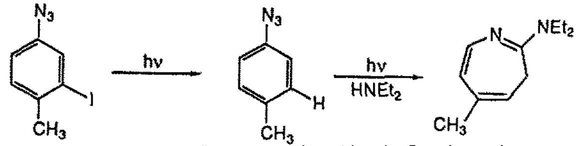
GRAPHICAL ABSTRACTS

Tetrahedron Lett. 30, 899 (1989)

Exploratory Photochemistry of Iodinated Aromatic Azides

David S. Watt, Kenji Kawada, Elisa Leyva and Matthew S. Platz
Department of Chemistry, The Ohio State University, Columbus, Ohio 43210



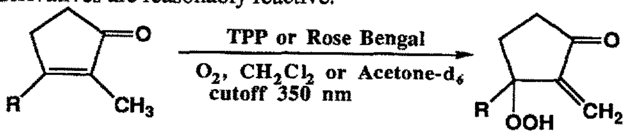
Photolysis of ortho or meta p-toluyl azide in diethylamine does not produce iodinated azepine adducts.

Tetrahedron Lett. 30, 903 (1989)

Reaction of Singlet Oxygen with 2-Cyclopenten-1-One

B.-M. Kwon, R. C. Kanner, and C. S. Foote*
Department of Chemistry and Biochemistry, University of California, Los Angeles, California 90024

The reaction of singlet oxygen with 2-cyclopenten-1-one derivatives is regioselective. Reactivity toward singlet oxygen is not solely determined by the conformation of the carbonyl group relative to the olefinic double bond, since even some s-*trans* derivatives are reasonably reactive.

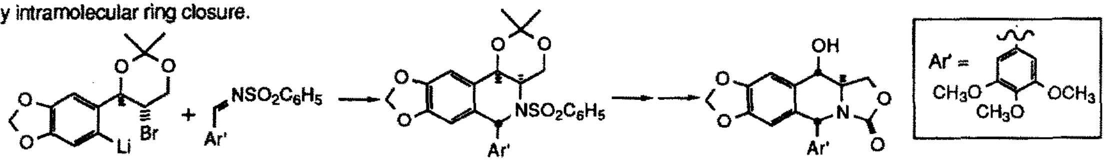


Tetrahedron Lett. 30, 907 (1989)

SYNTHESIS OF 2-AZAPODOPHYLLOTOXIN

H. L. Pearce*, N. J. Bach, and T. L. Cramer
Lilly Research Laboratories, Lilly Corporate Center, Indianapolis, IN 46285

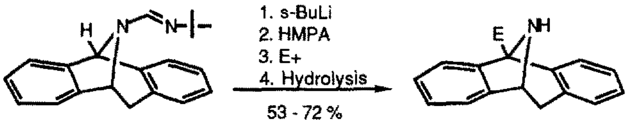
2-Azapodophyllotoxin was prepared by addition of an aryllithium to an appropriately substituted benzesulfonimine followed by intramolecular ring closure.



Tetrahedron Lett. 30, 911 (1989)

A BRIDGEHEAD α-AMINO CARBANION: FACILE PREPARATION OF C5(BRIDGEHEAD)-SUBSTITUTED ANALOGUES OF (±)-5H-DIBENZO[a,d]CYCLOHEPTEN-5,10-IMINE INCLUDING A STABLE α-IODO SECONDARY AMINE

J. A. Monn and K. C. Rice*
Section on Drug Design and Synthesis, Laboratory of Neuroscience, National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Bethesda, Maryland 20892

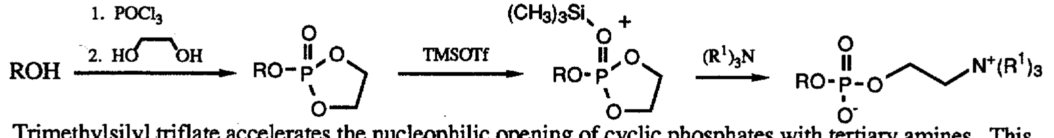


E = alkyl, acyl, I

Tetrahedron Lett.30,915(1989)

Trimethylsilyl Triflate Mediated Introduction of Phospholipid Head Groups.

