GRAPHICAL ABSTRACTS

Tet.Lett.,27,32,3685 (1986)

ALKYLATION OF SUBSTITUTED PYRROLE DIANIONS;SYNTHETIC STUDIES DIRECTED AT THE B/C RING SYSTEMS OF CC-1065

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Department of Chemistry
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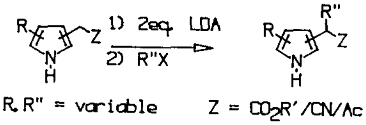
Liu Jing-hau
Department of Chemistry
Shanxi University, Taiyuan, Shanxi, Peoples Republic of China



The dianion chemistry of pyrroles is investigated using several alkylating agents. Inter-followed by intramolecular alkylation with dibromoethane affords cyclopropylpyrroles.

Tet.Lett.,27,32,3689 (1986)

SYNTHETIC STUDIES DIRECTED AT THE B/C RING SYSTEMS OF CC-1065; PREPARATION OF SUBSTITUTED CYCLOPROPYL INDOLENONES

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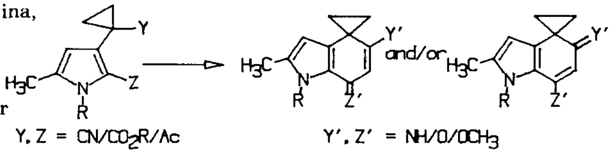
Department of Chemistry University of South Carolina,
Columbia, South Carolina 29201

Cyclopropyl indolenones are synthesized in good overall yields. The key reaction is an intramolecular enolate ring closure giving rise to the six membered carbocyclic ring.

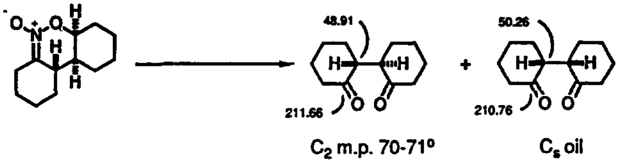


Tet.Lett.,27,32,3693 (1986)

THE STEREOSTRUCTURES OF [1,1'-BICYCLOHEXYL]-2,2'-DIONES: A REASSIGNMENT

Scott E. Denmark*, Christopher J. Cramer and Jeffrey A. Sternberg
Roger Adams Laboratory, School of Chemical Sciences, University of Illinois, Urbana, IL 61801, U.S.A.

The correct stereostructures of the $\underline{C}_2$ and $\underline{C}_s$ isomers of the title compounds have been unambiguously assigned by correlation to X-ray structural data.

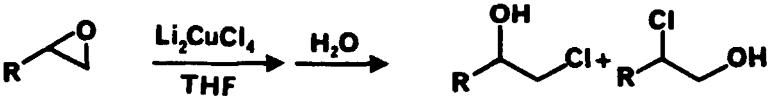


Tet.Lett.,27,32,3697 (1986)

DILITHIUM TETRACHLOROCUPRATE. A REAGENT FOR REGIO-SELECTIVE CLEAVAGE OF EPOXIDES TO CHLOROHYDRINS.

James A. Ciaccio, Kenneth J. Addess and Thomas W. Bell*
Department of Chemistry, State University of New York at Stony Brook, Stony Brook, NY 11794

The title reagent converts terminal epoxides to the 1-chloro-2-alkanols with good regioselectivity in most cases.

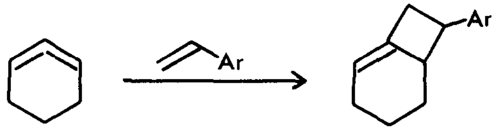


Tet.Lett.,27,32,3701 (1986)

THE ADDITION OF 1,2-CYCLOHEXADIENE TO SUBSTITUTED STYRENES

S. Harnos, S. Tivakornpannarai, and E. E. Waali
Department of Chemistry, University of Montana, Missoula, MT 59812 USA

1,2-Cyclohexadiene undergoes cycloaddition to a series of substituted styrenes with a Hammett ρ value of +0.79. Deuterium labelling shows the addition is stepwise.

