#### **GRAPHICAL ABSTRACTS**

Tetrahedron Letters, 1997, 38, 8915

The Application of the Shapiro Reaction to the Stereoselective Synthesis of E-Trisubstituted Olefins For Cation-Olefin Cyclization by Three Component Coupling

E. J. Corey,\* Jaemoon Lee and Bryan E. Roberts

Department of Chemistry and Chemical Biology, Harvard University, Cambridge, Massachusetts 02138

Tetrahedron Letters, 1997, 38, 8919

The Application of a Shapiro Reaction - Suzuki Coupling Sequence to the Stereoselective Synthesis of E-Trisubstituted Olefins

E. J. Corey\* and Bryan E. Roberts

Department of Chemistry and Chemical Biology, Harvard University, Cambridge, Massachusetts 02138

Remarkably Complex and Unpredictable Cyclization and Rearrangement Reactions of Cations Derived from Unsaturated Oxiranes

Tetrahedron Letters, 1997, 38, 8921

Tetrahedron Letters, 1997, 38, 8925

E. J. Corey\* and Bryan E. Roberts

Department of Chemistry and Chemical Biology, Harvard University, Cambridge, Massachusetts 02138

CYCLIZATION IN DEIODINATIVE FLUORINATION

Timothy B. Patrick and Likang Zhang, Department of Chemistry, Southern Illinois University at Edwardsville, IL USA 62026

Reactions of  $\omega$ -alkenyl alkyl halides with XeF2 result in the loss of iodine, cyclization, and incorporation of fluorine.

#### Intermolecular Free Radical Reactions on Solid Support. Allylation of Esters

Mukund P. Sibi,\* and Sitamalli V. Chandramouli, Department of Chemistry, North Dakota State University, Fargo, North Dakota 58105

Free radical allylation reactions on solid support proceed in good chemical yields with a variety of substrates as well as allylating agents. Control experiments indicate that the polymer matrix is inert to the reaction conditions.

### A base labile handle for solid phase organic chemistry

Tetrahedron Letters, 1997, 38, 8933

Carlos García-Echeverría, Oncology Research, Novartis Pharma Inc., CH-4002 Basel, Switzerland

We report the synthesis and initial studies of a base labile handle for solid phase organic synthesis. The attached molecule is cleaved from the solid support by oxidation of the sulfide to the sulfone, followed by β-elimination in base media.

### SYNTHESIS OF DISPACAMIDE FROM THE MARINE

Tetrahedron Letters, 1997, 38, 8935

SPONGE AGELAS DISPAR. Thomas Lindel\* and Holger Hoffmann,

Pharmazeutisch-Chemisches Institut der Universität, Im Neuenheimer Feld 364, D-69120 Heidelberg, Germany.

5-Alkylidene-2-iminoimidazolones are accessible from the corresponding 2-thiohydantoins through a facile one pot conversion.

## Cyclization of Enantio-enriched α-(Homoallyloxy)alkyllithiums:

Tetrahedron Letters, 1997, 38, 8939

Evidence for Retention of Configuration at the Carbanion Center

Katsuhiko Tomooka, Nobuyuki Komine, and Takeshi Nakai\*

Department of Chemical Technology, Tokyo Institute of Technology, Meguro-ku, Tokyo 152, Japan

The titled cyclization induced by Sn-Li transmetallation of the enantio-defined stannanes is shown to proceed with complete retention of configuration at the Li-bearing sp<sup>3</sup>-carbon to afford the enantio-enriched α,β-disubstituted tetrahydrofurans.

# FORMATION OF NON-RACEMIC E- AND Z-OLEFINS BASED ON DISCRIMINATION OF ENANTIOTOPIC CARBONYL GROUPS IN $\alpha\textsc{-}Diketones$ by a chiral phosphonate reagent

Kiyoshi Tanaka, Toshiyuki Watanabe, Yoshihisa Ohta, and Kaoru Fuji\* Institute for Chemical Research, Kyoto University, Uji 611, Japan.

