

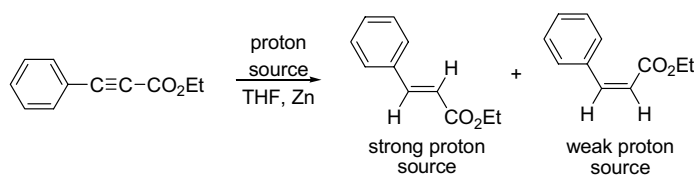
## Contents

### COMMUNICATIONS

#### Zinc reduction of alkynes

pp 5613–5615

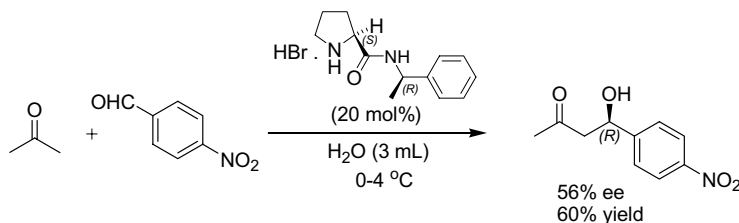
Don Kaufman,\* Erin Johnson and Michael D. Mosher



#### Protonated chiral prolinamide catalyzed enantioselective direct aldol reaction in water

pp 5617–5619

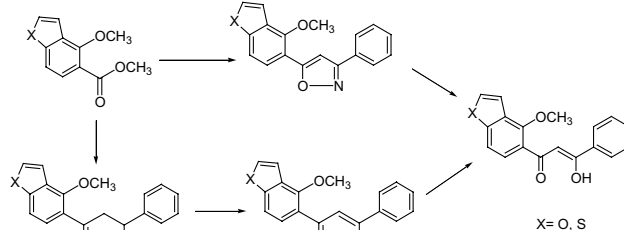
Swapandeep Singh Chimni,\* Dinesh Mahajan and V. V. Suresh Babu



#### An efficient route for commercially viable syntheses of furan- and thiophene-anellated β-hydroxychalcones

pp 5621–5624

Prem P. Yadav, Ghufuran Ahmad and Rakesh Maurya\*

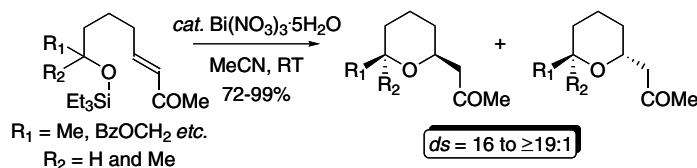


An easy and efficient approach towards commercially viable syntheses of β-hydroxychalcones containing anellated furan (pongamol) and thiophene rings is described.

### Stereoselective construction of *cis*-2,6-disubstituted tetrahydropyrans via an intramolecular bismuth-mediated oxa-conjugate addition reaction

pp 5625–5627

P. Andrew Evans\* and William J. Andrews



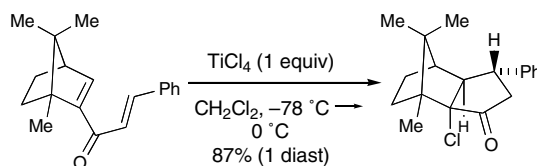
The intramolecular oxa-conjugate addition of tethered triethylsilyloxy substituted  $\alpha,\beta$ -unsaturated ketones mediated by bismuth(III) nitrate pentahydrate provides a mild and efficient method for the stereoselective construction of *cis*-2,6-disubstituted tetrahydropyrans.



### Halide trapping of the Nazarov intermediate in strained polycyclic systems: a new interrupted Nazarov reaction

pp 5629–5632

Timothy D. White and F. G. West\*

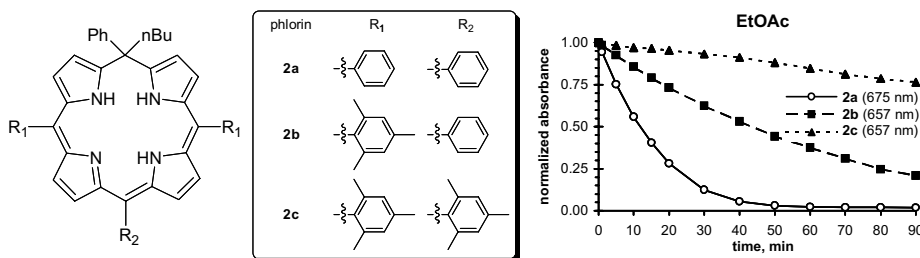


Upon treatment with  $\text{TiCl}_4$ , various bridged bicyclic dienones underwent Nazarov electrocyclization and efficient chloride trapping of the resulting cyclopentenyl cation. By this process, up to four new stereocenters are created with high control.

