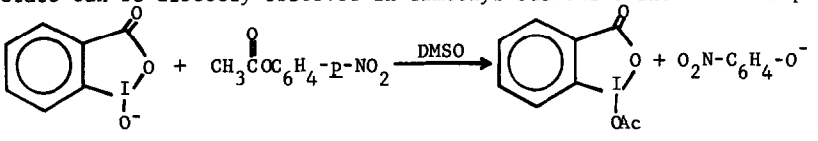
Tetrahedron Lett.28,251(1987)

CHEMISTRY OF AN ACYLOXYIODINANE, THE INTERMEDIATE IN IODOSOBENZOATE CATALYZED CLEAVAGE OF ACTIVE ESTERS

Robert A. Moss*, Paolo Scrimin, and Robert T. Rosen
Department of Chemistry, Rutgers University, New Brunswick, NJ 08903

The 1-acetoxy-1,2-benziodoxol-3(1H)-one intermediate in the o-iodosobenzoate cleavage of p-nitrophenyl acetate can be directly observed in dimethyl sulfoxide and its decomposition can be studied.



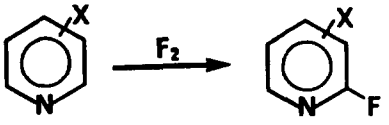
Tetrahedron Lett.28,255(1987)

DIRECT FLUORINATION OF SUBSTITUTED PYRIDINES

Michael Van Der Puy

Allied-Signal Corp., Buffalo Research Laboratory
Buffalo, New York,14210, USA

The direct fluorination of pyridines bearing alkyl, halogen, ester, or ketone functions has been employed to prepare the corresponding 2-fluoro-substituted pyridines.

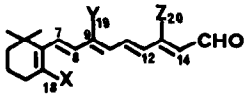


Tetrahedron Lett.28,259(1987)

9-CIS AND 11-CIS ISOMERS OF 18,18,18-, 19,19,19- AND 20,20,20-TRIFLUORORETINAL

D. Mead, A. E. Asato, M. Denny and R. S. H. Liu, Department of Chemistry, 2545 The Mall, University of Hawaii, Honolulu, Hawaii 96822, Y. Hanzawa, T. Taguchi, A. Yamada, N. Kobayashi, A. Hosoda and Y. Kobayashi, Tokyo College of Pharmacy, Horinouchi, Hachioji, Tokyo 192-03 Japan

Synthetic procedures to the title compounds and their spectroscopic properties are described.



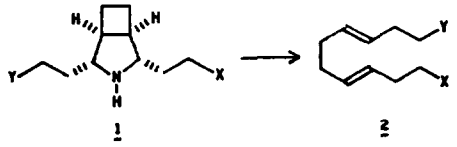
1: X = Y = CH_3 Z = CF_3
2: X = Z = CH_3 Y = CF_3
3: Y = Z = CH_3 X = CF_3

Tetrahedron Lett.28,263(1987)

A HIGHLY STEREOSELECTIVE SYNTHESIS OF 1,5-(E,E)-DIENES

Joseph J. Tufariello, Arnold Milowsky, Mohammed Al-Nuri and Steven Goldstein
Department of Chemistry, State University of New York at Buffalo, Buffalo, New York 14214

Amines of the type 1, readily available by the utilization of nitrone cycloaddition chemistry, were deazetized via the corresponding diazenes to afford 1,5-dienes with a high degree of stereochemical control.



