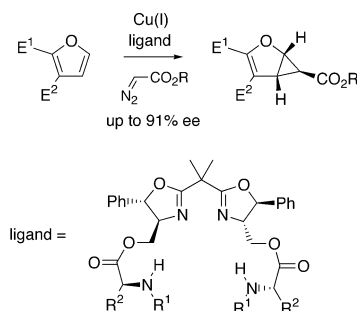


### New bis(oxazoline) ligands with secondary binding sites for the asymmetric cyclopropanation of furans

Marina Schinnerl, Claudius Böhm, Michael Seitz and Oliver Reiser\*

Institut für Organische Chemie der Universität, Universitätsstr. 31, 93053 Regensburg, Germany

*Tetrahedron: Asymmetry* 14 (2003) 765



### Polymer immobilization of bis(oxazoline) ligands using dendrimers as cross-linkers

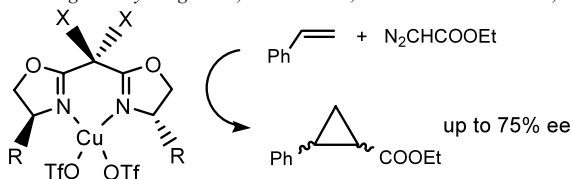
Enrique Díez-Barra,<sup>a</sup> José M. Fraile,<sup>b</sup> José I. García,<sup>b</sup> Eduardo García-Verdugo,<sup>c</sup>

Clara I. Herrerías,<sup>b</sup> Santiago V. Luis,<sup>c</sup> José A. Mayoral,<sup>b,\*</sup> Prado Sánchez-Verdú<sup>a</sup> and Juan Tolosa<sup>a</sup>

<sup>a</sup>Dep. Química Orgánica, Universidad de Castilla-La Mancha, E-13071 Ciudad Real, Spain

<sup>b</sup>Dep. Química Orgánica, Instituto de Ciencia de Materiales de Aragón, Universidad de Zaragoza-C.S.I.C., E-50009 Zaragoza, Spain

<sup>c</sup>Dep. Química Inorgánica y Orgánica, E.S.T.C.E., Universidad Jaume I, E-12080 Castellón, Spain



X = homopolymer  
up to 17 mmol cyclopropanes/mmol box

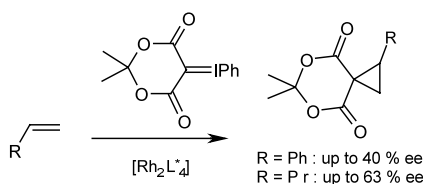
X = dendrimeric polymer  
up to **141** mmol cyclopropanes/mmol box  
(**ligand economy!**)

### Rhodium(II)-catalyzed olefin cyclopropanation with the phenyliodonium ylide derived from Meldrum's acid

Paul Müller,\* Yves Allenbach and Estelle Robert

Department of Organic Chemistry, University of Geneva, 30, Quai Ernest Ansermet, CH-1211 Geneva 4, Switzerland

*Tetrahedron: Asymmetry* 14 (2003) 779

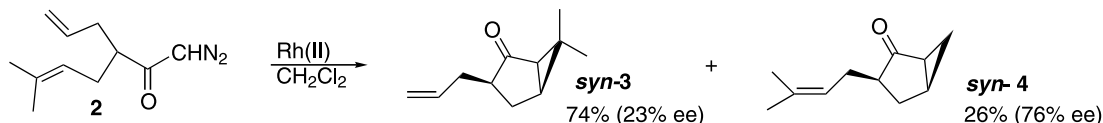


### A highly regio-, diastereo- and enantioselective intramolecular cyclopropanation reaction of a racemic $\alpha$ -diazo ketone catalyzed by chiral *ortho*-metalated dirhodium(II) compounds

Julia Pérez-Prieto,<sup>a,\*</sup> Salah-Eddine Stiriba,<sup>a,\*</sup> Eduardo Moreno<sup>b</sup> and Pascual Lahuerta<sup>b,\*</sup>

<sup>a</sup>Departamento de Q. Orgánica/ICMOL, Facultad de Farmacia, Universidad de Valencia, Vicent Andrés Estellés s/n, 46100 Valencia, Spain

<sup>b</sup>Departamento de Q. Inorgánica, Facultad de Químicas, Universidad de Valencia, Dr. Moliner 50, 46100 Valencia, Spain



**Asymmetric rhodium carbene insertion into the Si–H bond: identification of new dirhodium(II) carboxylate catalysts using parallel synthesis techniques**

