

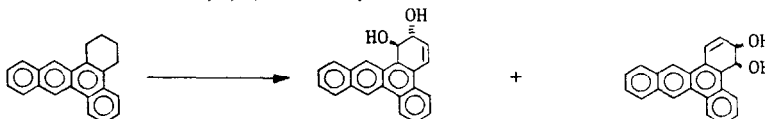
GRAPHICAL ABSTRACTS

DIHYDRODIOLS OF DIBENZ(a,c)ANTHRACENE

Subodh Kumar* and Panna L. Kole

Great Lakes Laboratory, State University of New York College at Buffalo,
1300 Elmwood Avenue, Buffalo, New York 14222.

An unequivocal synthesis of trans-1,2-dihydroxy-1,2-dihydro- and trans-3,4-dihydroxy-3,4-dihydrodibenz(a,c)anthracene from 1,2,3,4-tetrahydrodibenz(a,c)anthracene has been described.



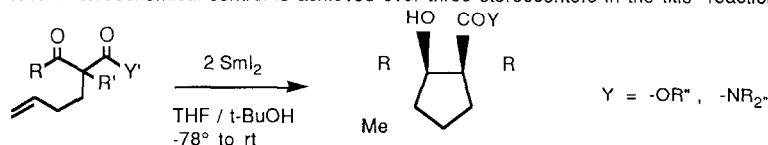
Tetrahedron Lett. 28, 4363 (1987)

STEREOCONTROLLED INTRAMOLECULAR KETONE-OLEFIN REDUCTIVE COUPLING REACTIONS PROMOTED BY SAMARIUM DIIODIDE

Gary A. Molander* and Caryn Kenny

Department of Chemistry & Biochemistry, University of Colorado, Boulder, CO 80309-0215 USA

Excellent stereochemical control is achieved over three stereocenters in the title reaction.

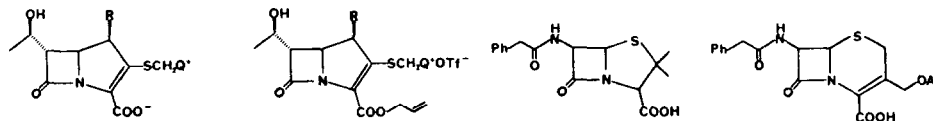


Tetrahedron Lett. 28, 4367 (1987)

MILD PALLADIUM (0)-CATALYZED DEPROTECTION OF ALLYL ESTERS.

A USEFUL APPLICATION IN THE SYNTHESIS OF CARBAPENEMS AND OTHER β-LACTAM DERIVATIVES.

Robert Déziel, Chemical Process Development, Bristol-Myers Pharmaceutical Research and Development Division, Candiac, Quebec, Canada J5R 1J1

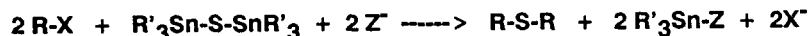


Tetrahedron Lett. 28, 4371 (1987)

CYANO AND FLUORODESTANNYLATION: A NEW METHODOLOGY USING SOME POWERFUL SULFUR TRANSFER REAGENTS, THE ORGANOTIN SULFIDES.

David N. Harpp* and Marc Gingras
Department of Chemistry
McGill University
Montreal, Quebec, Canada, H3A 2K6

Fluoride and cyanide ions destannylate bis(aryl)tin sulfides and trialkyltin sulfides giving, in the presence of a variety of alkyl and activated halides, the corresponding thioether derivatives in excellent yield.



Tetrahedron Lett. 28, 4373 (1987)

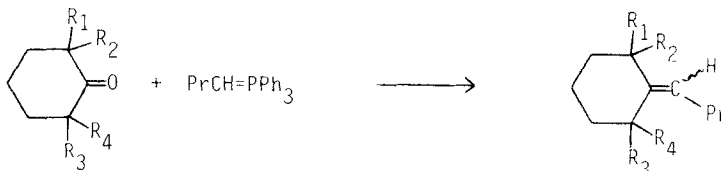
ORGANIC REACTIONS AT HIGH PRESSURE. WITTIG REACTION OF HINDERED KETONES WITH NONSTABILIZED YLIDES.

