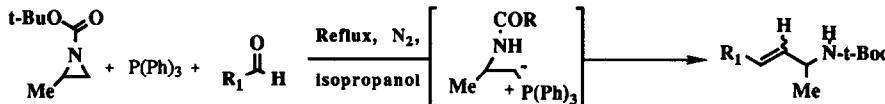


GRAPHICAL ABSTRACTS

Tetrahedron Lett. 1990, 31, 2661

WITTIG OLEFINATION IN THE ABSENCE OF AN EXOGENOUS BASE: A NEW SYNTHESIS OF

α -SUBSTITUTED PRIMARY ALLYLIC AMINES. Joseph F. Dellaria, Jr.* and Kevin J. Sallin
Immunosciences Research Area, Department 47K, Abbott Laboratories, Abbott Park, Illinois 60064



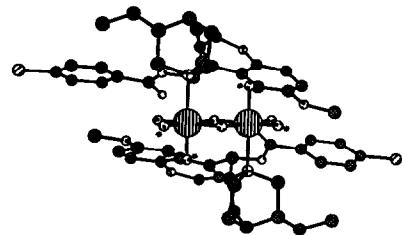
A new synthesis of α -substituted primary allylic amines through the *in situ* generation and trapping of an ylide is reported. These compounds can be prepared in >94.6% ee by utilizing an N-acyl aziridine derived from an optically pure aminoalcohol.

Tetrahedron Lett. 1990, 31, 2665

THE ORIGIN OF ENANTIOSELECTIVITY IN THE DIHYDROXYLATION OF OLEFINS BY OSMIUM TETROXIDE AND CINCHONA ALKALOID DERIVATIVES

E. J. Corey and Gerald I. Lotto
Department of Chemistry
Harvard University
Cambridge, MA 02138

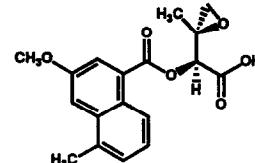
Proposed Catalytic Reactant:
(reaction at O*)



Tetrahedron Lett. 1990, 31, 2669

SYNTHETIC STUDIES TOWARDS CARZINOPHILIN: SYNTHESIS AND AMMONIUM HYDROXIDE-INDUCED REARRANGEMENT OF THE EPOXI-ACID FRAGMENT

Pamela England, Keun Ho Chun, Edmund J. Moran, Robert W. Armstrong*
Department of Chemistry and Biochemistry,
University of California at Los Angeles, Los Angeles, CA 90024

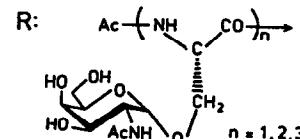
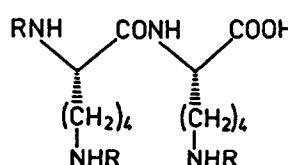


Tetrahedron Lett. 1990, 31, 2673

SYNTHETIC VACCINES: I. SYNTHESIS OF MULTIVALENT Tn ANTIGEN CLUSTER-LYSYLARGININE CONJUGATES

Tatsushi Toyokuni*, Barbara Dean,
and Sen-itiroh Hakomori

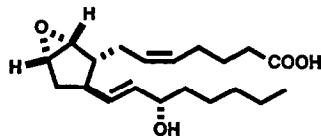
The Biomembrane Institute and
University of Washington,
201 Elliott Ave West,
Seattle, WA 98119



