

#### Tetrahedron Letters Vol. 47, No. 23, 2006

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A regioselective synthesis of 3-benzazepinones via intramolecular hydroamidation of acetylenes Ying Yu, Gregory A. Stephenson and David Mitchell\*

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A regioselective synthesis of 3-benzazepinones by palladium-catalyzed intramolecular hydroamidation of acetylene is reported.

An approach to total synthesis of the cylindricine B pyridoquinoline subclass of tricyclic marine ascidian alkaloids

pp 3815-3818

Wenchun Chao, Yogesh R. Mahajan and Steven M. Weinreb\*

$$\begin{array}{c} \text{CI} & \text{H} \text{ O} \\ \text{H} & \text{C}_{6}\text{H}_{13} \\ \text{cylindricine B} \end{array} \\ \begin{array}{c} \text{H} & \text{O} \\ \text{N} & \text{C}_{6}\text{H}_{13} \\ \text{H} & \text{Ph} \end{array}$$

Efficient approach for the parallel solid-phase synthesis of 1,1,3,4-tetrasubstituted-5-oxopiperazin-1-ium pp 3819–3822 compounds

Adel Nefzi\* and Rodegar T. Santos

#### Facile 5-endo electrophilic cyclization of unsaturated amides with 'BuOCl/I2

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Yu Tang and Chaozhong Li\*

5-Endo cyclization of  $\beta$ ,  $\gamma$ -unsaturated amides afforded conjugated iminolactones rather than the usual  $\beta$ -iodolactones.

## The first report of unusual flipping of the cycloadducts from 1,3-dipolar cycloaddition of 3,4,5,6-tetrahydropyridine N-oxide to N-cinnamoyl piperidines

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Avijit Banerji,\* Debasish Bandyopadhyay, Piyali Sengupta, Bidyut Basak, Thierry Prangé and Alain Neuman

### Unidirectional $\alpha$ -cyclodextrin-based [2]rotaxanes bearing viologen unit on axle

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Joon Woo Park,\* Hyun Jung Song and Hye-Jin Chang

An unusual palladium-catalyzed carbonylative cyclization of  $\beta$ -bromovinyl aldehydes leading to lactones pp 3835–3837 Chan Sik Cho\* and Hyung Sup Shim

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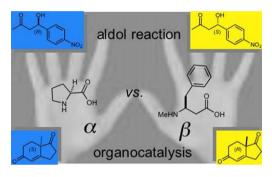
pp 3839-3842

Sébastien Noël, Laurent Djakovitch\* and Catherine Pinel

Ar 
$$=$$
 condensed aryl and heteroaryl Pd(OAc)<sub>2</sub>, nBu<sub>4</sub>NOAc Ar  $=$  ArX +  $=$  COEt  $=$  Pd(OAc)<sub>2</sub>, nBu<sub>4</sub>NOAc  $=$  Ar  $=$  COEt  $=$  Pd(OAc)<sub>2</sub>, nBu<sub>4</sub>NOAc  $=$  Ar  $=$  COEt  $=$  Pd(OAc)<sub>2</sub>, nBu<sub>4</sub>NOAc  $=$  Ar  $=$  COEt  $=$  DMF, KCI, K<sub>2</sub>CO<sub>3</sub>, 90 °C  $=$  1

# $\beta\text{-Homoamino}$ acids as catalysts in enantioselective intra- and intermolecular aldol reactions Michael Limbach

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### Synthesis and DNA triplex formation of an oligonucleotide containing an urocanamide

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Maria G. M. Purwanto and Klaus Weisz\*

#### Facile polyethylene glycol (PEG-400) promoted synthesis of $\beta$ -ketosulfones

pp 3853-3856

N. Suryakiran, T. Srikanth Reddy, K. Ashalatha, M. Lakshman and Y. Venkateswarlu\*

### Reaction of 1,4-bis(trimethylsilyl)-2-butene with aromatic aldehydes catalyzed by TiCl<sub>4</sub>: an approach to pp 3857–3860 (1-vinylallyl)benzene type derivatives

Qianqian Ding, Anne-Sophie Chapelon, Cyril Ollivier\* and Maurice Santelli\*

on, Cyril Ollivier and Maurice Santelli OH

$$R = t$$
-Bu

 $R = t$ -Bu

### Synthesis of selenocystine derivatives from cystine by applying the transformation reaction from disulfides to diselenides

pp 3861-3863

Michio Iwaoka,\* Chie Haraki, Ryuta Ooka, Masahiro Miyamoto, Ai Sugiyama, Yumiko Kohara and Noriyoshi Isozumi

$$\begin{pmatrix}
XHN & S \\
CO_2Et
\end{pmatrix}_2 & \frac{PPh_3 \cdot I_2}{DMAP} & \frac{1) 2NaHSe}{2) O_2} & \begin{pmatrix}
XHN & Se \\
CO_2Et
\end{pmatrix}_2$$

$$X = Z, Fmoc \qquad \sim 75\%$$

## Tandem oxidation processes for the regioselective preparation of 5-substituted and 6-substituted 1,2,4-triazines

pp 3865-3870

Surat Laphookhieo, Stuart Jones, Steven A. Raw, Yolanda Fernández Sainz and Richard J. K. Taylor\*