Tetrahedron Letters, 1997, 38, 8947

F<sup>-</sup>-INDUCED DECOMPOSITION OF 3-[(tert-BUTYLDIMETHYLSILOXY)PHENOXY]-3-PHENYL-1,2-DIOXETANES WITHOUT C-C BOND CLEAVAGE OF THE DIOXETANE RING. Masakatsu Matsumoto and Mitsunori Azami, Department of Materials Science, Kanagawa University, Tsuchiya, Hiratsuka, Kanagawa 259-12, Japan

F'-Induced decomposition of a dioxetane (5c) yielded an intramolecular redox product (7b). An isomer (5a) gave light with normal decomposition by CIEEL, though the major process was one to afford an acyloin.

SYNTHESIS AND CHARACTERIZATION OF β-O-TOSYL-DEHYDROSERINE AS A PRECURSOR OF DEHYDROAMINO ACIDS. Takashi Nakazawa\*, Tomiko Suzuki, and Masako Ishii Department of Chemistry, Nara Women's University, Nara 630, Japan Tetrahedron Letters, 1997, 38, 8951

Tetrahedron Letters, 1997, 38, 8955

 $\beta$ -O-Tosyldehydroserine 3 is obtained by the oxidation of serine 1 with dimethyl sulfoxide and p-toluenesulfonyl chloride.

$$O = \begin{pmatrix} A^{\perp} & A & A & A & A \\ CH_2 & CH_2$$

AB INITIO MOLECULAR ORBITAL STUDY ON INVERSION MECHANISM OF TRIMETHYLENE BRIDGES OF [3<sub>3</sub>](1,3,5)-AND [3<sub>4</sub>](1,2,3,4,5,6)CYCLOPHANES.

Kenzi Hori,\* Wakana Sentou and Teruo Shinmyozu, Department of Applied Chemistry, Faculty of

Engineering, Yamaguchi University, Ube 753, Japan

#### A NOVEL AND DIRECT SYNTHESIS OF 2-ALKYL-5-ARYL DISUBSTITUTED OXAZOLES

Jong Chan Lee\* and Taiyoung Hong

Department of Chemistry, Chung-Ang University, Seoul, 156-756, Korea

Tetrahedron Letters, 1997, 38, 8961

Tetrahedron Letters, 1997, 38, 8965

Tetrahedron Letters, 1997, 38, 8969

### SYNTHESIS AND APPLICATION OF NEW CHIRAL BIDENTATE

PHOSPHINE, 2,7-DI-TERT-BUTYL-9,9-DIMETHYL-4,5-BIS(METHYLPHENYLPHOSPHINO)XANTHENE

Yasumasa Hamada,\* Fumiyoshi Matsuura, Makoto Oku, Keiichiro Hatano, and Takayuki Shioiri

Faculty of Pharmaceutical Sciences, Chiba University, Yayoi-cho, Inage-ku, Chiba 263, Japan

Faculty of Pharmaceutical Sciences, Nagoya City University, Tanabe-dori, Mizuho-ku, Nagoya 467, Japan

#### SYNTHETIC STUDIES OF HALICHONDRIN B, AN ANTITUMOR POLYETHER MACROLIDE ISOLATED FROM A MARINE SPONGE. 8.

SYNTHESIS OF THE LACTONE PART (C1-C36) VIA HORNER-EMMONS COUPLING BETWEEN C1-C15 AND C16-C36 FRAG-MENTS AND YAMAGUCHI LACTONIZATION. K. Horita,\* M. Nagasawa, S. Hachiya, Y. Sakurai, T. Yamazaki, J. Uenishi and O. Yonemitsu.\*

Faculty of Pharmaceutical Sciences, Health University of Hokkaido, Ishikari 061-02; Faculty of Pharmaceutical Sciences. Hokkaido University, Sapporo 060; Department of Chemistry, Okayama University of Science, Okayama 700, Japan

The lactone part (1) of halichondrin B was synthesized via coupling of 2 with 3, prepared via stereoselective construction of the E ring starting from the C16-C26 and C27-C36 fragments, followed by Yamaguchi lactonization.