William G. Dauben and James J. Takasugi

Department of Chemistry, University of California, Berkeley, CA 94720

Using high pressure, the Wittig reaction of hindered ketones with nonstabilized ylides yields alkenes in 40-60% yield.

Tetrahedron Lett. 28, 4377 (1987)



A NON-CONGENER BASED SYNTHESIS OF L-(-)-RHODINOSE AND A C₄ HYDROXYL PROTECTED DERIVATIVE

Richard H. Schlessinger* and Deborah D. Graves

Department of Chemistry, University of Rochester, Rochester, New York 14627

A practical five step construction of the L-(-)-rhodinoase derivative **1** and of L-(-)-rhodinoase (**2**) from O-benzyl (S)-ethyl lactate is described.



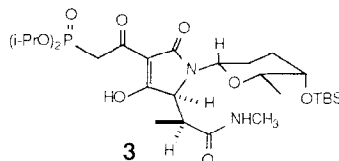
Tetrahedron Lett. 28, 4381 (1987)

A SYNTHESIS OF THE TETRAMIC ACID SUBUNIT OF STREPTOLYDIGIN. A REACTIVITY DEFINITION OF THIS SUBUNIT AS AN EMMONS REAGENT

Richard H. Schlessinger* and Deborah D. Graves

Department of Chemistry, University of Rochester, Rochester, New York 14627

A practical and brief construction of the tetramic acid-derived Emmons reagent **3** is described. The reactivity of this reagent with aldehydes has been examined.



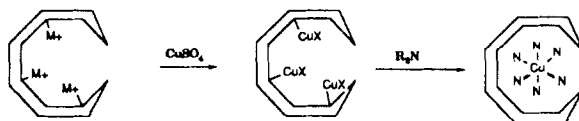
Tetrahedron Lett. 28, 4385 (1987)

MILD METHOD FOR EXTRACTING AMINES UNDER NEUTRAL CONDITIONS

Joanne M. Widom and Bruce Ganem,

Department of Chemistry, Baker Laboratory, Cornell University, Ithaca, New York 14853

Copper (II) ion-exchanged zeolites are highly active reagents for selective complexation of amines in aqueous or organic solutions.



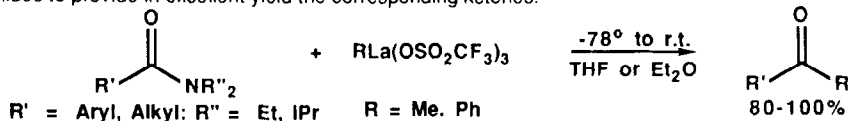
Tetrahedron Lett. 28, 4389 (1987)

ALKYL AND ARYLLANTHANUM TRIFLATES: NEW REAGENTS FOR THE
CONVERSION OF TERTIARY AMIDES TO KETONES

Scott Collins and Yaping Hong

Guelph-Waterloo Centre for Graduate Work in Chemistry, Waterloo, Ontario, Canada N2L 3G1

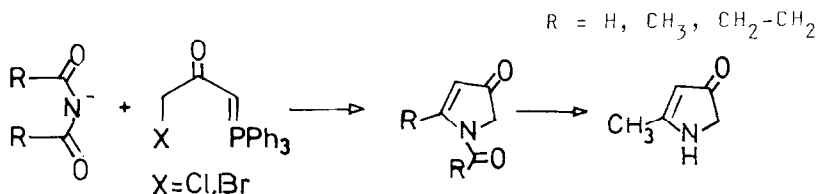
Alkyl and aryllanthanum triflates prepared from aryl or alkyllithium compounds and anhydrous lanthanum triflate react with tertiary amides to provide in excellent yield the corresponding ketones.



