



## Tetrahedron Vol. 65, No. 1, 2009

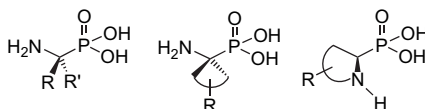
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An overview of stereoselective synthesis of  $\alpha$ -aminophosphonic acids and derivatives

Mario Ordóñez\*, Haydée Rojas-Cabrera, Carlos Cativiela\*

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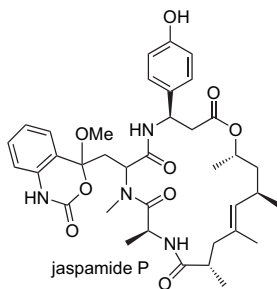


## ARTICLES

Jaspamides M–P: new tryptophan modified jaspamide derivatives from the sponge *Jaspis splendans*

Fulvio Gala, Maria Valeria D'Auria, Simona De Marino, Valentina Sepe, Franco Zollo, Charles D. Smith, Staci N. Keller, Angela Zampella\*

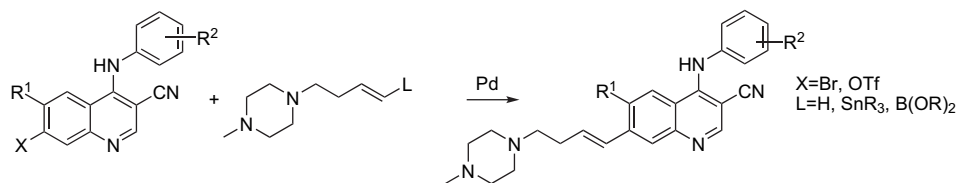
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**Synthesis of 7-(*E*)-alkenyl-4-amino-3-quinolinecarbonitriles via Pd-mediated Heck, Stille, and Suzuki reactions**

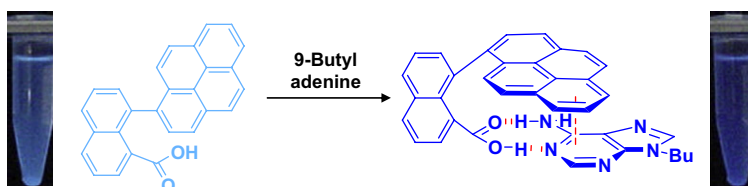
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Yanong D. Wang\*, Minu Dutia, M. Brawner Floyd, Amar S. Prashad, Dan Berger, Melissa Lin

**Synthesis and crystal structures of fluorescent receptors for 9-butyladenine**

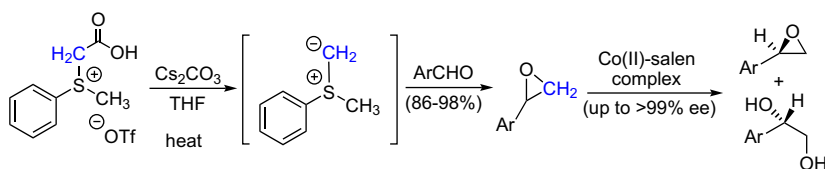
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Bassam Lamale, William P. Henry, Lee M. Daniels, Cungen Zhang, Suzane M. Klein, Yu Lin Jiang\*

**S-Methylidene agents: preparation of chiral non-racemic heterocycles**

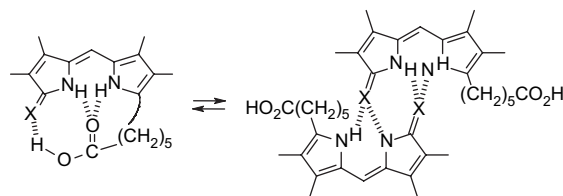
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David C. Forbes\*, Sampada V. Bettigeri, Samit A. Patrawala, Susanna C. Pischek, Michael C. Standen\*

**Carboxylic acid to thioamide hydrogen bonding**

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Suchitra Datta, David A. Lightner\*

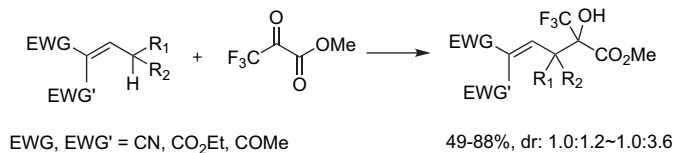


[6]-Semirubin (X=O) is an intramolecularly hydrogen-bonded monomer in non-polar solvents that is favored over the intermolecularly hydrogen-bonded dimer, with  $K_{\text{assoc}} \sim 25,000$ . [6]-Thiosemirubin (X=S) is a dimer, with  $K_{\text{assoc}} \sim 200$ .

