

## JOURNAL OF THE CHEMICAL SOCIETY

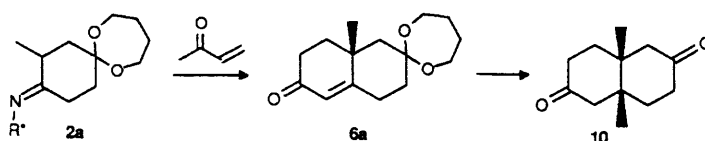
## Perkin Transactions 1

## Organic and Bio-organic Chemistry

## CONTENTS

## Perkin Communications

- 1935 **Michael reaction of functionalized chiral cyclanone imines. Enantioselective synthesis of  $C_2$ -symmetric *cis*-(1*R*,6*R*)-1,6-Dimethylbicyclo[4.4.0]decane-3,8-dione**



Michel Pfau, Ivan Jabin and Gilbert Reviel

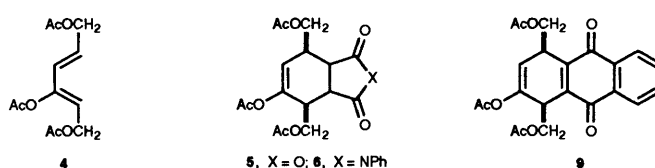
- 1937 **Simple, inexpensive synthesis of oxiranes from carbonyl compounds. Generation of sulfonium ylides from the ternary system methanol-sulfuric acid-dimethyl sulfide**



Julie Forrester, Ray V. H. Jones, Peter N. Preston and Elizabeth S. C. Simpson

Dimethylsulfonium methylide can be generated *in situ* from the ternary system MeOH-Me<sub>2</sub>S-conc.H<sub>2</sub>SO<sub>4</sub>

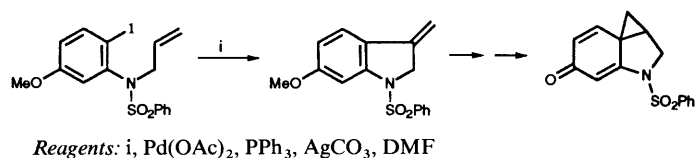
- 1939 **(2*Z*,4*E*)-1,3,6-Triacetoxyhexa-2,4-diene a novel Diels-Alder diene precursor of cyclohexanones**



Pilar Areces, Emilio Román, María C. Pozo and José A. Serrano

The diene **4**, prepared from tri-*O*-acetyl-D-glucal, reacts with electron-deficient dienophiles to yield the adducts **5**, **6** and **9**

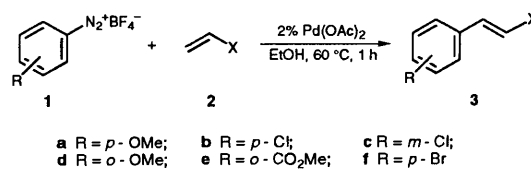
- 1941 **Concise synthesis of CC-1065/duocarmycin pharmacophore using the intramolecular Heck reaction**



Takao Sakamoto, Yoshinori Kondo, Masanobu Uchiyama and Hiroshi Yamanaka

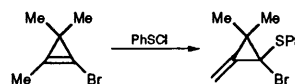
1943 Heck reaction of arenediazonium salts: a palladium-catalysed reaction in an aqueous medium

Saumitra Sengupta and Sanchita Bhattacharya



1945 Highly functionalised methylenecyclopropanes from cyclopropenes

Mark S. Baird, M. Fiona Shortt, Helmi H. Hussain and Juma'a R. Al Dulayymi



Reaction of a number of halogenocyclopropenes with benzenesulfonyl chloride leads to 2-bromo-2-phenylthio-1-methylenecyclopropanes

## Articles

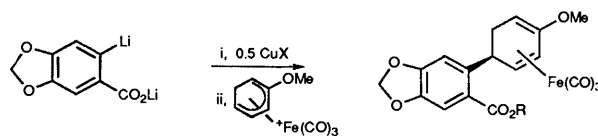
1947 Peptide synthesis: synthesis of the cysteine-containing peptides of biological and pharmaceutical interest,  $\alpha$ -h-ANF and h-big endothelin