Tetrahedron Lett. 28, 4391 (1987)

A NEW VERSATILE ROUTE TO 3-HYDROXYPYRROLES

W. Flitsch, K. Hampel and M. Hohenhorst, Inst. f. Org. Chem.,
Orléans-Ring 23, D-4400 Münster, FRG

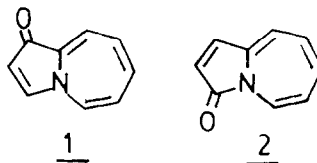


Tetrahedron Lett. 28, 4395 (1987)

AZAAZULENONES CONTAINING THE CARBONYL GROUP IN THE 5-MEMBERED RING

W. Flitsch, A.R. Jones and M. Hohenhorst, Inst. f. Org. Chem.,
Orléans-Ring 23, D-4400 Münster, FRG

Syntheses of compounds of type 1
(transient) and 2c; rearrangement
of 1 and spectral data of 2.

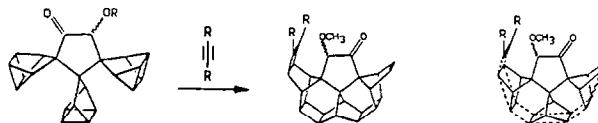


Tetrahedron Lett. 28, 4397 (1987)

INTERCYCLIC vs. INTRACYCLIC (π2+σ2+σ2)/[π2+π2]
CYCLOADDITION REACTIONS IN STERICALLY FIXED
NORBORNADIENE/QUADRICYCLANE SYSTEMS

Stephan Trah, Klaus Weidmann, Hans Fritz and Horst Prinzbach*
Chemisches Laboratorium der Universität, D-7800 Freiburg i. Br., BRD

In tris-spiro C₇H₆ systems multiple
intercyclic and potentially coopera-
tive bond formation ([π2+(σ2+σ2)₂(σ)]
has been realized.



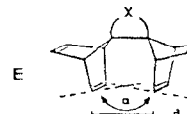
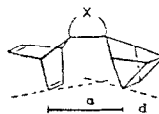
Tetrahedron Lett. 28, 4399 (1987)

Tetrahedron Lett. 28, 4403 (1987)

**COOPERATIVE [2+2+2] CYCLOADDITION REACTIONS
IN POLYQUADRICYCLANYLIDENE [n]ROTANES**

Stephan Trah, Klaus Weidmann, Hans Fritz and Horst Prinzbach*
Chemisches Laboratorium der Universität, D-7800 Freiburg i. Br., BRD

Competition between thermal/photochemical
intra- and intercyyclic cycloaddition was
studied in substrates D/E (X=NHCO;OCH₂CH₂O). D



**UV LASER PHOTOCHEMISTRY: EVIDENCE FOR "THROUGH-
BOND COUPLING" EFFECTS IN THE LIFETIMES OF 2,2-
DIMETHYL-1,3-CYCLOPENTADIYL TRIPLET DIRADICALS.**

Tetrahedron Lett. 28, 4407 (1987)

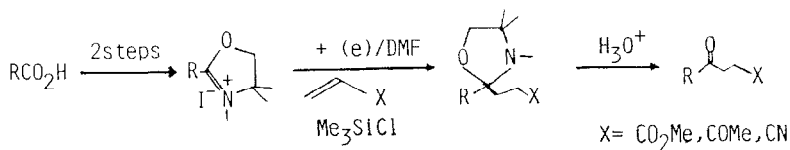
Waldemar Adam*, Erhard Günther, Peter Hössel, Herbert Platsch, Institute
of Organic Chemistry, University of Würzburg, D-8700 WÜRZBURG (FRG).
R. Marshall Wilson, Department of Chemistry, University of Cincinnati,
CINCINNATI, Ohio 45221 (USA).



Tetrahedron Lett. 28, 4411 (1987)

**MICHAEL ADDITION OF NOVEL ACYL ANION EQUIVALENTS GENERATED
BY THE ELECTROREDUCTION OF OXAZOLINIUM SALTS TO ACTIVATED OLEFINS**

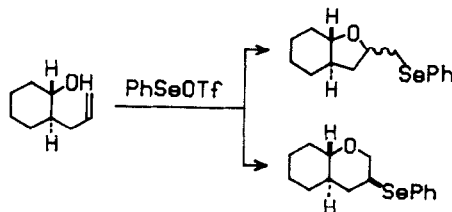
Tatsuya Shono,* Shigenori Kashimura, Yoshihide Yamaguchi, and Fumitaka Kuwata
Department of Synthetic Chemistry, Faculty of Engineering, Kyoto University,
Yoshida, Sakyo, Kyoto 606, JAPAN



