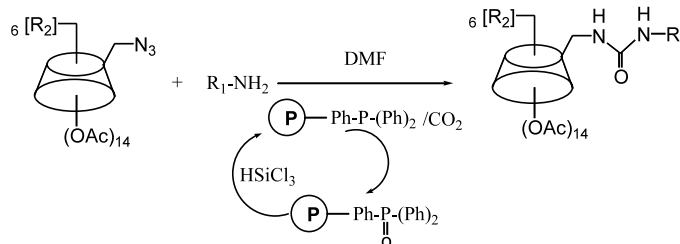


### A polymer-supported 'one-pot' phosphine imide reaction on cyclodextrins

Tetrahedron Letters 43 (2002) 8441

Stanisław Porwanski,<sup>a</sup> Bogusław Kryczka<sup>a</sup> and Alain Marsura<sup>b,\*</sup><sup>a</sup>Department of Organic and Applied Chemistry,  
University of Lodz, ul. Naturowicza 68, 90-136 Lodz, Poland<sup>b</sup>G.E.V.S.M. Unité Mixte de Recherche du CNRS 7565  
Structure et Réactivité des Systèmes Moléculaires Complexes,  
Faculté des Sciences Pharmaceutiques 5, rue A. Lebrun 5400,  
B.P. 403, Nancy Cedex, France

'One-pot' polymer-assisted synthesis of ureido-β-cyclodextrins.

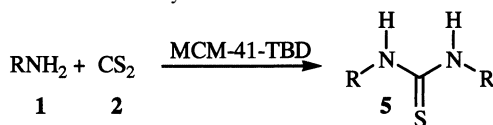


### MCM-41-TBD as a new, efficient, supported heterogeneous catalyst for the synthesis of thioureas

Tetrahedron Letters 43 (2002) 8445

Roberto Ballini,<sup>a,\*</sup> Giovanna Bosica,<sup>a</sup> Dennis Fiorini,<sup>a</sup> Raimondo Maggi,<sup>b,\*</sup> Paolo Righi,<sup>c</sup> Giovanni Sartori<sup>b</sup> and Raffaella Sartorio<sup>b</sup><sup>a</sup>Dipartimento di Scienze Chimiche dell'Università, Via S. Agostino 1, 62032 Camerino (MC), Italy<sup>b</sup>Dipartimento di Chimica Organica e Industriale dell'Università, Parco Area delle Scienze 17A, 43100 Parma, Italy<sup>c</sup>Dipartimento di Chimica Organica 'A. Mangini' dell'Università, V. le Risorgimento 4, 40136 Bologna, Italy

The preparation of thioureas, by reaction of carbon disulfide with primary amines, can be efficiently catalyzed, under heterogeneous conditions, by MCM-TBD as a new and reusable catalyst.

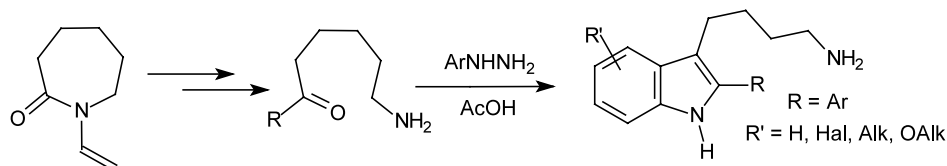


### A new strategy for 2-substituted indolylalkylamines: synthesis of 2-aryldihomotryptamines

Tetrahedron Letters 43 (2002) 8449

Valentine G. Nenajdenko,\* Eugene P. Zakurdaev and Elizabeth S. Balenkova

Department of Chemistry, Moscow State University, 119899 Moscow, Russia

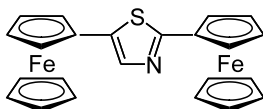


### Synthesis of the first homobimetallic thiazole-ferrocene ligand displaying metal-metal interaction and redox-switchable proton affinity

Tetrahedron Letters 43 (2002) 8453

Alberto Tarraga,\* Pedro Molina,\* David Curiel and M<sup>a</sup> Desamparados Velasco

Departamento de Química Orgánica, Facultad de Química, Universidad de Murcia, Campus de Espinardo, E-30100 Murcia, Spain



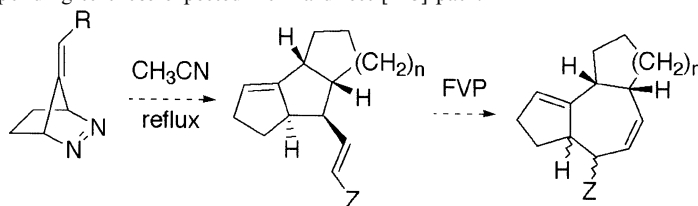
### [3+2] versus [4+3] cycloaddition of conjugated dienes to TMM diradicals

Tetrahedron Letters 43 (2002) 8459

Wade A. Russu, Veronica P. Villalon, Vivian R. Wang, James A. Miranda and R. Daniel Little\*

Department of Chemistry and Biochemistry, University of California Santa Barbara, Santa Barbara, CA 93106, USA

Conjugated dienes preferentially undergo intramolecular [3+2] cycloaddition to TMM diradicals. Subsequent sigmatropic rearrangement of affords products corresponding to those expected from a direct [4+3] path.