### 'ARMED-DISARMED" GLYCOSIDATION STRATEGY BASED ON GLYCOSYL DONORS AND ACCEPTORS CARRYING PHOSPHORO-AMIDATE AS A LEAVING GROUP: A CONVERGENT SYNTHESIS OF GLOBOTRIAOSYLCERAMIDE

Faculty of Pharmaceutical Sciences, Teikyo University, Sagamiko, Kanagawa 199-01, Japan

Shun-ichi Hashimoto,\*† Hiroki Sakamoto,† Takeshi Honda,<sup>‡1</sup> Hiroshi Abe,† Sei-ichi Nakamura,† and Shiro Ikegami\*<sup>‡</sup> Faculty of Pharmaceutical Sciences, Hokkaido University, Sapporo 060, Japan

"Disarmed" "Armed"

#### ENANTIOSELECTIVE CONJUGATE ADDITIONS OF ORGANO-LITHIUMS TO BHA ENOATES MEDIATED BY A CHIRAL LIGAND

Y. Asano, A. Iida, and K. Tomioka

Graduate School of Pharmaceutical Sciences, Kyoto University, Sakyo-ku, Kyoto 606-01, Japan

A chiral ligand controlled conjugate addition of organolithiums to enoates affords the corresponding adduct in high enantioselectivity.

#### SYNTHESIS OF CHIRAL ALLYLTITANIUMS HAVING AN AMINO GROUP AT THE C-4 POSITION AND THEIR DIASTEREOSELECTIVE ADDITION REACTION WITH ALDEHYDES

Tetrahedron Letters, 1997, 38, 8977

Xin Teng, Aleksandr Kasatkin, Yasufumi Kawanaka, Sentaro Okamoto, and Fumie Sato,\* Department of Biomolecular Engineering, Tokyo Institute of Technology, 4259 Nagatsuta-cho, Midori-ku, Yokohama, Kanagawa 226, Japan

#### TOTAL SYNTHESIS OF HALICLAMINE A, A MACROCYCLIC MARINE ALKALOID RELATED TO THE KEY BIOGENETIC INTERMEDIATE OF MANZAMINES

Yoshiki Morimoto\* and Chiho Yokoe

Department of Chemistry, Faculty of Science, Osaka City University, Sumiyoshiku, Osaka 558, Japan

The first convergent total synthesis of biogenetically stimulating haliclamine A (1) has been efficiently accomplished via inter- and intramolecular N-alkylations of 3-alkylpyridine derivatives.

Tetrahedron Letters, 1997, 38, 8981

### ISOCHROMAN-3-ONES VIA SITE-SELECTIVE RING OPENING OF BENZOCYCLOBUTENONES PROMOTED BY LITHIUM

Tetrahedron Letters, 1997, 38, 8985

TETRAMETHYLPIPERIDIDE AND REACTION WITH AROMATIC ALDEHYDES.

Takashi Matsumoto, Toshiyuki Hamura, Yokusu Kuriyama, and Keisuke Suzuki

Department of Chemistry, Tokyo Institute of

Technology, O-okayama, Meguro-ku, Tokyo 152,

Department of Chemistry, Keio University, Hiyoshi,

Kohoku-ku, Yokohama 223, Japan

A synthetic method of isochroman-3-one from a bezocyclobutenone and an aromatic aldehyde is described.

### DIINSERTION OF FLUORENYLIDENE INTO A SULFUR-SULFUR BOND OF DIARYL DISULFIDES.

Yasuhiko Kawamura,\* Kohji Akitomo, Masaaki Oe, Tokunaru Horie and Masao Tsukayama, Department of Chemical Science and Technology, Faculty of Engineering, Tokushima University, Minamijosanjima-cho, Tokushima 770, Japan

Upon irradiation (> 340 nm) of a benzene solution containing diazofluorene and di-p-tolyl- or di-p-anisyl disulfide, the corresponding 9,9'-bis(arylmercapto)bifluorenyls were afforded in good yields, respectively.

$$N_2 = \frac{\text{hv / ArS-SAr}}{(\text{Ar} = p\text{-MeC}_6\text{H}_4)}$$

$$p\text{-MeOC}_6\text{H}_4)$$

Synthesis of Novel Crownophanes Containing Two Phenolic Moieties via a Tandem Claisen Rearrangement, Kazuhisa HIRATANI,\* Hirotaka UZAWA,

Tetrahedron Letters, 1997, 38, 8993

A series of crownophanes [3] containing two phenolic moieties within macrocyclic ring have been successfully synthesized by one step thermal reaction from macrocyclic ethers (1) via a "Tandem Claisen Rearrangement".