**IDENTIFICATION OF A CRUCIAL SUBSTRUCTURAL UNIT
FOR THROMBOXANE A₂ RECEPTOR BINDING**

E. J. Corey and Wei-guo Su

Department of Chemistry, Harvard University
Cambridge, Massachusetts, 02138

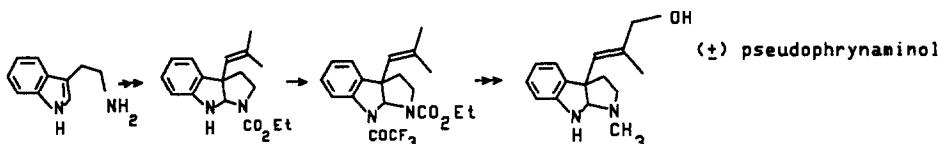


TXA₂ mimic; $K_{dis} = 10^{-8}$

TOTAL SYNTHESIS OF (+) PSEUDOPHYRYNAMINOL

Miguel O. Mitchell* and Philip W. Le Quesne*

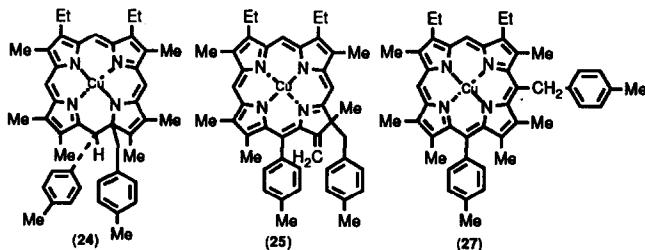
Department of Chemistry, Northeastern University, Boston, MA 02115



**NOVEL PERIPHERAL SUBSTITUENT
MIGRATION REACTIONS IN TETRA-
PYRROLE MACROCYCLES**

Paul A. Liddell, Marilyn M. Olmstead,
and Kevin M. Smith.* Department of
Chemistry, University of California,
Davis, CA 95616.

Copper(II) promoted cyclizations of
a,c-biladienes bearing bulky 1' and 8'
substituents afford a number of copper(II)
macrocycles, including meso-substituted
chlorins (25) and porphyrins (27).

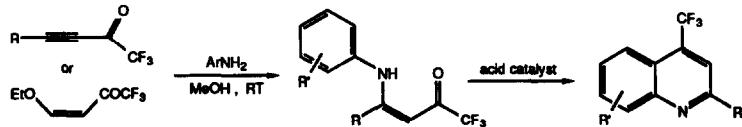


REGIOSELECTIVE SYNTHESIS OF TRIFLUOROMETHYL

SUBSTITUTED QUINOLINES FROM TRIFLUOROACETYL ACETYLENES

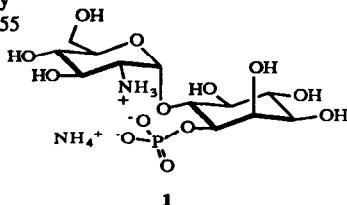
Russell J. Linderman* and Kirolos S. Kirolos, Department of Chemistry, North Carolina
State University, Raleigh, NC 27695-8204

Trifluoromethyl quinolines have been prepared from β -trifluoroacetyl enamines.



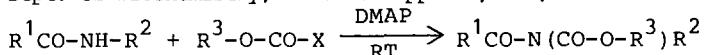
SYNTHESIS OF A POTENTIALLY INSULIN-MIMETIC PHOSPHODISACCHARIDE. Robert Plourde and Marc d'Alarcao* Michael Chemistry Laboratory, Department of Chemistry, Tufts University, Medford MA 02155

The synthesis of disaccharide **1** from *myo*-inositol and *D*-glucosamine is described. This structure is the terminal (and presumably essential) portion of the putative insulin second messenger.



NEW REAGENTS FOR EXHAUSTIVE ALKOXYCARBONYLATION OF AMIDES AND URETHANS. DI-1-ADAMANTYL DI- AND TRICARBONATE.

Andreas Körnecke, Leif Grehn, and Ulf Ragnarsson
Dept. of Biochemistry, Univ. of Uppsala, BMC, P.O. Box 576, S-751 23 Uppsala, Sweden



Amides and urethans react with Boc_2CO_3 , Adoc_2O and Adoc_2CO_3 in the presence of DMAP similarly as previously described for Boc_2O .