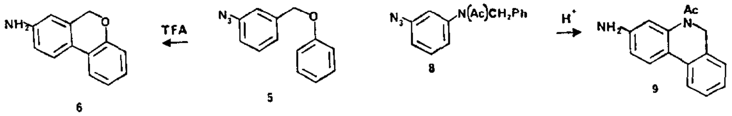


Tet.Lett.,27,32,3705 (1986)

REMOTE INTRAMOLECULAR FUNCTIONALIZATION OF ARYLNITRENIUM IONS: SYNTHESIS OF AMINO-DIHYDROPHENANTHRIDINES AND BENZO[c]CHROMANS

Rudolph A. Abramovitch,* Melanie M. Cooper, Ramasubbu Jeyeraman, and Grzegorz Rusek
Department of Chemistry, Clemson University, Clemson, SC 29634-1905, USA

Intramolecular C-C bond formation in arylnitrenium ions



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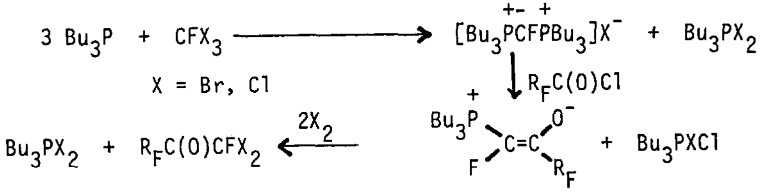
Tet.Lett.,27,32,3709 (1986)

REGIOSPECIFIC PREPARATION OF PERFLUORO-α,α-DIHALOKETONES

In Howa Jeong, Donald J. Burton* and Daryl G. Cox
Department of Chemistry, The University of Iowa, Iowa City, IA 52242 USA



$$3\ Bu_3P + CFX_3 \longrightarrow [Bu_3\overset{+}{P}\overset{-}{C}F\overset{+}{P}Bu_3]X^- + Bu_3PX_2$$

X = Br, Cl

$$\downarrow R_FC(O)Cl$$

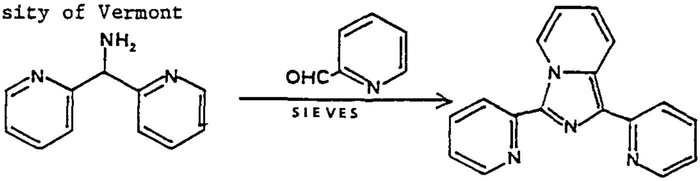
$$Bu_3PX_2 + R_FC(O)CFX_2 \xleftarrow{2X_2} (Bu_3\overset{+}{P})(F)C{=}C(O^-)(R_F) + Bu_3PXCl$$

Tet.Lett.,27,32,3713 (1986)

SYNTHESES OF 1,3-DISUBSTITUTED IMIDAZO(1,5-a)-PYRIDINES

A. Paul Krapcho* and John R. Powell
Department of Chemistry, University of Vermont
Burlington, Vermont 05405 USA

The base and acid catalyzed cyclizations of appropriately substituted imines to imidazo-(1,5-a)pyridines are described.

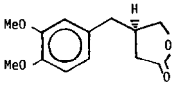


Tet.Lett.,27,32,3719 (1986)

(R)-(+)-VERATRYL-γ-BUTYROLACTONE, A NEW KEY-INTERMEDIATE FOR THE ASYMMETRIC SYNTHESIS OF VARIOUS LIGNANS

Eric Brown* and Alain Daugan
UA n° 482, Faculté des Sciences, Route de Laval, BP 535, 72017 Le Mans Cedex, France

The lactone (R)-(+)-1 was obtained in a preparative fashion and was used for the synthesis of optically active lignans such as 2-5.



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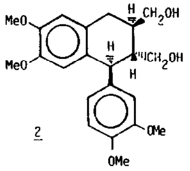

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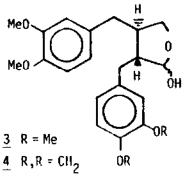
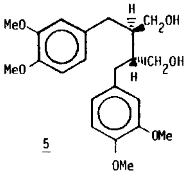


3 R = Me
4 R,R = CH$_2$



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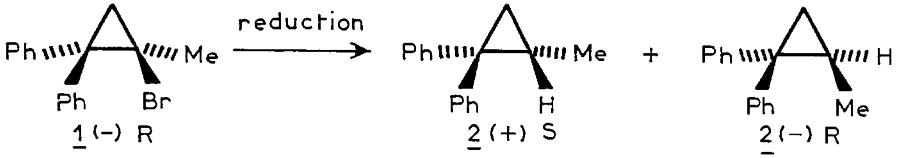
Tet.Lett.,27,32,3723 (1986)