*Tetrahedron: Asymmetry 14 (2003) 791*

Richard T. Buck,<sup>a,b</sup> Diane M. Coe,<sup>c</sup> Martin J. Drysdale,<sup>c</sup> Leigh Ferris,<sup>a</sup> David Haigh,<sup>c</sup> Christopher J. Moody,<sup>b,\*</sup> Neil D. Pearson<sup>d</sup> and J. Bobby Sanghera<sup>a</sup>

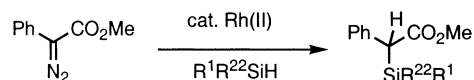
<sup>a</sup>Department of Chemistry, Loughborough University, Loughborough, Leicestershire LE11 3TU, UK

<sup>b</sup>School of Chemistry, University of Exeter, Stocker Road, Exeter EX4 4QD, UK

<sup>c</sup>GlaxoSmithKline, Medicines Research Centre, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY, UK

<sup>d</sup>GlaxoSmithKline, New Frontiers Science Park, Coldharbour Road, Harlow, Essex CM19 5AD, UK

Parallel synthesis is used to identify novel chiral dirhodium(II) carboxylates for enantioselective silane insertion reactions (up to 76% ee).

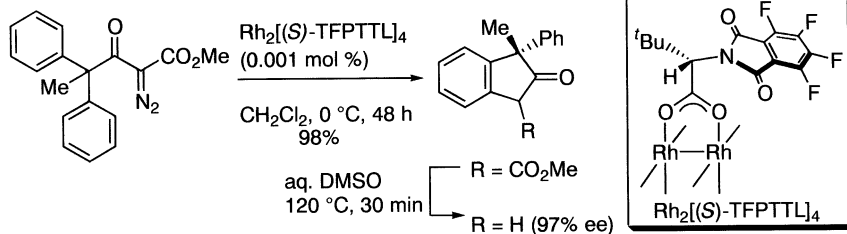


**Dirhodium(II) tetrakis[*N*-tetrafluorophthaloyl-(*S*)-*tert*-leucinate]: an exceptionally effective Rh(II) catalyst for enantiotopically selective aromatic C–H insertions of diazo ketoesters**

*Tetrahedron: Asymmetry 14 (2003) 817*

Hideyuki Tsutsui, Yukiko Yamaguchi, Shinji Kitagaki, Seichi Nakamura, Masahiro Anada and Shunichi Hashimoto\*

Graduate School of Pharmaceutical Sciences, Hokkaido University, Sapporo 060-0812, Japan



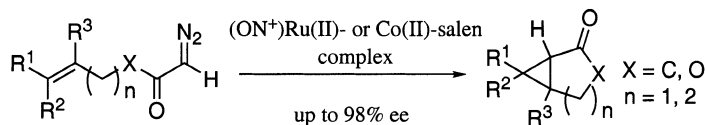
**Asymmetric intramolecular cyclopropanation of diazo compounds with metallosalen complexes as catalyst: structural tuning of salen ligand**

*Tetrahedron: Asymmetry 14 (2003) 823*

Biswajit Saha, Tatsuya Uchida and Tsutomu Katsuki\*

Department of Chemistry, Faculty of Science, Graduate School, Kyushu University 33, CREST, Japan Science and Technology (JST), Hakozaki, Higashi-ku, Fukuoka 812-8581, Japan

Chiral (ON<sup>+</sup>)Ru(II)- and Co(II)-salen complexes are efficient catalysts for asymmetric intramolecular cyclopropanation of diazoacetates and diazoketones.



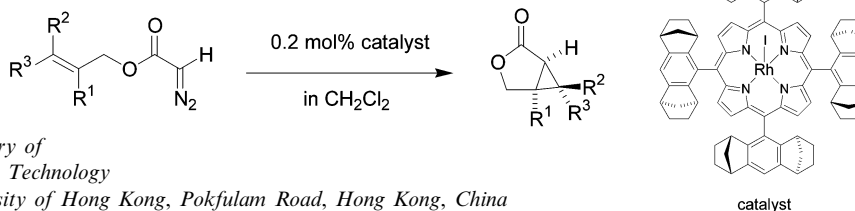
**Asymmetric inter- and intramolecular cyclopropanations of alkenes catalyzed by rhodium *D*<sub>4</sub>-porphyrin: a comparison of rhodium- and ruthenium-centred catalysts**

*Tetrahedron: Asymmetry 14 (2003) 837*

Pang-Fei Teng,<sup>a</sup> Tat-Shing Lai,<sup>a,b</sup> Hoi-Lun Kwong<sup>a,\*</sup> and Chi-Ming Che<sup>b,\*</sup>