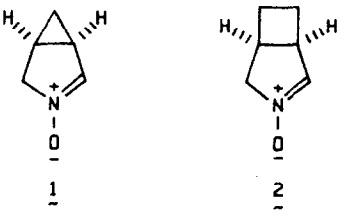
1 2

Tetrahedron Lett.28,267(1987)

THE SYNTHESIS AND CYCLOADDITION REACTIONS OF (+/-)-(1S,5R)-3-AZABICYCLO[3.1.0]HEX-2-ENE-3-OXIDE AND (+/-)-(1S,5R)-3-AZABICYCLO[3.2.0]HEPT-2-ENE-3-OXIDE

Joseph J. Tufariello*, Arnold S. Milowsky, Mohammed Al-Nuri, and Steven Goldstein
Department of Chemistry, State University of New York at Buffalo, Buffalo, New York 14214

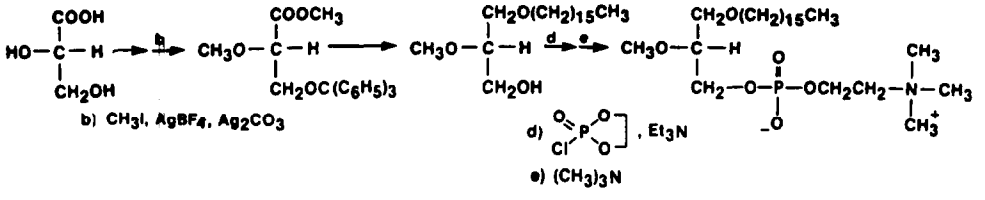
Bicyclic nitrones 1 and 2 were synthesized and their cycloaddition reactions with alkenes were explored.



Tetrahedron Lett.28,271(1987)

A NEW APPROACH TO THE SYNTHESIS OF ETHER PHOSPHOLIPIDS

Suresh K. Bhatia and Joseph Hajdu*
Department of Chemistry, California State University, Northridge, Northridge, CA 91330 USA

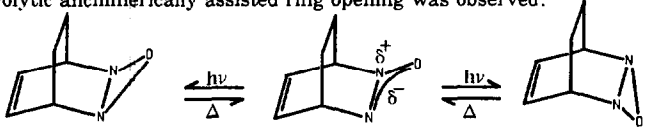


Tetrahedron Lett.28,275(1987)

THERMAL STABILITY OF CIS-OXADIAZIRIDINES. AN EXAMPLE OF ANCHIMERICALLY ASSISTED RING OPENING.

Michael E. Squillacote,* Adelle Bergman, James De Felippis, and Elizabeth M. West
Department of Chemistry, Brown University, Providence, RI 02912

The thermal decay of photochemically generated polycyclic oxadiaziridines was studied, and a rate enhancement caused by nonsolvolytic anchimerically assisted ring opening was observed.



Tetrahedron Lett.28,279(1987)

THE EFFECT OF PROTECTING GROUPS ON CHELATION CONTROL

S.D. Kahn, G.E. Keck and W.J. Hehre*
Departments of Chemistry, University of California, Irvine, CA 92717, University of Utah, Salt Lake City, UT 84112

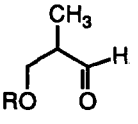
Relative chelating abilities of alcohols, ethers, and silyl ethers are rationalized in terms of the π accepting character of the group attached to oxygen. This in turn may be assessed by examination of the bond angle about oxygen.

Tetrahedron Lett.28,281(1987)

Direct Evidence for the Absence of Chelation with β-Silyloxy Aldehydes and Lewis Acids

Gary E. Keck* and Stephen Castellino
Department of Chemistry, University of Utah, Salt Lake City, UT 84112 USA

NMR spectroscopy clearly reveals the formation of a 1:1 chelate with the β-alkoxy aldehyde 2a and $SnCl_4$; with the β-siloxy derivative 2b, chelation is not observed.