FURTHER EVIDENCE OF S.E.T. MECHANISM DURING THE L.A.H. REDUCTION OF OPTICALLY ACTIVE 1-BROMO 1-METHYL 2,2-DIPHENYL CYCLOPROPANE

J. Hatem, J.M. Meslem and B. Waegell, laboratoire de stéréochimie, Marseille.

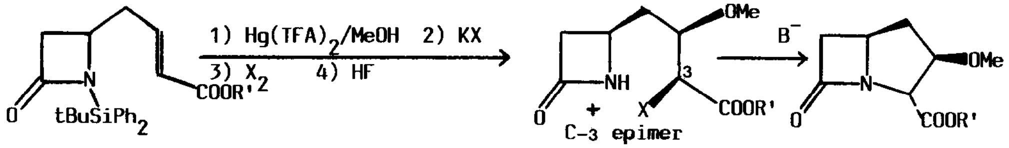
The stereochemical outcome of the reduction of 1(-)(R) with TBTH, SMEAH or LAH shows that with the latter a radical intermediate is involved.



Tet.Lett.,27,32,3725 (1986)

A NEW APPROACH TO THE CARBAPENAM NUCLEUS THROUGH AN INTRAMOLECULAR N-HETEROCYCLIZATION.

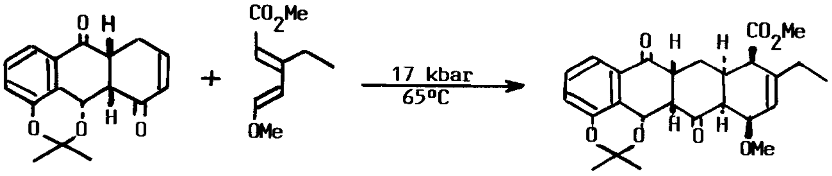
F. Dumas, J. d'Angelo
ESPCI, 10 rue Vauquelin 75231 Paris Cedex 05, France.



Tet.Lett.,27,32,3729 (1986)

APPROACH TO THE AKLAVINONE SERIES THROUGH A NEW HIGH PRESSURE-INDUCED (BCD→ABCD) CYCLOADDITION STRATEGY.

A. Guingant, J. d'Angelo
ESPCI, 10 rue Vauquelin 75231 Paris Cedex 05, France.

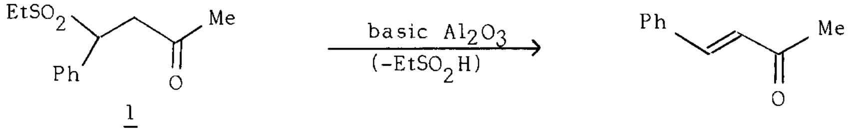


USE OF ALUMINA FOR ELIMINATION OF SULFINIC ACID FROM β-ARYL- AND β-ALKYLSULFONYL CARBONYL COMPOUNDS.

Tet.Lett.,27,32,3733 (1986)

Joëlle VIDAL and François HUET*
Laboratoire des Carbocycles, U.A. CRNS 478, Bâtiment 420
Université de Paris-Sud, 91405 ORSAY CEDEX (France)

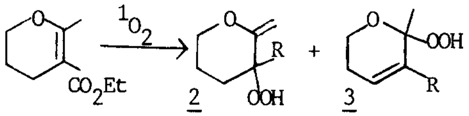
Sulfinic acid eliminations occur from compounds such as 1 by treatment with basic alumina (mild conditions, high yields).



SENSITIZED PHOTOOXYGENATION. II. SOLVENT EFFECTS IN THE REACTION OF SINGLET OXYGEN WITH 3,4-DIHYDRO-6-METHYL-2H-PYRAN-5-CARBOXYLIC ACID ETHYL ESTER

Tet.Lett.,27,32,3737 (1986)

Yuk-Yee CHAN,* Chen CHU, and Hiu-Kwong LEUNG*
Institute of Photographic Chemistry, Academia Sinica,
Beijing, China



Parallel solvent effect on product distribution for ene-mode and dioxetane-mode reaction: favoring "dioxetane-mode" product (2) in polar solvent.