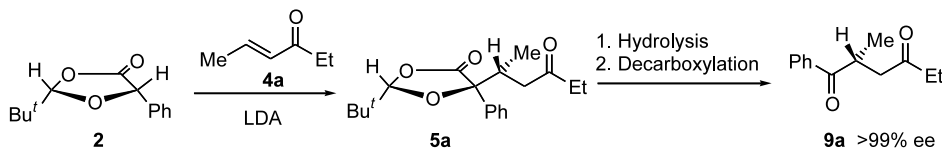


### Highly diastereoselective Michael reaction of (*S*)-mandelic acid enolate. Chiral benzoyl carbanion equivalent through an oxidative decarboxylation of $\alpha$ -hydroxyacids

Tetrahedron Letters 43 (2002) 8463

Gonzalo Blay, Isabel Fernández, Belén Monje, José R. Pedro\* and Rafael Ruiz

Departament de Química Orgànica, Facultat de Química, Universitat de València, E-46100 Burjassot (València), Spain

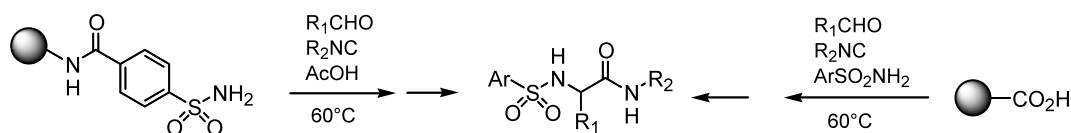


### Solid-phase synthesis of $\alpha$ -sulfonylamino amide derivatives based on Ugi-type condensation reaction using sulfonamides as amine input

Tetrahedron Letters 43 (2002) 8467

Eugene Campian, Boliang Lou\* and Hossain Saneii

Advanced SynTech, LLC, 9800 Bluegrass Parkway, Louisville, KY 40299 USA

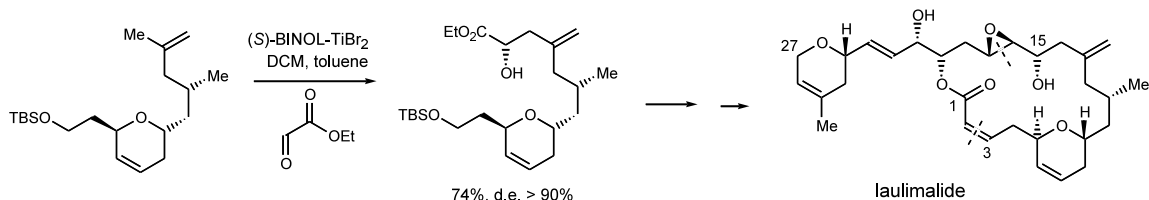


### A chirally catalysed ene reaction in a novel formal total synthesis of the antitumor agent laulimalide

Tetrahedron Letters 43 (2002) 8471

Michael R. Pitts and Johann Mulzer\*

Institut für Organische Chemie der Universität Wien, Währinger Strasse 38, A-1090 Wien, Austria



## Facile route to dihydroindacene type ligands using multiple Heck reactions on aryl polybromides

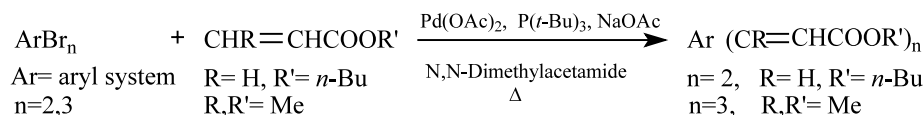
Tetrahedron Letters 43 (2002) 8475

Alberto Ceccon,<sup>a</sup> Laura Crociani,<sup>a,\*</sup> Saverio Santi,<sup>a</sup> Alfonso Venzo,<sup>b</sup> Andrea Biffis<sup>c</sup> and Giovanni Boccaletti<sup>c</sup>

<sup>a</sup>Dipartimento di Chimica Fisica, Università degli Studi di Padova, via Loredan 2, 35131 Padova, Italy

<sup>b</sup>CNR, Centro di Studi sugli Stati Molecolari, Radicalici ed Eccitati, via Loredan 2, 35131 Padova, Italy

<sup>c</sup>Dipartimento di Chimica Inorganica, Metallorganica e Analitica, Università degli Studi di Padova, Via Francesco Marzolo 1, 35131 Padova, Italy



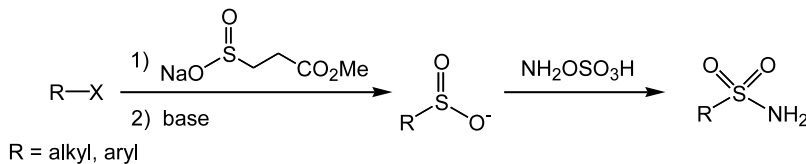
## A mild, convenient synthesis of sulfinic acid salts and sulfonamides from alkyl and aryl halides

Tetrahedron Letters 43 (2002) 8479

Jeremy M. Baskin and Zhaoyin Wang\*

Department of Medicinal Chemistry, Merck Frosst Centre for Therapeutic Research, PO Box 1005, Pointe-Claire/Dorval, Quebec, Canada H9R 4P8

A variety of alkyl and aryl sulfonates and sulfonamides can be prepared from the corresponding halides by a newly developed mild and convenient method.