Thomas R. Gadek
Syntex Research, Palo Alto, CA 94304



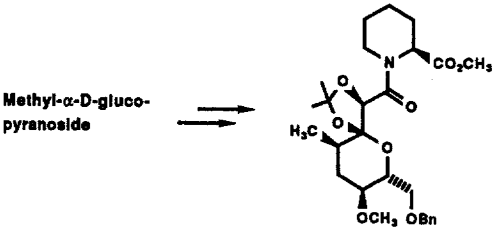
Trimethylsilyl triflate accelerates the nucleophilic opening of cyclic phosphates with tertiary amines. This reaction has been applied to the synthesis of ether phospholipids.

Tetrahedron Lett.30,919(1989)

STUDIES DIRECTED TOWARDS THE TOTAL SYNTHESIS OF FK-506. PREPARATION OF A C(1) TO C(15) SEGMENT.

Robert E. Ireland* and Peter Wipf
University of Virginia - Chemistry Department; McCormick Road; Charlottesville, Virginia 22901.

Starting from methyl a-D-glucopyranoside a protected C(1) to C(15) segment of the immunosuppressive agent FK-506 was synthesized.

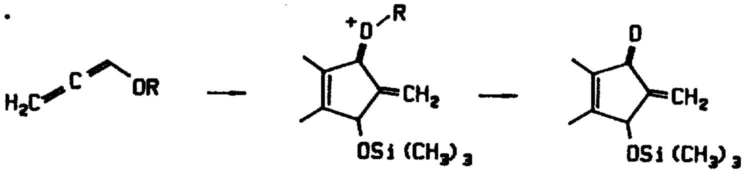


Tetrahedron Lett.30,923(1989)

ALLENE ETHERS FOR THE CATIONIC CYCLOPENTANNELATION

Marcus A. Tius*, J.-B. Ousset, Donald P. Astrab, Abdul H. Fauq and Sanjay Trehan
Department of Chemistry, University of Hawaii
Honolulu, Hawaii 96822, U.S.A.

Only allene ethers having a a group which is capable of departing as a stable cation participate in the cationic cyclopentannelation reaction.

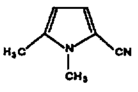


Tetrahedron Lett.30,925(1989)

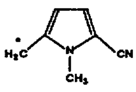
ANODIC OXYDATION OF 1,5-DIMETHYL-2-PYRROLECARBONITRILE

Fatih Köleli, Carl H. Hamann* and Jürgen Martens
Fachbereich Chemie der Universität Oldenburg, Carl-von-Ossietzky-Str. 9-11, D-2900 Oldenburg, West Germany

The anodic oxydation of 1,5-dimethyl-2-pyrrolecarbonitrile 1 in the presence of methanolate or cyanide leads to the products 5 respectively 6 via a radical intermediate 3 which was characterized by SEESR spectroscopy.



1



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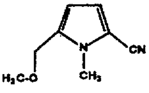

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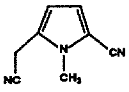

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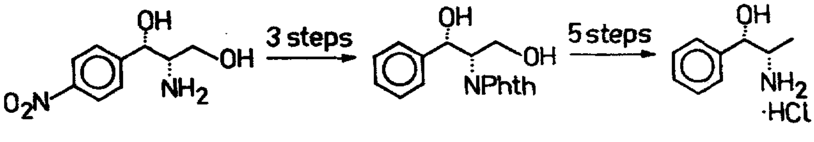
Tetrahedron Lett. 30, 929 (1989)

A CONVENIENT SYNTHESIS OF OPTICALLY PURE (S,S)-NORPSEUDOEPHEDRINE

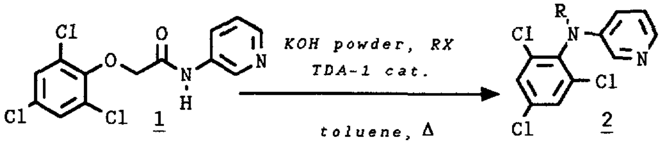
Armin Boerner and Hanswalter Krause
Central Institute of Organic Chemistry, Division of Complex Catalysis
GDR Academy of Sciences, 2500 Rostock, GDR



Tetrahedron Lett. 30, 931 (1989)

TDA-1 CATALYSIS IN SMILES REARRANGEMENT OF N-ARYLPHENOXYAMIDES. ACCELERATING EFFECT OF THE 2,4,6-TRICHLORO SUBSTITUTION.