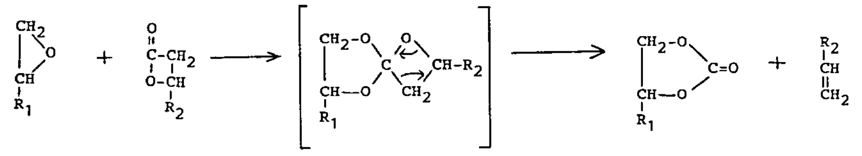
C_6H_6	10	90
CH_3CN	65	35

CONVENIENT SYNTHESES OF CYCLO CARBONATE BY NEW REACTION OF OXIRANES WITH β-BUTYROLACTONE

Tet.Lett.,27,32,3741 (1986)

Tadatomi Nishikubo*, Takashi Iizawa, Makoto Iida, and Naoki Isobe
Laboratory of Polymer Chemistry, Kanagawa University, Yokohama, 221 Japan

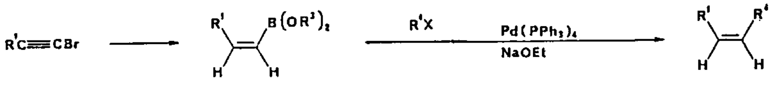
Cyclo carbonates were synthesized by new reaction of β-butyrolactone with oxiranes



STEREO- AND REGIOSPECIFIC SYNTHESES TO PROVIDE CONJUGATED (E,Z)- AND (Z,Z)-ALKADIENES, AND ARYLATED (Z)-ALKENES IN EXCELLENT YIELDS VIA THE PALLADIUM-CATALYZED CROSS-COUPLING REACTION OF (Z)-1-ALKENYLBORONATES WITH 1-BROMOALKENES AND ARYL IODIDES

Tet.Lett.,27,32,3745 (1986)

N. Miyaura, M. Satoh, and A. Suzuki*, Department of Applied Chemistry, Faculty of Engineering
Hokkaido University, Sapporo 060, Japan



R⁴= 1-alkenyl and aryl

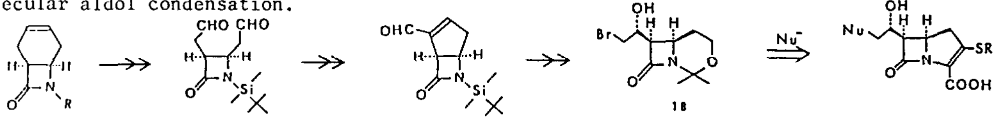
X = Br, I

Tet.Lett.,27,32,3749 (1986)

AN EFFICIENT SYNTHESIS OF A KEY INTERMEDIATE FOR OPTICALLY ACTIVE 5,6-CIS-CARBAPENEM ANTIBIOTICS

Norikazu Tamura,* Yasuhiko Kawano, Yoshihiro Matsushita, Kouichi Yoshioka, and Michihiko Ochiai
Central Research Division, Takeda Chemical Industries, Ltd., Yodogawa-ku, Osaka 532, Japan

Synthesis of a versatile intermediate **18** for optically active 5,6-*cis*-carbapenems *via* intramolecular aldol condensation.



Tet.Lett.,27,32,3753 (1986)

N-CARBOXYLATE ION EQUIVALENT. II. NOVEL TRANSFORMATIONS OF N-BENZYLOXYCARBONYL (Z) GROUP AND N-ALLYLOXYCARBONYL GROUP INTO N-t-BUTYLDIMETHYLSILYLOXYCARBONYL INTERMEDIATE

M.Sakaitani, N.Kurokawa, and Y.Ohfune*
Suntory Institute for Bioorganic Research, Shimamoto-cho, Mishima-gun, Osaka 618, Japan.

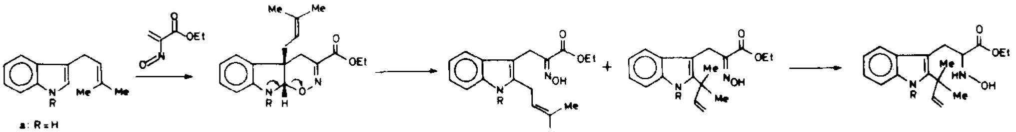
N-Benzyloxycarbonyl (Z) compounds as well as N-allyloxycarbonyl compounds were efficiently converted to the corresponding N-*t*-butyldimethylsilyloxycarbonyl compounds by the use of *t*-Bu-Me_2SiH in the presence of catalytic $Pd(OAc)_2$

$$RNHCO_2CH_2Ph \text{ and } RNHCO_2CH_2CH{=}CH_2 \xrightarrow[\underline{t}\text{-}BuMe_2SiH/Pd(OAc)_2]{} RNHCO_2Si(\underline{t}\text{-}Bu)Me_2$$