#### Phase transfer alkylation of arylacetonitriles revisited

pp 3871-3874

Michał Barbasiewicz, Karolina Marciniak and Michał Fedoryński\*

$$Ar \xrightarrow{CN} \underbrace{\begin{array}{c} sec\text{-RBr} \\ 60\text{-}75\% \\ \hline \text{R} \\ \text{KOH} \\ \hline \text{TBAB} \\ \hline \\ Br(\text{CH}_2)_2 \text{Br} \\ \hline \\ Ar \xrightarrow{CN} \\ Ar = Ph \\ \hline \\ Br(\text{CH}_2)_3 \text{Br} \\ \hline \\ Ar \xrightarrow{CN} \\ \hline \end{array}} \underbrace{\begin{array}{c} 84\text{-}93\% \\ 74\% \\ \text{CN} \\ \text{Ar} = Ph \\ \hline \\ \text{S5-}72\% \\ \hline \end{array}}_{Ar \xrightarrow{CN} \\ CN$$

Phase transfer alkylations of phenylacetonitrile and its derivatives with the secondary bromides, 1,2-dibromoethane and 1,3-dibromopropane carried out in the presence of 60–75% aqueous KOH, instead of the typical 50% NaOH, provide substantial improvements to the overall yield and purity of products.

### An easy access to spiroannulated glyco-oxetane, -thietane and -azetane rings: synthesis of spironucleosides

pp 3875-3879

Ashim Roy, Basudeb Achari and Sukhendu B. Mandal\*

## Microwave-assisted, solvent-free synthesis of 1-( $\alpha$ - or $\beta$ -hydroxynaphthyl)-1,2,3,4-tetrahydroiso-quinolines by the Mannich reaction

pp 3881-3883

István Szatmári, László Lázár and Ferenc Fülöp\*

#### Diastereoselectivity in the Overman rearrangement of O-cyclohexylideneethylimidates

pp 3885-3887

Ieva Jaunzeme, Aigars Jirgensons,\* Valerjans Kauss and Eduards Liepins

R 
$$\rightarrow$$
 A  $\rightarrow$  R  $\rightarrow$  R  $\rightarrow$  CCI<sub>3</sub>

1a-c  $\rightarrow$  eq-2a-c  $\rightarrow$  ax-2a-c

a, R = 4-t-Bu; b, R = 4-Ph
c, R = 3,3,5-triMe

1:1
12:1 from E-1c
19:1 from Z-1c

### A novel tunable aromatic bromination method using alkyl bromides and sodium hydride in DMSO

pp 3889-3892

MaoJun Guo,\* Laszlo Varady, Demosthenes Fokas, Carmen Baldino and Libing Yu

$$R_1$$
  $RBr$   $R_2$   $RBr$   $R_2$   $RBr$   $R_2$   $R_3$   $R_4$   $R_5$   $R_5$   $R_6$   $R_7$   $R_8$   $R_9$   $R_9$ 

Aromatic bromination on various aromatic systems with different substitutions was performed in the presence of alkyl bromide and sodium hydride in DMSO. Mono-bromination on a wide range of substrates was achieved by selecting proper alkyl bromides and controlling its amount. Further bromination could happen with more active alkyl bromides and additional amount of bromides and sodium hydride. The yields ranged from moderate to excellent. In addition, reaction mechanism was postulated to explain our observations.

### Microwave-assisted ring-closing metathesis of diallylamines: a rapid synthesis of pyrrole and pyrroline pp 3893–3896 derivatives

Qian Yang, Xin-Yong Li, Hong Wu and Wen-Jing Xiao\*

#### Copper fluorapatite catalyzed N-arylation of heterocycles with bromo and iodoarenes

M. Lakshmi Kantam,\* G. T. Venkanna, Ch. Sridhar and K. B. Shiva Kumar

pp 3897-3899

$$X = Br, I$$
 $X = Br, I$ 
 $CuFAP$ 
 $DMSO, 110 °C$ 
 $K_2CO_3$ 
 $Vield: 85-98\%$ 