### Enhancement of phlorin stability by the incorporation of *meso*-mesityl substituents

pp 5633–5637

Timothy D. LeSaulnier, Brad W. Graham and G. Richard Geier, III\*



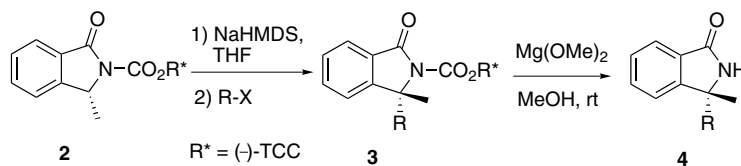
The effect of sterically bulky mesityl substituents on the stability towards light and air of dilute solutions of *meso*-substituted phlorins was examined.



### Asymmetric synthesis of 3,3-disubstituted isoindolinones

pp 5639–5642

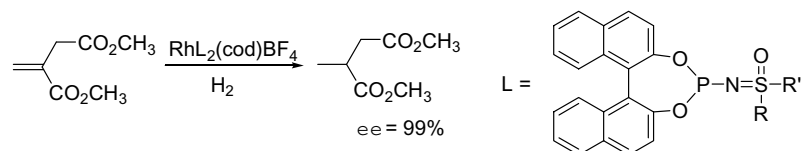
Daniel L. Comins\* and Anne-Cécile Hiebel



**BINOL-derived *N*-phosphino sulfoximines as ligands for asymmetric catalysis**

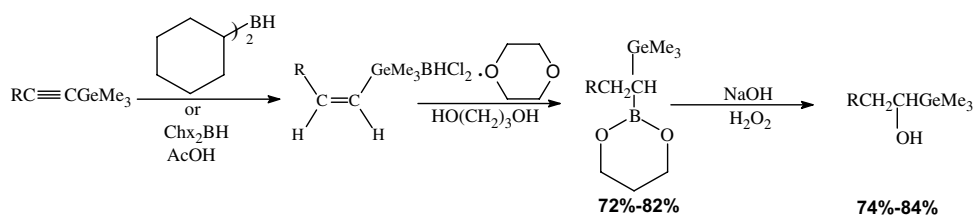
pp 5643–5646

Manfred T. Reetz,\* Oleg G. Bondarev, Hans-Joachim Gais\* and Carsten Bolm

**A simple synthesis of B-2-(1-trimethylgermyl-1-alkyl)-1,3,2-dioxaborinanes. Isolation and selective oxidation to 1-trimethylgermyl-1-alkanols**