2a R = CH_2Ph

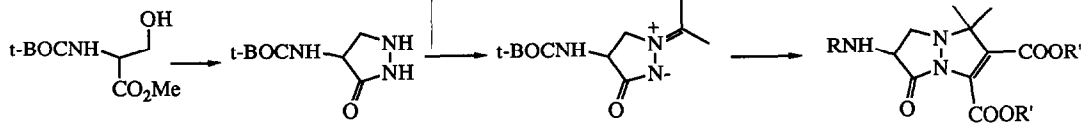
2b R = TBS

Tetrahedron Lett.28,285(1987)

BICYCLIC PYRAZOLIDINONES, A NEW CLASS OF ANTIBACTERIAL AGENT BASED ON THE B-LACTAM MODEL

Louis N. Jungheim*, Sandra K. Sigmund, and Jack W. Fisher
Lilly Research Laboratories, Indianapolis, IN 46285 USA

Bicyclic pyrazolidinones were synthesized via the 1,3-dipolar cycloaddition reaction of an azomethine imine.

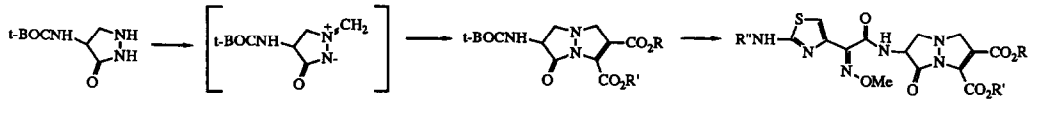


Tetrahedron Lett.28,289(1987)

BICYCLIC PYRAZOLIDINONES, STERIC AND ELECTRONIC EFFECTS ON ANTIBACTERIAL ACTIVITY

Louis N. Jungheim*, Sandra K. Sigmund, Noel D. Jones, and John K. Swartzendruber
Lilly Research Laboratories, Indianapolis, IN 46285 USA

Bicyclic pyrazolidinones were synthesized via the 1,3-dipolar cycloaddition reaction of an azomethine imine.

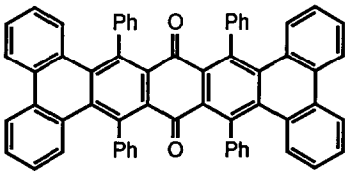


Tetrahedron Lett.28,293(1987)

THE SOLID STATE STRUCTURE OF 9,11,20,22-TETRAPHENYLTETRABENZO[*a*,*c*,*l*,*n*]PENTACENE-10,21-DIONE: A LONGITUDINALLY TWISTED MOLECULAR RIBBON.

Robert A. Pascal, Jr.,* and Donna Van Engen
Department of Chemistry, Princeton University, Princeton, New Jersey 08544

An X-ray crystallographic analysis of the title compound shows that the pentacene nucleus is highly twisted.

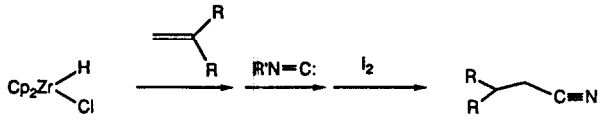


Tetrahedron Lett.28,295(1987)

A REGIOSPECIFIC METHOD FOR THE HYDROCYANATION OF OLEFINS

Stephen L. Buchwald* and Susan J. LaMaire
Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA 02139

A regiospecific method for the anti-Markovnikov hydrocyanation of olefins is reported. This one pot transformation involves olefin hydrozirconation with subsequent insertion of an isonitrile and cleavage with iodine.

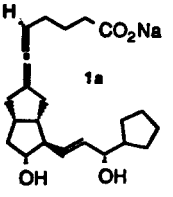


Tetrahedron Lett.28,299(1987)

A STEREOCONTROLLED SYNTHESIS OF A NOVEL PROSTACYCLIN ANALOG "ALLENE-CARBACYCLIN". APPLICATION OF MOLECULAR MECHANICS CALCULATIONS TO ORGANIC SYNTHESIS.

S.W. Djuric, M. Miyano, M. Clare and R.M. Rydzewski
Department of Medicinal Chemistry, Searle Research and Development, Div. of G.D. Searle & Co., Skokie, IL 60077, USA.