Tetrahedron Lett. 28, 4415 (1987)

**STEREOSELECTIVE FORMATION OF TETRAHYDRO-
FURAN AND -PYRAN BY BENZENESELENYNYL
TRIFLATE**

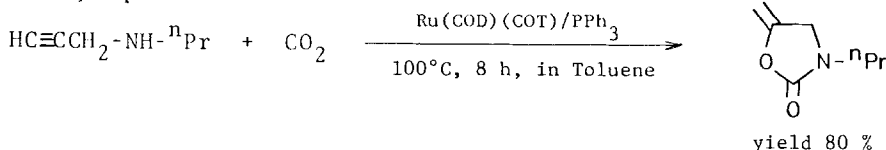
Shizuaki Murata* and Toshiyasu Suzuki
Department of Chemistry, College of General
Education, Nagoya University, Chikusa-ku,
Nagoya, 464 Japan



RUTHENIUM CATALYZED SYNTHESIS OF ENOL CARBAMATES
BY FIXATION OF CARBON DIOXIDE

Tetrahedron Lett. 28, 4417 (1987)

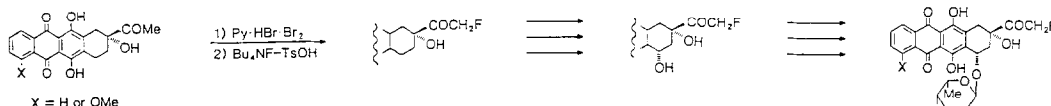
Take-aki Mitsudo,* Yoji Horii, Yasushi Yamakawa, and Yoshihisa Watanabe*
Department of Hydrocarbon Chemistry, Faculty of Engineering, Kyoto University, Sakyo-ku,
Kyoto 606, Japan



EFFICIENT SYNTHESIS AND ANTITUMOR ACTIVITY
OF NOVEL 14-FLUOROANTHRACYCLINES

Tetrahedron Lett. 28, 4419 (1987)

Teruyo Matsumoto, Masako Ohsaki, Fuyuhiko Matsuda, and Shiro Terashima*
Sagami Chemical Research Center, 4-4-1, Nishi-Onnuma, Sagami-hara, Kanagawa 229, Japan

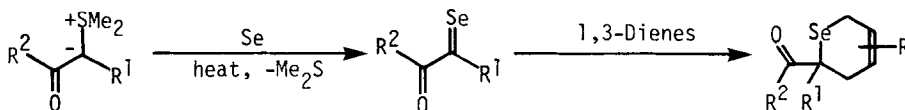


GENERATION AND DIENOPHILIC REACTIVITY
OF α -OXOSELENOALDEHYDES AND KETONES

Tetrahedron Lett. 28, 4423 (1987)

Juzo Nakayama,* Keiichi Akimoto, Jun Niijima, and Masamatsu Hoshino
Department of Chemistry, Faculty of Science, Saitama University, Urawa, Saitama 338, Japan

The reaction of elemental selenium with carbonyl-stabilized sulfur ylides affords α -oxo-selenoaldehydes and ketones which can be trapped by Diels-Alder reaction with 1,3-dienes.



BASE AND ACID CATALYZED REACTIONS OF PHENYLAZO
1-NAPHTHYL ETHER, A NEW REACTIVE DIAZOETHER.

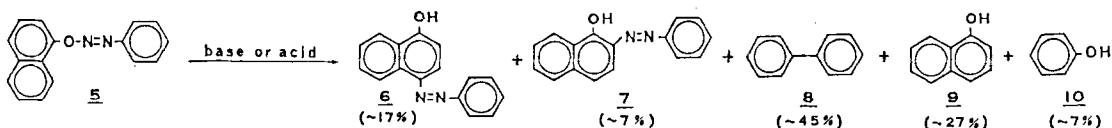
Tetrahedron Lett. 28, 4427 (1986)

REPLY TO THE KEKULÉ'S MECHANISM FOR THE DIAZO COUPLING REACTION.