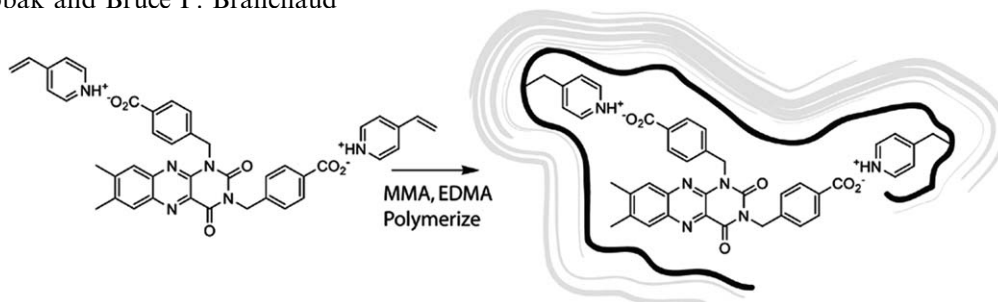
pp 5647–5649

Narayan G. Bhat,\* Matthew B. Carroll and Wendy C. Lai

**First example of a molecularly imprinted polymer incorporating a difunctionalized alloxazine flavin isomer**

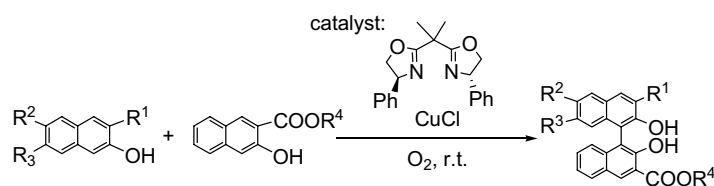
pp 5651–5654

Andrew J. Robak and Bruce P. Branchaud\*

**Highly selective oxidative cross-coupling of 2-naphthol derivatives with chiral copper(I)-bisoxazoline catalysts**

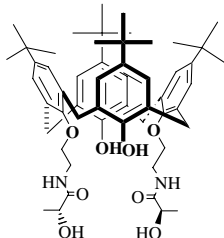
pp 5655–5657

Tomohisa Temma and Shigeki Habaue\*

R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> = H, R<sup>4</sup> = CH<sub>3</sub>: Cross-coupling selectivity = 95.8%

**Synthesis, structure and anion binding properties of lower rim  $\alpha$ -hydroxyamide calix[4]arene derivatives** pp 5659–5663

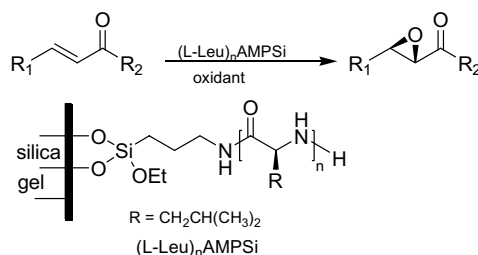
Sofiane Ben Sdira, Caroline Felix,\* Marie-Béatrice Giudicelli, Francis Vocanson, Monique Perrin and Roger Lamartine



A new family of *p*-*tert*-butylcalix[4]arenes functionalized at the lower rim with  $\alpha$ -ketoamide or  $\alpha$ -hydroxyamide functions has been prepared. Host–guest complexation properties towards various anions of a chiral  $\alpha$ -hydroxyamide have been examined by  $^1\text{H}$  NMR spectroscopy. This new receptor has shown promising selectivity for  $\text{H}_2\text{PO}_4^-$  and *N*-tosyl-(*L*)-alaninate.

**Asymmetric epoxidation of  $\alpha,\beta$ -unsaturated ketones catalyzed by silica-grafted poly-(*L*)-leucine catalysts** pp 5665–5668

Hua Yi, Gang Zou, Qiang Li, Qun Chen, Jie Tang\* and Ming-yuan He

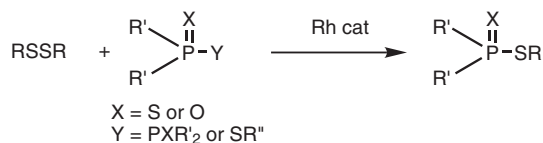


A readily recoverable silica-grafted poly(amino acid) catalyst has been developed for Juliá–Colonna asymmetric epoxidation of  $\alpha,\beta$ -unsaturated aromatic ketones.

**Rhodium-catalyzed thiophosphinylation and phosphinylation reactions of disulfides and diselenides**

pp 5669–5671

Mieko Arisawa, Tetsuya Ono and Masahiko Yamaguchi\*


**Preference of intra- and intermolecular cation– $\pi$  interaction: *cis*–*trans* geometrical effects of amide bond on the interaction mode**

pp 5673–5676

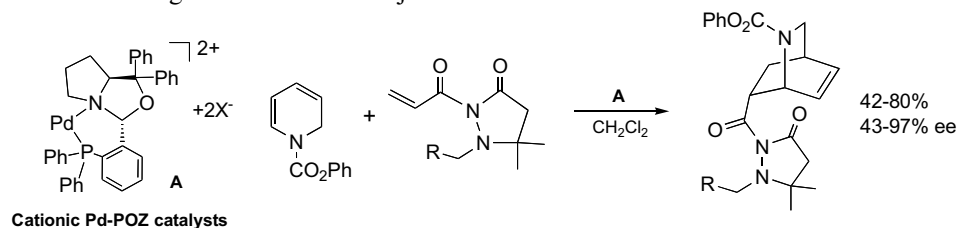
Shinji Yamada,\* Yuka Morimoto and Tomoko Misono