1,2,5,6-TETRA-EXO-METHYLENECYCLOOCTANE AND [2.2]-(2,3)-FURANOPHANE AS BIS-DIENE COMPONENTS IN DIELS-ALDER REACTIONS

Matthias Pollmann, Werner Wohlfarth, and Klaus Müllen*
Max-Planck-Institut für Polymerforschung, D-6500 Mainz, FRG
Johann Lex

Department of Organic Chemistry, University of Cologne, D-5000 Köln 41, FRG

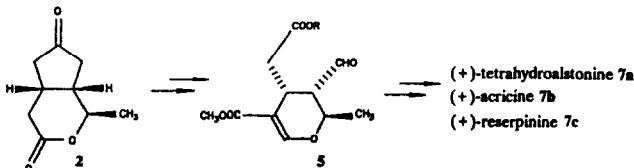
Repetitive Diels-Alder reactions of bis-dienes **3** and **6** yield oligomeric and polymeric band structures.



ENANTIOSELECTIVE TOTAL SYNTHESIS OF (+)-TETRAHYDROALSTONINE, (+)-ACRICINE, AND (+)-RESERPINE

Peter Hölscher, Hans-Joachim Knölker, and Ekkehard Winterfeldt*

Institut für Organische Chemie der Universität Hannover, Schneiderberg 1B, D-3000 Hannover



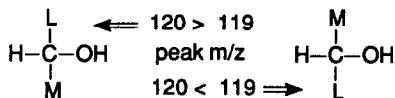
Starting from (-)- β -ketoester **1a** the preparation of (+)-elenoic acid **4a** and (+)-isoelenoic acid **5a** is described. Standard operations transform **5a** into **7a-c**.

MICROMETHOD OF DETERMINATION OF SECONDARY ALCOHOL CONFIGURATIONS BY KINETIC RESOLUTION

Alain Horeau* et Andrée Nouaille

Chimie des Interactions Moléculaires, Collège de France, 11 Place Marcelin Berthelot, 75005 Paris, France.

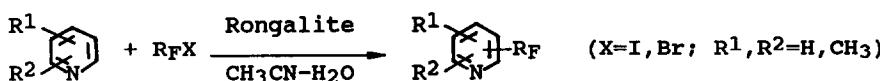
An optically active secondary alcohol is treated by an equimolecular mixture of (+)-2-phenylbutyric and (-)-2-phenyl-4-*d*-butyric anhydrides. The configuration of the carbon atom bearing the OH group is deduced from the relative heights of peaks *m/z* 120 and 119 observed in the mass spectra of the resulting diastereoisomeric esters.



A FACILE METHOD FOR THE PERFLUOROALKYLATION OF PYRIDINE AND ITS DERIVATIVES

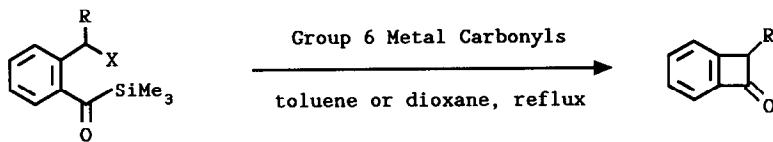
Bingnan Huang*, Jintao Liu

Shanghai Institute of Organic Chemistry, Academia Sinica
345 Lingling Lu, Shanghai 200032, China



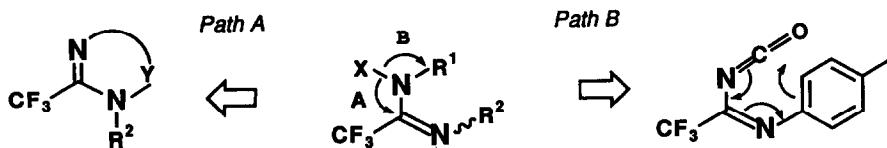
BENZOCYCLOBUTENONES FROM ACYLSILANES

Jahyo Kang, Young Ro Choi, Byoung Ju Kim, Jae Uk Jeong, Seongsu Lee,
Jae Hyoung Lee, and Chongsuh Pyun
Department of Chemistry, Sogang University, Seoul 121-742, KOREA