**Organic base catalyzed carbonyl allylation of methyl trifluoropyruvate with activated alkenes**

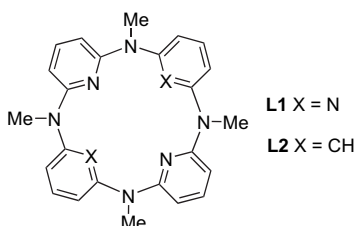
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Fan Zhang, Xiao-Jin Wang, Chen-Xin Cai, Jin-Tao Liu\*

**Highly selective complexation of metal ions by the self-tuning tetraazacalixpyridine macrocycles**

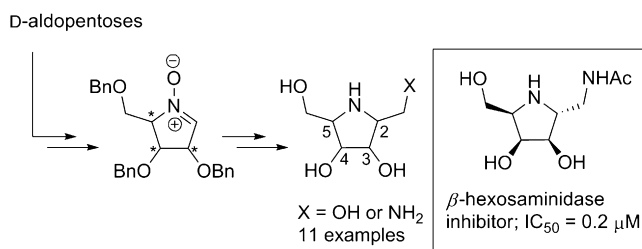
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Han-Yuan Gong, De-Xian Wang, Qi-Yu Zheng, Mei-Xiang Wang\*

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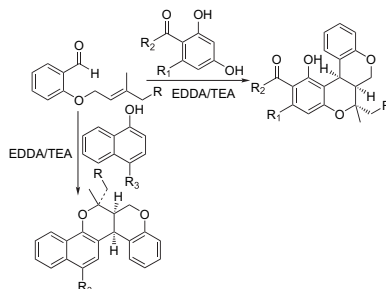
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En-Lun Tsou, Yao-Ting Yeh, Pi-Hui Liang, Wei-Chieh Cheng\*

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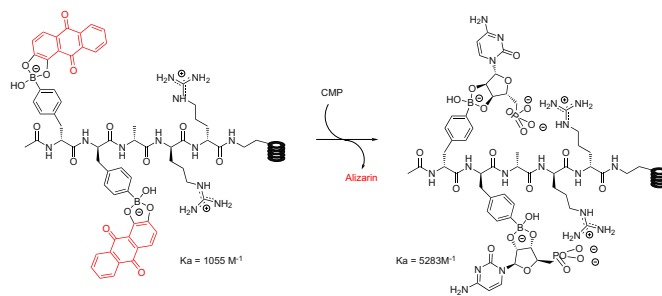
Yong Rok Lee\*, Yun Mi Kim, Sung Hong Kim



**Remarkably selective saccharide recognition by solid-supported peptide boronic acids**

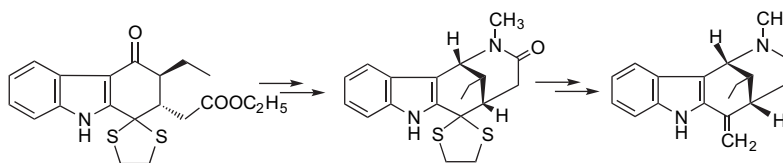
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Peter J. Duggan\*, Daniel A. Offermann

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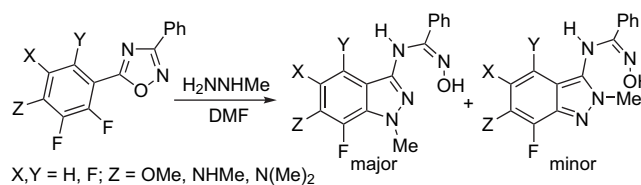
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Suleyman Patir\*, Nesimi Uludag

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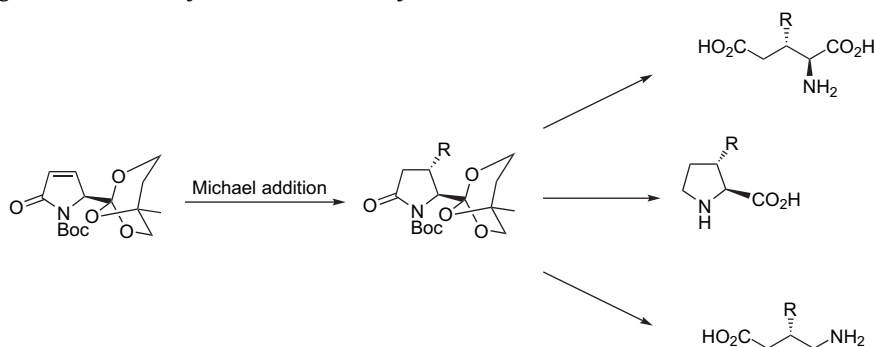
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Antonio Palumbo Piccionello\*, Andrea Pace, Paola Pierro, Ivana Pibiri, Silvestre Buscemi, Nicolò Vivona

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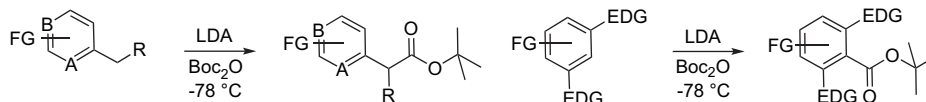
Makoto Oba\*, Tsuneki Saegusa, Naohiro Nishiyama, Kozaburo Nishiyama\*



**Di-*tert*-butyl dicarbonate: a versatile carboxylating reagent**

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John Kallikat Augustine\*, Y. Arthoba Naik, Veeramani Vairaperumal, Sharmila Narasimhan



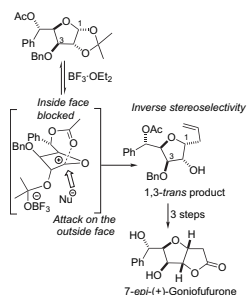
- (1) A = Nitrogen; B = Nitrogen or Carbon; R = H, alkyl etc.  
 (2) A, B = Carbon; R = electron withdrawing group

EDG = electron donating group

**Inverse stereoselectivity in the nucleophilic attack on five-membered ring oxocarbenium ions. Application to the total synthesis of 7-*epi*-(+)-goniofufurone**