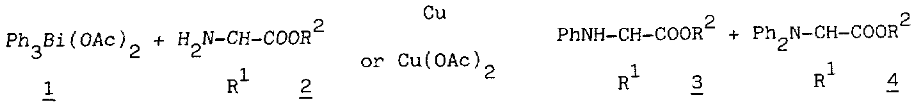
A. GREINER
Rhône Poulenc Agrochimie, Centre de Recherches de la Dargoire, BP 9163
69263-LYON CEDEX 09, France



Tetrahedron Lett. 30, 937 (1989)

N-PHENYLATION OF AMINO ACID DERIVATIVES

Derek H.R. Barton[a], Jean-Pierre Finet[*,b], Jamal Khamsi[b]
a - Texas A & M University, College Station, TX77843, USA
b - Faculté des Sciences St Jérôme, 13397 Marseille Cedex 13, France.



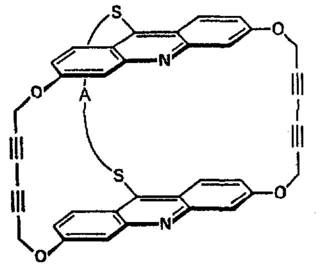
$$\underset{\underline{1}}{Ph_3Bi(OAc)_2} + \underset{\underline{2}}{H_2N\text{-}\underset{R^1}{CH}\text{-}COOR^2} \xrightarrow[\text{or } Cu(OAc)_2]{Cu} \underset{\underline{3}}{PhNH\text{-}\underset{R^1}{CH}\text{-}COOR^2} + \underset{\underline{4}}{Ph_2N\text{-}\underset{R^1}{CH}\text{-}COOR^2}$$

3 : 16-92% 4 : 4-85%

Tetrahedron Lett. 30, 941 (1989)

BICYCLO-BIS-INTERCALANDS : SYNTHESIS OF TRIPLY BRIDGED BIS-INTERCALANDS BASED ON ACRIDINE SUBUNITS.

Sylvain Claude, Jean-Marie Lehn*, Jean-Pierre Vigneron
Laboratoire de Chimie des Interactions Moléculaires,
Collège de France, 11, Place Marcelin Berthelot, 75005 PARIS



Macrobicyclic receptor molecules built on two triply-bridged acridine intercalating subunits have been synthesized via an efficient intramolecular cyclization procedure.

Tetrahedron Lett. 30,945(1989)

INORGANIC SOLIDS IN "DRY MEDIA". AN EFFICIENT WAY FOR DEVELOPING MICROWAVE IRRADIATION ACTIVATED ORGANIC REACTIONS

E.Gutteriez[1],A.Loupy[2],G.Bram[2] and E.Ruiz-Hitzky[1] - [1]Instituto de Ciencia de Materiales, Madrid (Spain) [2]Laboratoire des Réactions Sélectives sur Supports, Orsay (France)

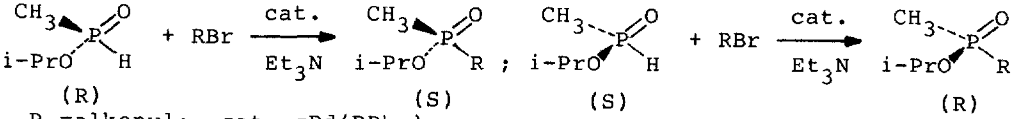
$$\text{pinacol} \xrightarrow{\text{microwave 450W, 15min}} \text{pinacolone} \quad \text{94-99\% } (M^{n+}\text{-montmorillonite})$$

$$\text{AcOK} + \text{BrC}_8\text{H}_{17} \xrightarrow{\text{microwave 600W, 10min}} \text{AcOC}_8\text{H}_{17} \quad \text{82\% (silica) ; 91\% (alumina)}$$

Tetrahedron Lett. 30,949(1989)

AN EFFICIENT SYNTHESIS OF CHIRAL, NONRACEMIC ISOPROPYL ALKENYLMETHYLPHOSPHINATES VIA PALLADIUM ROUTE

Yuanyao Xu*, Hengxu Wei, Jing Zhang and Guohua Huang
Shanghai Institute of Organic Chemistry, Academia Sinica,
345 LingLing Lu, Shanghai, People's Republic of China



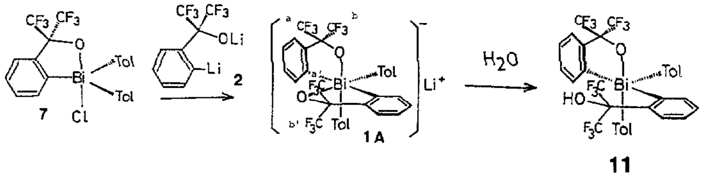
R =alkenyl; cat. =$Pd(PPh_3)_4$

Tetrahedron Lett. 30,953(1989)