N, N'-DISUBSTITUTED TRIFLUOROACETOAMIDINES FOR TRIFLUOROMETHYLATED POLYNITROGEN HETEROCYCLES

Kenji Uneyama*, Fumio Yamashita, Koji Sugimoto, and Osamu Morimoto
Department of Applied Chemistry, Faculty of Engineering,
Okayama University, Okayama 700, Japan

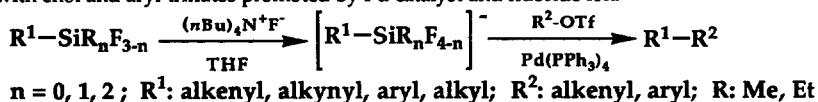


A WIDE RANGE OF ORGANOSILICON COMPOUNDS COUPLES WITH ENOL AND ARYL TRIFLATES

Yasuo Hatanaka and Tamejiro Hiyama*

Sagami Chemical Research Center, 4-4-1 Nishiohnuma, Sagamihara, Kanagawa 229, Japan

Various types of organosilicon compounds undergo highly chemoselective and stereospecific cross-coupling reaction with enol and aryl triflates promoted by Pd catalyst and fluoride ion.



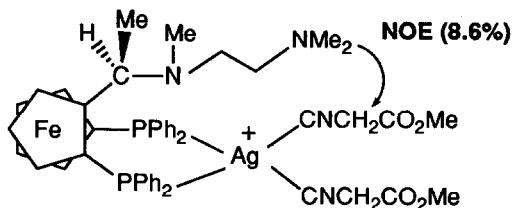
NMR STUDIES OF THE GOLD(I)-CATALYZED ASYMMETRIC ALDOL REACTION OF ISOCYANOACETATE

M. Sawamura and Y. Ito*

Department of Synthetic Chemistry, Kyoto University, Kyoto 606, Japan

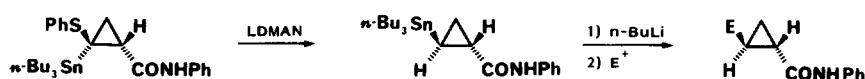
T. Hayashi*

Catalysis Reserch Center, Hokkaido University, Sapporo 060, Japan



STEREOCHEMISTRY OF SULFUR-LITHIUM AND TIN-LITHIUM EXCHANGE REACTIONS OF FUNCTIONALIZED CYCLOPROPANES

Kazuhiko Tanaka,* Keizaburo Minami, Ikuo Funaki, and Hitomi Suzuki
Department of Chemistry, Faculty of Science, Kyoto University, Kyoto 606, Japan

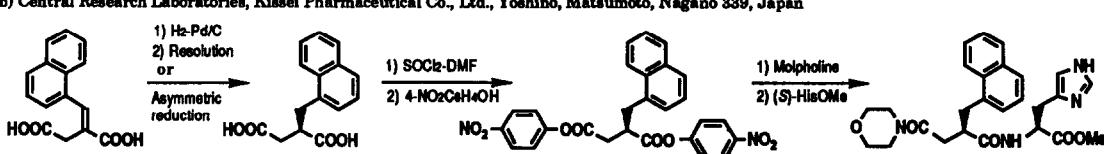


AN EFFICIENT SYNTHESIS OF METHYL N-[2-(R)-(1-NAPHTHYLMETHYL)-3-(MORPHOLINOCARBONYL)PROPYNYL]-S-HISTIDINATE, THE KEY SYNTHETIC INTERMEDIATE OF RENIN INHIBITORS

Yoshio Ito,^{a)} Tetsuhiko Kamijo,^{b)} Hiromu Harada,^{b)} Fuyuhiko Matsuda,^{a)} and Shiro Terashima^{a)*}

a) Sagami Chemical Research Center, Nishi-Ohnuma, Sagamihara, Kanagawa 229, Japan