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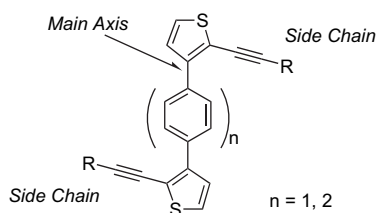
Luis Hernández-García, Leticia Quintero, Herbert Höpfl, Martha Sosa, Fernando Sartillo-Piscil\*



**Preparations of bis[2-(2-arylethynyl)-3-thienyl]arenes and bis[2-{2-(trimethylsilyl)ethynyl}-3-thienyl]arenes**

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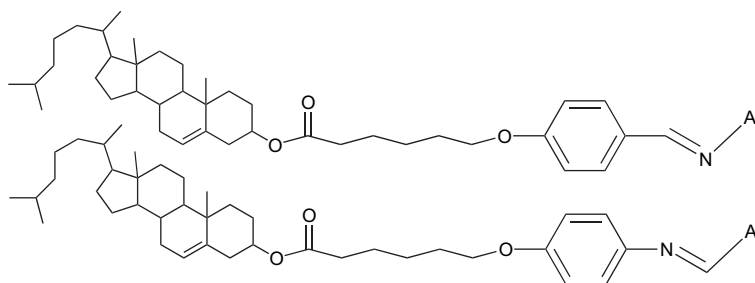
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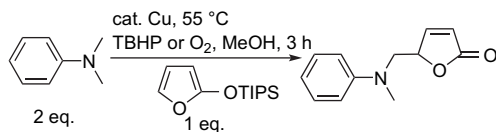
K.C. Majumdar\*, S. Chakravorty, N. Pal, Nandiraju V.S. Rao\*



**Highly efficient Cu-catalyzed oxidative coupling of tertiary amines and siloxyfurans**

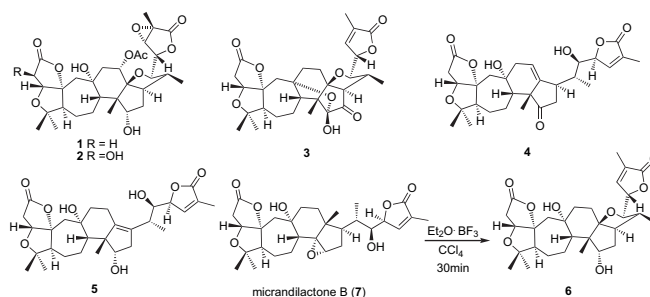
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Youming Shen, Ze Tan\*, De Chen, Xunbo Feng, Mo Li, Can-Cheng Guo\*, Chengliang Zhu

**A class of 18(13→14)-abeo-schichtane skeleton nortriterpenoids from *Schisandra propinqua* var. *propinqua***

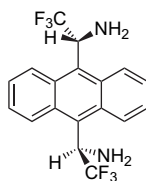
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Chun Lei, Jian-Xin Pu\*, Sheng-Xiong Huang, Ji-Jun Chen, Jing-Ping Liu, Li-Bin Yang, Yun-Bao Ma, Wei-Lie Xiao, Xiao-Nian Li, Han-Dong Sun\*

**Preparation of (1*R*,1'*R*)-1,1'-(anthracene-9,10-diyl)bis(2,2,2-trifluoroethanamine): a chiral diamine with low basicity**

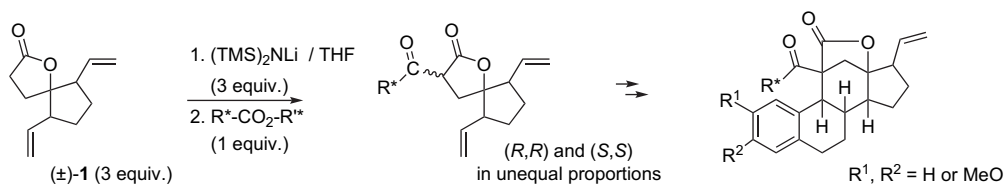
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Carla Estivill, Julen Mendizabal, Albert Virgili\*, Eva Monteagudo, Teresa Flor, Francisco Sánchez-Ferrando, Angel Alvarez-Larena, Juan F. Piniella

**Enantioselective synthesis of 11-substituted 2- or 3-methoxy-17-vinylgona-1,3,5(10)-trien-13-ols**

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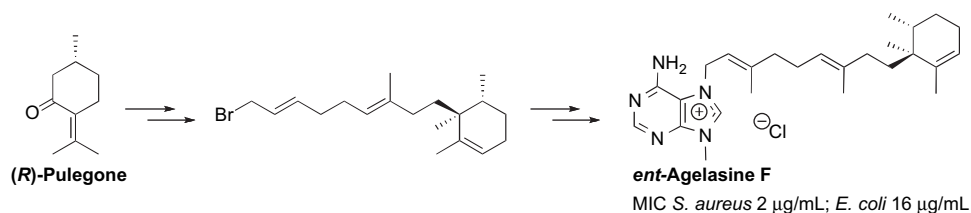
Delphine Moraleda, Michel Giorgi, Maurice Santelli\*