### The highly enantioselective Diels–Alder reaction of 1,2-dihydropyridine using chiral cationic palladium–phosphinooxazolidine catalyst for the synthesis of chiral isoquinuclidines

pp 5677–5681

Hiroto Nakano,\* Natsumi Tsugawa and Reiko Fujita

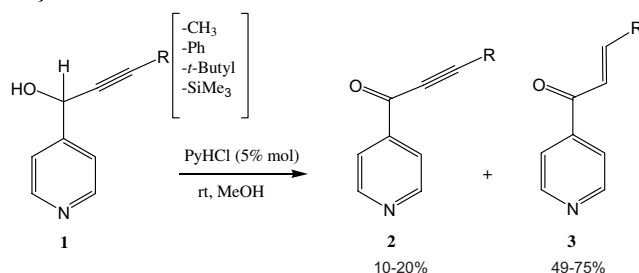


The DA reaction of 1-phenoxy-1,2-dihydropyridine with 1-substituted 2-acryloyl-pyrazolidin-3-ones using cationic chiral Pd-phosphinooxazolidine catalyst afforded chiral isoquinuclidines with an excellent optical purity (up to 97% ee).

### Facile conversion of pyridine propargylic alcohols to enones: stereochemistry of protonation of allenol

pp 5683–5685

Ramazan Erenler and Jean-François Biellmann\*

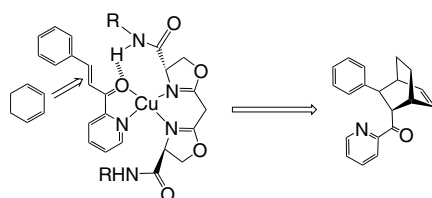


(Z)-Enone 3 was detected at early times except for R = CH<sub>3</sub>. When carried out in MeO<sup>2</sup>H, the two vinylic hydrogens of enone 3 are deuterated.

### Preparation of new bis(oxazoline) ligand bearing non-covalent interaction sites and an application in the highly asymmetric Diels–Alder reaction

pp 5687–5690

Kenji Matsumoto, Koichiro Jitsukawa\* and Hideki Masuda



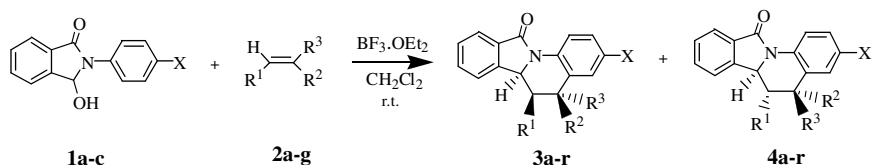
High catalytic performance was achieved through the interligand hydrogen bonding interaction.



### A facile synthesis of isoindolo[2,1-a]quinolin-11-one via [4+2] reactions of N-acyliminium intermediates with olefins

pp 5691–5694

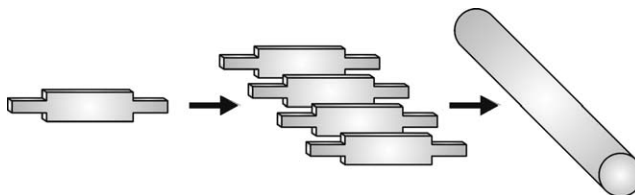
Wei Zhang,\* Airong Zheng, Zhengang Liu, Li Yang and Zhongli Liu



**Self-assembly of naphthalene diimides into cylindrical microstructures**

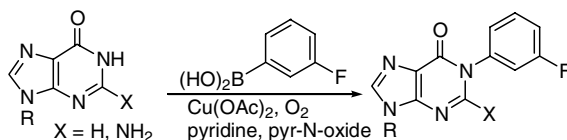
pp 5695–5698

Massimiliano Tomasulo, David M. Naistat, Andrew J. P. White, David J. Williams and Francisco M. Raymo\*

