

JOURNAL OF THE CHEMICAL SOCIETY

Perkin Transactions I

Organic and Bio-organic Chemistry

CONTENTS

- 1369 New cyclopenta[*b*]-pyrroles and -pyridines by reaction of 2-azido- and 2-phosphoranylideneaminocyclopent-1-ene-1-carbaldehydes with aliphatic esters **Thierry Aubert, Badia Tabyaoui, Michel Farnier, and Roger Guillard**
- 1375 Addition-rearrangement reactions of *N*-(arylsulphonyloxy)amines and 3,4-dihydro-2*H*-pyran **Robert V. Hoffman and James M. Salvador**
- 1381 Nitrodibromoacetonitrile: an agent for bromination and for the formation of adducts formally derived from cyano-nitrocarbene **Joseph H. Boyer and Thanikavelu Manimaran**
- 1387 Dilithiated (*E*)-*N*-isopropyl-3-tosylacrylamide: a new β -acylvinyl anion equivalent in organic synthesis **Carmen Nájera and Miguel Yus**
- 1393 Absolute stereochemistry of the novel dioxaspiro diterpenoids strictanonic and grindelistrictic acids. Stereoselective synthesis of strictanonic acid methyl ester and its C-6 epimer **Manuel Gonzalez-Sierra, Alejandro C. Olivieri, Maria I. Colombo, and Edmundo A. Rúveda**
- 1401 Unambiguous synthesis of 3-aryloxymethylmorpholine hydrochlorides without ring enlargement side reactions **George R. Brown and Alan J. Foubister**
- 1405 Organic heterocyclothiazenes. Part 8. 7-Amino-1,3,5,2,4,6-trithiatriazepine and related compounds **Peter J. Dunn and Charles W. Rees**
- 1411 Photoreaction of 1-aryl 1,3-diketones. Trapping reaction of the biradicals generated in the type II reaction with oxygen **Michikazu Yoshioka, Kazuhiko Funayama, and Tadashi Hasegawa**
- 1415 Radical-nucleophilic substitution ($S_{RN}1$) reactions. Part 6. *N*-Anions of diazoles in $S_{RN}1$ and oxidative additions **Adelaide T. O. M. Adebayo, W. Russell Bowman, and W. G. Salt**
- 1423 The total synthesis of *myo*-inositol phosphates *via myo*-inositol orthoformate **David C. Billington, Raymond Baker, Janusz J. Kulagowski, Ian M. Mawer, Joseph P. Vacca, S. Jane deSolms, and Joel R. Huff**
- 1431 *meso*-Tetraphenylporphyrinatoiron catalysed reductive cleavage of some S-O, S-N, and S-C bonds in sulphoxides and sulphilimines **Toshiyuki Nagata, Ken Fujimori, Toshiaki Yoshimura, Naomochi Furukawa, and Shigeru Oae**
- 1437 Pyrrolizidine alkaloid biosynthesis. Synthesis of ^3H -labelled trachelanthamidine and isoretronecanol and their incorporation into three pyrrolizidine bases (necines) **Ellen K. Kunec and David J. Robins**
- 1443 Use of an electrocyclic reaction of *o*-quinodimethane and an intramolecular Mannich-type cyclisation in diterpene alkaloid synthesis: a synthesis of Nagata's intermediate for (\pm)-atisine **Kozo Shishido, Kou Hiroya, Keiichiro Fukumoto, Tetsuji Kametani, and Chizuko Kabuto**
- 1453 Studies related to penicillins. Part 28. β -Elimination reactions of sulphones derived from penicillins leading to *cis*-3-acylamino-4-oxoazetidino-2-sulphinic acids **G. D. Sriyani Ananada, Karl J. Jankowski, Anthony Schofield, John Steele, Richard J. Stoodley, and Colin W. Greengrass**
- 1461 On the biosynthetic origins of the hydrogen atoms in the macrotetrolide antibiotics: and their mode of assembly catalysed by a nonactin polyketide synthase **Doreen M. Ashworth, Carole A. Clark, and John A. Robinson**