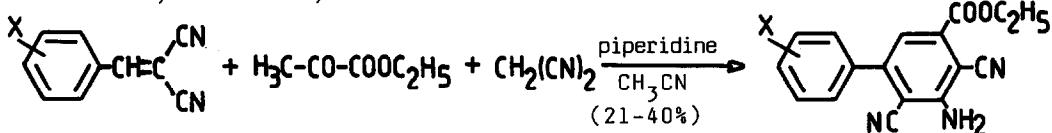
b) Central Research Laboratories, Kissei Pharmaceutical Co., Ltd., Yoshino, Matsumoto, Nagano 339, Japan



**NEW SYNTHESIS OF SUBSTITUTED BIPHENYLS,
BIARYLS, AND TERPHENYLS FROM ARYLIDENEMALONODINITRILES,
ETHYL PYRUVATE, AND MALONODINITRILE**

Piotr Milart and Janusz Sepiół

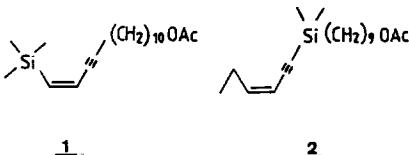
Department of Organic Chemistry, Jagiellonian University
30-060 Krakow, Karasia 3, Poland



**SILA-PHEROMONES: SILICON ANALOGUES
OF THE FEMALE SEX PHEROMONE OF THE
PROCESSIONARY MOTH *Thaumetopoea pityocampa***

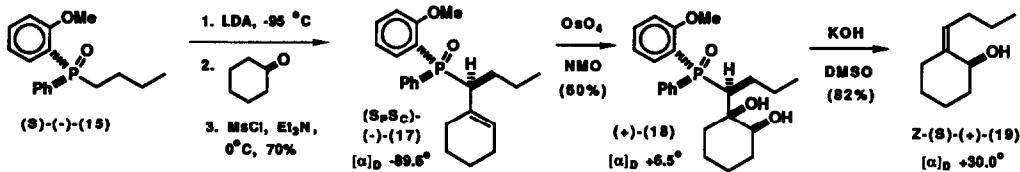
Gemma Arsequell, Francisco Camps*, Gemma Fabriàs and Angel Guerrero
Department of Biological Organic Chemistry, C.I.D. (C.S.I.C.)
Jordi Girona 18-26, 08034 Barcelona-Spain.

The first insect silapheromones, acetates **1** and **2**, were synthesized to evaluate the influence of the silicon atom on the biological activity.



**CHIRAL SYNTHESIS OF Z-2-BUTYLIDENE CYCLOHEXAN-1-OL AND
-1-YL PHENYLSULPHIDE FROM OPTICALLY ACTIVE PHOSPHINE OXIDES**
N.J.S. Harmer and S. Warren, Chemistry Dept., Lensfield Road, Cambridge CB2 1EW

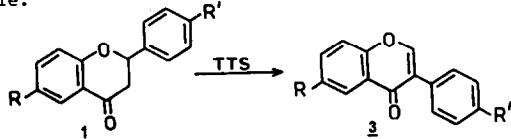
Optically active phosphine oxides e.g. (15) are used in chiral synthesis by the Horner-Wittig reaction via e.g. (18) to give e.g. (19).



**Oxidative 1,2-Aryl Rearrangement in Flavanones using Thallium(III)
p-Tolylsulphonate (TTS): A New useful Route to Isoflavones.**

Om V. Singh, C.P. Garg and R.P. Kapoor
Department of Chemistry, Kurukshetra University, Kurukshetra- 132 119, India.

Oxidation of flavanones to isoflavones by 1,2-aryl rearrangement using thallium(III) p-tolylsulphonate in propionitrile.