Takahiro Tezuka,* Katsunori Sasaki, and Setsuo Ando

Department of Chemistry, University of Tsukuba, Sakura-mura, Ibaraki 305, Japan

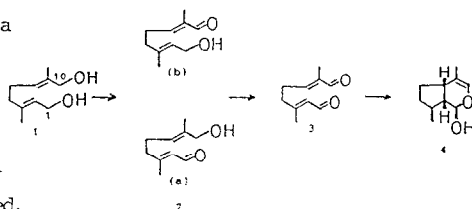
The Kekulé's diazo coupling mechanism was tested by the reaction of a new re-active diazoether 5.



ELUCIDATION OF IRIDODIAL FORMATION MECHANISM - PARTIAL PURIFICATION AND CHARACTERIZATION OF THE NOVEL MONOTERPENE CYCLASE FROM *RAUWOLFIA SERPENTINA* CELL SUSPENSION CULTURES
 S. Uesato,^{a,b} H. Ikeda,^{a,b} T. Fujita,^a H. Inouye^a and M. H. Zenk^b, Faculty of Pharmaceutical Sciences, Kyoto University,^a Sakyo-ku, Kyoto 606, Japan and Institut für Pharmazeutische Biologie, Universität München,^b 8000 München 2, W. Germany

Tetrahedron Lett., 28, 4431 (1987)

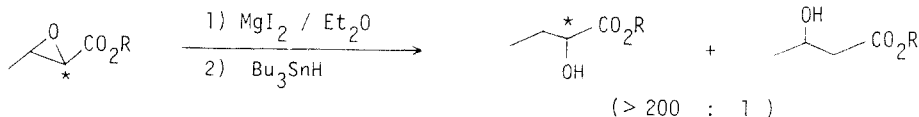
Three intermediates (2a,b and 3) for iridodial (4) biosynthesis were isolated from the incubation system of 10-hydroxygeraniol (1) and crude enzyme extracts from *Rauwolfia serpentina* cell suspension cultures. The cyclase catalyzing the formation of (4) was partially purified and characterized.



Tetrahedron Lett., 28, 4435 (1987)

A HIGHLY STEREOSELECTIVE CONVERSION OF α,β -EPOXY ESTERS TO α -HYDROXY ESTERS. AN EFFICIENT ROUTE TO OPTICALLY ACTIVE α -HYDROXYESTERS

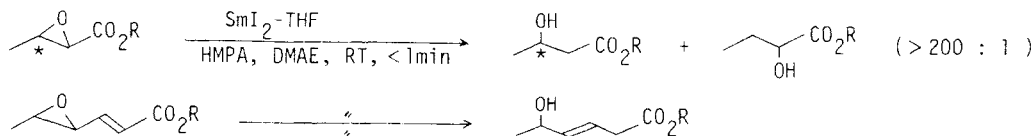
Kenji Otsubo, Junji Inanaga,^{*} and Masaru Yamaguchi
 Department of Chemistry, Kyushu University 33, Hakozaki, Higashi-ku, Fukuoka 812, Japan



Tetrahedron Lett., 28, 4437 (1987)

SmI_2 -INDUCED HIGHLY REGIOSELECTIVE REDUCTION OF α,β -EPOXY ESTERS AND γ,δ -EPOXY- α,β -UNSATURATED ESTERS. AN EFFICIENT ROUTE TO OPTICALLY ACTIVE β -HYDROXY AND δ -HYDROXY ESTERS

Kenji Otsubo, Junji Inanaga,^{*} and Masaru Yamaguchi
 Department of Chemistry, Kyushu University 33, Hakozaki, Higashi-ku, Fukuoka 812, Japan



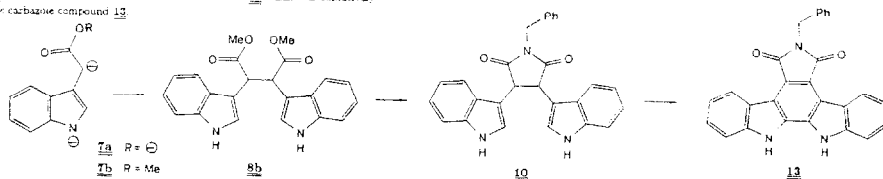
Tetrahedron Lett., 28, 4441 (1987)

COUPLING OF INDOLEACETIC ACID TRIANION OR METHYL INDOLEACETIC ACID DIANION.