## A convenient synthesis of isothianaphthene oligomers and their electrochemical studies

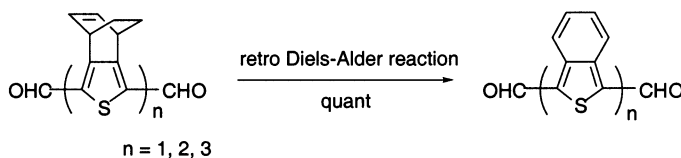
Tetrahedron Letters 43 (2002) 8485

Yusuke Shimizu,<sup>a</sup> Zhen Shen,<sup>a</sup> Satoshi Ito,<sup>a</sup> Hidemitsu Uno,<sup>b</sup> Jörg Daub<sup>c</sup> and Noboru Ono<sup>a,\*</sup>

<sup>a</sup>Department of Chemistry, Faculty of Science, Ehime University, Bunkyo-cho 2-5, Matsuyama 790-8577, Japan

<sup>b</sup>Advanced Instrumentation Center for Chemical Analysis, Ehime University, Bunkyo-cho 2-5, Matsuyama 790-8577, Japan

<sup>c</sup>Institut für Organische Chemie, Universität Regensburg, D-93040 Regensburg, Germany

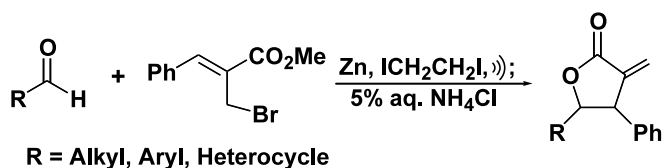


## Synthesis of 3,4-disubstituted $\alpha$ -methylene- $\gamma$ -lactones via sonochemical Barbier-type reaction

Tetrahedron Letters 43 (2002) 8489

Adam Shih-Yuan Lee,\* Yu-Ting Chang, Shu-Huei Wang and Shu-Fang Chu

Department of Chemistry, Tamkang University, Tamsui, 251 Taiwan

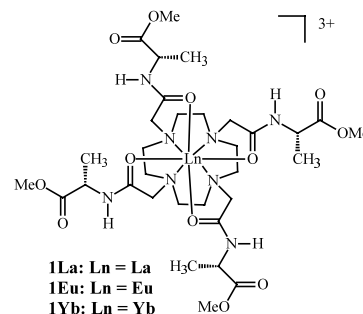


### Glycine–alanine conjugated macrocyclic lanthanide ion complexes as artificial ribonucleases

Thorfinnur Gunnlaugsson,\* John E. O'Brien and Sinéad Mulready

Department of Chemistry, Trinity College Dublin, Dublin 2, Ireland

The GlyAla conjugated macrocyclic La(III), Eu(III) and Yb(III) complexes **1La**, **1Eu** and **1Yb** show large enhancements in the hydrolysis of the phosphodiester of the RNA model compound HPNP, under physiological conditions.

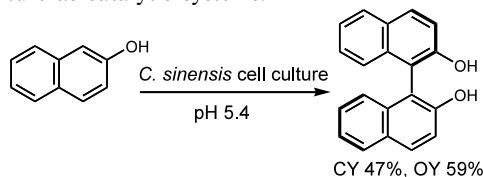


### Enantioselective oxidative coupling of 2-naphthol derivatives catalyzed by *Camellia sinensis* cell culture

Masumi Takemoto,\* Yuki Suzuki and Kiyoshi Tanaka

School of Pharmaceutical Sciences, University of Shizuoka, 52-1 Yada, Shizuoka 422-8526, Japan

Optically active 1,1'-binaphthyl-2,2'-diols were synthesized by oxidative coupling of 2-naphthols using *Camellia sinensis* cell culture as catalytic systems.

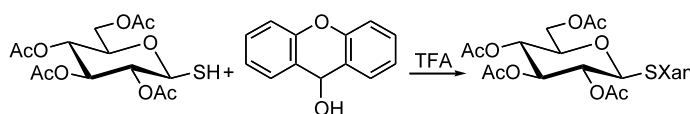


Optically active 1,1'-binaphthyl-2,2'-diols were synthesized by oxidative coupling of 2-naphthols using *Camellia sinensis* cell culture as catalytic systems.

### The *S*-xanthenyl group: potential for application in the synthesis of thioglycosides

Robert A. Falconer\*

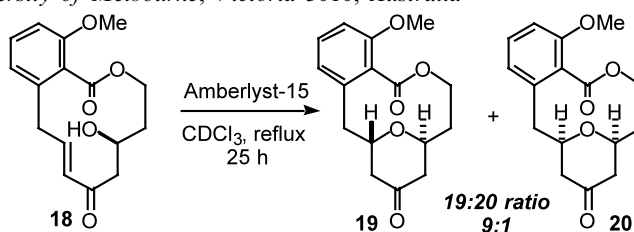
Department of Pharmaceutical & Biological Chemistry, The School of Pharmacy, University of London, 29–39 Brunswick Square, London WC1N 1AX, UK



### Synthesis of the core of apicularen A by transannular conjugate addition

Ferdows Hilli, Jonathan M. White and Mark A. Rizzacasa\*

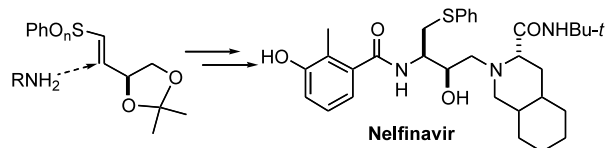
School of Chemistry, The University of Melbourne, Victoria 3010, Australia