Kazuyuki KASUGA, and Hide KAMBAYASHI, National Institute of Materials and Chemical Research, Tsukuba 305, Japan

### CONSTITUENTS OF REGENERATED PLANTS OF OPHIORRHIZA PUMILA; FORMATION OF A NEW GLYCOCAMPTOTHECIN AND

PREDOMINANT FORMATION OF (3R)-DEOXYPUMILOSIDE OVER (3S)-CONGENER

Mariko Kitajima,<sup>a</sup> Mio Nakamura,<sup>a</sup> Hiromitsu Takayama,<sup>a</sup> Kazuki Saito,<sup>a</sup> Joachim Stöckigt,<sup>b</sup> and Norio Aimi <sup>a, a</sup> Faculty of Pharmaceutical Sciences, Chiba University, 1-33, Yayoi-cho, Inage-ku, Chiba 263, Japan .<sup>b</sup> Institute of Pharmacy, Johannes Gutenberg-Universität Mainz, Staudinger Weg 5, 55099 Mainz, Germany

Plant regeneration of Ophiorrhiza pumila was successful from the cultured calli. Camptothecin and a new compound, 9- $\beta$ -glucosyloxycamptothecin, were found in the regenerated plants. (3S)-Deoxypumiloside, a plausible biogenetic intermediate to camptothecin, could not be detected, whereas the (3R)-isomer was isolated.

Tetrahedron Letters, 1997, 38, 8997

R = H : Camptothecin R = O-β-Gic : 9-β-Glucosyoxy-

(3*S*)-Deoxypumiloside (3*R*)-Deoxypumiloside

### Tetrahedron Letters, **1997**, 38, 9001

camptothecin

### THERMAL AND PHOTO-INDUCED TRANSFORMATIONS OF N-ARYL-N-NITROSOHYDROXYLAMINE AMMONIUM

SALTS TO AZOXY COMPOUNDS. Jih Ru Hwu,\* Chii Shyang Yau, Shwu-Chen Tsay, and Tong-Ing Ho Department of Chemistry, National Tsing Hua University, Hsinchu, Taiwan 30043, R.O.C.; Institute of Chemistry, Academia Sinica, Taipei, Taiwan 11529, R.O.C.

Upon heating or photolysis, N-aryl-N-nitrosohydroxylamine ammonium salts in ethanol were transformed to azoxy compounds in 51-93% yields.

Reactions of Methylenecyclopropanes with a Diethylzinc-Bromoform System, and the

Utilization for Synthesis of a Novel Cyclopropylidene-Nucleoside
Changmei Cheng, Tetsuro Shimo, Kenichi Somekawa\* Department of Applied Chemistry and Chemical Engineering,
Faculty of Engineering, Kagoshima University, Korimoto, Kagoshima 890 Japan; Masaru Kawaminami Department of Physics, Faculty of Science, Kagoshima University, Korimoto, Kagoshima 890 Japan.

Exploratory reactions of substituted methylenecyclopropane with diethylzinc-bromoform, and derivations of the products to a, \beta-unsaturated carbocyclic nucleosides are described.

Tetrahedron Letters, 1997, 38, 9009

#### STRUCTURALLY SIMPLIFIED ZARAGOZIC ACID (SOUALESTATIN): STEREOSELECTIVE PREPARATION OF A 3,4-UNSUBSTITUTED DERIVATIVE

H. Ito<sup>a</sup>, M. Matsumoto<sup>a</sup>, T. Yoshizawa<sup>a</sup>, K. Takao<sup>b</sup>, and S. Kobayashi<sup>b</sup>\*.

- <sup>a</sup> Sagami Chemical Research Center, Nishi-Ohnuma, Sagamihara 229, Japan,
- Faculty of Pharmaceutical Sciences, Science University of Tokyo, Ichigaya-Funagawara-machi, Shinjuku-ku, Tokyo 162, Japan.
- 3,4-Unsubstituted zaragozic acid derivative was prepared in stereo- and regioselective manners starting from diacetone D-glucose.

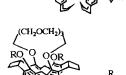
picrate.