A BIOMIMETIC APPROACH TO INDOLOCARBAZOLE ALKALOIDS

J. Bergman and B. Pelman, Department of Organic Chemistry, Royal Institute of Technology, S-100 44 Stockholm, Sweden

The bisindoleacetic acid ester **8b** was obtained as a mixture of diastereomers by iodine promoted coupling of the dianion **7b** or via the trianion **7a**. The dimer was converted to the N-phenylamide **10** which was oxidatively cyclized to the indolo[2,3-b]pyrrolo[2,4-c]carbazole compound **13**.

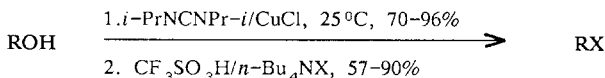


Tetrahedron Lett. 28, 4445 (1987)

CONVERSION OF ALCOHOLS INTO ALKYL
BROMIDES AND IODIDES VIA O-ALKYLISOUREAS

Stephen P. Collingwood, Alan P. Davies and Bernard T. Golding* Department of Organic Chemistry, Bedson Building, The University, Newcastle upon Tyne, NE1 7RU, United Kingdom (SPC and BTG); Unilever Research, Colworth Laboratory, Colworth House, Sharnbrook, Bedford MK44 1LQ, United Kingdom (APD)

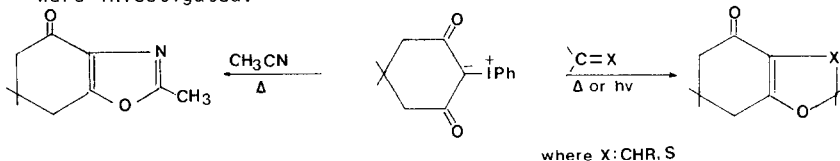
Treatment of O-alkylisoureas with trifluoromethanesulphonic acid and a tetrabutylammonium salt (bromide or iodide) affords alkyl halides in high yields.

Tetrahedron Lett. 28, 4449 (1987)

THE CHEMISTRY OF PHOTOLYTICALLY AND THERMALLY GENERATED
 α -KETOCARBENES FROM IODONIUM YLIDES OF β -DIKETONES

LAZAROS P. HADJIARAPOGLOU, Laboratory of Organic Chemistry, Department of Chemistry, Aristotelian University of Thessaloniki, Greece 54006.

The reactions of iodonium ylide of dimedone with various double bonds were investigated.

Tetrahedron Lett. 28, 4451 (1987)

TAMDEM AZA-WITTIG REACTION/ELECTROCYCLIC RING CLOSURE

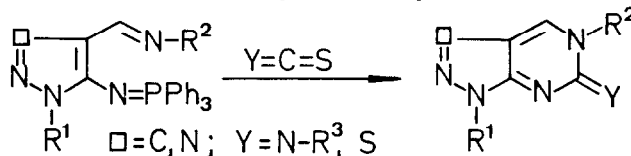
A FACILE ENTRY TO THE SYNTHESIS OF FUSED PYRIMIDINES:

PREPARATION OF PYRAZOLO[3,4-d] AND 1,2,3-TRIAZOLO[4,5-d]PYRIMIDINE DERIVATIVES

P. Molina, A. Arques, M.V. Vinader, J. Becher and K. Brondum.

Departamento de Química Orgánica, Universidad de Murcia, Spain and Department of Chemistry, Odense University, Denmark.

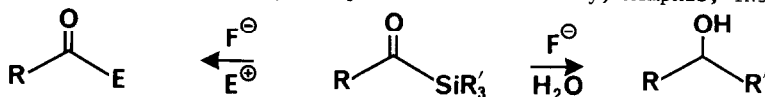
The aza-Wittig reaction of imino-phosphoranes derived from 5-azido-4-formyl azoles, with heterocumulenes leads to functionalized fused pyrimidines.