**Copper catalyzed arylation with boronic acids for the synthesis of *N*<sup>1</sup>-aryl purine nucleosides**

pp 5699–5702

J. Jacob Strouse, Marjan Jeselnik, Frederick Tapaha, Colleen B. Jonsson, William B. Parker and Jeffrey B. Arterburn\*

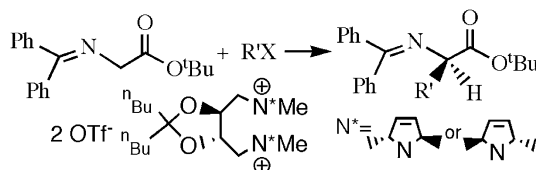


Chemoselective copper(II) mediated oxidative coupling with boronic acids was used to synthesize *N*<sup>1</sup>-aryl inosine and guanosine derivatives.

**Combining chiral elements: a novel approach to asymmetric phase-transfer catalyst design**

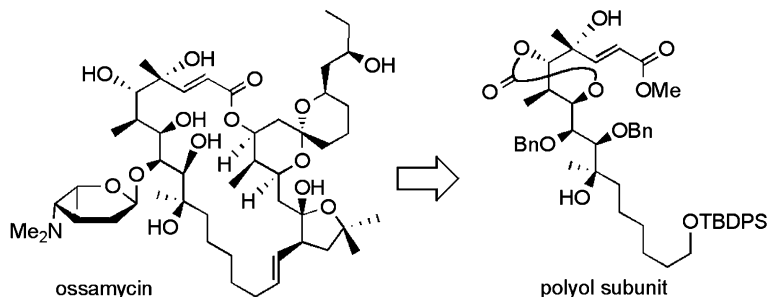
pp 5703–5705

Walter E. Kowtoniuk, Darren K. MacFarland\* and Gregory N. Grover

**Asymmetric synthesis of the polyol subunit of the macrolide antibiotic, ossamycin**

pp 5707–5709

Noriki Kutsumura and Shigeru Nishiyama\*

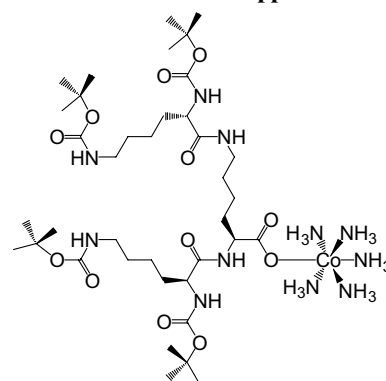


**Facile synthesis of poly-(L-lysine) dendrimers with a pentaaminecobalt(III) complex at the core**

pp 5711–5714

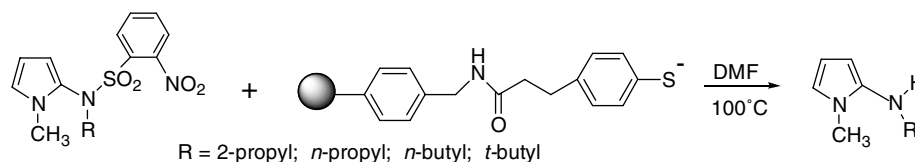
Madleine Al-Hamra and Tarek H. Ghaddar\*

The synthesis of second and third generation dendrimers based on poly-(L-lysine) with a pentaamine cobalt(III) metal complex at the core is described. The synthesis and purification of these dendrimers were facilitated by using the metal complex as the C-terminal protecting group.

**Solid phase deprotection of 2-nitrobenzenesulfonamides: synthesis of simple 2-(alkylamino)-pyrroles**

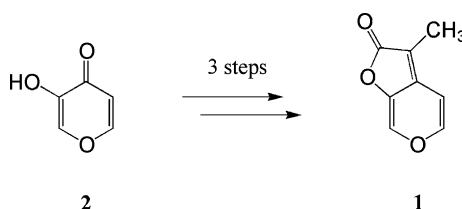
pp 5715–5717

Michael De Rosa,\* Nicola Stepani, Todd Cole, Jaclyn Fried, Lisa Huang-Pang, Lori Peacock and Michael Pro

