

## Tetrahedron Letters Vol. 47, No. 38, 2006

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From cyclic dehydrodipeptides to uncommon acyclic peptide mimetics Juan Francisco González, Elena de la Cuesta and Carmen Avendaño\*



#### Intramolecular cycloaddition/cycloreversion of (E)-3β,17β-diacetoxy-5,10-secoandrost-1(10)-en-5-one pp 6715-6718

Vladimir A. Khripach,\* Vladimir N. Zhabinskii, Anna I. Kuchto, Yuliya Y. Zhiburtovich, Vladimir V. Gromak, Marinus B. Groen, Jaap van der Louw and Aede de Groot



## Naupliolide, a sesquiterpene lactone with a novel tetracyclic skeleton from Nauplius graveolens subsp. odorus

Mohamed Akssira,\* Fouad Mellouki, Ali Salhi, Hakim Alilou, Abderrahmane Saouf, Fadwa El Hanbali, Jesús F. Arteaga and Alejandro F. Barrero\*



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NMR spectroscopy study of 2-methylbenzoxazolium salts hydroxylation in DMSO-*d*<sub>6</sub> solution Ricardo Santos, Luís M. Fernandes, Renato F. Boto, Rogério Simões and Paulo Almeida\* pp 6723-6725



2-Methylbenzoxazolium salts showed an unexpected transformation at room temperature, promoted by residual water present in dimethyl sulfoxide. The resulting benzoxazolols have been characterized by HRMS, <sup>1</sup>H and <sup>13</sup>C NMR.

Synthesis of 5-aryltriazole ribonucleosides via Suzuki coupling and promoted by microwave irradiation pp 6727–6731 Jingiao Wan, Ruizhi Zhu, Yi Xia, Fangi Qu, Qiongyou Wu, Guangfu Yang, Johan Neyts and Ling Peng\*



Aryltriazole nucleosides with various aromatic groups in the 5-position on the triazole ring were synthesized and characterized with the aim to develop novel triazole nucleosides. The aromatic groups were introduced into the triazole ring via a Suzuki reaction starting with bromotriazole nucleoside. Microwave irradiation significantly promoted the Suzuki coupling, quickly giving clean products with good to excellent yields.

## Synthesis of an azaspirane via Birch reduction alkylation prompted by suggestions from a computer program

Akio Tanaka,\* Takashi Kawai, Tetsuhiko Takabatake, Noriko Oka, Hideho Okamoto and Malcolm Bersohn



A rate enhancement of *tert*-butoxycarbonylation of aromatic amines with Boc<sub>2</sub>O in alcoholic solvents pp 6739–6742 Tirayut Vilaivan

$$R^{1,N}R^{2} + Boc_{2}O \xrightarrow{EtOH} R^{1,N}R^{2} + CO_{2} + {}^{t}BuOH$$

A rate enhancement of *tert*-butoxycarbonylation of aromatic amines by  $Boc_2O$  in alcohols compared to aprotic solvents was demonstrated. Reactions between  $Boc_2O$  and various aliphatic and aromatic amines in ethanol provided the *N*-Boc derivatives in good to excellent yields in short reaction times.

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## **Rh(I)-catalyzed cross-coupling reactions of alkenyl tosylates with potassium aryltrifluoroborates** Jie Wu,\* Liang Zhang and Yong Luo

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Facile preparation of difluoromethyl- and monofluoromethyl-containing amides via Ritter reactionpp 6753–6756Jun Liu, Chuanfa Ni, Ya Li, Laijun Zhang, Guanyu Wang and Jinbo Hu\*pp 6753–6756



(R<sup>1</sup>, R<sup>2</sup> = aryl, alkyl, H, etc.; R<sub>F</sub> = CF<sub>2</sub>H, CFH<sub>2</sub>, CF<sub>2</sub>SO<sub>2</sub>Ph)

 $(\mathbf{i})^{+}$ 

The unique regioselectivity in the formation of disubstituted-1,4-benzoquinones generated from the reaction of 4-hydroxycoumarins with 1,4-benzoquinone

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Synthetic applications of a three-component Mannich reaction. Total synthesis of IL-6 inhibitor (+)-madindoline A and B

Tomoyasu Hirose, Toshiaki Sunazuka, Daisuke Yamamoto, Eisuke Kaji and Satoshi Ōmura\*





One-carbon ring-expansion of 2-substituted cyclohexanones via lithium- and magnesium β-oxido carbenoid rearrangement: a new synthesis of 2,7-disubstituted and 2,2,7-trisubstituted cycloheptanones Tsuyoshi Satoh,\* Shu Tanaka and Naoyuki Asakawa





# Mc (+)-Madindoline A and B

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Intermolecular hydroamination and hydroarylation reactions of alkenes in ionic liquids Alexandre A. M. Lapis, Brenno A. DaSilveira Neto, Jackson D. Scholten, Fabiane M. Nachtigall, Marcos N. Eberlin and Jairton Dupont<sup>\*</sup>



A copper(II)-catalyzed protocol for modified Friedländer quinoline synthesis Chan Sik Cho,\* Wen Xiu Ren and Sang Chul Shim\*



**C–C Bond formation from alcohols using a Xantphos ruthenium complex** Paul A. Slatford, Michael K. Whittlesey and Jonathan M. J. Williams\*



A ruthenium complex of Xantphos has been shown to be a good catalyst for the alkylation of active methylene compounds with a range of alcohols.