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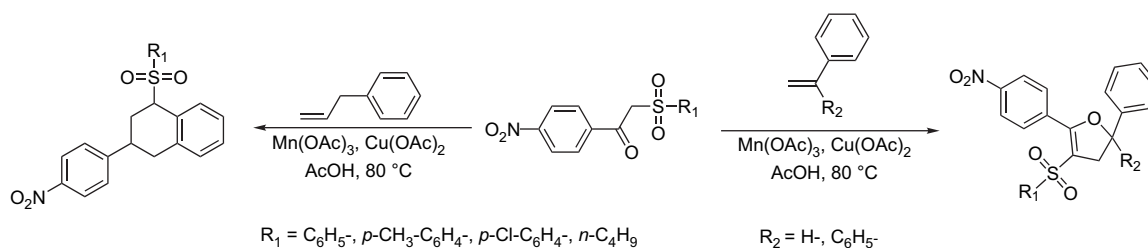
Ágnes Proszenyák, Morten Brændvang, Colin Charnock, Lise-Lotte Gundersen\*



**Microwave-assisted manganese(III) acetate based oxidative cyclizations of alkenes with β-ketosulfones**

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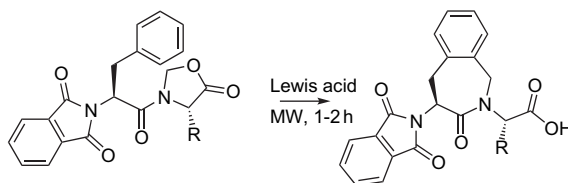
Christophe Curti, Maxime D. Crozet, Patrice Vanelle\*



**Efficient microwave-assisted synthesis of 4-amino-2-benzazepin-3-ones as conformationally restricted dipeptide mimetics**

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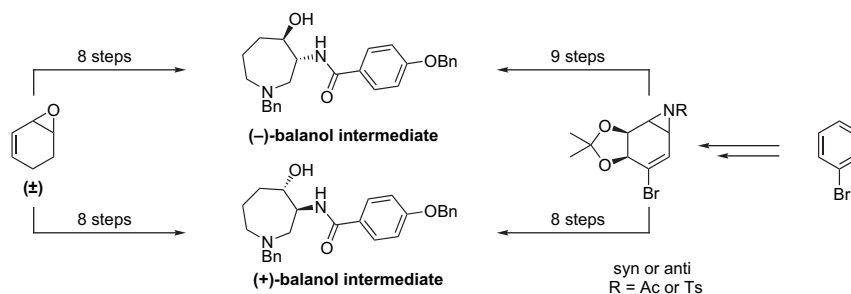
Beatrice Severino, Ferdinando Fiorino, Antonella Esposito, Francesco Frecentese, Francesca De Angelis, Elisa Perissutti, Giuseppe Caliendo, Vincenzo Santagada\*



**Formal total synthesis of (–)- and (+)-balanol: two complementary enantiodivergent routes from vinyloxiranes and vinylaziridines**

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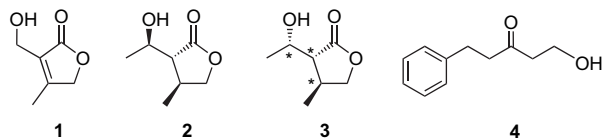
Jacqueline Gilmet, Bradford Sullivan, Tomas Hudlicky\*



**Endoplasmic reticulum (ER) stress protecting compounds from the mushroom *Mycoleptodonoides aitchisonii***

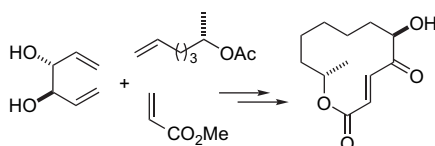
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Jae-hoon Choi, Madoka Horikawa, Hiroshi Okumura, Shinya Kodani, Kaoru Nagai\*, Daisuke Hashizume, Hiroyuki Koshino, Hirokazu Kawagishi\*

**Synthesis and stereochemical assignment of (+)-Cladospolide D**

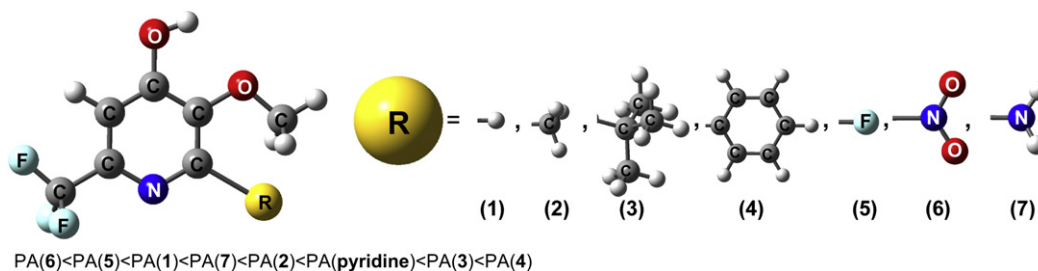
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Ke-Jhen Lu, Chia-Hsiu Chen, Duen-Ren Hou\*

**Density functional theory rationalization of the substituent effects in trifluoromethyl-pyridinol derivatives**

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Jorge A. Fallas, Leticia González, Inés Corral\*

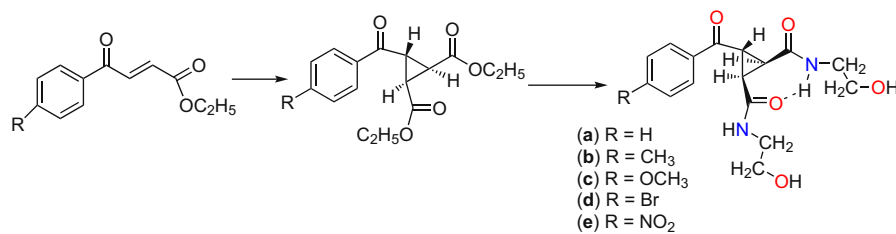


Trifluoromethyl-pyridinol derivatives show unexpected geometrical arrangements and proton affinity (PA) scale.