### A short synthesis of the HIV-protease inhibitor nelfinavir via a diastereoselective addition of ammonia to the $\alpha,\beta$ -unsaturated sulfoxide derived from (*R*)-glyceraldehyde acetonide

Dawei Ma,\* Bin Zou, Wei Zhu and Huadong Xu

State Key Laboratory of Bio-organic and Natural Product Chemistry, Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, 354 Fenglin Lu, Shanghai 200032, China



### Diastereoselective synthesis of 1,2,3,6-tetrahydrophosphinine 1-oxides with an exocyclic P-function by a Michael type addition

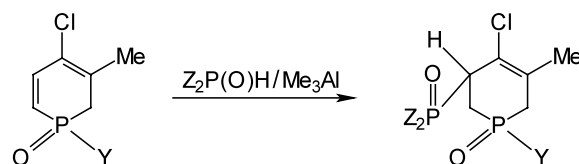
György Keglevich,<sup>a,\*</sup> Melinda Sipos,<sup>a</sup> Tímea Imre,<sup>b</sup> Krisztina Ludányi,<sup>b</sup> Dénes Szieberth<sup>c</sup> and László Tőke<sup>d</sup>

<sup>a</sup>Department of Organic Chemical Technology, Budapest University of Technology and Economics, 1521 Budapest, Hungary

<sup>b</sup>Hungarian Academy of Sciences, Chemical Research Center, 1525 Budapest, Hungary

<sup>c</sup>Department of Inorganic Chemistry, Budapest University of Technology and Economics, 1521 Budapest, Hungary

<sup>d</sup>Research Group of the Hungarian Academy of Sciences at the Department of Organic Chemical Technology, Budapest University of Technology and Economics, 1521 Budapest, Hungary



Activated  $Z_2P(O)H$  reacts easily with the  $\alpha,\beta$ -double-bond of dihydrophosphinine oxides to give the title compounds.

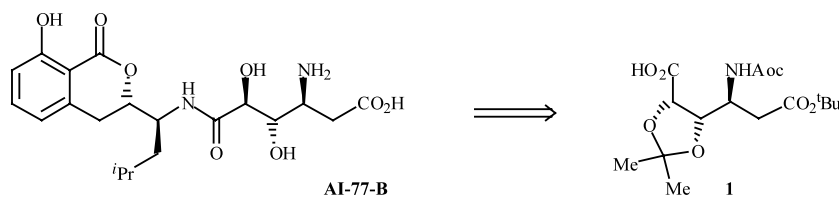
### Studies toward a synthesis of AI-77-B

Glen Davies<sup>a</sup> and Andrew T. Russell<sup>b,\*</sup>

<sup>a</sup>Department of Chemistry, University of Salford, Salford M5 4WT, UK

<sup>b</sup>Department of Chemistry, University of Reading, Whiteknights, Reading RG6 6AD, UK

The synthesis of **1**, in racemic form, is described together with an improved protocol for introducing an Aoc group.

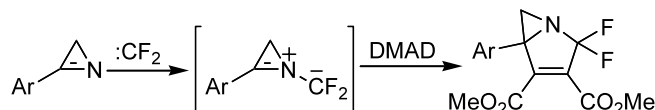


### Generation and cycloadditions of azirinium difluoromethanides—strained azomethine ylides

Alexander F. Khlebnikov,\* Mikhail S. Novikov and Amer A. Amer

Department of Chemistry, St. Petersburg State University, Universitetskii pr. 26, 198504 St. Petersburg, Petrodvorets, Russia

The reaction of 3-aryl-2*H*-azirines with difluorocarbene involves the formation of azirinium difluoromethanides—the first strained azomethine ylides which undergo 1,3-dipolar cycloaddition with dimethyl acetylenedicarboxylate, giving rise to fluorinated fused azirinopyrrole derivatives.



## Heterogeneous catalytic transfer hydrogenation of aromatic nitro and carbonyl compounds over cobalt(II) substituted hexagonal mesoporous aluminophosphate molecular sieves

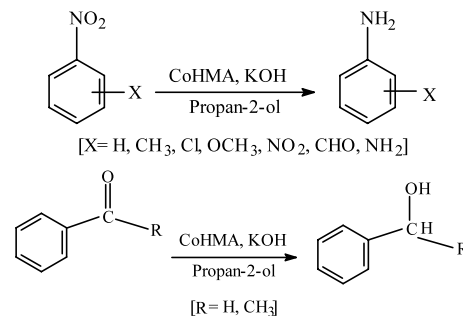
Susanta K. Mohapatra,<sup>a</sup> Sachin U. Sonavane,<sup>b</sup> Radha V. Jayaram<sup>b</sup> and Parasuraman Selvam<sup>a,\*</sup>

<sup>a</sup>Department of Chemistry, Indian Institute of Technology-Bombay, Powai, Mumbai 400 076, India

<sup>b</sup>Applied Chemistry Division, University of Mumbai Institute of Chemical Technology, Matunga, Mumbai 400 019, India

Mesoporous CoHMA was found to be a highly efficient solid acid catalyst for catalytic transfer hydrogenation (CTH) of aromatic nitro and carbonyl compounds.