<sup>a</sup>Department of Biology and Chemistry and Open Laboratory of Chirotechnology of the Institute of Molecular Technology for Drug Discovery and Synthesis, City University of Hong Kong, Tat Chee Avenue, Kowloon, Hong Kong, China

<sup>b</sup>Department of Chemistry and Open Laboratory of Chemical Biology of the Institute of Molecular Technology for Drug Discovery and Synthesis, The University of Hong Kong, Pokfulam Road, Hong Kong, China

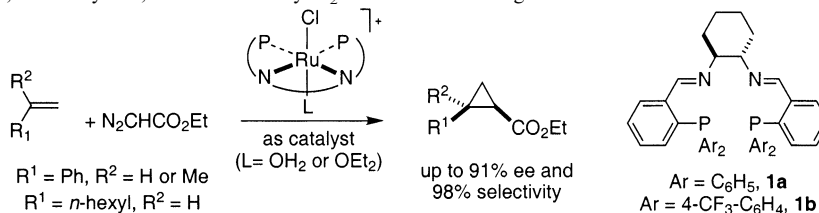


## Electronic tuning of the PNNP ligand for the asymmetric cyclopropanation of olefins catalysed by [RuCl(PNNP)]<sup>+</sup>

Cristina Bonaccorsi, Stephan Bachmann and Antonio Mezzetti\*

Department of Chemistry, Swiss Federal Institute of Technology, ETH Hönggerberg, CH-8093 Zürich, Switzerland

Cationic ruthenium complexes of the type [RuCl(L)(PNNP)]<sup>+</sup> (L = OEt<sub>2</sub>, OH<sub>2</sub>; PNNP = **1a** or **1b**) catalyse the asymmetric cyclopropanation of styrene,  $\alpha$ -Me-styrene, and 1-octene by N<sub>2</sub>CHCO<sub>2</sub>Et with high *cis*- and enantioselectivities.

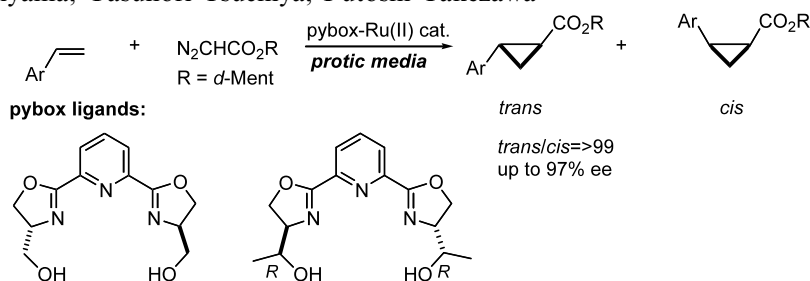


*Tetrahedron: Asymmetry 14 (2003) 845*

## Catalytic asymmetric cyclopropanation of alkenes with diazoesters in protic and biphasic media

Seiji Iwasa,\* Shinji Tsushima, Kohei Nishiyama, Yasunori Tsuchiya, Futoshi Takezawa and Hisao Nishiyama\*

School of Materials Science,  
Toyohashi University of Technology,  
Tempaku-cho, Toyohashi, Aichi 441-8580, Japan

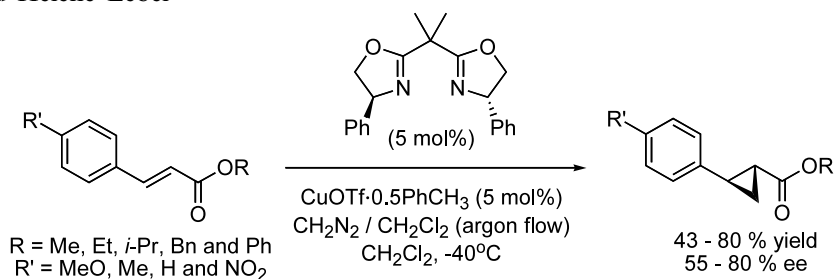


*Tetrahedron: Asymmetry 14 (2003) 855*

## Bis(oxazoline)-copper(I)-catalyzed enantioselective cyclopropanation of cinnamate esters with diazomethane

André B. Charette,\* Marc K. Janes and Hélène Lebel\*

Département de Chimie, Université de Montréal,  
PO Box, 6128, Station Downtown,  
Montréal (Québec), Canada H3C 3J7