# Enantioselective reduction of aliphatic ketones using NaBH<sub>4</sub> and TarB–NO<sub>2</sub>, a chiral boronic ester Jinsoo Kim and Bakthan Singaram\*

pp 3901-3903

$$O_{R}$$
 +  $O_{2}$   $O_$ 

## Application of a stereospecific $RhCl(PPh_3)_3$ decarbonylation reaction for the total synthesis of 7-( $\pm$ )-deoxypancratistatin

pp 3905-3908

Hongjun Zhang and Albert Padwa\*

### Sequenced cyclizations involving intramolecular capture of alkyl-oxyaminyl radicals. Synthesis of heterocyclic compounds

pp 3909-3912

Luz Marina Jaramillo-Gómez,\* Alix Elena Loaiza, Jaime Martin, Luz Amalia Ríos and Peng George Wang

$$\begin{array}{c|c} CO_2R_1 & R_3 \\ \hline & R_2 \\ \hline & N \\ X & H_3C & OBn \\ \hline & Cy, AIBN, 80^{\circ}C \\ \hline & Cy, AIBN, 80^{\circ}C \\ \hline & CO_2R_1 \\ \hline & R_2 \\ \hline & R_3 \\ \hline & R_3 \\ \hline & CO_2R_1 \\ \hline & R_3 \\ \hline & R_3 \\ \hline & CO_2R_1 \\ \hline & R_3 \\ \hline & R_3 \\ \hline & CO_2R_1 \\ \hline & R_3 \\ \hline & R_3 \\ \hline & CO_2R_1 \\ \hline & R_3 \\ \hline & R_3 \\ \hline & CO_2R_1 \\ \hline & CO_2R_1 \\ \hline & R_3 \\ \hline & CO_2R_1 \\ \hline & CO_2R_$$

X = Br,  $R_1 = Et$ : **2a**  $R_2 = CO_2Me$ ,  $R_3 = H$ ; **2b**  $R_2 = CN$ ;  $R_3 = H$ ; **2d**  $R_2 = Ph$ ;  $R_3 = H$ ; **2e**;  $R_1 = R_2 = Me$ ; **2f**  $R_2 = R_3 = H$  X = I,  $R_1 = Me$ : **2c**  $R_2 = Ph$ ,  $R_3 = H$ 

### Serendipitous synthesis of 2-amino-2,3-dihydrobenzofuran derivatives starting from Baylis-Hillman adducts

pp 3913-3917

Ka Young Lee, Joobeom Seo and Jae Nyoung Kim\*

#### Photochemical behaviors of tetraphenyldiphosphine in the presence of alkynes

pp 3919-3922

Shin-ichi Kawaguchi, Shoko Nagata, Takamune Shirai, Kaname Tsuchii, Akihiro Nomoto and Akiya Ogawa\*

$$R = + (Ph_2P)_2 \xrightarrow{h\nu} R$$

$$Ph_2P PPh_2$$

# Alkynylation of halo pyrimidines under Pd/C-copper catalysis: regioselective synthesis of 4- and 5-alkynylpyrimidines

pp 3923-3928

Manojit Pal,\* Venkateswara Rao Batchu, Nalivela Kumara Swamy and Srinivas Padakanti

Z = NH<sub>2</sub>, SC<sub>2</sub>H<sub>5</sub>

$$R$$
 $X = I$ 
 $X$ 

#### A new family of bis-tetrazole (BIZOL) BINOL-type ligands

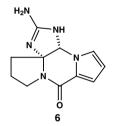
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Hossein A. Dabbagh,\* Alireza Najafi-Chermahini and Soodabeh Banibairami

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Masakazu Nakadai and Patrick G. Harran\*

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### (i)<sup>+</sup>

## A biogenetically patterned synthetic approach to the unusual furan methylenecyclobutanol moiety in providencin

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Christopher D. Bray and Gerald Pattenden\*

### Cesium fluoride and tetra-*n*-butylammonium fluoride mediated 1,4-N $\rightarrow$ O shift of disubstituted phenyl ring of a bicalutamide derivative

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Renukadevi Patil, Wei Li, Charles R. Ross, II, Elfi Kraka, Dieter Cremer, Michael L. Mohler, James T. Dalton and Duane D. Miller\*

A novel 1,4-N→O migration of disubstituted phenyl ring in the presence of CsF and TBAF was observed.

#### Solvent free preparation of amidophosphonates from isocyanides

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Laurent El Kaïm,\* Laurence Grimaud and Simon Hadrot

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Truls Ingebrigtsen and Tore Lejon\*



#### Synthesis of oxazolidinedione derived bicalutamide analogs

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Vipin A. Nair, Suni M. Mustafa, Michael L. Mohler, James T. Dalton and Duane D. Miller\*

#### Hydrophobic effects in a simple Diels-Alder reaction in water

pp 3957-3958

Diganta Sarma, Sanjay S. Pawar, Suvarna S. Deshpande and Anil Kumar\*

The *endolexo* ratio for a simple Diels–Alder reaction carried out in water has been used to argue that hydrophobic effects can dominate the geometries of the transition states.

Dicationic (BINAP)palladium-catalyzed enantioselective aldol reaction of aldehydes with a silyl enol ether: a simplified practical procedure

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Syun-ichi Kiyooka,\* Satomi Hosokawa and Sayaka Tsukasa

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\*Corresponding author

\*\* Supplementary data available via ScienceDirect



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