

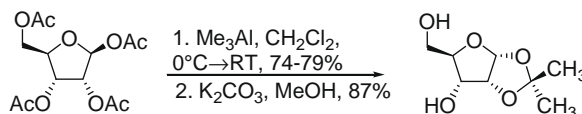
## Tetrahedron Letters Vol. 50, No. 22, 2009

## Contents

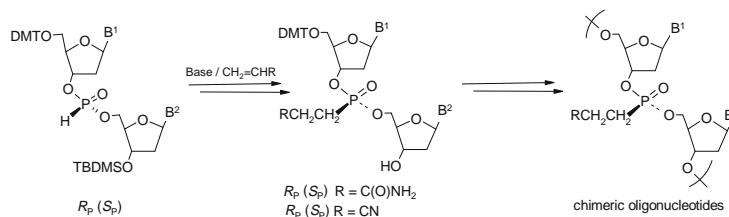
## Communications

**Reaction of acetylated carbohydrates with trimethylaluminum: concise synthesis of 1,2-*O*-isopropylidene  $\alpha$ -ribofuranose**

pp 2617–2619

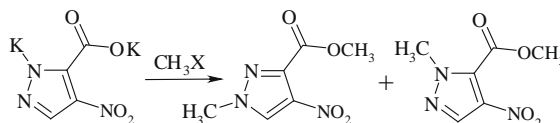
 Jesse D. More <sup>\*</sup>, Michael G. Campbell

**Stereodefined dinucleoside (3',5')-propionamidophosphonates and  $\beta$ -cyanoethylphosphonates and their incorporation into modified oligonucleotides**

pp 2620–2623

 Lucyna A. Wozniak <sup>\*</sup>, Malgorzata Bukowiecka-Matusiak, Izabela Burzynska-Pedziwiatr, Wojciech J. Stec

 Base-catalyzed stereospecific anti-Markovnikov addition of dinucleoside (3',5')-*H*-phosphonates to the activated alkenes acrylamide and acrylonitrile resulting in the synthesis of *P*-chiral diastereomerically pure dinucleoside (3',5')-alkylphosphonates is reported.

**Methylation of 4-nitro-3(5)-pyrazolecarboxylic acid**

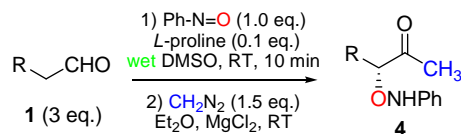
pp 2624–2627

 Andrzej Regiec, Henryk Mastalarz <sup>\*</sup>, Agnieszka Mastalarz, Andrzej Kochel


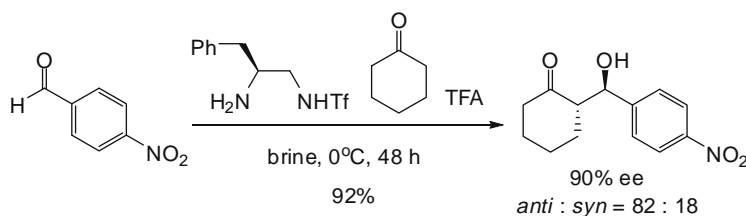
Methylation of 4-nitro-3(5)-pyrazolecarboxylic acid dipotassium salt in different solvents using various methylating agents has been investigated to improve the synthesis of isomeric 1-methyl-4-nitro-3- and -5-pyrazolecarboxylic acids.

**Asymmetric synthesis of 3-hydroxyl-2-alkanones via tandem organocatalytic aminoylation of aldehydes and chemoselective diazomethane homologation**

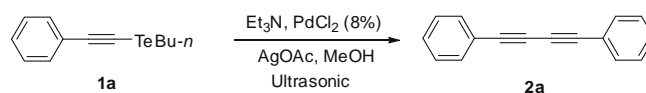
pp 2628–2631

Li Yang, Run-Hua Liu, Bing Wang<sup>\*</sup>, Ling-Ling Weng, Hu Zheng
**Direct asymmetric aldol reactions in brine using novel sulfonamide catalyst**

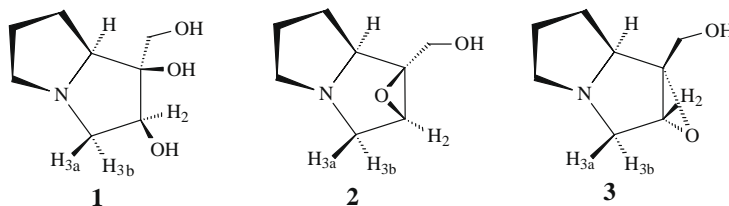
pp 2632–2635

Tsuyoshi Miura<sup>\*</sup>, Yumi Yasaku, Naka Koyata, Yasuoki Murakami, Nobuyuki Imai<sup>\*</sup>
**Synthesis of symmetrical 1,3-diynes via homocoupling reaction of *n*-butyl alkynyltellurides**

pp 2636–2639

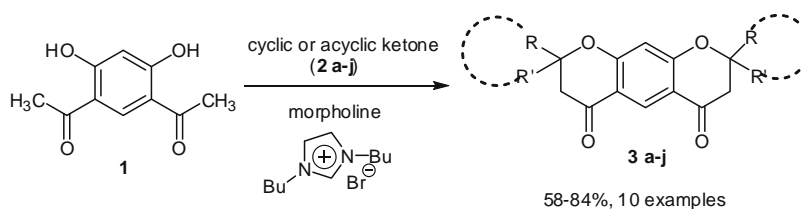
Fateh V. Singh, Mônica F. Z. J. Amaral, Hélio A. Stefani<sup>\*</sup>
**Structural characterization of saturated pyrrolizidine alkaloids from *Heliotropium transalpinum* var. *transalpinum* Vell by NMR spectroscopy and theoretical calculations**

pp 2640–2642

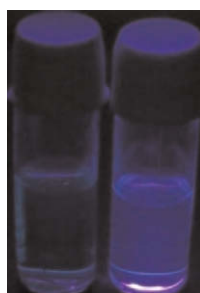
Janaina C. M. Medina, Gisele F. Gauze, Gentil J. Vidotti<sup>\*</sup>, Maria H. Sarragiotto, Ernani A. Basso, Juliana L. B. Peixoto

