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### Tetrahedron Letters Vol. 51, No. 14, 2010





A concise enantioselective approach to the core of the marine natural product awajanomycin is described, beginning with L-alanine.

Awajanomycin

An effective C-C double bond formation via Cu(I)-catalyzed dehydrogenation Thomas A. Ramirez, Baoguo Zhao, Yian Shi\*

ÕН

 $H_3C(H_2C)_6$ 

COMMUNICATIONS



pp 1822-1825

NBn



etrahedro





#### **NMR Studies and electrophilic properties of triphenylphosphine–trifluoromethanesulfonic anhydride; a remarkable dehydrating reagent system for the conversion of aldoximes into nitriles** Ziad Moussa\*, Saleh A. Ahmed, Ahmad S. ElDouhaibi, Shaya Y. Al-Raqa

RCH=N-OH Ph<sub>3</sub>P (1.3 equiv.), Tf<sub>2</sub>O (1.0 equiv.) Et<sub>3</sub>N (2 equiv.), CH<sub>2</sub>Cl<sub>2</sub>, 0 °C, 10 min R−C≡N

The electrophilic properties of triphenyl(trifluoromethylsulfonyloxy)phosphonium trifluoromethanesulfinate and its corresponding bis(triphenyl)oxodiphosphonium trifluoromethanesulfinate dimer system have been exploited in the development of a mild method for converting aldoximes into nitriles.

#### Synthesis of nontrivial quinopimaric acid derivatives by oxidation with dimethyldioxirane

DMDO

pp 1832-1835

Oxana B. Kazakova<sup>\*</sup>, Elena V. Tretyakova, Olga S. Kukovinets, Albina R. Abdrakhmanova, Nataliya N. Kabalnova, Dmitri V. Kazakov, Genrikh A. Tolstikov, Aidar T. Gubaidullin

Ē

COOCH3

Dimethyldioxirane (DMDO) is employed under mild conditions to achieve the regioselective direct synthesis of valuable and previously inaccessible oxyfunctionalized derivatives of dihydroquinopimaric acid.

H

СООСН3

## Methyl 3-bromomethyl-3-butenoate as an isopentane building block for the stereoselective preparation of (*S*)-4-methyl-3,6-dihydro-2*H*-pyran-2-carbaldehyde and (+)-faranal

Iryna V. Mineyeva, Oleg G. Kulinkovich\*



#### Diselenophosphinates of lupinine or anabasine via a new three-component reaction of secondary phosphines, pp 1840elemental selenium, and amines

Nina K. Gusarova, Alexander V. Artem'ev, Svetlana F. Malysheva, Sergei V. Fedorov, Olga N. Kazheva, Grigorii G. Alexandrov, Oleg A. Dyachenko, Boris A. Trofimov\*



pp 1836-1839

pp 1840-1843

pp 1826-1831

Normal Heck reaction

#### Synthesis of 2-substituted indoles via a palladium-catalyzed domino Heck reaction and dealkylation Hui Mao, Jie-Ping Wan, Yuanjiang Pan, Cuirong Sun\*



Direct benzylation and allylic alkylation in high-temperature water without added catalysts Tsunehisa Hirashita\*, Shō Kuwahara, Sota Okochi, Makoto Tsuji, Shuki Araki



pp 1852-1855



[Omim][BF4], a green and recyclable ionic liquid medium for the one-pot chemoselective synthesis of benzoxazinones

Ali Sharifi\*, Mehdi Barazandeh, M. Saeed Abaee, Mojtaba Mirzaei



Total synthesis of resolvin E2

Yusuke Kosaki, Narihito Ogawa, Yuichi Kobayashi\*



pp 1844-1846

pp 1847-1851



pp 1856-1859

### Copper-bipyridine-catalyzed enantioselective $\alpha$ -amination of $\beta$ -keto esters

Subrata Ghosh, Mecheril Valsan Nandakumar, Harald Krautscheid, Christoph Schneider\*

pp 1860-1862

pp 1863-1866



# Reaction of Dess–Martin periodinane with 2-(alkylselenyl)pyridines. Dehydration of primary alcohols under extraordinarily mild conditions

Thanos Andreou, Jordi Burés, Jaume Vilarrasa\*



# Efficient alternative for the reduction of *N*-trichloroacetyl groups in synthetic chondroitin oligosaccharide intermediates

Aude Vibert, Chrystel Lopin-Bon, Jean-Claude Jacquinet\*



An efficient alternative for the reduction of N-trichloroacetyl groups in synthetic chondroitin oligosaccharide intermediates is reported.