**Design, synthesis and conformational analysis of turn inducer cyclopropane scaffolds: microwave assisted amidation of unactivated esters on catalytic solid support to obtain  $\gamma$ -turn mimic scaffolds**

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Surinderjit Singh Bhella, Munusamy Elango, Mohan Paul S. Ishar\*



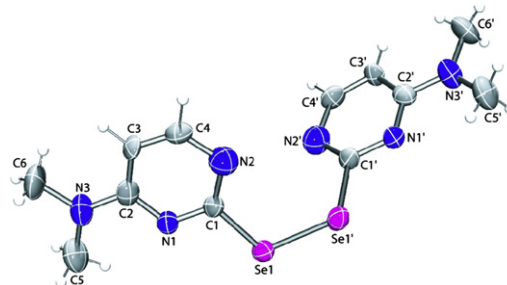


**Preparation and characterization of bis[4-dimethylamino-2-pyrimidyl] dichalcogenides (S, Se, Te): X-ray crystal structure of bis[4-dimethylamino-2-pyrimidyl] diselenide and its physicochemical behavior in microemulsion media**

pp 247–252

K.K. Bhasin\*, Ekta Arora, Khushwinder Kaur, Sung-Kyu Kang, Michael Gobel, T.M. Klapoetke, S.K. Mehta\*

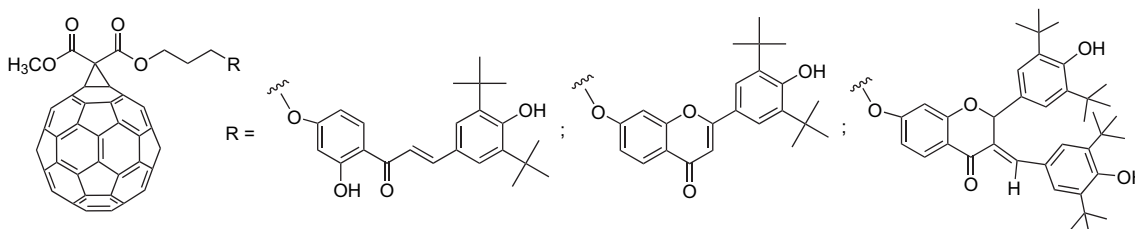
Bis[4-dimethylamino-2-pyrimidyl] dichalcogenides (S, Se, Te) compounds have been synthesized and characterized by various spectroscopic techniques. Molecular structure of bis[4-dimethylamino-2-pyrimidyl] diselenide has been established by single crystal X-ray analysis and its interactions in microemulsion media have also been established.



**Synthesis and antioxidant activity of [60]fullerene–flavonoid conjugates**

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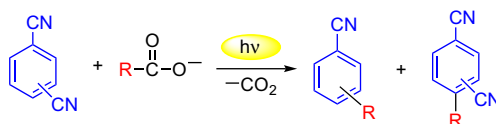
Roger F. Enes, Andreia S.F. Farinha, Augusto C. Tomé\*, José A.S. Cavaleiro, Riccardo Amorati, Silvia Petrucci, Gian Franco Pedulli\*



**Decarboxylative photosubstitution of dicyanobenzenes with aliphatic carboxylate ions**

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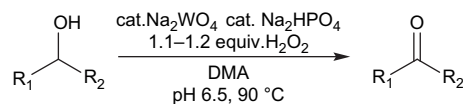
Tatsuya Itou, Yasuharu Yoshimi\*, Toshio Morita, Yuji Tokunaga, Minoru Hatanaka\*



**Practical and versatile oxidation of alcohol using novel Na<sub>2</sub>WO<sub>4</sub>–H<sub>2</sub>O<sub>2</sub> system under neutral conditions**

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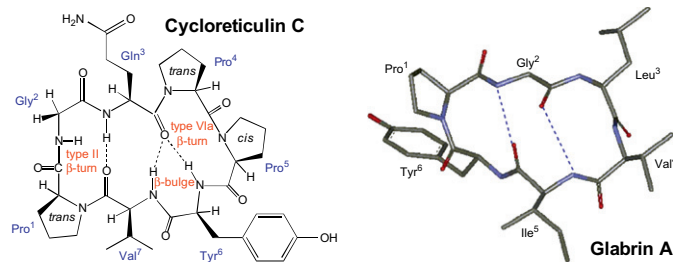
Takemasa Hida\*, Hideo Nogusa