- 1469 Synthesis of novel near-infrared absorbing metal complex dyes with indoaniline-type ligands **Yuji Kobo, Kyoko Sasaki, Hisa Kataoka, and Katsuhira Yoshida**
- 1473 Preparation and crystal structure of a twin twist-boat bicyclo[3.3.1]nonane monohydrate **Roger Bishop, Donald C. Craig, and Marcia L. Scudder**
- 1479 Synthesis and properties of optically active 2-substituted taurines **Kunihiko Higashiura, Hiroe Morino, Hirohide Matsuura, Yoshio Toyomaki, and Kazuharu Ienaga**
- 1483 Higher-carbon sugars. Part 13. The catalytic osmylation of some α,β -un-saturated octuronic acid derivatives and a synthesis of (*meso*)-*threo*-gluco-octitol **John C. Barnes, John S. Brimacombe, and Graeme McDonald**
- 1491 Novel gangliosides of frog brain. Establishment of the structures by their ^1H n.m.r. and mass spectra **Kiyotaka Munesada, Akira Nishikawa, and Takayuki Suga**
- 1497 Synthesis of photoresponsive cyclobutane-1,2-dicarbonyl-capped 2-*n* diazacrown ethers by intramolecular [2 + 2] photocycloaddition and the structures of their lithium and mercury(II) complexes **Sadatoshi Akabori, Takeshi Kumagai, Yoichi Habata, and Sadao Sato**
- 1507 Synthesis of *trans*-2,6-dialkylpiperidines by intramolecular amidomercuration and by 1,3-cycloaddition of alkenes to 2-methyl-2,3,4,5-tetrahydropyridine oxide **David R. Adams, William Carruthers, Michael J. Williams, and Patrick J. Crowley**
- 1515 Aziridination of cyclohex-2-enols and 3-substituted cyclohexenes: comparison with epoxidation **Robert S. Atkinson and Brian J. Kelly**
- 1521 Stereoselective thermal reactions between (*E*)-1-alkoxymethoxybut-2-enyl(tributyl)stannanes and aldehydes **Andrew J. Pratt and Eric J. Thomas**
- 1529 Synthesis of optically active (*E*)-1-alkoxymethoxybut-2-enyl(tributyl)stannanes: stereochemistry of their thermal reactions with aldehydes **Vincent J. Jephcote, Andrew J. Pratt, and Eric J. Thomas**

Perkin Communications

- 1537 Amide-armed azamacrocycles as a new series of synthetic carriers for alkali and alkaline earth metal cations **Hiroshi Tsukube, Hayamitsu Adachi, and Shiro Morosawa**
- 1539 A role for paxilline in the biosynthesis of indole-diterpenoid penitrem mycotoxins **Peter G. Mantle and Julia Penn**
- 1541 Selective formation of linear and angular triquinane carbon skeleta by directed intramolecular photocycloaddition of 5-phenylpent-1-ene **Kevin Cosstick and Andrew Gilbert**
- 1543 5-(*Z*)-Oct-2-enyltetrahydrofuran-2-one as a key intermediate in the synthesis of leukotriene B₄ **György Dormán, Stanley M. Roberts, Basil J. Wakefield, and John A. Winders**
- 1544 Synthesis of 12-bromo-, 12-chloro- and 12-fluoro-forskolin **Gregory M. Shutske**
- 1547 Formation of indolzines by the addition of α -chloroacrylonitrile to pyridinium ylides: Regioselectivity and Hammett correlation **Roland Bonneau, Michael T. H. Liu, and René Lapouyade**
- 1548 Asymmetric reduction of ketoxime *O*-alkyl ethers with sodium borohydride-Lewis acid **Shinichi Itsuno, Yoshiki Sakurai, Koji Shimizu, and Koichi Ito**
- 1550 Tandem Michael addition-1,3-dipolar cycloaddition of imines of α -amino acid esters and aminoacetonitrile **Darrin A. Barr, Gregory Donegan, and Ronald Grigg**
- 1552 Absolute configurations of the liverwort sesquiterpenoids, (–)-chiloscyphone and (+)-chiloscypholone: total synthesis of optically active compounds **Motoo Tori, Takeshi Hasebe, and Yoshinori Asakawa**
- 1553 Regioselective β -scission of α -oxoalkoxyl radicals: a novel formation of hydroxy ϵ -lactones by photolysis of steroidal α -oxo alcohol hypiodites in the presence of mercury(II) oxide and iodine **Hiroshi Suginome, Jian Bo Wang, and Gen Satoh**
- 1555 New reduction method of α -diketones, oxo amides, and quinones with Zn-EtOH in the presence of a salt **Fumio Toda, Koichi Tanaka, and Hiroshi Tange**