Robert Ramage and Andrew S. J. Stewart

The synthesis of the biologically important peptides,  $\alpha$ -h-atrial natriuretic factor and h-big endothelin have been synthesised and a study made of S-protection and S-S formation

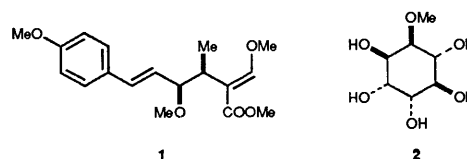
1953 Preparation and reactivity of cuprate derivatives of lithium 6-lithiopiperonylate with tricarbonyl(2-methoxycyclohexadienyl)-iron(1+) hexafluorophosphate(1-)

Stephen T. Astley and G. Richard Stephenson



1957 Utilisation of L-quebrachitol in natural product synthesis. Total synthesis and absolute configuration of (–)-oudemansin X

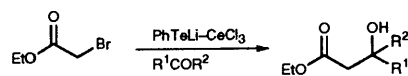
Noritaka Chida, Ken Yamada and Seiichiro Ogawa



The first total synthesis of antifungal antibiotic (–)-oudemansin X **1** starting from L-quebrachitol **2** is described

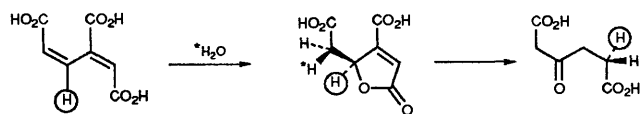
- 1963 **Lithium benzenetellurolate-induced Reformatsky-type reaction in the presence of cerium trichloride**

Shin-ichi Fukuzawa and Katsuhiko Hirai



- 1967 **Stereochemistry and mechanisms of the 3-carboxymuconate fungal pathway in *Neurospora* SY4a**

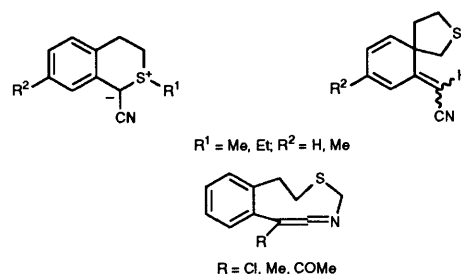
Robert A. Hill, Gordon W. Kirby, Gary J. O'Loughlin and David J. Robins



Reactions catalysed by *Neurospora* enzymes

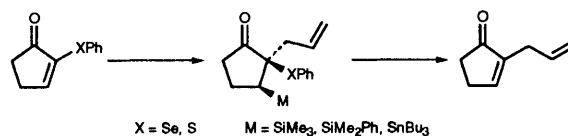
- 1973 **Novel rearrangements of cyano-stabilised cyclic sulfur ylides, 2-alkyl-1-cyano-3,4-dihydro-1H-2-thionaphthalen-1-ides: spiro-compound formation and ring expansion reactions**

Tadashi Kataoka, Masahiro Kataoka, Megumi Ikemori, Hiroshi Shimizu, Mikio Hori and Iwao Miura



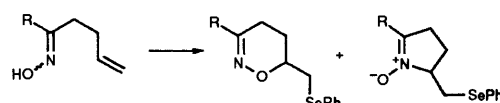
- 1981 **Vinyl anion equivalents. Part 3. Diastereoselective allylation of 2-phenylseleno-3-trialkylsilyl- and 2-phenylthio-3-(tributylstannyl)cyclopentanone enolates**

Shinya Kusuda, Yoshio Ueno, Tsuneo Hagiwara and Takeshi Toru



- 1989 **Ring-closure reactions of alkenyl oximes induced by persulfate anion oxidation of diphenyl diselenide. Formation of 1,2-oxazines and cyclic nitrones**