FIRST EXAMPLE OF THERMALLY STABLE HYPERVALENT BISMUTH ATE COMPLEX (12-Bi-6) WITH TWO BIDENTATE LIGANDS: SYNTHESIS AND STRUCTURE

Kin-ya Akiba,* Keisuke Ohdoi, and Yohsuke Yamamoto,
Department of Chemistry, Faculty of Science, Hiroshima University, Hiroshima 730, JAPAN

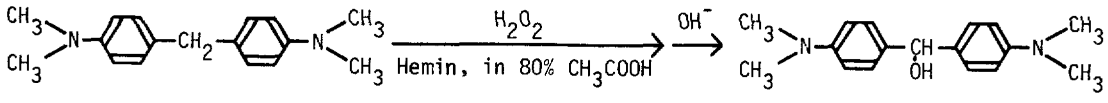
A hexacoordinate bismuth ate complex (1A) was synthesized and the structure was determined by ^{19}F NMR. 1A was decomposed to alcohol (11) by water.



Tetrahedron Lett. 30,957(1989)

4,4'-TETRAMETHYLDIAMINODIPHENYLMETHANOL FROM TETRABASE WITH HEMIN IN ACETIC ACID

Atsushi Ohkoshi, Katsunobu Takahashi, Ayako Matsushima, Kazuya Abe and Yuji Inada*
Department of Materials Science and Technology, Toin University of Yokohama
Kurogane-cho 1614, Midori-ku, Yokohama 227, Japan

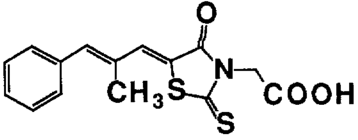


Tetrahedron Lett. 30, 959 (1989)

STRUCTURAL ELUCIDATION OF EPALRESTAT(ONO-2235), A POTENT ALDOSE REDUCTASE INHIBITOR, AND ISOMERIZATION OF ITS DOUBLE BONDS

Toshimasa ISHIDA*, Yasuko IN, Masatoshi INOUE, Yoko UENO and Chiaki TANAKA and Nobuyuki HAMANAKA*
Osaka University of Pharmaceutical Sciences, 2-10-65 Kawai, Matsubara, Osaka 580, Japan
ONO Pharmaceutical Co., Ltd., 3-1-1 Sakurai, Shimamoto, Mishima, Osaka 618, Japan

The structure of (ONO-2235) is revised by X-ray single crystal analysis and NMR technics.



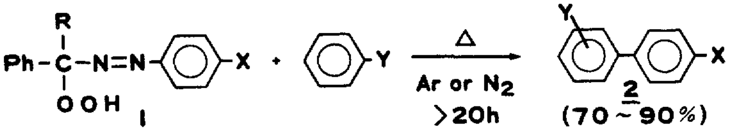
ONO-2235

Tetrahedron Lett. 30, 963 (1989)

THERMAL HIGH YIELD AROMATIC ARYLATION WITH α-AZOHYDROPEROXIDE (PART 1). A NOVEL FREE RADICAL AROMATIC ARYLATION REACTION

Takahiro Tezuka,* Katsunori Sasaki, Nozomu Narita, Mikako Fujita, Keiichi Ito, and Takashi Otsuka
Department of Chemistry, University of Tsukuba, Tsukuba, Ibaraki 305, Japan

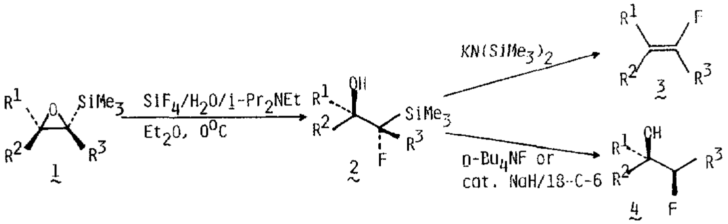
Heating α-azohydroperoxide (1) in benzene under reflux with bubbling inert gas affords biphenyls (2) in high yields (70 - 90%). A mechanism involving an induced decomposition radical chain reaction is suggested.



Tetrahedron Lett. 30, 967 (1989)

REGIOSPECIFIC RING OPENING OF α,β-EPOXYSILANES WITH SILICON TETRAFLUORIDE AND APPLICATION TO THE SYNTHESIS OF FLUOROALKENES.