AUTHOR INDEX

- Adachi, Hayamitsu, 1537
Adams, David R., 1507
Adebayo, Adelaide T. O. M., 1415
Akabori, Sadatoshi, 1497
Ananada, G. D. Sriyani, 1453
Asakawa, Yoshinori, 1552
Ashworth, Doreen M., 1461
Atkinson, Robert S., 1515
Aubert, Thierry, 1369
Baker, Raymond, 1423
Barnes, John C., 1483
Barr, Darrin A., 1550
Billington, David C., 1423
Bishop, Roger, 1473
Bonneau, Roland, 1547
Bowman, W. Russell, 1415
Boyer, Joseph H., 1381
Brimacombe, John S., 1483
Brown, George R., 1401
Carruthers, William, 1507
Clark, Carole A., 1461
Colombo, Maria I., 1393
Cosstick, Kevin, 1541
Craig, Donald C., 1473
Crowley, Patrick J., 1507
deSolms, S. Jane, 1423
Donegan, Gregory, 1550
Dormán, György, 1543
Dunn, Peter J., 1405
Farnier, Michel, 1369
Foubister, Alan J., 1401
Fujimori, Ken, 1431
Fukumoto, Keichiro, 1443
Funayama, Kazuhiko, 1411
Furukawa, Naomochi, 1431
Gilbert, Andrew, 1541
Gonzalez-Sierra, Manuel, 1393
Greengrass, Colin W., 1453
Grigg, Ronald, 1550
Guilard, Roger, 1369
Habata, Yoichi, 1497
Hasebe, Takeshi, 1552
Hasegawa, Tadashi, 1411
Higashiura, Kunihiko, 1479
Hiroya, Kou, 1443
Hoffman, Robert V., 1375
Huff, Joel R., 1423
Ienaga, Kazuharu, 1479
Ito, Koichi, 1548
Itsuno, Shinichi, 1548
Jankowski, Karl J., 1453
Jephcote, Vincent J., 1529
Kabuto, Chizuko, 1443
Kametani, Tetsuji, 1443
Kataoka, Hisa, 1469
Kelly, Brian J., 1515
Kubo, Yuji, 1469
Kulagowski, Janusz J., 1423
Kumagai, Takeshi, 1497
Kunec, Ellen K., 1437
Lapouyade, René, 1547
Liu, Michael T. H., 1547
Manimaran, Thanikavelu, 1381
Mantle, Peter G., 1539
Matsuura, Hirohide, 1479
Mawer, Ian M., 1423
McDonald, Graeme, 1483
Morino, Hiroe, 1479
Morosawa, Shiro, 1537
Munesada, Kiyotaka, 1491
Nájera, Carmen, 1387
Nagata, Toshiyuki, 1431
Nishikawa, Akira, 1491
Oae, Shigeru, 1431
Olivieri, Alejandro C., 1393
Penn, Julia, 1539
Pratt, Andrew J., 1521, 1529
Rees, Charles W., 1405
Roberts, Stanley M., 1543
Robins, David J., 1437
Robinson, John A., 1461
Rúveda, Edmundo A., 1393
Sakurai, Yoshiki, 1548
Salt, W. G., 1415
Salvador, James M., 1375
Sasaki, Kyoko, 1469
Sato, Sadao, 1497
Satoh, Gen, 1553
Schofield, Anthony, 1453
Scudder, Marcia L., 1473
Shimizu, Koji, 1548
Shishido, Kozo, 1443
Shutske, Gregory M., 1544
Steele, John, 1453
Stoodley, Richard J., 1453
Suga, Takayuki, 1491
Suginome, Hiroshi, 1553
Tabyaoui, Badia, 1369
Tanaka, Koichi, 1555
Tange, Hiroshi, 1555
Thomas, Eric J., 1521, 1529
Toda, Fumio, 1555
Tori, Motoo, 1552
Toyomaki, Yoshio, 1479
Tsukube, Hiroshi, 1537
Vacca, Joseph P., 1423
Wakefield, Basil J., 1543
Wang, Jian Bo, 1553
Winders, John A., 1543
Williams, Michael J., 1507
Yoshida, Katsuhira, 1469
Yoshimura, Toshiaki, 1431
Yoshioka, Michikazu, 1411
Yus, Miguel, 1387

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