Tetrahedron Letters, 1997, 38, 9013

A New Class of Chiral Calix[4] arenes as Receptors with Planar Chirality

Yukihiro Okada, Manabu Mizutani, Fuyuhiko Ishii, and Jun Nishimura\* Department of Chemistry, Gunma University, Tenjin-cho Kiryu 376, Japan

The modification of title compounds to chiral receptors and their characterization are reported. The two synthetic methods were developed. The racemates obtained could be resolved to each stable enantiomer by a chiral HPLC column. Chiral calixarenes were designed as the receptors with planar chirality. (-)-receptor strongly forms 1:1 complex with (R)-(+)- $\alpha$ -phenylethylammonium



#### A NOVEL ENHANCEMENT OF THE REDUCING ABILITY OF YTTERBIUM DIIODIDE BY IRRADIATION WITH NEAR-UV LIGHT

Tetrahedron Letters, 1997, 38, 9017

Akiya Ogawa,\* Syoji Ohya, Yukihito Sumino, Noboru Sonoda,† and Toshikazu Hirao\* Department of Applied Chemistry, Faculty of Engineering, Osaka University, Suita, Osaka 565, Japan <sup>†</sup>Department of Applied Chemistry, Faculty of Engineering, Kansai University, Suita, Osaka 564, Japan

Ybl<sub>2</sub>-hv R-X (X = I, Br, OTs, TeAr) R-H

GENERATION OF ALLYLIC MANGANATES FROM TRIMETHYLMANGANATE AND ALLYLIC STANNANES AND THEIR REACTIONS WITH EPOXIDES

J. Tang, H. Yorimitsu, H. Kakiya, R. Inoue, H. Shinokubo, and K. Oshima\*

Department of Material Chemistry, Graduate School of Engineering, Kyoto University, Yoshida, Sakyo-ku, Kyoto 606-01, Japan

### CATALYSIS OF GIANT PALLADIUM CLUSTER COMPLEXES.

Tetrahedron Letters, 1997, 38, 9023

### HIGHLY SELECTIVE OXIDATIONS OF *PRIMARY* ALLYLIC ALCOHOLS TO α,β-UNSATURATED ALDEHYDES IN THE PRESENCE OF MOLECULAR OXYGEN

Kiyotomi Kaneda\*, Yoko Fujie, and Kohki Ebitani

Department of Chemical Science and Engineering, Graduate School of Engineering Science, Osaka University, Toyonaka Osaka 560, Japan

A giant Pd cluster,  $Pd_{561}phen_{60}(OAc)_{180}$  and heterogeneous Pd cluster,  $Pd_{561}phen_{60}(OAc)_{180}/TiO_2$  have high catalytic activities for the selective oxidations of *primary* allylic alcohols to the corresponding  $\alpha,\beta$ -unsaturated aldehydes under oxygen atmosphere.

### REACTION OF CARBON MONOXIDE WITH N-LITHIOKETIMINES DERIVED BY THE ADDITION OF ALKYLLITHIUM

Tetrahedron Letters, 1997, 38, 9027

### TO ORTHO-SUBSTITUTED BENZONITRILES. DIVERSE COURSES OF CYCLIZATION VIA CARBONYL ANIONS

Hidetomo Kai, Masakazu Yamauchi, and Shinji Murai\* Department of Applied Chemistry, Faculty of Engineering, Osaka University, Suita, Osaka 565, Japan

The reaction of CO with N-lithioketimines prepared from 2-substituted benzonitriles and t-BuLi result in selective cyclizations with participation of ortho-substituents via carbonyl anions.

Tetrahedron Letters, 1997, 38, 9031

#### SYNTHESIS OF A NOVEL CONSTRAINED α-AMINO ACID WITH QUINOXALINE

SIDE CHAIN: 7-AMINO-6,7-DIHYDRO-8H-CYCLOPENTA[g]QUINOXALINE-7-CARBOXYLIC ACID.