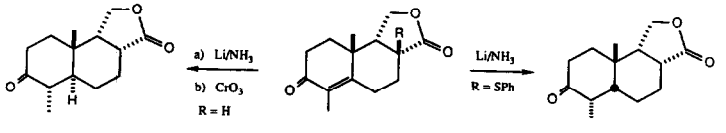
A highly stereocontrolled synthesis of a novel biologically active carbacyclin analog 1a.



Tetrahedron Lett.28,303(1987)

STEREOCONTROL OF THE METAL-AMMONIA REDUCTION: FORMATION OF EITHER cis- OR trans-FUSED DECALONES FROM A COMMON INTERMEDIATE

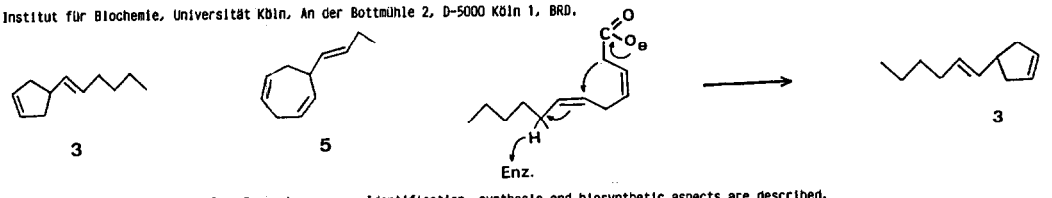
Robert A. Holton and Robert M. Kennedy
Dittmer Laboratory of Chemistry, Florida State University, Tallahassee, FL 32306 USA



Tetrahedron Lett.28,307(1987)

ON THE ODOR OF THE MEDITERRANEAN SEAWEED DICTYOPTERIS MEMBRANACEA; NEW C_{11} HYDROCARBONS FROM MARINE BROWN ALGAE - III

W. Boland* and D.G. Müller
Institut für Biochemie, Universität Köln, An der Bottmühle 2, D-5000 Köln 1, BRD.



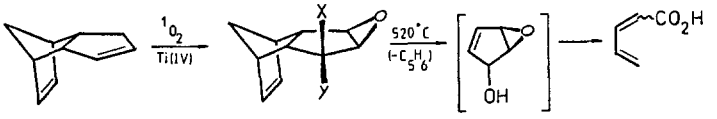
3 and 5 are new hydrocarbons from D. membranaceae. Identification, synthesis and biosynthetic aspects are described.

Tetrahedron Lett.28,311(1987)

3,4-EPOXY-5-HYDROXYCYCLOPENTENE VIA TITANIUM(IV)-CATALYZED PHOTOOXYGENATION AND ITS PYROLYSIS TO 2,4-PENTADIENOIC ACID.

Waldemar ADAM*[a] and Lucia PASQUATO*[b], Institut für Organische Chemie[a], Universität Würzburg, Am Hubland, D-8700 WÜRZBBURG, FRG. Dipartimento di Chimica Organica[b], Università di Padova, Via Marzolo, 1, I-35131 PADOVA, Italy.

Direct hydroxy-epoxidation of dicyclopentadiene and cracking affords the titel compound, which rearranges to 2,4-pentadienoic acid.



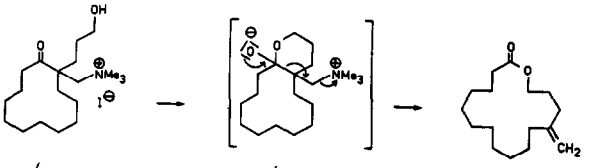
1a (X=OH, Y=H)
1b (X=H, Y=OH)
2
3

Tetrahedron Lett.28,315(1987)

RING ENLARGEMENT BY FRAGMENTATION REACTION: TRANSFORMATION OF 2-AMINOMETHYL-2-(3-HYDROXYPROPYL)CYCLODODECANONE TO 12-METHYLENE-15-PENTADECANOLIDE

Branimir Milenkov, Armin Guggisberg and Manfred Hesse*
Organisch-chemisches Institut, Universität Zürich, 8057 Zürich, Switzerland

A synthesis of the decanolide (5) from the ammonium compound 4 with base by fragmentation reaction.



