisation to give the spiro, tricyclic *N*-benzoyloxy-pyrrolidine **8**

Neil J. Gibson, Alexander R. Forrester and Charles Brown

- 511 Reaction of noracronycine and 1-hydroxy-3-methoxy-10-methylacridone with alkyl- and aryl-lithiums: formation of quinone methides



Catherine Jolivet, Christian Rivalle and Emile Bisagni

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- Simple Synthesis of Furfuryl Sulfides *via* Extrusion of COS from Xanthates and Mechanistic Aspects
K. Harano, M. Eto, M. Nishimoto, T. Uemura and T. Hisano
- Synthesis of the Potent Influenza Neuraminidase Inhibitor 4-Guanidino-Neu5Ac2en
R. Storer, M.J. Bamford, M. Chandler, R. Conroy, B. Lamont, B. Patel, V.K. Patel, I.P. Steeples, N.G. Weir, M. Wright and C. Williamson
- Synthesis of 6, 7 and 8 Carbon Sugar Analogues of Potent Anti-influenza 2,3-Didehydro-2,3-dideoxy-*N*-acetylneuraminic Acid R. Storer, M.J. Bamford, J.C. Pichel, W. Husman, B. Patel and N.G. Weir
- Approaches to Carbocyclic Analogues of the Potent Neuraminidase Inhibitor 4-Guanidino-Neu5Ac2en
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- Catalytic Oxidation of Chlorpromazine and Related Phenothiazines. Cation Radicals as the Reactive Intermediates in Sulfoxide Formation J.K. Kochi and E. Bosch
- Photocleavage of the C-O Bond of 9-Phenanthrylmethyl ω -Anilinoalkyl Ether *via* Photo-induced Intramolecular Electron Transfer A. Sugimoto, S. Kimoto, T. Adachi and H. Inoue
- Oligomeric Isoflavonoids. Part 3. Daljanelins A-D. The First Pterocarpan and Isoflavonoid Neoflavonoid Analogues
J.A. Ferreira, J.W. Nel, E.V. Brandt, B.C.B. Bezuidenhout and D. Ferreira
- Hydrocyanation of some α,β -Unsaturated Ketones, and the Synthesis of Some Unusual Isoxazoles
D.H. Grayson, W. Cocker and P.V.R. Shannon
- Furan-2(3*H*)- and -2(5*H*)-ones. Part 6. Di- π -methane Rearrangement of the 4-Benzylfuran-2(5*H*)-one System
O. Muraoka, G. Tanabe, M. Higashiura, T. Minematsu and T. Momose
- Enantiospecific Total Synthesis of (+)-Muricatacin P. Somfai
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- New Syntheses of Aryl Phosphinic Acids from the Reaction of Ethyl Diethoxymethylphosphinate with Aryl Bromides and Phenols R.G. Hall and S.N.L. Bennett
- Medium-sized Cyclophanes. Part 36. Synthesis and Conformational Studies of Dimethoxy[*n,m*]metacyclophanes
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