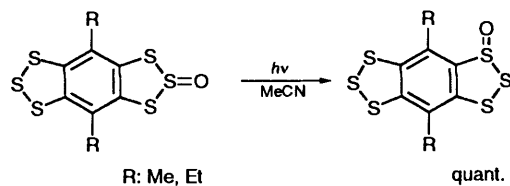
Marcello Tiecco, Lorenzo Testaferri, Marco Tingoli, Luana Bagnoli and Francesca Marini



The electrophilic selenenylating agent produced from the reaction of  $\text{PhSeSePh}$  with ammonium persulfate and trifluoromethanesulfonic acid induces regioselective ring closure of  $\gamma$ -alkenyl oximes to give 1,2-oxazine and cyclic nitron derivatives

- 1995 **Oxidation of benzotrithiole analogues. Photochemical rearrangement of benzotrithiole 2-oxides to benzotrithiole 1-oxides involving intramolecular oxygen migration**

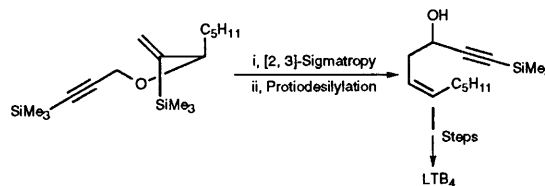
Naoki Yomoji, Shouichi Takahashi, Shin-ichi Chida, Satoshi Ogawa and Ryu Sato



Intramolecular photochemical oxygen migration was found

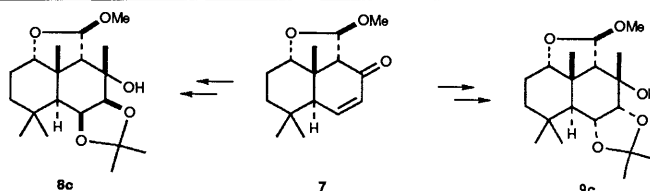
2001 **Stereoselective alkene synthesis via silicon-directed [2,3]-sigmatropic rearrangements: an approach to leukotrienes**

John E. Crawley, Aston D. Kaye, Gerald Pattenden and Stanley M. Roberts



2009 **Synthetic and structural studies of key intermediates toward forskolin and/or erigerol. Relative stereochemistry, conformational preferences and stereoselectivity control**

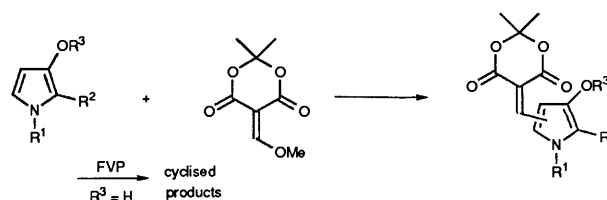
José A. Bacigaluppo, María I. Colombo, Manuel González-Sierra, Marcelo D. Preite, Juan Zinczuk, Edmundo A. Rúveda, Helmut Duddeck and Monika Hiegemann



The relative stereochemistry and conformation of significant intermediates towards a synthesis of forskolin and erigerol are described

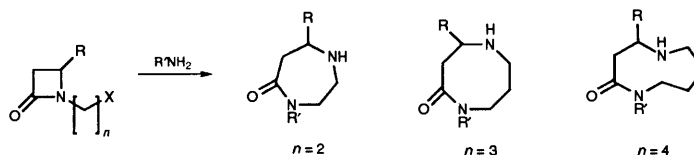
2017 **3-Hydroxypyrroles and 1*H*-pyrrol-3(2*H*)-ones. Part 13. Reactions of methoxymethylene Meldrum's acid with 3-hydroxypyrroles, with 3-methoxypyrroles and with other active substrates, and pyrolytic heterocyclisations of the products**

Paul A. Derbyshire, Gordon A. Hunter, Hamish McNab and Lilian C. Monahan



2027 **Study of transamidative ring expansion of *N*- $\omega$ -halogenoalkyl- $\beta$ -lactams of alkyl chain lengths 2–12 in liquid ammonia and other liquid amines: syntheses of 7-, 8- and 9-membered 1,5-diaza cyclic ketones, including routes to ( $\pm$ )-dihydroperiphylline and ( $\pm$ )-celabenzine**