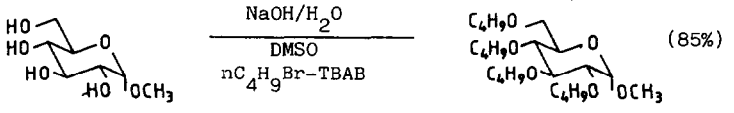
4 4a 5

Tetrahedron Lett.28,319(1987)

A New Direct Method to Obtain Fully Alkylated Sugars (pyranosides) under Phase Transfer Catalytic Conditions.

Robert Nouguier and Christian Médani.
Laboratoire de Chimie Organique B, Faculté des Sciences Saint Jérôme,13397 Marseille cedex 13 France.

A series of 6 pyranosides has been fully butylated. For example

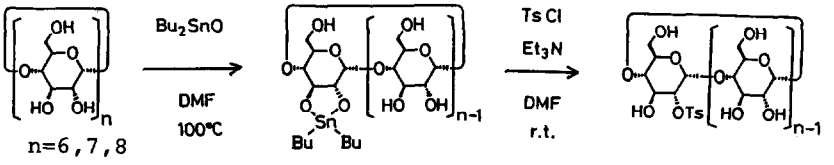


from sucrose, the octabutylether is obtained (40%).

Tetrahedron Lett.28,321(1987)

REGIOSELECTIVE SULFONATION OF A SECONDARY HYDROXYL GROUP OF CYCLODEXTRINS

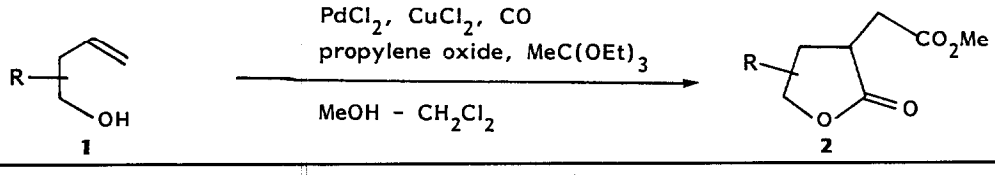
Teiichi Murakami*, Kazuaki Harata, and Satoshi Morimoto
Research Institute for Polymers and Textiles, Yatabe, Tsukuba, 305, Japan



INTER- AND INTRAMOLECULAR DOUBLE ALKOXY-CARBONYLATION OF 3-BUTENOLS CATALYZED BY PALLADIUM(II)

Tetrahedron Lett.28,325(1987)

Yoshinao Tamaru, Makoto Hojo, and Zen-ichi Yoshida
Department of Synthetic Chemistry, Kyoto University, Yoshida, Kyoto 606, Japan



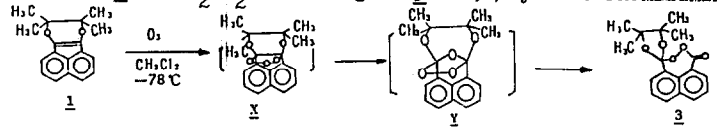
1 2

OZONATION AND CHEMILUMINESCENCE OF 8,8,9,9-TETRAMETHYLACENAPHTHO-[1,2-b]-1,4-DIOXIN. EVIDENCE FOR DUAL REACTION PATHWAYS.

Tetrahedron Lett.28,329(1987)

Tai-Shan Fang* and Wang-Ping Mei
Department of Chemistry, National Taiwan Normal University, Taipei,Taiwan 11718.

Ozonization of 1 in CH_2Cl_2 or MeOH gave 3 in 90% yield. Chemiluminescence was also observed.