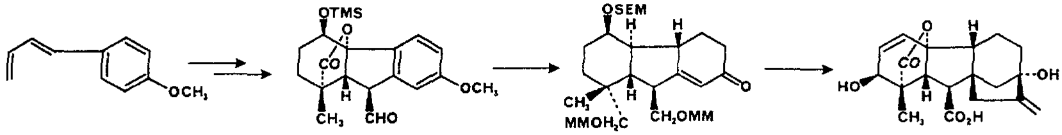
Makoto Shimizu and Hirosuke Yoshioka The Institute of Physical & Chemical Research (RIKEN), Wako, Saitama 351-01, JAPAN



Tetrahedron Lett. 30, 971 (1989)

TOTAL SYNTHESIS OF (±)-GIBBERELLIC ACID

Hiroto Nagaoka, Masanao Shimano and Yasuji Yamada*
Tokyo College of Pharmacy, Horinouchi, Hachioji, Tokyo 192-03, Japan



(±)-gibberellic acid

Total synthesis of (±)-gibberellic acid was accomplished.

Tetrahedron Lett. 30, 975 (1989)

PALLADIUM-CATALYZED DESULFONYLATIVE COUPLING OF ARYLSULFONYL CHLORIDES WITH ACRYLATE ESTERS UNDER SOLID-LIQUID PHASE TRANSFER CONDITIONS

Masahiro Miura,* Hideo Hashimoto, Kenji Itoh, and Masakatsu Nomura
Department of Applied Chemistry, Faculty of Engineering,
Osaka University, Suita, Osaka 565, Japan

$$ArSO_2Cl \quad + \quad CH_2{=}CHCOOR \xrightarrow[K_2CO_3/BzOct_3NCl]{PdCl_2(PhCN)_2} ArCH{=}CHCOOR$$

Tetrahedron Lett. 30, 977 (1989)

DIASTEREOSELECTIVE SYNTHESIS OF α-ALKYL-β-HYDROXY THIOACETALS BY CHELATION-CONTROLLED ADDITION TO α-HYDROXY KETENE THIOACETALS

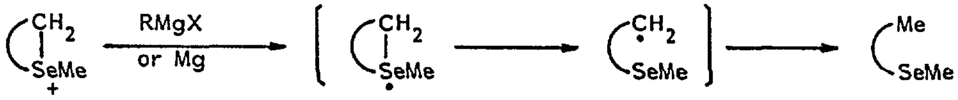
Toshio SATO, Masaki NAKAKITA, Satoshi KIMURA, and Tamotsu FUJISAWA*
Chemistry Department of Resources, Mie University, Tsu, Mie 514, Japan

Diastereoselective addition of alkyllithiums and lithium aluminum hydride to (S)-2-(2-hydroxypropylidene)-1,3-dithianes affords *syn*- and *anti*-α-alkyl-β-hydroxy thioacetals, respectively.

Tetrahedron Lett. 30, 981 (1989)

RADICAL C-Se BOND CLEAVAGE OF SELENONIUM SALTS WITH GRIGNARD REAGENTS OR MAGNESIUM METAL

Mikio Hori*, Tadashi Kataoka, Hiroshi Shimizu, and Kazuhiro Tsutsumi
Gifu Pharmaceutical University, 5-6-1, Mitahora-higashi, Gifu 502, Japan



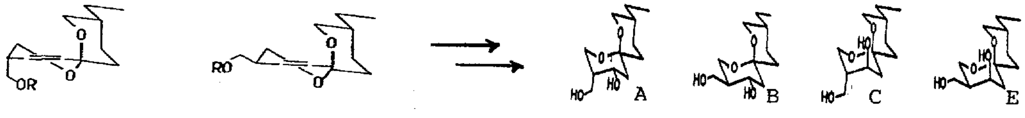
Cyclic and acyclic selenonium salts were reduced by magnesium reagents to give C-Se bond cleaved products in good yields. A sulfonium salt similarly reacted.

Tetrahedron Lett. 30, 985 (1989)

SYNTHESIS OF (±)-TALAROMYCINS A, B, C AND E

Raymond Baker*, Alastair L. Boyes+ and Christopher J. Swain*. *Chemistry Department, Merck Sharp and Dohme Research Laboratories, Neuroscience Research Centre, Terlings Park, Harlow, Essex, CM 20 2QR. +Department of Chemistry, The University, Southampton, SO9 5NH, U.K.