**Synthesis of the seed germination stimulant 3-methyl-2H-furo[2,3-c]pyran-2-one**

pp 5719–5721

Gavin R. Flematti,\* Emilio L. Ghisalberti, Kingsley W. Dixon and Robert D. Trengove

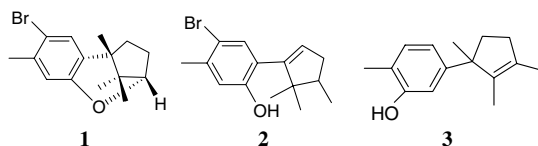


The synthesis of the potent seed germination stimulant 3-methyl-2H-furo[2,3-c]pyran-2-one **1**, obtained in three steps from pyromeconic acid **2**, is described.

**Cytotoxic cuparene sesquiterpenes from *Laurencia microcladia***

pp 5723–5726

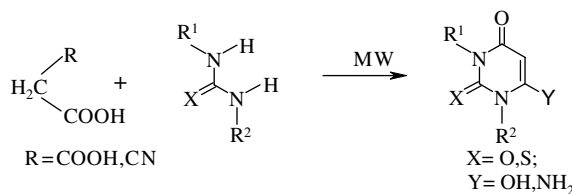
Maria Kladi, Constantinos Vagias, Giovanni Furnari, Dimitri Moreau, Christos Roussakis and Vassilios Roussis\*



### An expedient method for the synthesis of 6-substituted uracils under microwave irradiation in a solvent-free medium

pp 5727–5729

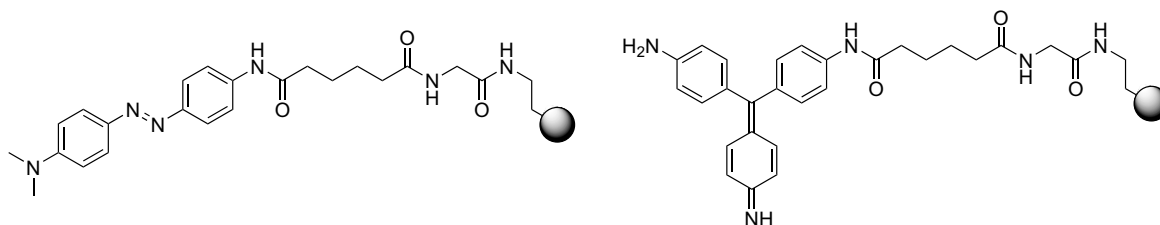
Ipsita Devi and Pulak J. Bhuyan\*



### Immobilisation and assessment of aniline dyes for non-fluorescent pH sensing applications

pp 5731–5734

Lu Shin Wong and Mark Bradley\*



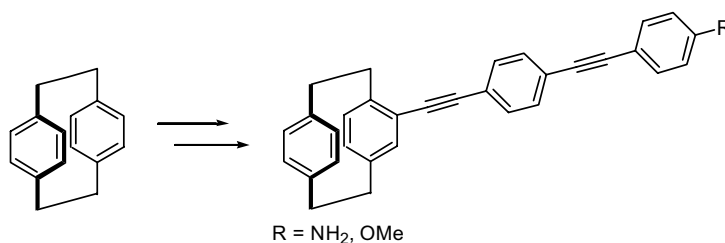
Two aniline-based indicators were immobilised on controlled pore glass and evaluated as pH sensors. The UV–vis spectrometric pH response ranges and response times were examined.



### Synthesis and structure of [2.2]paracyclophanes incorporating alkyne units in the extended linear chain

pp 5735–5737

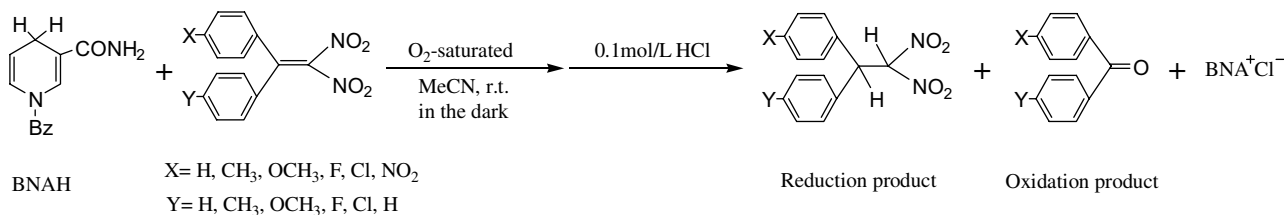
Lucio Minuti,\* Aldo Taticchi,\* Assunta Marrocchi, Selvaggia Landi and Eszter Gacs-Baitz