**3D-structure of cycloreticulin C and glabrin A, cyclopeptides from the seeds of *Annona reticulata***

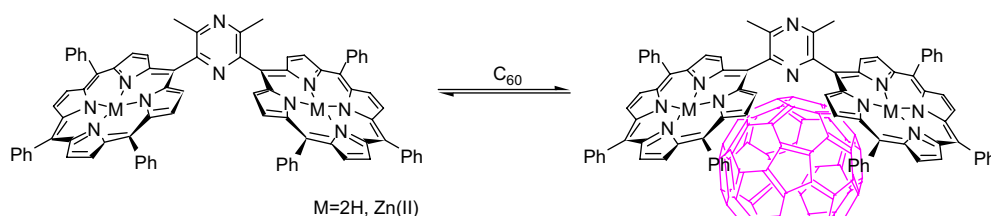
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Alassane Wélé, Claudine Mayer, Dermigny Quentin, Yanjun Zhang, Alain Blond, Bernard Bodo\*

**2,6-Bis(porphyrin)-substituted pyrazine: a new class of supramolecular synthon binding to a transition-metal ion and fullerene (C<sub>60</sub>)**

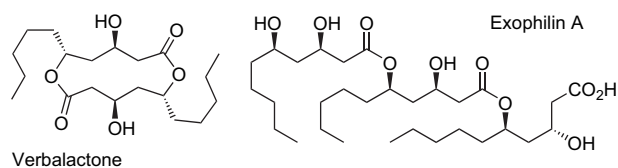
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Yusaku Eda, Kennosuke Itoh, Yoshio N. Ito, Toshio Kawato\*

**Facile access to some chiral building blocks. Synthesis of verbalactone and exophilin A**

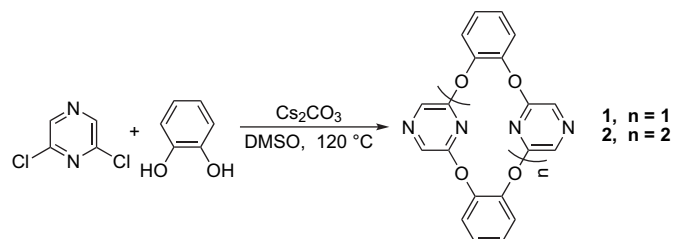
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Jian-Zhong Wu, Jian Gao, Guo-Bao Ren, Zhi-Bin Zhen, Yihua Zhang, Yikang Wu\*

**Synthesis, structure, and conformation of *ortho*-linked oxacalix[n]arene[n]hetarenes**

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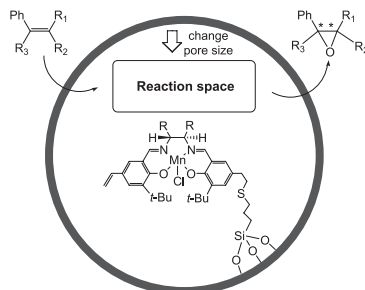
Mingliang Ma, Hongxiu Wang, Xiaoyan Li, Longqing Liu, Haishan Jin, Ke Wen\*



### Heterogeneous chiral Mn(III) salen catalysts for the epoxidation of unfunctionalized olefins immobilized on mesoporous materials with different pore sizes

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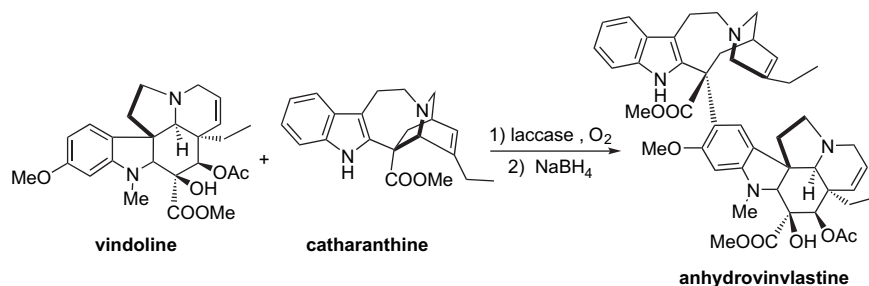
Kai Yu, Zhicheng Gu, Runan Ji, Lan-Lan Lou, Shuangxi Liu\*



### Laccase-catalyzed coupling of catharanthine and vindoline: an efficient approach to the bisindole alkaloid anhydrovinblastine

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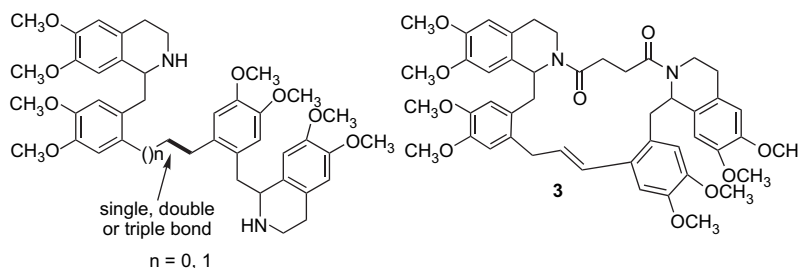
Francesca Sagui, Cosimo Chirivì, Gabriele Fontana, Silvia Nicotra, Daniele Passarella, Sergio Riva\*, Bruno Danieli\*



### The synthesis of carbon linked bis-benzylisoquinolines using Mizoroki–Heck and Sonagashira coupling reactions

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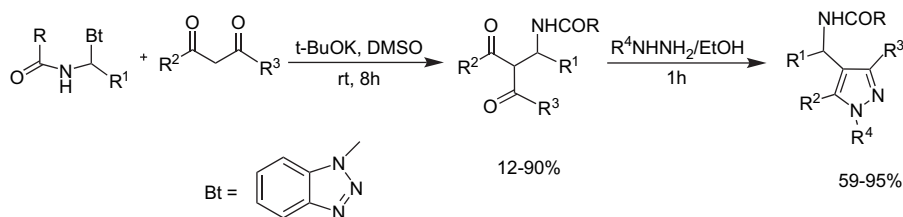
Uta Batenburg-Nguyen, Alison T. Ung\*, Stephen G. Pyne\*