Tetrahedron Lett. 28, 4455 (1987)

Acyl silanes as synthetic intermediates: formation of acyl anions and unusual fluoride-initiated silicon to carbon alkyl group migration.

P.C.B. Page and S. Rosenthal, Department of Organic Chemistry, University of Liverpool, P.O. Box 147, Liverpool, L69 3BX, U.K.

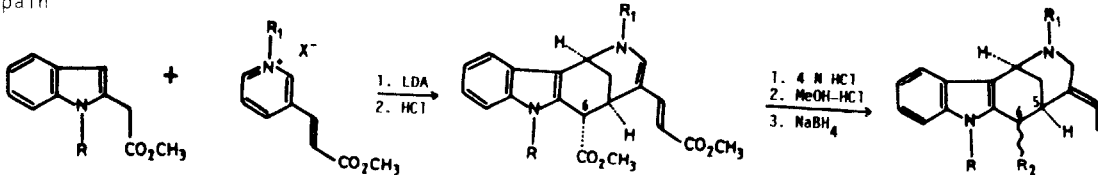
R.V. Williams, Department of Chemistry, Memphis State University, Memphis, TN38152, U.S.A.



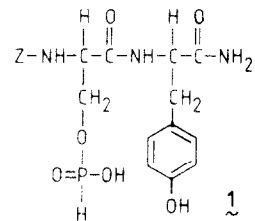
Tetrahedron Lett. 28, 4457 (1987)STUDIES ON THE SYNTHESIS OF *STRYCHNOS* INDOLE ALKALOIDS.A DIRECT ENTRY TO 4-ETHYLIDENE-HEXAHYDRO-1,5-METHANOAZOCINO[4,3-*b*]INDOLES

Mercedes Alvarez, Rodolfo Lavilla, and Joan Bosch*

Laboratory of Organic Chemistry, Faculty of Pharmacy, University of Barcelona, 08028 Barcelona, Spain

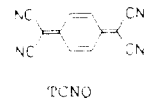
Tetrahedron Lett. 28, 4461 (1987)MILD BASIC AND HIGHLY SELECTIVE HYDROLYSIS OF AN ARYL-ALKYL 1-H-PHOSPHONATE DIESTER: PREPARATION OF THE MONO 1-H-PHOSPHONYLATED DIPEPTIDE Z-Ser(OPO₂H₂)-Tyr(OH)NH₂.E. Kuyt-Yeheskiely, C.M. Tromp, G.A. van der Marel and J.H. van Boom
Gorlaeus Laboratories, PO-Box 9502, 2300 RA Leiden, The Netherlands

Synthesis of mono-1-H-phosphonylated dipeptide 1
 via basic hydrolysis of an intermediate di-1-H-phosphonate diester of 1.

CONDUCTING AND INSULATING SALTS OF PHOSPHINIMINIUM CATIONS WITH
7,7,8,8-TETRACYANO-p-QUINODIMETHANE (TCNQ)Tetrahedron Lett. 28, 4465 (1987)Martin R. Bryce^a, Adrian J. Moore^a, Y.H. Kim^b, Z-X. Liu^{1b} and M.J. Nowak^b^a Department of Chemistry, University of Durham, Durham, DH1 1LE, U.K.^b Department of Physics and Institute for Polymers and Organic Solids, Santa Barbara, CA 93106, U.S.A.Ph₃P=N⁺R

- (1) R = Me
- (2) R = Et
- (3) R = n-Pr
- (4) R = n-Bu

Abstract: A new series of cation-TCNQ salts is described: phosphiniminium cations (1) and (2) form 1:2 salts with TCNQ that are organic conductors (σ_{300} 0.05–0.15 S cm⁻¹) whereas cations (3) and (4) form insulating 1:1 salts; variable temperature conductivity, magnetic susceptibility and FTIR data are described.

Tetrahedron Lett. 28, 4469 (1987)

CONTINUOUS-FLOW SOLID-PHASE PEPTIDE SYNTHESIS

Viktor Krchňák, Josef Vágner, Martin Flegel and Otakar Mach

A simple manually operated synthesizer for solid-phase peptide synthesis. The synthesis is performed on standard polystyrene-based resin in a flow reactor under low-pressure conditions.