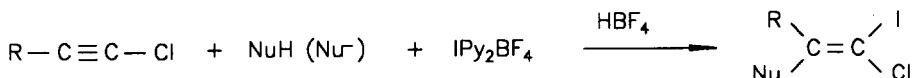


SYNTHESIS OF 2-FUNCTIONALIZED 1-CHLORO-1-IODO-1-ALKENES FROM 1-CHLORO-1-ALKYNES AND IPy_2BF_4

José Barluenga,* Miguel A. Rodríguez, and Pedro J. Campos

Departamento de Química Organometálica, Universidad de Oviedo, 33071-Oviedo, Spain

1-Chloro-1-alkynes react with bis(pyridine)iodine(I)tetrafluoroborate (1) and nucleophiles to give, in a regio- and stereoselective addition, 2-functionalized 1-chloro-1-iodo-1-alkenes.

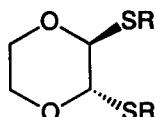


CONFORMATIONAL BEHAVIOUR OF TRANS-2,3-BIS(R-THIO)-1,4-DIOXANES

Antoni Riera, Miquel A. Pericàs and Francesc Cabré

Departament de Química Orgànica, Universitat de Barcelona

c/ Martí i Franquès, 1-11. 08028-Barcelona (Spain)

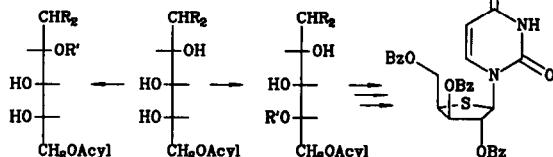


The conformation of eight *trans*-2,3-bis(R-thio)-1,4-dioxanes has been studied in chloroform solution using ^1H NMR techniques.

STANNYLENE DIRECTED SELECTIVE ACYLATION OF SOME OPEN-CHAIN L-ARABINOSE DERIVATIVES

Martin W. Bredenkamp, Cedric W. Holzapfel* and Anna D. Swanepoel, Department of Chemistry and Biochemistry, Rand Afrikaans University, P.O. Box 524, JOHANNESBURG 2000, South Africa

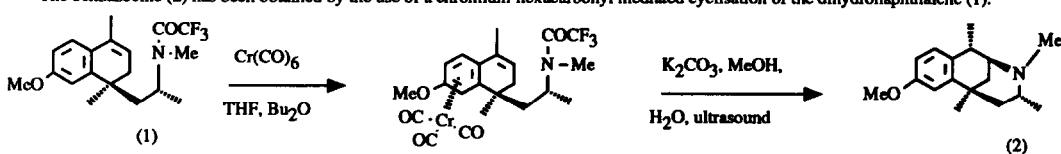
Controlled mono 2- or 4-acylation of open-chain L-arabinose derivatives is achieved by terminal group manipulation and dibutylstannylene oxide activation. The method was used for the preparation of a 4-mesyl-L-arabinose derivative which was converted into a thioxylose synthon.



AN ENANTIOSELECTIVE SYNTHESIS OF A 6,7-BENZOMORPHAN THROUGH A CHROMIUM HEXACARBONYL MEDIATED CYCLISATION OF AN 1-AMINOETHAN-2-YL-1,2-DIHYDRONAPHTHALENE

Malcolm Sainsbury* and Colin S. Williams, School of Chemistry, University of Bath, BA2 7AY, U.K., and Alan Naylor and David I.C. Scopes, Chemical Research, Glaxo Group Research, Ware, Herts. SG12 ODJ

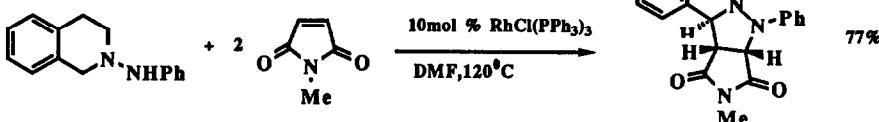
The benzazocine (2) has been obtained by the use of a chromium hexacarbonyl mediated cyclisation of the dihydronaphthalene (1).



A CATALYTIC DEHYDROGENATION ROUTE TO AZOMETHINE IMINES.