#### First total synthesis of (+)-Carainterol A

Kaiqing Ma, Chunbo Zhang, Mingming Liu, Yong Chu, Lu Zhou, Changqi Hu, Deyong Ye\*



pp 1867-1869

pp 1870-1872

Triphenylphosphine-catalysed one-pot synthesis of  $\gamma$ -butyrolactone derivatives and highly substituted enones via pp 1873-1875 reaction of dimethyl acetylenedicarboxylate and aryl aldehydes

Mohammad Bayat\*, Hossein Imanieh, Fatemeh Hassanzadeh

$$PPh_{3} + MeO_{2}C = CO_{2}Me + Ar H \xrightarrow{O} H \xrightarrow{CH_{2}Cl_{2}} O \xrightarrow{O} Ar + MeO_{2}C \xrightarrow{CO_{2}Me} Ar \xrightarrow{H} O \xrightarrow{CO_{2}Me} Ar \xrightarrow{CO_{2}$$

 $\cap$ 

ΗÒ

(-)-Diversifolin (1)

#### Second-generation total synthesis of (-)-diversifolin

TESŌ

Kazuma Tsuboi, Tomoaki Nakamura, Takahiro Suzuki, Atsuo Nakazaki, Susumu Kobayashi\*

RCM



Vincent Mascitti\*, Ralph P. Robinson, Cathy Préville, Benjamin A. Thuma, Christopher L. Carr, Matthew R. Reese, Robert J. Maguire, Michael T. Leininger, André Lowe, Claire M. Steppan

HŌ



Several syntheses of C-5-spirocycle-containing C-glycosides are discussed. A multigram-scale synthesis capitalizing on a one-pot aldol-Cannizzaro sequence is described. Spiro oxetane formation using an unprotected penta-ol C-glycoside as substrate is also exemplified.

#### Direct asymmetric aldol reaction of acetone with *α*-ketoesters catalyzed by primary-tertiary diamine organocatalysts

Zhaoqin Jiang, Yixin Lu\*



A novel primary-tertiary diamine organocatalyst-promoted enantioselective aldol reaction of acetone with  $\alpha$ -ketoesters is described.

1811

pp 1876-1879





# Catalyst/ligand-free synthesis of benzimidazoles and quinazolinones from amidines via intramolecular transamination reaction

Sahaj Gupta, Piyush K. Agarwal, Bijoy Kundu\*



An efficient catalyst/ligand-free synthesis of benzimidazoles and quinazolinones from amidines in quantitative yields has been described.

**Magnetically separable Fe<sub>3</sub>O<sub>4</sub> nanoparticles: an efficient catalyst for the synthesis of propargylamines** B. Sreedhar<sup>\*</sup>, A. Suresh Kumar, P. Surendra Reddy pp 1891-1895

pp 1887-1890



# An efficient one-pot synthesis of C<sub>2</sub>-symmetric triazolophanes by copper(I)-catalyzed azide-alkyne cycloaddition pp 1896–1898 (CuAAC) reaction

R. Rajesh, G. Periyasami, R. Raghunathan\*



#### **Gold-catalyzed cyclization of enyne-1,6-diols to substituted furans** Sundae Kim, Dongjin Kang, Seunghoon Shin, Phil Ho Lee\*



 $\begin{array}{ll} {\sf R}=\textit{n-Pr}, {\sf C}_6{\sf H}_{11}, {\sf Ph}, 4\mbox{-}{\rm Cl-C}_6{\sf H}_4, 3\mbox{-}{\sf MeO-C}_6{\sf H}_4, 4\mbox{-}{\sf MeO-C}_6{\sf H}_4 & {\sf R}^1={\sf H}, {\sf MeO-C}_6{\sf H}_4, 4\mbox{-}{\sf MeO-C}_6{\sf H}_4 & {\sf R}^1={\sf H}, {\sf M}_6{\sf H}, {\sf M}_6{\sf R}^1={\sf H}, {\sf M}_6{\sf H}, {\sf M}, {\sf M}_6{\sf H}, {\sf M}, {\sf M}, {\sf M}, {\sf M}, {\sf M},$ 

pp 1899-1901

### Transition metal-free activation of allylic acetates toward regioselective S-allylation of thiols

Amit Saha, Brindaban C. Ranu\*



Allylic acetates have been used as allylating agents under transition metal-free condition toward an economical and sustainable regioselective S-allylation of aromatic and aliphatic thiols in the presence of potassium carbonate.

## Microwave-accelerated fluorodenitrations and nitrodehalogenations: expeditious routes to labeled PET ligands and pp 1906–1909 fluoropharmaceuticals

Paul LaBeaume, Michael Placzek, Mathew Daniels, Ian Kendrick, Patrick Ng, Melissa McNeel, Roushan Afroze, Abigail Alexander, Rhiannon Thomas, Amy E. Kallmerten, Graham B. Jones\*



Methods for the expeditious fluorination of arenes have been investigated, using readily available fluoride sources. An optimized procedure for microwave-accelerated fluorodenitration has been developed, giving good to excellent yields in less than 10 min, rendering it practical for use in the preparation of F<sup>18</sup> labeled ligands for PET imaging. Application of the method in the synthesis of CNS agents is demonstrated, and a practical method for the preparation of substrates has been identified.

### Joined use of oxazolidinone and desymmetric amino protection: a new strategy for protection of glucosamine

Shih-Che Lin, Chin-Sheng Chao, Chiu-Ching Chang, Kwok-Kong T. Mong\*



### pp 1910-1913

pp 1914-1918

# Excited-state intramolecular proton transfer in 2-(2',6'-dihydroxyphenyl) benzoxazole: effect of dual hydrogen bonding on the optical properties

Wei-Hua Chen, Yi Pang\*



pp 1902-1905

# Band gap tunable for near-infrared absorbing chromophores with multi-triphenylamine and tris (thieno)hexaazatriphenylenes acceptors

Baoxiang Gao\*, Defang Xia, Yanhou Geng, Yanxiang Cheng, Lixiang Wang\*



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\*Corresponding author

()+ Supplementary data available via ScienceDirect

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