Solvent-free direct aza-Friedel–Crafts reactions between 3,4-dihydroisoquinoline and 1- or 2-naphthols pp 6791–6794 Patricia D. MacLeod, Zhiping Li, Jianqing Feng and Chao-Jun Li\*



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Deepu John Varughese, Maghar S. Manhas and Ajay K. Bose\*

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This procedure is an energy-efficient version of the Cadogan reaction for nitrene-based synthesis of nitrogen heterocycles.

Short and practical enantioselective synthesis of linezolid and eperezolid via proline-catalyzed pp 6799–6802 asymmetric α-aminooxylation

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Structure-activity relationship studies of gymnocin-A





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A short enantioselective synthesis of the antiepileptic agent, levetiracetam based on proline-catalyzed pp 6813–6815 asymmetric α-aminooxylation

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Dichlorocarbene adducts of alkyl enol ethers as precursors to furans: application to a total synthesis pp 6817–6820 of the furanosesquiterpene (±)-pallescensin A

Jonathan S. Foot, Andrew T. Phillis, Phillip P. Sharp, Anthony C. Willis and Martin G. Banwell\*



An efficient method for chlorination of alcohols using PPh<sub>3</sub>/Cl<sub>3</sub>CCONH<sub>2</sub> Wanchai Pluempanupat and Warinthorn Chavasiri\*

$$\begin{array}{c} \text{PPh}_3, \text{Cl}_3\text{CCONH}_2\\ \hline \\ \text{ROH} & \longrightarrow \\ \text{CH}_2\text{Cl}_2, \text{RT}, 15 \text{ min} \end{array}$$

A mild and efficient acetylation of alcohols, phenols and amines with acetic anhydride using  $La(NO_3)_3 \cdot 6H_2O$  as a catalyst under solvent-free conditions

pp 6825-6829

T. Srikanth Reddy, M. Narasimhulu, N. Suryakiran, K. Chinni Mahesh, K. Ashalatha and Y. Venkateswarlu\*



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# Nucleophile-solvent isotope effects between methanol isotopomers during the interception of aziridinium imide-'like' closed intermediates

Zois Syrgiannis and Yiannis Elemes\*

(Trideuterio)methanol intercepts more efficiently, than methanol, the aziridinium imide-'like' closed intermediates formed in the reaction of phenyltriazolinedione with simple alkenes.





## A novel and efficient method for the synthesis of 1,2-diazetidines Wei Miao, Weiliang Xu, Zhiliu Zhang, Rujian Ma,\* Shu-Hui Chen and Ge Li



# Sequential transhalogenation and Heck reaction for efficient access to dioxo-tetrasubstituted 2,4 E,E-dienes: synthesis of segment C1–C6 of apoptolidin

Xiaojin Li\* and Xingzhong Zeng



Efficient access to dioxo-tetrasubstituted 2,4 *E*,*E*-dienes is developed in three steps from commercially available starting materials via sequential transhalogenation and Heck reaction, which provides potentially useful synthons for the synthesis of a tetrasubstituted conjugated diene structure in complex molecules. Thereby, segment C1–C6 of apoptolidin is synthesized.

# $\label{eq:preparation} Preparation \ of \ pilot \ library \ with \ tetrahydro-\beta-carboline \ alkaloid \ core \ skeleton \ using \ tandem \ intramolecular \ Pictet-Spengler \ cyclization$

Sung-Chan Lee, Soo Young Choi, Young Keun Chung and Seung Bum Park\*

A solid phase strategy has been developed for the synthesis of tetrahydro- $\beta$ -carboline alkaloid library. The key transformation is an acid-catalyzed tandem intramolecular Pictet–Spengler cyclization from L-tryptophan, which forms acyl iminiums with synchronous cleavage of products from the acid-labile SASRIN<sup>TM</sup> solid support. A pilot library with two diversity points has been successfully synthesized in high purity.