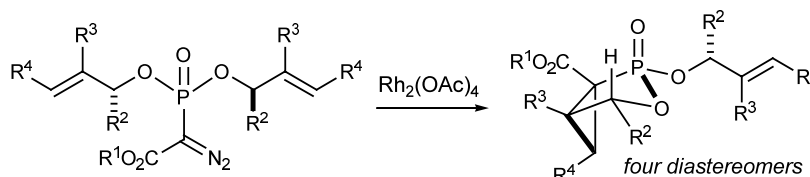


*Tetrahedron: Asymmetry 14 (2003) 867*

## Substituent effects in the double diastereotopic differentiation of $\alpha$ -diazophosphonates via intramolecular cyclopropanation

Joel D. Moore and Paul R. Hanson\*

Department of Chemistry, University of Kansas, 1251 Wescoe Hall Drive, Lawrence, KS 66045-7582, USA



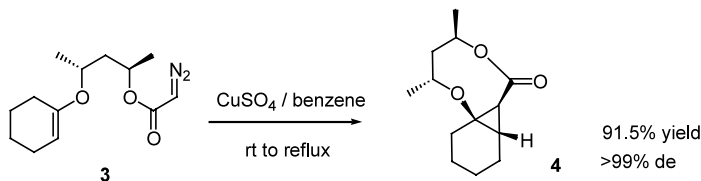
*Tetrahedron: Asymmetry 14 (2003) 873*

**Chiral and flexible 2,4-pentanediol-tethered cyclopropanation of olefins with a carbenoid derived from a diazo ester to construct three stereogenic centers**

*Tetrahedron: Asymmetry 14 (2003) 881*

Takashi Sugimura,\* Atsushi Mori, Akira Tai, Takahiro Tei, Yasuhiro Sakamoto and Tadashi Okuyama

Graduate School of Science, Himeji Institute of Technology, 3-2-1 Kohto, Kamigori, Ako-gun, Hyogo 678-1297, Japan



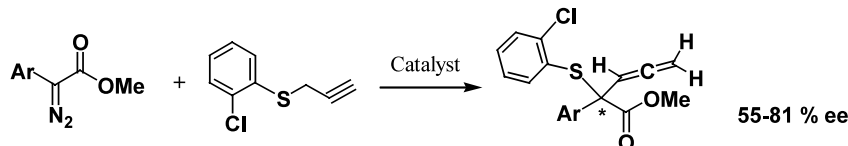
**Catalytic asymmetric [2,3] sigmatropic rearrangement of sulfur ylides generated from carbenoids and propargyl sulfides**

*Tetrahedron: Asymmetry 14 (2003) 891*

Xiaomei Zhang,<sup>a</sup> Ming Ma<sup>a</sup> and Jianbo Wang<sup>a,b,\*</sup>

<sup>a</sup>Key Laboratory of Bioorganic Chemistry and Molecular Engineering of Ministry of Education, Department of Chemical Biology, College of Chemistry, Peking University, Beijing 100871, PR China

<sup>b</sup>State Key Laboratory of Elemento-Organic Chemistry, Nankai University, Tianjin 300071, PR China

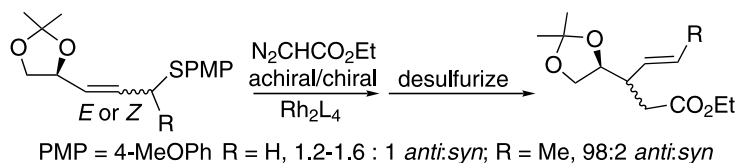


**Diastereoselective rhodium(II)-catalyzed sulfonium ylide formation-[2,3]-sigmatropic rearrangement reaction of chiral non-racemic allylic sulfides**

*Tetrahedron: Asymmetry 14 (2003) 897*

Andrew G. H. Wee,\* Qing Shi, Zhongyi Wang and Kimberly Hatton

Department of Chemistry and Biochemistry, University of Regina, Regina, Saskatchewan, S4S 0A2, Canada

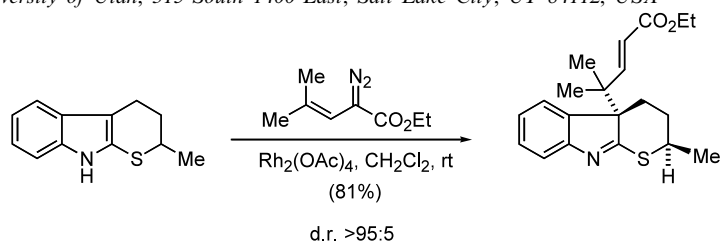


**Diastereoselective synthesis of quaternary substituted thioindolines from sulfur ylide intermediates**

*Tetrahedron: Asymmetry 14 (2003) 911*

Alexei V. Novikov, Amir Sabahi, Abijah M. Nyong and Jon D. Rainier\*

Department of Chemistry, University of Utah, 315 South 1400 East, Salt Lake City, UT 84112, USA