Sambasivarao Kotha,\* Enugurthi Brahmachary, Department of Chemistry, Indian Institute of Technology, Mumbai-400 076, India; Atsuo Kuki, \* Kamil Lang, Demetrios Anglos, Department of Chemistry, Cornell University, Ithaca, NY, 14853; Bakthan Singaram, William Chrisman, Department of Chemistry & Biochemistry, University of California, Santa Cruz, CA, 95064

# VERSATILE STEREOCONTROL IN KINETIC RESOLUTION OF A DIPHENYL-PHOSPHINYL-PROTECTED $\alpha\textsc{-}\textsc{amino}$ aldehyde by reaction with chiral phosphonates

Reinhard Kreuder, a,b Tobias Rein, b,\* and Oliver Reiserc,\*, aInstitut für Organische Chemie der Georg-August-Universität, Tammanstr. 2, D-37077 Göttingen, Germany, bDepartment of Organic Chemistry, Technical University of Denmark, DK-2800 Lyngby, Denmark, cInstitut für Organische Chemie der Universität Stuttgart, Pfaffenwaldring 55, D-70569 Stuttgart, Germany

with the chiral phosphonates 2, an appropriate choice of parameters (R group in 2, base, and solvent) allows any of the four possible products to be obtained as the major one.

## enantiorner of the chiral auxiliary)

### CONVENIENT SYNTHESIS OF (1H)-ISOINDOLES AND CYCLOPENTA [C] PYRROLE SKELETONS

P. Veera Reddy and Sujata V. Bhat

Department of Chemistry, Indian Institute of Technology, Powai, Bombay-400 076, India.

$$\begin{array}{c} O \\ (n) \\ R_3 \\ R_1 \\ EtO \\ O \\ R_1 \\ EtO \\ O \\ \\ R_1 \\ R_2 \\ \end{array}$$

$$\begin{array}{c} O \\ COOEt \\ (h) \\ R_3 \\ R_2 \\ \\ R_2 \\ \end{array}$$

$$\begin{array}{c} R_1 \\ R_2 \\ \\ R_2 \\ \end{array}$$

$$\begin{array}{c} R_1 \\ R_2 \\ \\ R_2 \\ \end{array}$$

### New Homochiral Ketoalcohols from Aldol Reactions of

(+)-Isomenthone and Reversal of Diastereoselectivity

Jameel H. Chughtai<sup>a</sup>, John M. Gardiner\*<sup>a</sup>, Steven G. Harris<sup>b</sup>, Simon Parsons<sup>b</sup>, David W. H. Rankin<sup>b</sup> and Carl H. Schwalbe<sup>c</sup>
<sup>a</sup>Department of Chemistry, University of Manchester Institute of Science and Technology, PO Box 88, Manchester M60 1QD, UK.
<sup>b</sup>Department of Chemistry, University of Edinburgh, West Mains Road, Edinburgh EH9 3JJ, UK.

<sup>e</sup>Department of Pharmaceutcial & Biological Sciences, Aston University, Birmingham B4 7ET, UK.

(+)-Isomenthone enolate reacts with a range aryl and alkyl aldehydes giving enantiopure diastereomeric keto alcohols (2 and 3). C-C bond to formation is diastereospecific at C6; enantiofacial selectivity for addition to the aldehyde can be reversed by changing reaction conditions. X-ray analyses (ambient temp or 100K) prove the stereochemical outcomes.

### APPLICATION OF REVERSIBLE AMIDE-BOND PROTECTION TO SUPPRESS PEPTIDE SEGMENT EPIMERISATION.

John Offer\*, MRC Laboratory of Molecular Biology, Hills Road, Cambridge CB2 2QH, U.K.
Tony Johnson and Martin Quibell, Peptide Therapeutics, Cambridge Science Park, Milton CB4 4UG, U.K.

The activation and coupling of a model peptide segment with novel 'safety catch' C-terminal amide-bond substitution proceeds with minimal epimerisation and good yield.

Tetrahedron Letters, 1997, 38, 9043

Tetrahedron Letters, 1997, 38, 9047

## A SIMPLE AND EFFICIENT PdCl<sub>2</sub> MEDIATED CONVERSION OF γ,δ-OLEFINIC ALCOHOLS INTO C-GLYCOSIDES

G.V.M. Sharma\*, A. Subhash Chander, K. Krishnudu and Palakodety Radha Krishna Discovery Laboratory, Organic Chemistry Division III Indian Institute of Chemical Technology, Hyderabad - 500 007, India