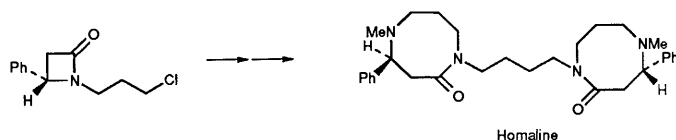
Michael J. Begley, Leslie Crombie, David Haigh, Raymond C. F. Jones, Steven Osborne and Richard A. B. Webster



Unsubstituted, substituted, and unsaturated variants: applications to alkaloid synthesis

2047 **Synthesis of the alkaloid homaline in ( $\pm$ ) and natural (*S,S*)-(-) forms, using amination and transamidative ring expansion in liquid ammonia**

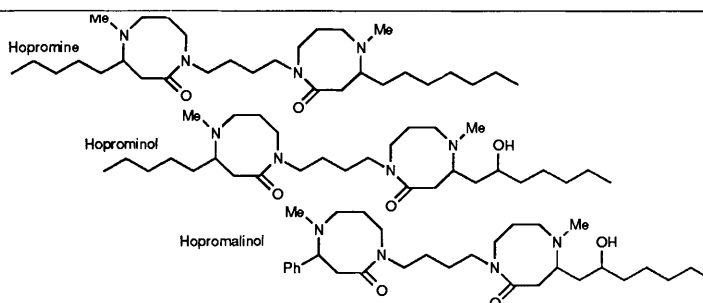
Leslie Crombie, David Haigh, Raymond C. F. Jones and Ab. Rasid Mat-Zin



Synthesis of natural (*S,S*)-homaline, and ( $\pm$ ) and *meso* forms

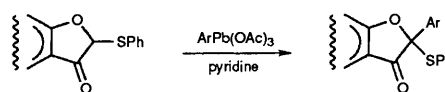
2055 **Synthesis of alkaloids hopramine, hoprominol and hopromalinol, using transamidation methods**

Leslie Crombie, David Haigh, Raymond C. F. Jones and Ab. Rasid Mat-Zin



- 2069 **Arylation of  $\alpha$ -(phenylthio)ketones with aryllead(IV) derivatives: application to the synthesis of 2-arylbenzofuran-3(2H)-one derivatives**

Dervilla M. X. Donnelly, Joshua M. Kielty, Antoine Cormons and Jean-Pierre Finet



- 2075 **Synthetic application of lithiated tris(methylthio)methane: preparation of aliphatic methyl thiolcarboxylates from the corresponding halides. Convenient synthesis of tris(methylthio)methane**

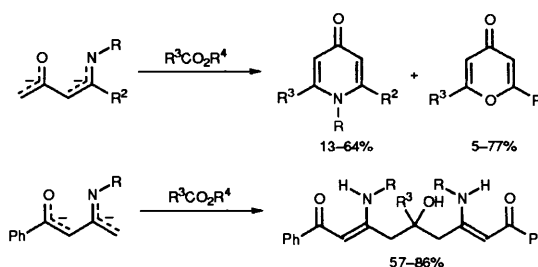
Margherita Barbero, Silvano Cadamuro, Iacopo Degani, Stefano Dughera and Rita Fochi



Methyl thiolcarboxylates have been synthesized from alkyl halides, via trimethyl trithioorthocarbonylates

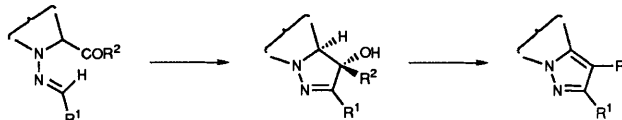
- 2081 **Reaction of dianions of acyclic  $\beta$ -enamino ketones with electrophiles. Part 5. Esters: synthesis of pyridin-4-one and pyran-4-one derivatives**

Giuseppe Bartoli, Marcella Bosco, Cristina Cimarelli, Renato Dalpozzo, Giuseppe Guercio and Gianni Palmieri