### *N*-( $\alpha$ -Amidoalkyl)benzotriazole-mediated synthesis of $\beta'$ -amido $\beta$ -diketones: a general synthetic protocol for *N*-[ $\beta$ -(3,5-di and 1,3,5-trisubstituted pyrazol-4-yl)alkyl] amides

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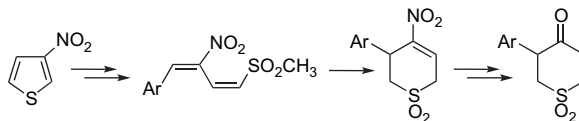
İlhami Çelik\*, Nevin Kanışkan, Şule Kökten



**A new route to thiopyran S,S-dioxide derivatives via an overall ring-enlargement protocol from 3-nitrothiophene**

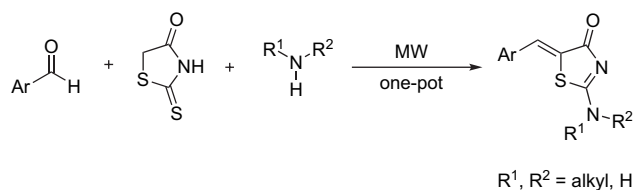
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Lara Bianchi, Massimo Maccagno, Giovanni Petrillo\*, Egon Rizzato, Fernando Sancassan, Elda Severi, Domenico Spinelli, Marco Stenta, Andrea Galatini, Cinzia Tavani

**Three-component one-pot synthetic route to 2-amino-5-alkylidene-thiazol-4-ones**

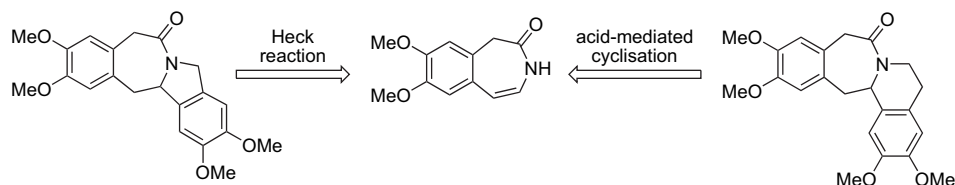
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Marko Anderluh\*, Marko Jukič, Rok Petrič

**A new synthetic approach towards isoquinobenzazepinone and isoindolinobenzazepinone using acid-mediated cyclisation and Heck reaction**

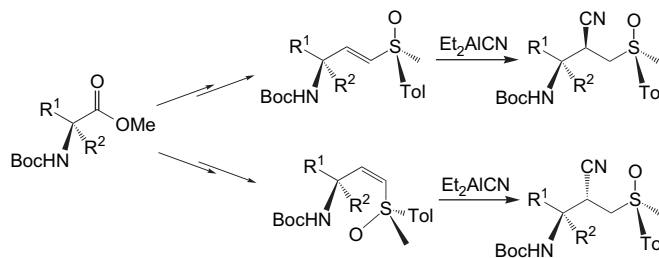
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Wong Phakhodee, Poonsakdi Ploypradith, Poolsak Sahakitpichan, Somsak Ruchirawat\*

 **$\gamma$ -Amino vinyl sulfoxides in asymmetric synthesis. Synthesis of optically pure  $\alpha$ -substituted  $\beta$ -amino nitriles**

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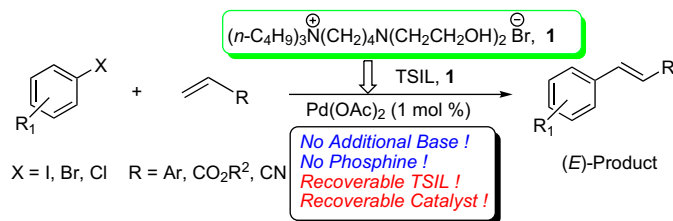
Ricardo Alfaro, Francisco Yuste\*, Benjamín Ortiz, Rubén Sánchez-Obregón, José L. García Ruano\*



**Task-specific ionic liquid as base, ligand and reaction medium for the palladium-catalyzed Heck reaction**

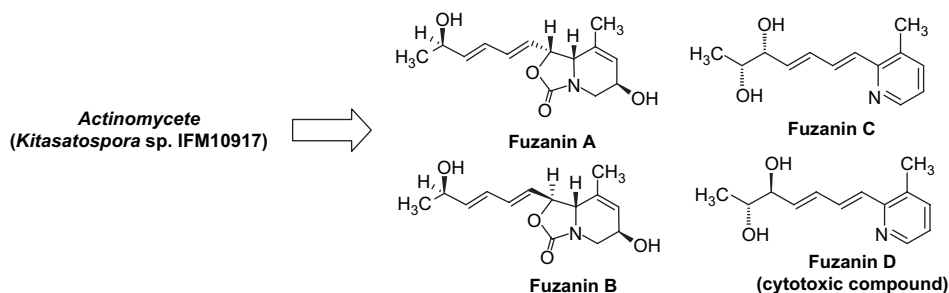
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Lei Wang\*, Hongji Li, Pinhua Li