Tetrahedron Letters 43 (2002) 8527

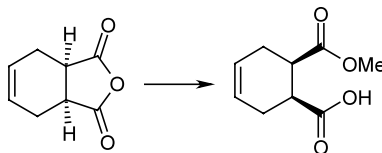


## The potential of membrane reactors in the asymmetric opening of meso-anhydrides

Jens Wöltinger,\* Hans-Peter Krimmer and Karlheinz Drauz

Degussa AG, Business Unit Fine Chemicals, PO Box 1345, D-63403 Hanau, Germany

A polymer-bound catalyst was employed for the asymmetric opening of meso-anhydrides. Because of the vast amount of catalyst otherwise required and the requirement for reuse of the catalyst, an application of membrane reactors is favorable.



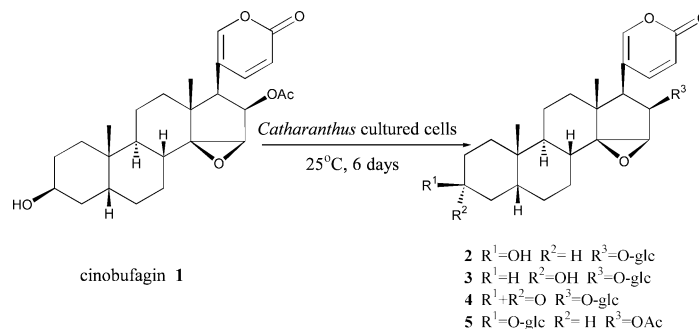
Tetrahedron Letters 43 (2002) 8531

## Glucosylation of cinobufagin by cultured suspension cells of Catharanthus roseus

Min Ye, Jungui Dai, Hongzhu Guo, Yajun Cui and Dean Guo\*

The State Key Laboratory of Natural and Biomimetic Drugs, School of Pharmaceutical Sciences, Peking University, Xueyuan Road # 38, Beijing 100083, PR China

Four new glucosylated compounds were obtained from cinobufagin by selective biotransformation using *Catharanthus roseus* cell suspension cultures.

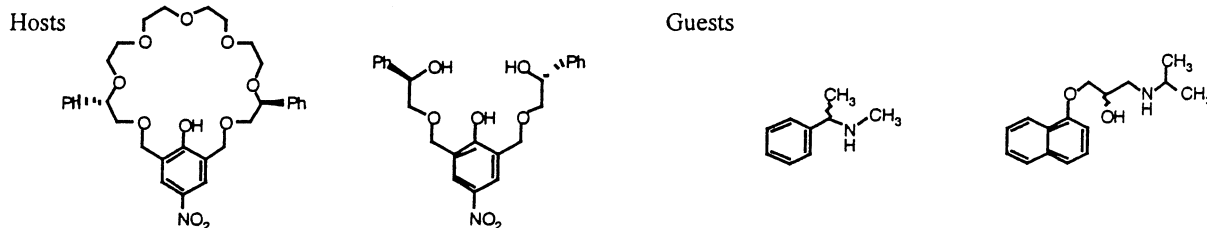


Tetrahedron Letters 43 (2002) 8535

## Chiral recognition of secondary amines by using chiral crown ether and podand

Keiji Hirose,\* Akihito Fujiwara, Kazuhisa Matsunaga, Nobuaki Aoki and Yoshito Tobe

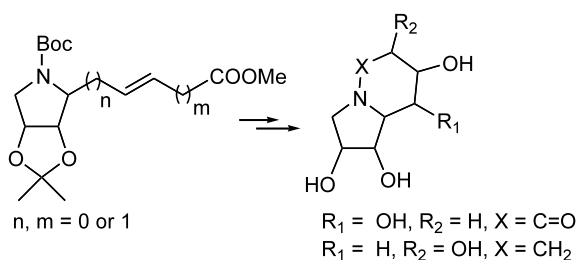
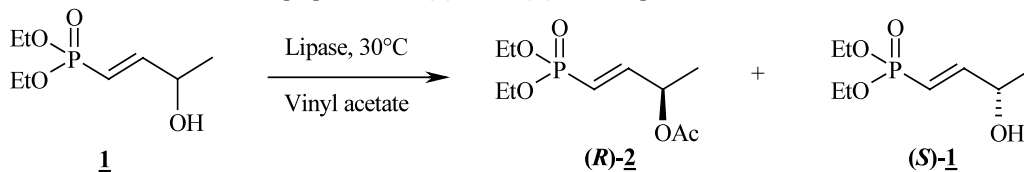
Department of Chemistry, Faculty of Engineering Science, Osaka University, and CREST, Japan Science and Technology Corporation (JST), Toyonaka, Osaka 560-8531, Japan



Tetrahedron Letters 43 (2002) 8539

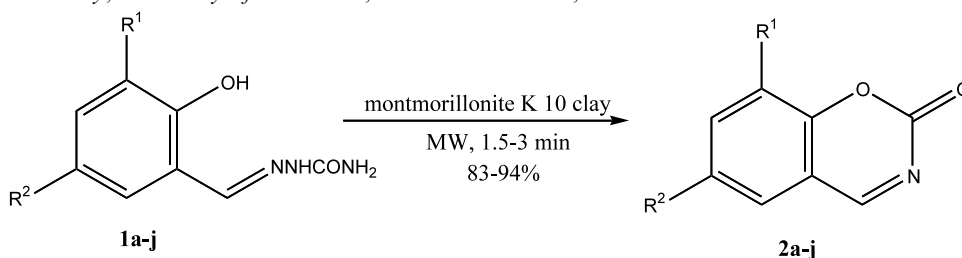
**A convenient stereoselective route to novel tetrahydroxyindolizidines**