### Mechanistic investigation on the reaction of 1,1-di-p-substituted phenyl-2,2-dinitroethylene with 1-benzyl-1,4-dihydronicotin-amide in oxygen saturated acetonitrile—clear evidence for intermediate mechanism

pp 5739–5742

Hua-Jian Xu, Dan-Mei Dai, You-Cheng Liu,\* Jing Li, Shi-Wei Luo and Yun-Dong Wu\*



On the basis of the ratios of the reduction product to the oxidation product from the title reaction it is seen that there exists a mechanistic spectrum between polar mechanism and SET mechanism for the equivalent hydride transfer.



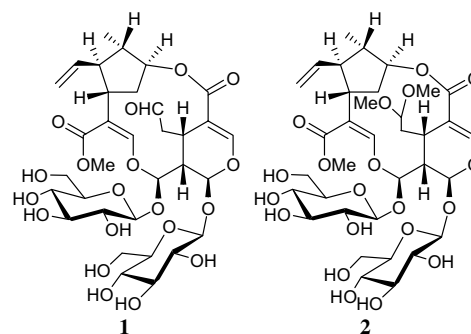


**Rapulasides A and B: two novel intermolecular rearranged biiridoid glucosides from the roots of *Heracleum rapula***

pp 5743–5746

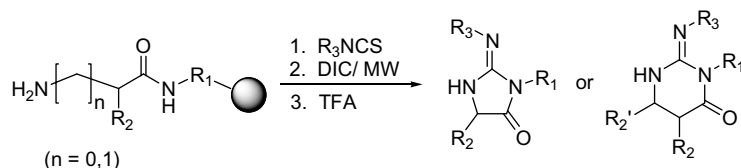
Weilie Xiao, Shenghong Li,\* Xuemei Niu, Yu Zhao and Handong Sun\*

Two novel intermolecular rearranged biiridoid glucosides, rapulasides A and B (**1** and **2**), have been isolated from the roots of *Heracleum rapula*. Their structures were identified by extensive spectral analysis especially different NMR techniques. NOESY experiment, with the help of Dreiding molecular model, was used to elucidate their relative stereochemistry. Both compounds were tested for their inhibitory effects on rabbit platelet aggregation induced by PAF, ADP, or AA, respectively. Only trends of inhibition were observed for them.

**Microwave assisted DIC-promoted intramolecular cyclization for solid phase synthesis of trisubstituted imidazolidinones and pyrimidinones**