Tetrahedron Letters, 1997, 38, 9055

### REDUCTIVE FORMATION AND TRANSFORMATION OF EPOXIDES

IN NEUTRAL AQUEOUS MEDIUM. Gábor Kovács and Károly Micskei,

Department of Inorganic and Analytical Chemistry, Lajos Kossuth University, H-4010 Debrecen 10, HUNGARY
4 Cr(II)

$$R = \frac{2 \text{ Cr(II)}}{H_2O / DMF} R OH$$

$$Q DH = 5.5$$

$$Q Cr(II)L$$

### REGIOSELECTIVE 21-3,6-DIHYDROPYRAN SYNTHESIS WITH TANDEM OXO-ENE FORMALISM

Tetrahedron Letters, 1997, 38, 9057

Charles M. Marson, \*\$ and Asad Fallah.\* \*Department of Chemistry, University of Sheffield, Sheffield S3 7HF, U.K. \*New address: Department of Chemistry, Queen Mary and Westfield College, University of London, London E1 4NS, U.K.

α,β-Unsaturated amides undergo cyclocondensation with s-trioxane to give 2H-3,6-dihydropyrans

### SYNTHESIS AND SCINTILLATING EFFICIENCIES OF 4-FUNCTIONALISED-2,5-DIPHENYLOXAZOLES

Tetrahedron Letters, 1997, 38, 9061

Bruce Clapham, Amanda J. Richards, Michael L. Wood and Andrew J. Sutherland\*
Department of Chemistry & Physics, The Nottingham Trent University, Clifton Lane, Nottingham, NG11 8NS, UK

A series of 4-functionalised-2,5-diphenyloxazoles 1 have been synthesised. The scintillating efficiency of each member of the series has been established relative to 2,5-diphenyloxazole (PPO), (1, R=H).

#### SOLID PHASE SYNTHESIS OF 5-AMINOPYRAZOLES AND DERIVATIVES

Stephen P. Watson, Richard D. Wilson, Duncan B. Judd and Stephen A. Richards

The development of a novel solid phase synthesis of some 5-aminopyrazoles and derivatives is described. Reaction of hydrazines with solid supported  $\beta$ -keto-nitrile (1) affords 5-aminopyrazoles (2) which are readily acylated or sulphonylated. Generation of the solid supported  $\beta$ -keto-nitrile (1) represents a key step in the synthesis.

# AN EXPLORATION OF THE SCOPE FOR RADICAL-MEDIATED TRANSANNULAR DIELS-ALDER REACTIONS IN POLYCYCLE SYNTHESIS

Tetrahedron Letters, 1997, 38, 9069

Philip Jones, Wan-Sheung Li, Gerald Pattenden\* and Nicholas M Thomson, Department of Chemistry, Nottingham University, Nottingham, NG7 2RD, England

Treatment of the iododienynone 4 with Bu<sub>3</sub>SnH-AIBN results in the formation of the tricyclic enone 6 by way of radical-mediated macrocyclisation, followed by transannular Diels-Alder reaction.

# ENANTIOSELECTIVE $\alpha$ - ALKYLATION OF PIPERIDINE via CHIRAL PERHYDROPYRIDO [2,1-b] [1,3,4]-OXADIAZINONE: AN EASY ROUTE FOR THE SYNTHESIS OF BOTH ENANTIOMERS OF CONLINE

Ganesh Pandey\* and Parthasarathi Das, Division of Organic Chemistry (Synthesis), National Chemical Laboratory, Pune 411 008, INDIA

$$\begin{array}{c|c} & & & \\ & & & \\$$

## REGIOCHEMICAL CONTROL IN ASYMMETRIC DIELS-ALDER CYCLOADDITIONS OF ENANTIOPURE (S)S-(p-TOLYLSULFINYL)-1,4-

Tetrahedron Letters, 1997, 38, 9077

Tetrahedron Letters, 1997, 38, 9073

BENZOQUINONES WITH DANE'S DIENE. M.C. Carreño, J.L. García Ruano, C.Z. Remor, A. Urbano, J. Fischer. Dpto. Química Orgánica (C-I), Universidad Autónoma, Cantoblanco, 28049-Madrid, Spain.

#### Enantio- and Diastereoselective Synthesis of Erysulfone and Erysulfoxide

Laurence Bourdeau and Alan G. Sutherland\*
School of Applied Chemistry, University of North London, Holloway Road, London N7 8DB, UK.

The natural products erysulfone (1) and erysulfoxide (2) have been prepared from (+)-muconolactone (3).