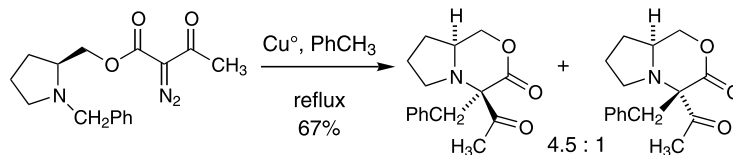


### Stereoselective formation and rearrangement of morpholinium ylides derived from copper carbenoids

*Tetrahedron: Asymmetry 14 (2003) 917*

Kevin W. Glaeske, B. N. Naidu and F. G. West\*

Department of Chemistry, University of Utah, 315 S. 1400 East, Rm. 2020, Salt Lake City, UT 84112-0850, USA



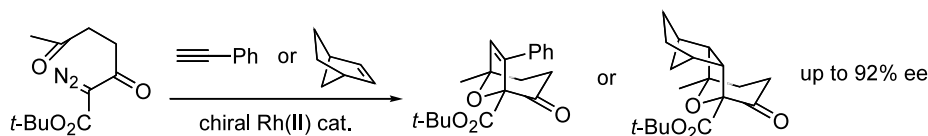
### Catalytic enantioselective intermolecular cycloadditions of a 2-diazo-3,6-diketoester-derived carbonyl ylide with alkyne and strained alkene dipolarophiles

*Tetrahedron: Asymmetry 14 (2003) 921*

David M. Hodgson,<sup>a,\*</sup> Agnès H. Labande,<sup>a</sup> Rebecca Glen<sup>a</sup> and Alison J. Redgrave<sup>b</sup>

<sup>a</sup>Dyson Perrins Laboratory, Department of Chemistry, University of Oxford, South Parks Road, Oxford, OX1 3QY, UK

<sup>b</sup>Medicinal Chemistry 1, Respiratory and Inflammation CEDD, GlaxoSmithKline Medicines Research Centre, Gunnels Wood Road, Stevenage, SG1 2NY, UK

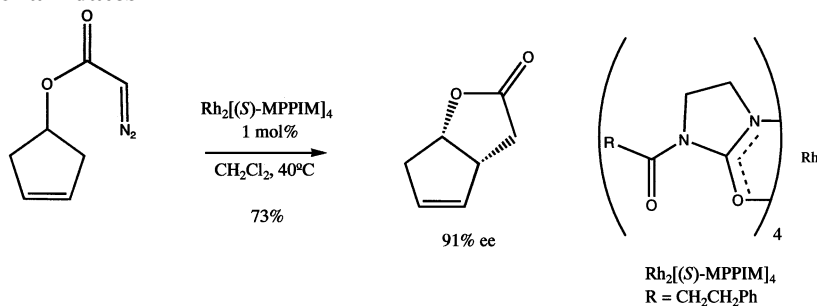


### A short stereoselective synthesis of (+)- and (–)-2-oxabicyclo-[3.3.0]oct-6-en-3-one by intramolecular carbon–hydrogen insertion catalyzed by chiral dirhodium(II) carboxamidates

*Tetrahedron: Asymmetry 14 (2003) 925*

Michael P. Doyle\* and Arthur J. Catino

Department of Chemistry, University of Arizona, Tucson, AZ 85721, USA

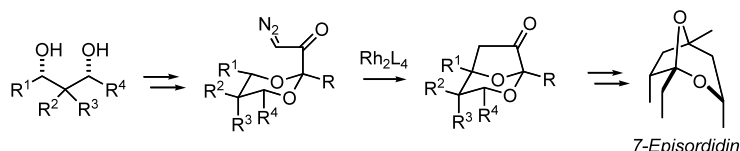


### Template-directed C–H activation: development and application to the total synthesis of 7-episordidin

*Tetrahedron: Asymmetry 14 (2003) 929*

Duncan J. Wardrop,\* Raymond E. Forslund, Chad L. Landrie, Adriana I. Velter, Donald Wink and Bushan Surve

Department of Chemistry, University of Illinois at Chicago, 845 West Taylor Street, Chicago, IL 60607, USA



**Intermolecular C–H activation at benzylic positions: synthesis of (+)-imperanene and (–)- $\alpha$ -conidendrin**

*Tetrahedron: Asymmetry 14 (2003) 941*

Huw M. L. Davies\* and Qihui Jin

*Department of Chemistry, University at Buffalo, The State University of New York, Buffalo, NY 14260-3000, USA*