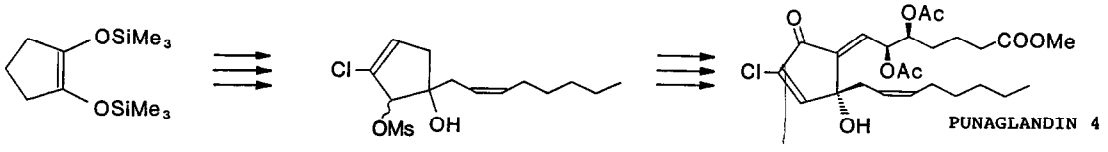
1 X Y 3

TOTAL SYNTHESIS OF PUNAGLANDIN 4

Tetrahedron Lett.28,333(1987)

Hiroaki Sasai and Masakatsu Shibasaki*
Sagami Chemical Research Center, Nishi-Ohnuma, Sagamihara, Kanagawa, 229 Japan

Punaglandin 4 was synthesized in 13 steps.

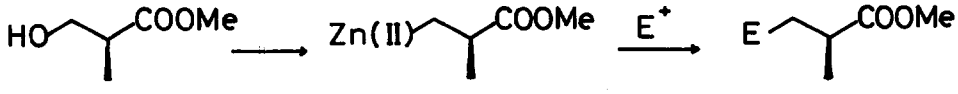


CHIRAL ZINC HOMOENOLATE OF METHYL ISOBUTYRATE. A NEW BUILDING BLOCK FOR THE SYNTHESIS OF CHIRAL α-METHYLESTERS

Tetrahedron Lett.28,337(1987)

Eiichi NAKAMURA,* Kouichi SEKIYA, and Isao KUWAJIMA*
Department of Chemistry, Tokyo Institute of Technology, Meguro, Tokyo 152, Japan

Homo-Reformatsky reaction, acylation, allylation, arylation, and vinylation of the chiral homoenolate of methyl isobutyrate have been achieved.



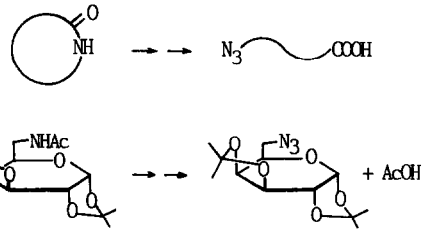
Tetrahedron Lett.28,341(1987)

NEW SYNTHETIC "TRICKS". FROM ALIPHATIC AMINES AND AMIDES TO AZIDES AND/OR HOW TO CONVERT RNHCOR' INTO RNHCOR" AVOIDING DRASTIC HYDROLYSES

Jordi Garcia and Jaume Vilarrasa
Departament de Química Orgànica, Universitat de Barcelona

Controlled reduction of N-alkyl-N-nitrosoamides to hydrazides followed by nitrosation and fragmentation affords azides in good overall yields.

$PhCH_2NHCOCH_2Ph \rightarrow\rightarrow PhCH_2N_3 + PhCH_2COOH$



Tetrahedron Lett.28,343(1987)

A STABLE AND LONG-LIVED GERMAIMINE

Christopher Glidewell, Douglas Lloyd, Keith W. Lumbard and James S. McKechnie.
Department of Chemistry, University of St. Andrews, St. Andrews, Fife KY16 9ST, U.K.

Spectroscopic identification of the first reported stable and persistent germaimine is provided, together with an analysis of its bond structure.

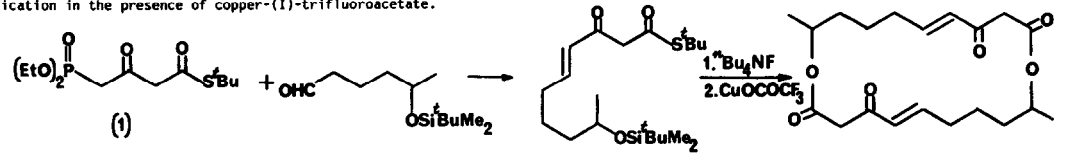
$[(Me_3Si)_2N]_2Ge{=}N{-}N{=}C(COOMe)_2$

Tetrahedron Lett.28,345(1987)

PREPARATION OF t-BUTYL 4-DIETHYLPHOSPHONO-3-OXOBUTANETHIOATE AND USE IN THE SYNTHESIS OF (E)-4-ALKENYL-3-OXOESTERS AND MACROLIDES

Steven V. Ley* and Peter R. Woodward
Department of Chemistry, Imperial College, London SW7 2AY, U.K.