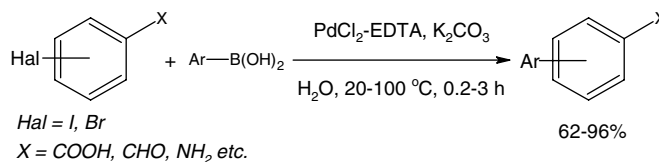
pp 5747–5750

Xiaobing Wang, Seth Dixon, Nianhuan Yao, Mark J. Kurth and Kit S. Lam\*

**Pd-EDTA as an efficient catalyst for Suzuki–Miyaura reactions in water**

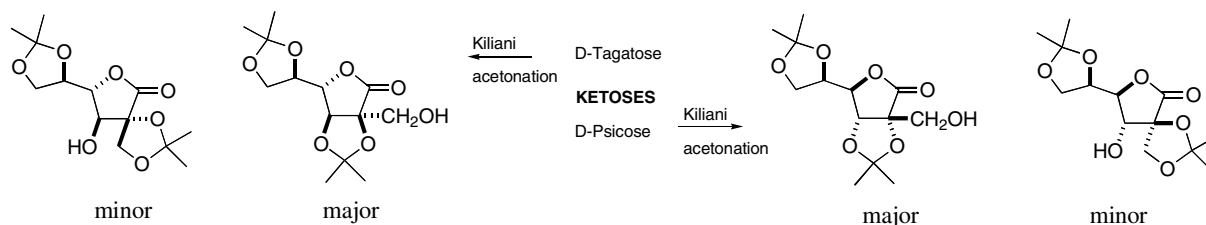
pp 5751–5754

Dmitrii N. Korolev and Nikolay A. Bumagin\*

**Kiliani reactions on ketoses: branched carbohydrate building blocks from D-tagatose and D-psicose**

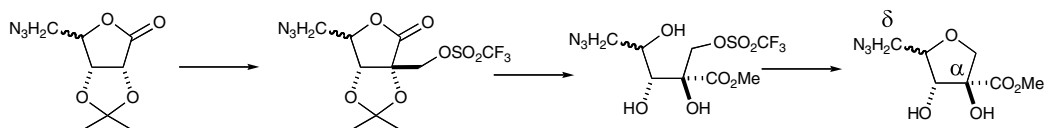
pp 5755–5759

Raquel Soengas, Ken Izumori, Michela Iezzi Simone, David J. Watkin, Ulla P. Skytte, Wim Soetaert and George W. J. Fleet\*



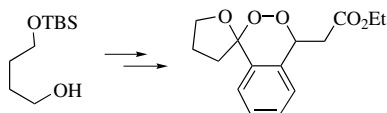
**Branched tetrahydrofuran  $\alpha,\alpha$ -disubstituted- $\delta$ -sugar amino acid scaffolds from branched sugar lactones: a new family of foldamers?**

Michela Iezzi Simone, Raquel Soengas, Christopher R. Newton, David J. Watkin and George W. J. Fleet\*


**Synthesis of 1,6,7-trioxa-spiro[4.5]decanes**

Hong-Xia Jin, He-Hua Liu, Qi Zhang and Yikang Wu\*

pp 5767–5769

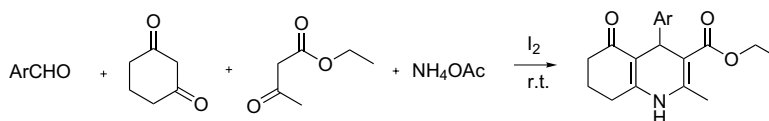


Four novel spiro-peroxides were designed and synthesized.

**Molecular iodine-catalyzed one-pot synthesis of 4-substituted-1,4-dihydropyridine derivatives via Hantzsch reaction**

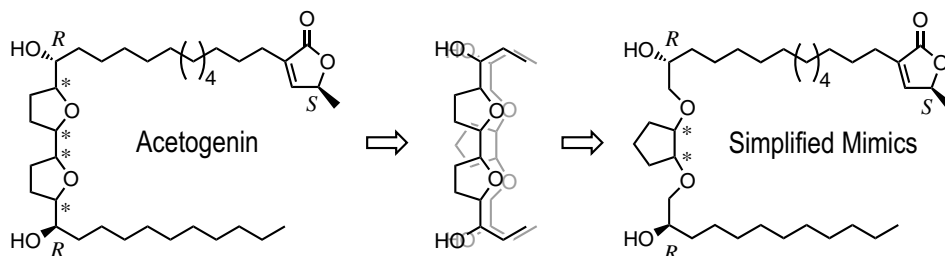
Shengkai Ko, M. N. V. Sastry, Chunchi Lin and Ching-Fa Yao\*

pp 5771–5774


**Synthesis of non-THF analogs of acetogenin toward simplified mimics**

Daisuke Fujita, Naoya Ichimaru, Masato Abe, Masatoshi Murai, Takeshi Hamada, Takaaki Nishioka and Hideto Miyoshi\*

pp 5775–5779



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\*Corresponding author

①<sup>+</sup> Supplementary data available via ScienceDirect**COVER**

Highly efficient asymmetric synthesis of isoquinuclidines was achieved by the enantioselective Diels–Alder reaction of 1-phenoxy-1,2-dihydropyridine with 1-substituted 2-acryloyl-pyrazolidin-3-ones using cationic chiral palladium–phosphinooxazolidine catalyst. *Tetrahedron Letters* **2005**, 46, 5677–5681.

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ISSN 0040-4039