Ronald Grigg,^a Frances Heaney,^b Jonathan Idle,^b Anoma Somasunderam.^a

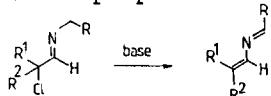
a. School of Chemistry, Leeds University, Leeds LS2 9JT. b. Chemistry Department, Queen's University, Belfast BT9 5AG, Northern Ireland.



1,4-DEHYDROCHLORINATION OF α -CHLOROIMINES AS A SUITABLE PROCEDURE FOR THE SYNTHESIS OF UNACTIVATED 2-AZA-1,3-DIENES AND 3-AZA-1,3,5-TRIENES.

N. De Kimpe*, Zi-Peng Yao, M. Boeykens and M. Nagy
Laboratory of Organic Chemistry, Fac. Agricultural Sciences, State University of Gent, B-9000 Gent, Belgium

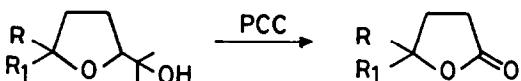
2-Aza-1,3-dienes and 3-aza-1,3,5-trienes were prepared from α -chloroimines by base-induced 1,4-dehydrochlorination.



OXIDATION OF TETRAHYDROFURAN METHANOL DERIVATIVES WITH PCC: A FACILE SYNTHESIS OF γ -BUTYROLACTONES

S. BASKARAN AND S. CHANDRASEKARAN*

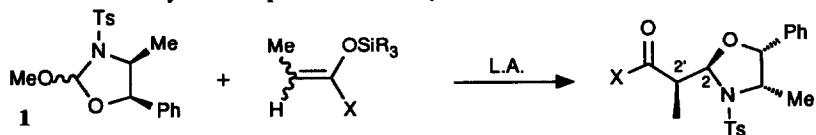
Department of Organic Chemistry, Indian Institute of Science, Bangalore 560 012, INDIA



NOREPHEDRINE DERIVED 2-METHOXY OXAZOLIDINES AS CHIRAL FORMYL CATION EQUIVALENTS.

Anna Bernardi, Silvia Cardani, Oliviero Carugo, Lino Colombo, Carlo Scolastico* and Roberto Villa

The first effective chiral synthetic equivalent of formyl cation 1 is described.

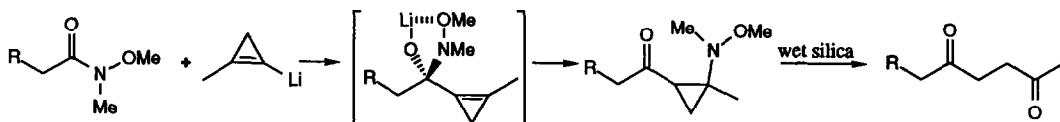


A FACILE SYNTHESIS OF 1,4-DIKETONES

Rolf Bergman, Bo Nilsson and Börje Wickberg*

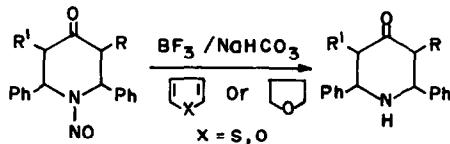
Organic Chemistry 2, Lund Institute of Technology, P.O.B. 124, S-221 00 Lund, Sweden.

Yields are usually good.



FACILE DENITROSATION OF CYCLIC N-NITROSAMINES WITH BORON TRIFLUORIDE

Ramasubbu Jeyaraman* and
Thiruvenkadam Ravindran
Department of Chemistry,
Bharathidasan University,
Tiruchirapalli-620 024
Tamil Nadu, India



A new method for denitrosation of N-nitrosamines employing BF_3 -Furan, BF_3 -Thiophene, or BF_3 -THF, in the presence of NaHCO_3 is described.

FLAVAN AND XANTHENE COMPOUNDS FROM REARRANGEMENT OF PHLOROGLUCINOL POLYMERS

Jonathan White and Lai Yeap Foo
Chemistry Division, DSIR, Private Bag, Petone, New Zealand