Ana T. Carmona, José Fuentes and Inmaculada Robina\*

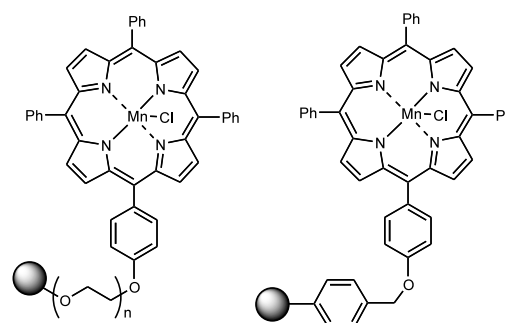
Departamento de Química Orgánica, Facultad de Química,  
Universidad de Sevilla, Apartado 553, E-41071 Sevilla, SpainNew tetrahydroxyindolizidines are obtained via *syn*-hydroxylation followed by cyclization reactions.**Enzymatic resolution of diethyl (3-hydroxy-1-butenyl) phosphonate**Mireille Attolini,<sup>a</sup> Gilles Iacazio,<sup>b</sup> Gilbert Peiffer<sup>a</sup> and Michel Maffei<sup>a,\*</sup><sup>a</sup>Laboratoire des Organo-Phosphorés (UMR 6009 du CNRS), BP 552, Faculté de Saint Jérôme, Avenue Escadrille Normandie-Niemen, 13397 Marseille Cedex 20, France<sup>b</sup>Laboratoire de Bioinorganique Structurale (UMR 6517 du CNRS), BP 432, Faculté de Saint Jérôme, Avenue Escadrille Normandie-Niemen, 13397 Marseille Cedex 20, FranceThe enzymatic resolution of **1** allows the preparation of (*S*)-**1** and (*R*)-**2** with up to 99% ee.**Novel clay-catalysed cyclisation of salicylaldehyde semicarbazones to 2H-benz[e]-1,3-oxazin-2-ones under microwave irradiation**

Lal Dhar S. Yadav,\* Sarvesh Singh and Amrish Singh

Department of Chemistry, University of Allahabad, Allahabad 211 002, India

**Supported manganese porphyrin catalysts as P450 enzyme mimics for alkene epoxidation**

Emilie Brulé and Yolanda R. de Miguel\*

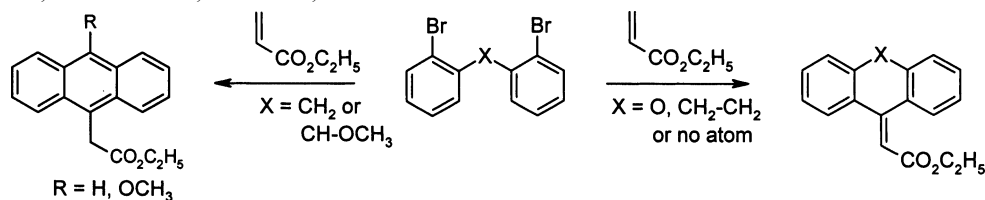
Department of Chemistry, King's College London, Strand,  
London WC2R 2LS, England, UK

## Double Heck reaction of bridged *o,o'*-dibromobiaryls with ethyl acrylate

Tetrahedron Letters 43 (2002) 8559

Mahavir Prashad,\* Yugang Liu, Xiao Yin Mak, Denis Har, Oljan Repič and Thomas J. Blacklock

Process Research and Development, Chemical and Analytical Development, Novartis Institute for Biomedical Research, One Health Plaza, East Hanover, NJ 07936, USA



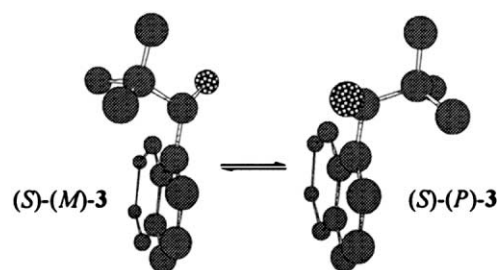
## Conformational stability of atropisomeric 1-naphthylcarbinols and 1-(1-naphthyl)ethylamines

Tetrahedron Letters 43 (2002) 8563

Christian Wolf,\* Lakshmi Pranatharthyharan and

Ryan B. Ramagosa

Department of Chemistry, Georgetown University, Washington, DC 20057, USA

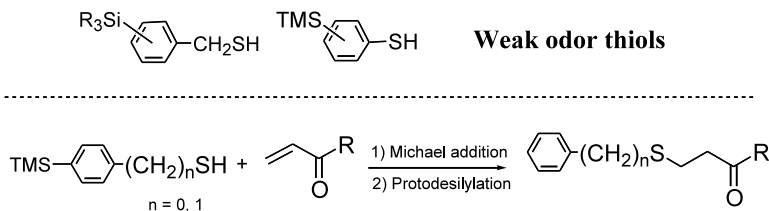


## Synthetic equivalents of benzenethiol and benzyl mercaptan having faint smell: odor reducing effect of trialkylsilyl group

