

# Tetrahedron Letters Vol. 48, No. 26, 2007

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### COMMUNICATIONS

An efficient synthesis of 4-bromo-N-substituted oxindoles by an intramolecular copper-catalyzed pp 4461–4465 amidation reaction

Adri van den Hoogenband,\* Jos H. M. Lange, Jack A. J. den Hartog, Remco Henzen and Jan Willem Terpstra



A highly efficient synthetic approach to novel 4-bromo-N-substituted oxindoles is described.

Synthesis of novel texaphyrins containing lanthanides and boron Achintya K. Bandyopadhyaya, Sureshbabu Narayanasamy,\* Rolf F. Barth and Werner Tjarks pp 4467-4469

pp 4471-4475



# Synthesis and properties of 2-(2-pyridyl)-1-azaazulene

Mitsunori Oda,\* Kazutaka Ogura, Nguyen Chung Thanh, Sayaka Kishi, Shigeyasu Kuroda, Kunihide Fujimori, Tomonori Noda and Noritaka Abe\*



## Quencher-fluorophore ensemble for detection of pyrophosphate in water Dong Hoon Lee, Soon Young Kim and Jong-In Hong\*

pp 4477-4480



A new synthetic route to (-)-cassine via asymmetric aminohydroxylation Guncheol Kim<sup>\*</sup> and Nakjeong Kim





# Cortistatins J, K, L, novel abeo-9(10-19)-androstane-type steroidal alkaloids with isoquinoline unit, from pp 4485–4488 marine sponge *Corticium simplex*

Shunji Aoki, Yasuo Watanabe, Daiki Tanabe, Andi Setiawan, Masayoshi Arai and Motomasa Kobayashi\*



Three novel anti-angiogenic steroidal alkaloids, cortistatins J (1), K (2), L (3), have been isolated from the Indonesian marine sponge *Corticium simplex*. Cortistatin J showed cytostatic anti-proliferative activity against HUVECs at 8 nM, with 300–1000-fold selective index.

### Catalytic investigations of calix[4]arene scaffold based phase transfer catalyst Pallavi Srivastava and Rajendra Srivastava\*

Calix[4]arene scaffold based quaternary ammonium salts as multi-site phase transfer catalysts were prepared and their catalytic activities were investigated for Darzens condensation, O/N-alkylation reactions and ethyl benzene oxidation. These calix[4]arene based multi-site phase transfer catalysts showed significant high catalytic activity as compared to single-site phase transfer catalysts.





4450

H. Surya Prakash Rao,\* S. Jothilingam, K. Vasantham and Hans W. Scheeren



Reagents and conditions: (i) 85% HCOOH, concd H<sub>2</sub>SO<sub>4</sub> (cat), MW, 2 min, 76–96%.

Soluble polyisobutylene-supported reusable catalysts for olefin cyclopropanation David E. Bergbreiter<sup>\*</sup> and Jianhua Tian



# An efficient and fast synthesis of 4-aryl-3,4-dihydrocoumarins by (CF<sub>3</sub>SO<sub>3</sub>)<sub>3</sub>Y catalysis under microwave pp 4505–4508 irradiation

Cláudio E. Rodrigues-Santos and Aurea Echevarria\*



Suppression of racemization in the carbonylation of amino acid-derived aryl triflates Jonathan B. Grimm,\* Kevin J. Wilson and David J. Witter

pp 4509-4513

 $HO_{2}C \xrightarrow{OH} 3 \text{ steps} R^{1} \xrightarrow{O} H^{1} \xrightarrow{O} DTf \\ NHBoc \\ >98\% \text{ ee} \\ R^{2} = H 92-99\% \text{ ee} \\ R^{2} = H 88-99\% \text$ 



pp 4499-4503

## Highly regioselective radical alkylation of 3-substituted pyrroles Oscar Guadarrama-Morales, Francisco Méndez and Luis D. Miranda\*

pp 4515-4518

pp 4519-4522



# Design and synthesis of a novel ring-expanded 4'-thio-apio-nucleoside derivatives Yuichi Yoshimura,\* Yoshiko Yamazaki, Masatoshi Kawahata, Kentaro Yamaguchi and Hiroki Takahata\*