Tet.Lett.,27,32,3755 (1986)

SYNTHESIS OF 2-(DIMETHYLALLYL)-N-HYDROXYTRYPTOPHANS FROM INDOLE

Ralf Plate and Harry C.J. Ottenheijm*
Department of Organic Chemistry, University of Nijmegen,
Toernooiveld, 6525 ED NIJMEGEN, the Netherlands



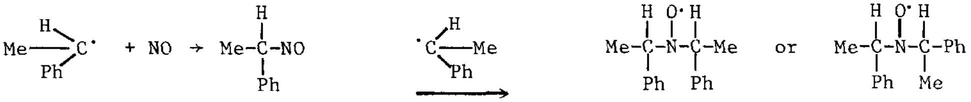
Tet.Lett.,27,32,3759 (1986)

SPIN TRAPPING REACTIONS WITH NITRIC OXIDES I. DIALKYL NITROXIDES

Miklós Győr, Antal Rockenbauer* and Ferenc Tüdős†

Central Research Institute for Chemistry, H-1525 Budapest, P.O.Box 17, Hungary
†also Eötvös Loránd University, Department of Chemical Technology, Budapest

Spin trapping properties of nitric oxide reacting with two alkyl radicals, stereoselectivity of the formation of diastereomers



$$Me\!-\!\overset{H}{\underset{Ph}{C^{\cdot}}} + NO \rightarrow Me\!-\!\overset{H}{\underset{Ph}{C}}\!-\!NO \xrightarrow{{}^{\cdot}\overset{H}{\underset{Ph}{C}}-Me} Me\!-\!\overset{H}{\underset{Ph}{C}}\!-\!\overset{O^{\cdot}}{N}\!-\!\overset{H}{\underset{Ph}{C}}\!-\!Me \text{ or } Me\!-\!\overset{H}{\underset{Ph}{C}}\!-\!\overset{O^{\cdot}}{N}\!-\!\overset{H}{\underset{Me}{C}}\!-\!Ph$$

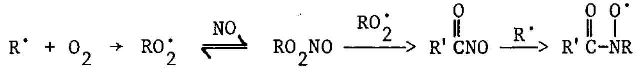
Tet.Lett.,27,32,3763 (1986)

SPIN TRAPPING REACTIONS WITH NITRIC OXIDES II. ACYLALKYL NITROXIDES

Antal Rockenbauer*, Miklós Győr and Ferenc Tüdős†

Central Research Institute for Chemistry, H-1525 Budapest, P.O.Box 17, Hungary
†also: Eötvös Loránd University, Department of Chemical Technology, H-1088 Budapest,

Radical trapping of nitric oxide in the presence of oxygen yields acylalkyl nitroxides



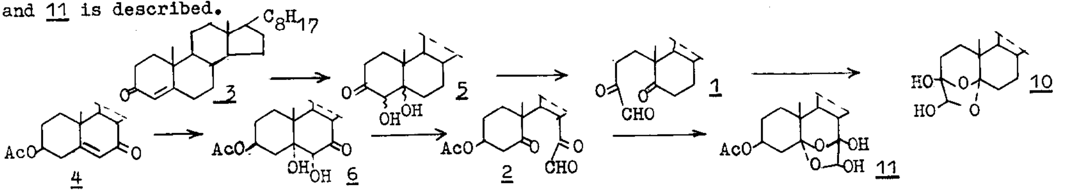
$$R^\cdot + O_2 \rightarrow RO_2^\cdot \overset{NO}{\rightleftharpoons} RO_2NO \xrightarrow{RO_2^\cdot} R'\overset{O}{\overset{\|}{C}}NO \xrightarrow{R^\cdot} R'\overset{O}{\overset{\|}{C}}-\overset{O^\cdot}{\overset{|}{N}}R$$

Tet.Lett.,27,32,3767 (1986)

INTRAMOLECULAR CYCLIZATION OF STEROIDAL DIKETO-ALDEHYDES TO ACETALS

Zbigniew Bończa-Tomaszewski,
Department of Chemistry, Warsaw University, 02-093 Warszawa, ul. Pasteura 1 Poland

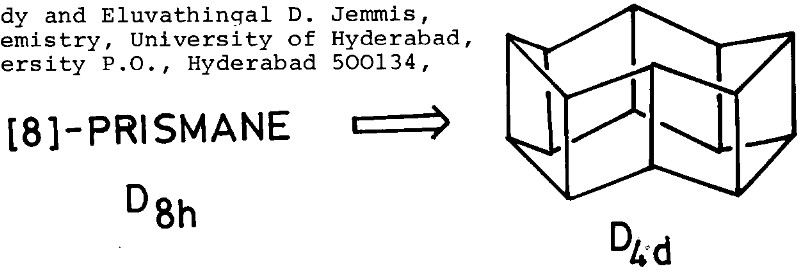
The intramolecular cyclization of steroidal diketo-aldehydes 1 and 2 into respective acetals 10 and 11 is described.