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## Oxidative ring opening of 2,5-diarylfurans by Selectfluor<sup>®</sup> Stanhan L Plank and Chad E Stanhans<sup>\*</sup>

Stephen J. Blank and Chad E. Stephens\*

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Activation of the NC–H bond of Baylis–Hillman adducts of *N*-methylisatin with CAN/ROH Ponnusamy Shanmugam,\* Vadivel Vaithiyanathan and Baby Viswambharan

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A one-pot synthesis of novel sugar derived 5,6-dihydro-quinazolino[4,3-*b*]quinazolin-8-ones: an entry towards highly functionalized sugar-heterocyclic hybrids

Abhijeet Deb Roy, Arunachalam Subramanian, Balaram Mukhopadhyay\* and Raja Roy\*



Improved solid-phase peptide synthesis of 'difficult peptides' by altering the microenvironment of the developing sequence pp 6861–6864

Nikos Zinieris, Christos Zikos and Nicolas Ferderigos\*



ACP-(65-74)VQAAIDYING\_(Rink-amide linker)



A mild, rapid and highly regioselective ring-opening of epoxides and aziridines with acetic anhydride pp 6865–6868 under solvent-free conditions using ammonium-12-molybdophosphate

Biswanath Das,\* V. Saidi Reddy and Fouzia Tehseen



## A simple and efficient method to label L-fucose

Emmanuelle Jestin, Karine Bultel-Rivière, Alain Faivre-Chauvet, Jacques Barbet, Anthony Loussouarn and Jean-François Gestin\*



#### Lactones 30. Reaction of halolactones with trialkylphosphites

Bartłomiej Pisarski and Czesław Wawrzeńczyk\*



The reaction of halolactones with trialkylphosphites in the presence of water afforded dehalogenated lactones.

Highly chemoselective nitration of aromatic amines using the Ph<sub>3</sub>P/Br<sub>2</sub>/AgNO<sub>3</sub> system Nasser Iranpoor,\* Habib Firouzabadi,\* Najmeh Nowrouzi and Dena Firouzabadi pp 6879-6881

 $\begin{array}{c} \mathsf{NH}_2 \\ \mathsf{Ph}_3\mathsf{P}/\mathsf{Br}_2/\mathsf{AgNO}_3 \\ \mathsf{CH}_3\mathsf{CN}, \mathsf{rt}, 5 \min, 90\% \end{array} \begin{array}{c} \mathsf{NH}_2 \\ \mathsf{NO}_2 \\ \mathsf{O} \\$ 



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# Metal catalyst-free direct $\alpha$ -iodination of ketones with molecular iodine Maddali L. N. Rao<sup>\*</sup> and Deepak N. Jadhav

# $R \xrightarrow{O}_{R'} \frac{l_2}{DME} R \xrightarrow{O}_{R'} R$

Microwave enhanced ligand- and base-free cross-coupling of potassium aryltrifluoroborates salts pp 6887–6889 with aryl triflates

George W. Kabalka,\* Li-Li Zhou and Abhijit Naravane



A microwave enhanced ligand- and base-free protocol for the cross-coupling of potassium aryltrifluoroborate salts with triflates is reported.

## Air-oxidized products of multi-component reactions between 3-amino-1,2,4-triazole, aromatic aldehydes and isonitriles

Vladislav Z. Parchinsky, Vladimir V. Koleda, Olga Shuvalova, Dmitry V. Kravchenko and Mikhail Krasavin\*



Synthesis of oxepine-, oxocine- and azepine-annulated carbazole derivatives by combined Claisen rearrangement and diene/enyne metathesis

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Shital K. Chattopadhyay,\* Shankar P. Roy, Debalina Ghosh and Gautam Biswas



Preparation of substituted 1,2,3,4-tetrahydroquinoxalines and 2,3,4,5-tetrahydro-1*H*-benzo[*b*][1,4]diazepines from catalytic Cp\*Ir hydrogen transfer N-heterocyclization of anilino alcohols C. Todd Eary\* and Dane Clausen pp 6899-6902

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 $R^{1} \xrightarrow[R^{2}]{I_{1}} \xrightarrow{NH_{2}} OH \\ R^{2} \xrightarrow{R^{4}} K_{2}CO_{3}, \Delta \qquad R^{1} \xrightarrow[R^{2}]{I_{1}} \xrightarrow{R^{4}} R^{3}$ 

Synthesis of fluorenones based on a '[3+3] cyclization/Suzuki cross-coupling/Friedel-Crafts acylation' pp 6903-6905 strategy

Stefanie Reim, Matthias Lau and Peter Langer\*



## First synthesis of indirubin N-glycosides (red sugars)

Stefanie Libnow, Martin Hein,\* Dirk Michalik and Peter Langer\*



Indium(I) iodide promoted cleavage of dialkyl/diaryl disulfides and subsequent anti-Markovnikovpp 6911–6914addition to styrenes: a new route to linear thioethersBrindaban C. Ranu\* and Tanmay Mandal

## Synthesis of enantiomerically pure functionalised trianglamine macrocycles by N-acylation and N-alkylation reactions

Nikolai Kuhnert,\* Daniela Göbel, Caroline Thiele, Benjamin Renault and Bing Tang



The true configuration of the benzilosazone isomers María V. Mirífico,\* José A. Caram and Enrique J. Vasini

The stable benzilosazone isomer has a Z,Z configuration as shown by single crystal X-ray diffraction. Approximate calculations are used to analyze the NMR measurements used to assign an erroneous E, E configuration.

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## Corrigendum

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

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