#### Synthesis of the C8–C20 and C21–C30 segments of pectenotoxin 2

Kenshu Fujiwara,\* Yu-ichi Aki, Fuyuki Yamamoto, Mariko Kawamura, Masanori Kobayashi, Azusa Okano, Daisuke Awakura, Shunsuke Shiga, Akio Murai, Hidetoshi Kawai and Takanori Suzuki



# A novel system for decarboxylative bromination

Vikas N. Telvekar\* and Somsundaram N. Chettiar



pp 4523-4527

pp 4529-4532

#### Synthesis of an oxa-lipoic acid

D. Srinivasa Reddy,\* P. Srinivas, D. Balasubrahmanyam and Javed Iqbal



THF. rt

Fe-cat. Et<sub>3</sub>Al

MeOOC

MeOOC,

COOEt

 $\begin{array}{c} \text{1. Fe-cat.} \\ \xrightarrow{\text{Et}_3\text{Al}} & \text{H} \\ \hline \end{array} \\ \xrightarrow{2. \text{H}^+} & \text{X} \\ \hline \end{array} \\ \begin{array}{c} \text{Cl} \\ \text{Cl} \\ \end{array}$ 

 $X = C(COOEt)_2$ 

endo-3aa

COOEt

exo-3aa

Monalisa Boruah,\* Dilip Konwar and Saikat Das Sharma

1a



 $Ph_{\sim}N_{\sim}COOEt + \_COOMe_{KF/Al_2O_3}$ 

2a





X = NR<sub>2</sub> NHR, NH<sub>2</sub> CHO, OH, CO<sub>2</sub>Li



pp 4533-4534

pp 4539-4541





Mônica M. Linn, Daysi C. Poncio and Vanderlei G. Machado\*



An improved synthesis of 2-(1,2,4-thiadiazol-5-yl)pyridine by interception of an intermediate involved in a pp 4553–4555 competing cyclisation reaction

Chris Richardson and Peter J. Steel\*



*N*-Dimethylphosphoryl-protected glucosamine trichloroacetimidate as an effective glycosylation donor pp 4557–4560 You Yang and Biao Yu\*



Sulfoxide-directed desymmetrisation of cyclohexa-1,4-dienes Mark C. Elliott,\* Nahed Nasser Eid El Sayed and Li-ling Ooi pp 4561-4564

pp 4547-4551



The cyclisation of enolate anions onto cyclohexadienes can be controlled by the use of a chiral sulfoxide.

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An efficient synthesis of 2-(1-methyl-1,2,5,6-tetrahydropyridin-3-yl)morpholine: a potent M<sub>1</sub> selective pp 4565–4568 muscarinic agonist

Y. C. Sunil Kumar, M. P. Sadashiva and K. S. Rangappa\*



# An efficient bakers' yeast catalyzed synthesis of 3,4-dihydropyrimidin-2-(1*H*)-ones Atul Kumar<sup>\*</sup> and Ram Awatar Maurya



## Revised structure of palau'amine

Malcolm S. Buchanan, Anthony R. Carroll and Ronald J. Quinn\*

The structure of palau'amine, a bioactive hexacyclic pyrrole–imidazole alkaloid, from the sponge *Stylotella aurantium* was revised by detailed analysis of its 1D NOESY and 2D ROESY data.

#### SnCl<sub>4</sub> and SbCl<sub>5</sub> promoted aromatization of enamines

Mohammad Ali Bigdeli,\* Abbas Rahmati, Hossein Abbasi-Ghadim and Gholam Hossein Mahdavinia



pp 4573-4574



# Cyclic disulfides as functional mimics of the histone deacetylase inhibitor FK-228

Jared R. Mays, José A. Restituyo, Rebeccah J. Katzenberger, David A. Wassarman and Scott R. Rajski\*



The synthesis and preliminary biological assessment of a panel of diversifiable cyclic disulfides is described. These agents are functional mimics of the potent histone deacetylase inhibitor FK-228.





The formyl group was successfully removed from N-aryl formamide by KF on a solid support of basic Al<sub>2</sub>O<sub>3</sub> in 4–20 min with microwave irradiation.