Tet.Lett.,27,32,3771 (1986)

A D_{4d} STRUCTURE FOR 8 -PRISMANE

V.Pitchi Reddy and Eluvathingal D. Jemmis,
School of Chemistry, University of Hyderabad,
Central University P.O., Hyderabad 500134,
India



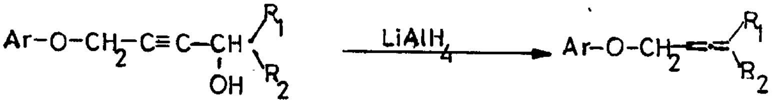
Tet.Lett.,27,32,3777 (1986)

REGIOSELECTIVE REDUCTIVE ELIMINATION OF ARYLOXYMETHYLETHYNYLCARBINOLS - SYNTHESIS OF ARYLOXYMETHYLALLENES

T. RAJAMANNAR and K.K. BALASUBRAMANIAN+

Department of Chemistry, Indian Institute of Technology, Madras 600 036, India

Reduction of tertiary aryloxymethylethynylcarbinols with $LiAlH_4$ furnished the respective aryloxymethylallenes.

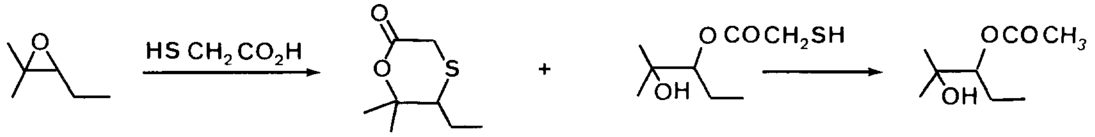


$$Ar{-}O{-}CH_2{-}C{\equiv}C{-}\underset{OH}{CH}<^{R_1}_{R_2} \xrightarrow{LiAlH_4} Ar{-}O{-}CH_2{-}{=}{=}<^{R_1}_{R_2}$$

Tet.Lett.,27,32,3781 (1986)

THE ACTION OF MERCAPTOACETIC ACID ON A TRIALKYL EPOXIDE

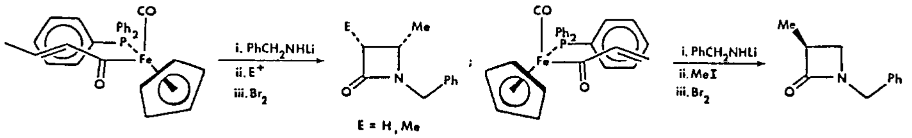
Stefan T Orszulik
Tun Abdul Razak Laboratory, Malaysian Rubber Producers' Research Association,
Brickendonbury, Hertford, SG13 8NL, England



Tet.Lett.,27,32,3787 (1986)

THE ASYMMETRIC SYNTHESIS OF β-LACTAMS.
THE STEREOCONTROLLED ASYMMETRIC TANDEM MICHAEL ADDITIONS AND ALKYLATIONS OF α,β-UNSATURATED ACYL LIGANDS BOUND TO THE CHIRAL AUXILIARY [(η^5-C$_5$H$_5$)Fe(CO)(PPh$_3$)].

Stephen G. Davies*. Isabelle M. Dordor-Hedgecock. Kevin H. Sutton and Jonathan C. Walker.
The Dyson Perrins Laboratory. South Parks Road. Oxford OX1 3QY.



Tet.Lett.,27,32,3791 (1986)

COBALT(II) CHLORIDE CATALYSED COUPLING OF THIOLS AND ANHYDRIDES: A NEW AND EFFICIENT SYNTHESIS OF THIOL ESTERS

Saeed Ahmad and Javed Iqbal#
Department of Chemistry, Indian Institute of Technology, Kanpur 208016, India

Cobalt(II) chloride catalyses the coupling of thiols and anhydrides to yield thiol esters