- 2087 **Intramolecular reaction of the hydrazonyl group with formyl and oxo groups: preparation of pyrazolo[1,5-*a*]indoles and related pyrazolo compounds**

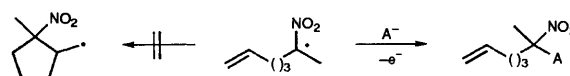
Jing-Kang Shen, Hajime Katayama, Noriyuki Takatsu and Itsuo Shiro



Dihydropyrazole and pyrazole rings have been formed by intramolecular reaction of a hydrazonyl group with aldehyde and ketone carbonyl groups catalysed by Lewis acid

- 2099 **Oxidative addition reactions of  $\omega$ -alkenyl nitronate anions**

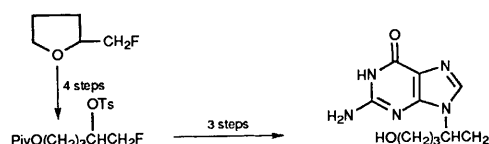
W. Russell Bowman, David S. Brown, Catherine A. Burns and David Crosby



Addition of anions to intermediate  $\alpha$ -nitroalkyl radicals, generated by oxidation of  $\omega$ -alkenyl nitronate anions, proceeds faster than radical cyclisation onto the alkene except in intermediate radicals strongly biased towards cyclisation

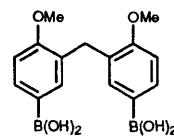
- 2107 **9-(1-Fluoro-5-hydroxypentan-2-yl)-9H-guanine: synthesis and evaluation of antiviral activity**

Maureen Lewis, T. Brian H. McMurry and Erik De Clercq



- 2111 **Specific complexation of glucose with a diphenylmethane-3,3'-diboronic acid derivative: correlation between the absolute configuration of mono- and di-saccharides and the circular dichroic activity of the complex**

Yutaka Shiomi, Miwako Saisho, Kazuhiko Tsukagoshi and Seiji Shinkai

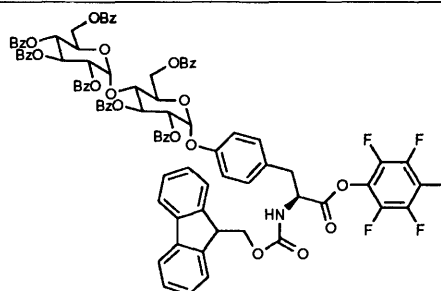


2

A new sensory system for saccharides by using CD spectrometry

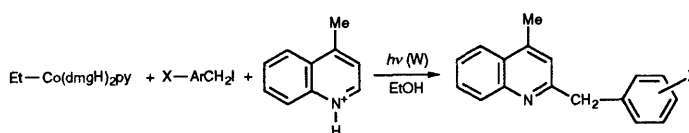
- 2119 **Glycosylation of phenols: preparation of 1,2-*cis* and 1,2-*trans* glycosylated tyrosine derivatives to be used in solid-phase glycopeptide synthesis**

Knud J. Jensen, Morten Meldal and Klaus Bock



- 2131 **Generation and trapping of benzyl radicals from benzyl iodides by cobaloxime-mediated iodine atom abstractions**

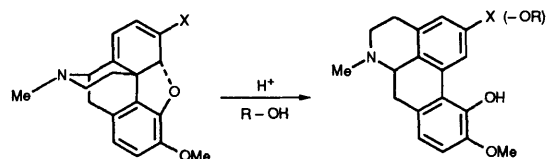
Trevor M. Brown, Christopher J. Cooksey, David Crich, Alan T. Dronsfield and Robert Ellis



A convenient method of benzyl radical generation by way of iodine abstraction using ethylcobaloxime in the presence of tungsten light is reported

- 2137 **Rearrangement of morphinandienes in methanesulfonic acid**

Sándor Berényi, Mónika Czirják and Sándor Makleit



Acid-catalysed rearrangement has been found to be accompanied by substitution in the presence of nucleophiles

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