ОН

Resolution

CO<sub>2</sub>H

ŇНз

>99% ee

Single crystallization

## A highly efficient resolution protocol for 2'-halo-a-methylbenzylamines

Liane M. Klingensmith, Kelly A. Nadeau and George A. Moniz\*



 $NH_2$ 

(+/-)

X=F, CI, Br



A fast and efficient bromination method has been developed for isoxazoles and pyrazoles using microwave irradiation. This method gives good yields for the bromination of highly unreactive isoxazoles and pyrazoles.

#### 4456

pp 4585-4588

pp 4579-4583



pp 4589-4593

pp 4595-4599

pp 4601-4603 Synthesis and biological activity of a stereoisomeric mixture of the mating hormone of Phytophthora Arata Yajima,\* Naoki Kawanishi, Jianhua Qi, Tomoyo Asano, Youji Sakagami, Tomoo Nukada and Goro Yabuta



A stereoisomeric mixture of hormone  $\alpha 1$ , the mating hormone of *Phytophthora*, was synthesized and confirmed to be bioactive.

Studies toward the synthesis of phomactin A. An approach to the macrocyclic core pp 4605-4607 Dawei Teng, Bo Wang, Alex J. Augatis and Nancy I. Totah\*



#### pp 4609-4611 $\alpha$ -(1*H*-Imidazol-1-vl)alkyl (IMIDA) carboxylic acid esters as prodrugs of carboxylic acid containing drugs

Susruta Majumdar, Maren Mueller Spaeth, Sashikala Sivendran, Juha Juntunen, Joshua D. Thomas and K. B. Sloan\*



A pseudopolyrotaxane consisting in PPV threaded in multiple cucurbiturils Avelino Corma,\* Hermenegildo Garcia\* and Pedro Montes-Navajas

pp 4613-4617

A necklace made of conducting polymer inserted in CB[7] has been prepared by polymerization of the monomer-CB complex.



# AgOAc catalyzed asymmetric [3+2] cycloaddition of azomethine ylides with chiral ferrocene derived P,S pp 4619–4622 ligands

Wei Zeng and Yong-Gui Zhou\*



Ferrocene derived P,S-heterodonor ligands were effectively used in AgOAc catalyzed asymmetric cycloaddition of azomethine ylides. The roles of planar chirality and electronic properties of the phosphorous substituents have been examined, and up to 93% ee was obtained.

Asymmetric enamide hydrogenation in the synthesis of *N*-acetylcolchinol: a key intermediate for ZD6126 pp 4623–4626 Ian C. Lennon, James A. Ramsden,\* Catherine J. Brear, Simon D. Broady and James C. Muir



Catalytic asymmetric hydrogenation with either ruthenium or rhodium FerroTANE catalysts provides an efficient route to *N*-acetylcolchinol, a key intermediate in the synthesis of the prodrug ZD6126.

Asymmetric synthesis of (S)-(-)-N-acetylcolchinol via Ullmann biaryl coupling Simon D. Broady, Michael D. Golden, John Leonard,\* James C. Muir and Mickael Maudet



# Enzymatic kinetic resolution of racemic 4-tetrahydropyranols by *Candida rugosa* lipase J. S. Yadav,\* B. V. Subba Reddy, B. Padmavani, Ch. Venugopal and A. Bhaskar Rao

pp 4631-4633

OH *Candida rugosa* lipase OAc OH

$$Ar \begin{pmatrix} O \\ O \end{pmatrix} \xrightarrow{} Vinyl acetate, cyclohexane, r.t. Ar \begin{pmatrix} O \\ O \end{pmatrix} + Ar \begin{pmatrix} O \\ Ar \end{pmatrix} O$$
  
(±)-1 (+)-2 (-)-3

pp 4627–4630

# Revisit to the reaction of [60]fullerene with nitrile ylides generated from imidoyl chlorides and triethylamine

Guan-Wu Wang\* and Hai-Tao Yang



Novel generation of (α-ketovinyl)thioketenes as intermediates through tandem [2,3]/[3,3] sigmatropic pp 4639–4642 rearrangement of alkynyl propargyl sulfoxides

Shigenobu Aoyagi,\* Muneyoshi Makabe, Kazuaki Shimada, Yuji Takikawa and Chizuko Kabuto



## **OTHER CONTENT**

#### Corrigendum

\*Corresponding author ()<sup>+</sup> Supplementary data available via ScienceDirect

Available online at www.sciencedirect.com



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