The preparation of t-butyl 4-diethylphosphono-3-oxobutanethioate (1) and Wadsworth-Emmons reaction with aldehydes and ketones is reported. Some of the products of these reactions were converted to unsaturated 3-oxomacrolides or 3-oxodiolides by transesterification in the presence of copper-(I)-trifluoroacetate.

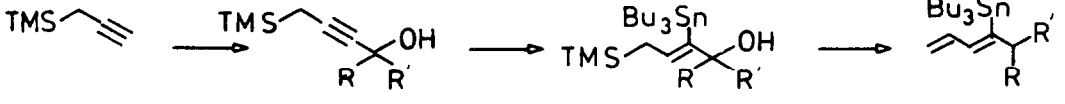


Tetrahedron Lett.28,347(1987)

A Regioselective Synthesis of 2-Tributylstannyl-1,3-dienes

Cristina Nativi, Maurizio Taddei*, André Mann.
Centro CNR Composti Eterociclici,Dipartimento Chimica Organica, Firenze, Italy.

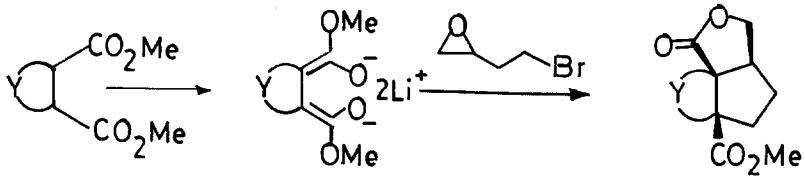
A regioselective synthesis of differently substituted 2-stannyl-1,3-dienes is reported.



Tetrahedron Lett.28,351(1987)

REACTION OF DILITHIATED 1,2-DIESTERS WITH β-BROMOETHYLOXIRANE. SYNTHESIS OF ANNELATED γ-LACTONES

Peter J. Garratt, John R. Porter
Department of Chemistry, University College London, 20 Gordon Street, London WC1H 0AJ, UK.

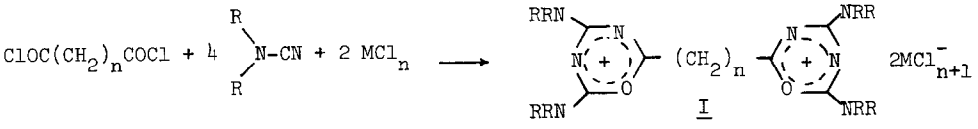


Tetrahedron Lett.28,353(1987)

THE REACTION OF ACYLIUM SALTS WITH DIALKYLCYANAMIDES

Mahmoud Al-Talib and Hasan Tashtoush
Chemistry Department, Yarmouk University, Irbid-Jordan

Treatment of acid chloride with dialkylcyanamide in the presence of Lewis acid leads to the stable 1,3,5-oxadiazinium salts, I. The reaction proceeds via a stepwise mechanism.



Tetrahedron Lett.28,357(1987)

ENZYMIC OPTICAL RESOLUTION AND FLASH VACUUM THERMOLYSIS IN CONCERT FOR THE SYNTHESIS OF OPTICALLY ACTIVE CYCLOPENTENONES

A.J.H. Klunder, W.B. Huizenga, P.J.M. Sessink and B. Zwanenburg*
Department of Organic Chemistry, University of Nijmegen
Toernooiveld, 6525 ED NIJMEGEN, The Netherlands