Tetrahedron Letters 43 (2002) 8569

Kiyoharu Nishide, Tetsuo Miyamoto, Kamal Kumar, Shin-ichi Ohsugi and Manabu Node\*

Kyoto Pharmaceutical University, Misasagi, Yamashina, Kyoto 607-8414, Japan

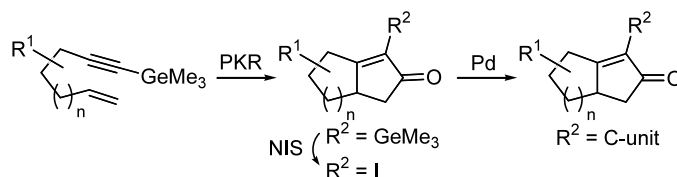


## Trimethylgermyl group in Pauson-Khand reaction

Tetrahedron Letters 43 (2002) 8575

Chisato Mukai,\* Takashi Kozaka, Yukihiro Suzuki and In Jong Kim

Faculty of Pharmaceutical Sciences, Kanazawa University, Takara-machi, Kanazawa 920-0934, Japan



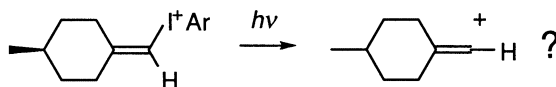


### Photosolvolysis of optically active 4-methyl-cyclohexyldenemethyl-(aryl)iodonium tetrafluoroborate

Tetrahedron Letters 43 (2002) 8579

Morifumi Fujita, Machiko Furutani and Tadashi Okuyama\*

Graduate School of Science, Himeji Institute of Technology, Kamigori, Hyogo 678-1297, Japan

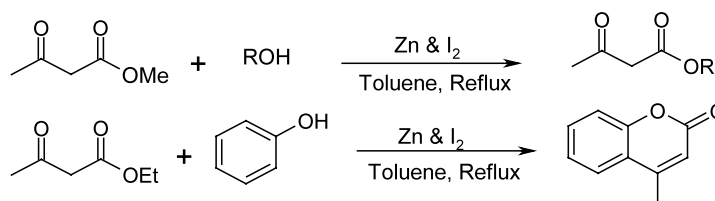


### Zinc mediated transesterification of $\beta$ -ketoesters and coumarin synthesis

Tetrahedron Letters 43 (2002) 8583

Subhash P. Chavan,\* K. Shivasankar, R. Sivappa and Ramesh Kale

Division of Organic Chemistry Technology, National Chemical Laboratory, Pune 411 008, India

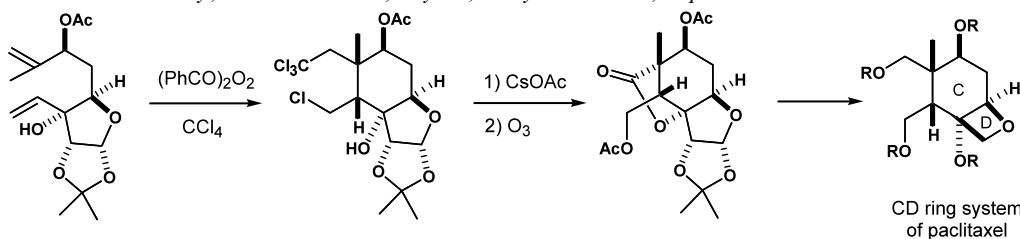


### Synthesis of the CD ring system of paclitaxel by atom-transfer radical annulation reaction

Tetrahedron Letters 43 (2002) 8587

Takehiko Yoshimitsu,\* Hideyuki Nakajima and Hiroto Nagaoka\*

Meiji Pharmaceutical University, 2-522-1 Noshio, Kiyose, Tokyo 204-8588, Japan



### Synthesis of thiomorpholines by an intramolecular Ugi reaction

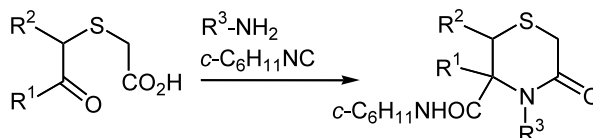
Tetrahedron Letters 43 (2002) 8591

Stefano Marcaccini,<sup>a</sup> Roberto Pepino,<sup>a</sup> Tomás Torroba,<sup>b</sup> Daniel Miguel<sup>c</sup> and María García-Valverde<sup>b,\*</sup>

<sup>a</sup>Dipartimento di Chimica Organica "Ugo Schiff", Università di Firenze, 50019 Sesto Fiorentino, Firenze, Italy

<sup>b</sup>Departamento de Química, Facultad de Ciencias, Universidad de Burgos, 09001 Burgos, Spain

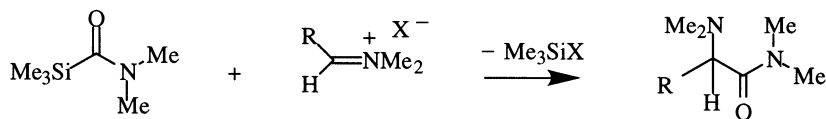
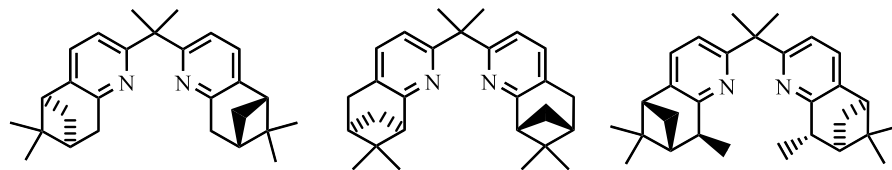
<sup>c</sup>Departamento de Química Inorgánica, Facultad de Ciencias, Universidad de Valladolid, 47005 Valladolid, Spain