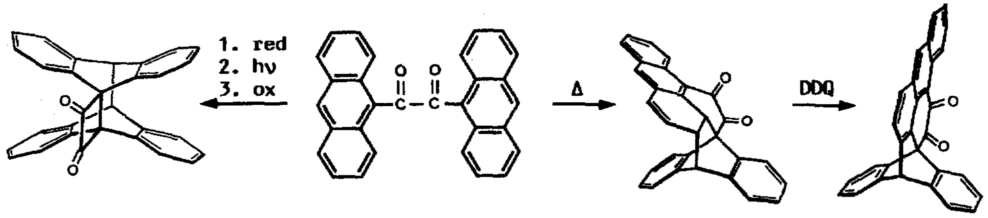
Two key unsaturated spiroacetals have been used in the synthesis of Talaromycins A, B, C and E.



Tetrahedron Lett. 30, 989 (1989)

9,9'-ANTHRIL (DI-9-ANTHRYLETHANEDIONE)

Hans-Dieter Becker*, Henrik Sörensen, and Eva Hammarberg, Department of Organic Chemistry, Chalmers University of Technology and University of Gothenburg, S-412 96 Gothenburg (Sweden)

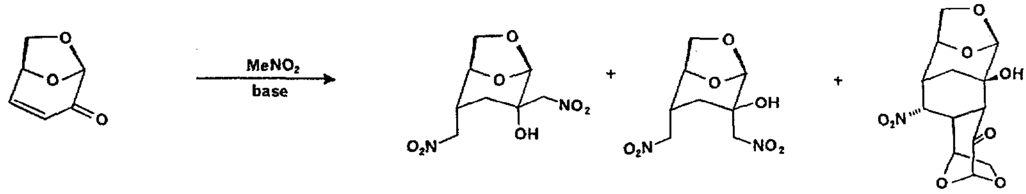


Tetrahedron Lett. 30, 993 (1989)

HIGHLY SELECTIVE BASE-CATALYSED ADDITIONS OF NITROMETHANE TO LEVOGLUCOSENONE

Angus C. Forsyth, R. Michael Paton, and Ian Watt

Department of Chemistry, University of Edinburgh, West Mains Road, Edinburgh EH9 3JJ, Scotland

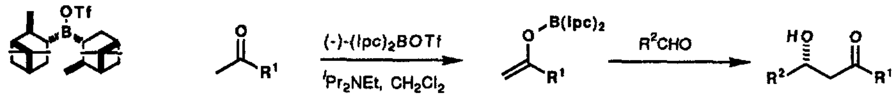


Tetrahedron Lett. 30, 997 (1989)

ALDOL REACTIONS OF METHYLKETONES USING CHIRAL BORON REAGENTS: A REVERSAL IN ALDEHYDE ENANTIOFACE SELECTIVITY.

Ian Paterson* and Jonathan M. Goodman, University Chemical Laboratory, Lensfield Road, Cambridge CB2 1EW, UK.

Aldol additions of methylketones to aldehydes using (-)-(Ipc)$_2$BOTf, (-)-1, take place with moderate enantioselectivity (53-78% ee). The aldehyde enantioface selectivity is opposite to that of the corresponding ethylketone reaction.



(-)-1

53-78% ee

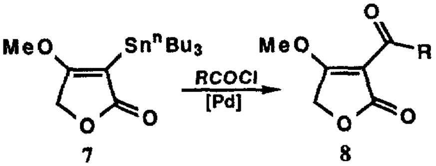
Tetrahedron Lett. 30, 1001 (1989)

PREPARATION OF O-METHYL 3-ACYL TETRONIC ACIDS BY THE DIRECT ACYLATION OF STANNYL TETRONATES.

Steven V. Ley* and David J. Wadsworth.

Department of Chemistry, Imperial College, London. SW7 2AY.

The synthesis of O-methyl 3-acyl tetronic acids (8) by the direct acylation of the stannyl tetronate (7) with acid chlorides in the presence of a palladium catalyst is described.



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Tetrahedron Lett. 30,1005 (1989

A WATER-SOLUBLE CYCLIC TETRAMER FROM REACTING CHROMOTROPIC ACID WITH FORMALDEHYDE

Bo-Long Poh,* Chooi Seng Lim and Kong Soo Khoo
School of Chemical Sciences, Universiti Sains Malaysia,
Penang, Malaysia.