**Isolation of new carbamate- or pyridine-containing natural products, fuzanins A, B, C, and D from *Kitasatospora* sp. IFM10917**

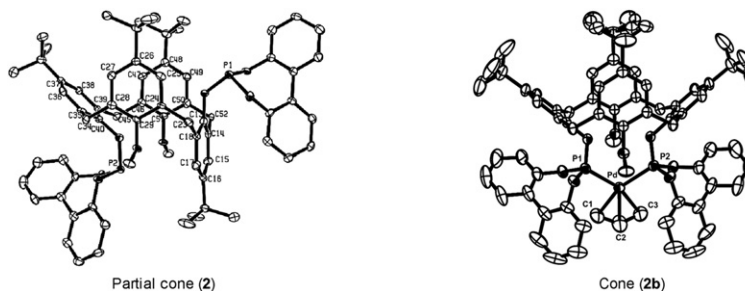
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Wataru Aida, Takashi Ohtsuki, Xiaofan Li, Masami Ishibashi\*

**Calix[4]arene bisphosphite ligands bearing two distal 2,2'-biphenyldioxy or 2,2'-binaphthyldioxy moieties: conformational flexibility and allyl–palladium complexes**

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Arindam Sarkar, Setharampattu S. Krishnamurthy\*, Munirathinam Nethaji

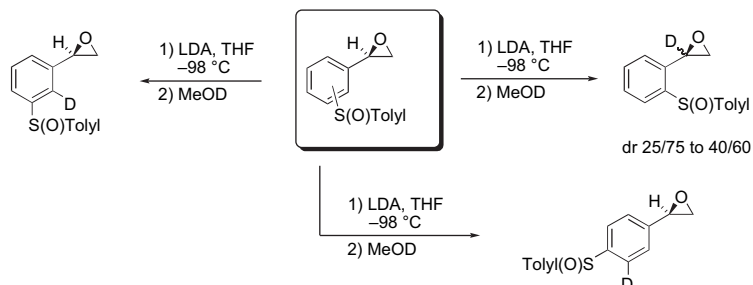


Conformational exchange of novel calix[4]arene bisphosphite ligands and its freezing by complexation are presented.

**Influence of an *ortho*-sulfinyl group on the configurational stability of  $\alpha$ -lithiated aryloxiranes: deuteration of tolylsulfinyl styrene oxides**

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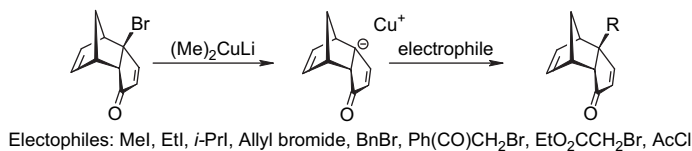
Vito Capriati, Saverio Florio\*, Renzo Luisi, Antonio Salomone, Maria Giovanna Tocco, Ana M. Martín Castro, José Luis García Ruano\*, Esther Torrente



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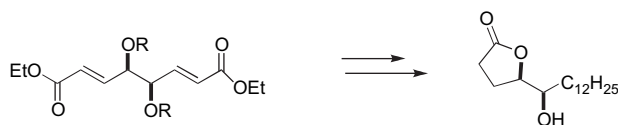
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**Synthesis of  $\gamma$ -lactones by desymmetrization. A synthesis of (–)-muricatacin**

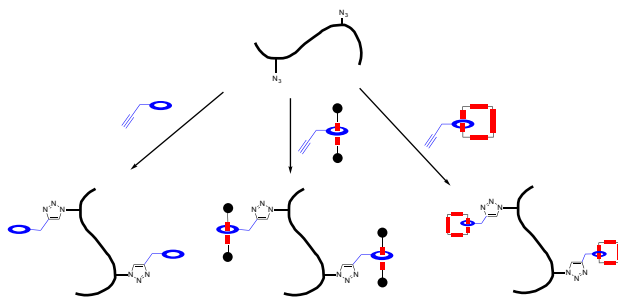
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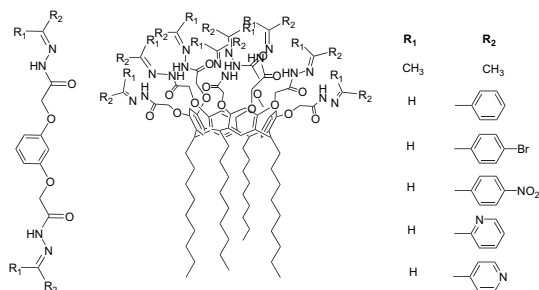
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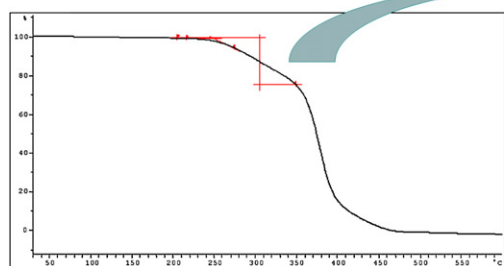
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**Studies on the Toxic Oil Syndrome: proposal of a mechanism for the thermal conversion of 3-N-phenylamino-1,2-propanediol esters into anilides under deodorisation conditions**

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