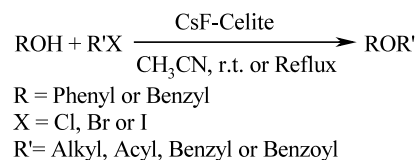
**$\alpha$ -(Dimethylamino)amides from a carbamoylsilane and iminium salts**

Jianxin Chen and Robert F. Cunico\*

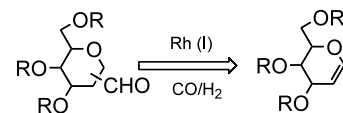
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**Design of a new class of chiral  $C_2$ -symmetric dipyridylmethane ligands and their application in asymmetric catalysis**Giorgio Chelucci,<sup>a,\*</sup> Giovanni Loriga,<sup>b</sup> Gabriele Murineddu<sup>b</sup> and Gerard A. Pinna<sup>b</sup><sup>a</sup>Dipartimento di Chimica, Università di Sassari, via Vienna 2, I-07100 Sassari, Italy<sup>b</sup>Dipartimento Farmaco Chimico Tossicologico, Università di Sassari, Via Muroni 23, I-07100 Sassari, Italy**An efficient approach towards syntheses of ethers and esters using CsF–Celite as a solid base**Syed Tasadaque A. Shah,<sup>a,\*</sup> Khalid M. Khan,<sup>b</sup> Angelica M. Heinrich,<sup>a</sup> M. Iqbal Choudhary<sup>b</sup> and W. Voelter<sup>a,\*</sup><sup>a</sup>Abteilung für Physikalische Biochemie des Physiologisch-chemischen Instituts der Universität Tübingen, Hoppe-Seyler Straße 4, D-72076 Tübingen, Germany<sup>b</sup>HEJ Research Institute of Chemistry, International Center for Chemical Sciences, University of Karachi, Karachi 75270, Pakistan

The coupling reactions of a number of alcohols and phenols with alkyl, acyl or benzoyl halides in acetonitrile with cesium fluoride–Celite are described. It has been found that CsF–Celite combinations provide an efficient, convenient and practical method for syntheses of both, ethers and esters.

**Hydroformylation of glycals using a rhodium(I)(acac)(CO)<sub>2</sub> catalyst**Mohindra Seepersaud,<sup>a</sup> Mika Kettunen,<sup>b</sup> Adnan S. Abu-Surrah,<sup>c</sup> Wolfgang Voelter<sup>d</sup> and Yousef Al-Abed<sup>a,d,\*</sup><sup>a</sup>The Picower Institute for Medical Research, 350 Community Drive, Manhasset, NY 11030, USA<sup>b</sup>Department of Inorganic Chemistry, University of Helsinki, FIN-00014 Helsinki, Finland<sup>c</sup>Department of Chemistry, Hashemite University, Zarqa 13115, Jordan<sup>d</sup>Physiologisch-chemisches Institut der Universität, D-72076 Tübingen, Germany

The hydroformylation of a series of protected glycals was carried out using rhodium(I) carbonyl-based catalyst. For the glucal series, the C-2 formyl adduct was the major product while for galactal, an equimolar mixture of C-2 and C-1 regioisomers were observed.



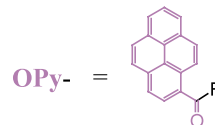
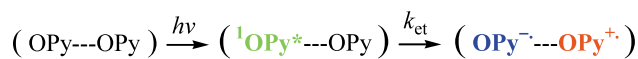
## Photoinduced electron transfer in alkanoylpyrene aggregates in conjugated polypeptides

Tetrahedron Letters 43 (2002) 8611

Valentine I. Vullev\* and Guilford Jones, II\*

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Unlike other pyrene derivatives (e.g. alkylypyrene), the excimer of alkanoylpyrene (OPy) manifests a low fluorescence quantum yield. Photophysical and electrochemical data suggested that the emission quenching upon alkanoylpyrene aggregation in conjugated polypeptides is due to photoinduced electron transfer within the chromophore assemblies.

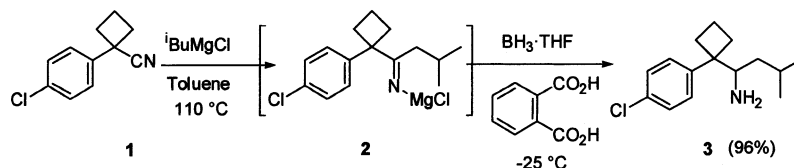


## Novel diacid accelerated borane reducing agent for imines

Tetrahedron Letters 43 (2002) 8617

Zhi-Hui Lu,\* Nandkumar Bhongle, Xiping Su, Seth Ribe and  
Chris H. Senanayake\*

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## syn-Selective additions to Garner aldehyde: synthesis of a potent glucosylceramide synthase inhibitor

Tetrahedron Letters 43 (2002) 8621

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