**The first ionic liquid-promoted Kabbe condensation reaction for an expeditious synthesis of privileged bis-spirochromanone scaffolds**

pp 2643–2648

M. Muthukrishnan<sup>\*</sup>, U. M. V. Basavanag, Vedavati G. Puranik**Terphenyl based 'Turn On' fluorescent sensor for mercury**

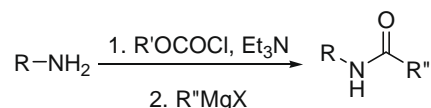
pp 2649–2652

Vandana Bhalla<sup>\*</sup>, Ruchi Tejpal, Manoj Kumar, Rajiv Kumar Puri, Rakesh K. Mahajan

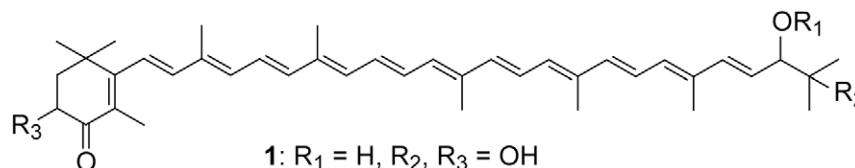
New terphenyl-based derivative **4** with pyrene as a fluorophore has been synthesized and examined for its cation recognition abilities toward various cations by NMR and fluorescence spectroscopy. The results show that it has very high binding affinity ( $\log \beta = 5.12$ ) and selectivity for mercury. A fluorescence enhancement of 375% was observed for the 4-Hg<sup>2+</sup> system in THF. The lower limit of detection is  $2.1 \times 10^{-6}$  M.

**Amidation through carbamates**

pp 2653–2655

Antonio Latorre, Santiago Rodríguez<sup>\*</sup>, Javier Izquierdo, Florenci V. González<sup>\*</sup>**2'-Methyl and 1'-xylosyl derivatives of 2'-hydroxyflexixanthin are major carotenoids of *Hymenobacter* species**

pp 2656–2660

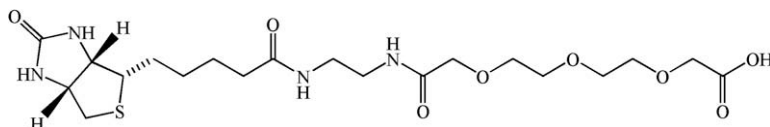
Jonathan L. Klassen, Ryan McKay, Julia M. Foght<sup>\*</sup>

- 1: R<sub>1</sub> = H, R<sub>2</sub>, R<sub>3</sub> = OH
- 2: R<sub>1</sub> = H, R<sub>2</sub> = xylose, R<sub>3</sub> = OH
- 4: R<sub>1</sub> = Me, R<sub>2</sub>, R<sub>3</sub> = OH
- 5: R<sub>1</sub> = Me, R<sub>2</sub> = OH, R<sub>3</sub> = H<sub>2</sub>

**A new water soluble 3,6,9-trioxaundecanedioic acid-based linker and biotinyating reagent**

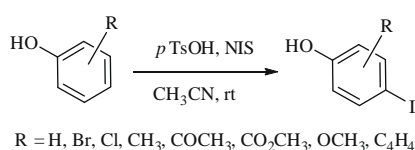
pp 2661–2663

Ádám Bartos, Ferenc Hudecz, Katalin Uray \*

**Regioselective iodination of phenol and analogues using *N*-iodosuccinimide and *p*-toluenesulfonic acid**

pp 2664–2667

Pakorn Bovonsombat \*, Juthamard Leykajakarukul, Chiraphorn Khan, Kawin Pla-on, Michael M. Krause, Pratheep Khanthapura, Rameez Ali, Niran Doowa

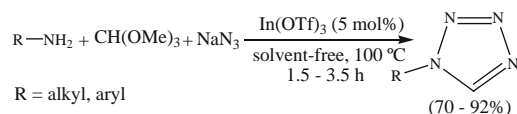


Highly regioselective *para*-iodinations of phenol and analogues are achieved at room temperature in high to excellent yields with a combination of *p*-toluenesulfonic acid and *N*-iodosuccinimide.

**Indium triflate-catalyzed one-pot synthesis of 1-substituted-1*H*-1,2,3,4-tetrazoles under solvent-free conditions**

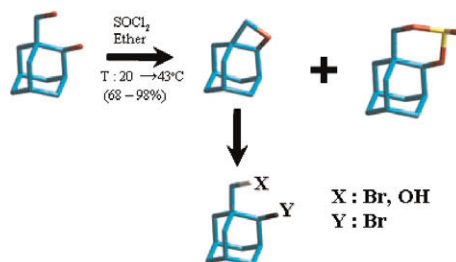
pp 2668–2670

Dhiman Kundu, Adinath Majee \*, Alakananda Hajra \*

**Synthesis of 1,2-annulated adamantane heterocycles: structural determination studies of a bioactive cyclic sulfite**

pp 2671–2675

Grigoris Zoidis, Dimitra Benaki, Vassilios Myrianthopoulos, Lieve Naesens, Erik De Clercq, Emmanuel Mikros, Nicolas Kolocouris \*



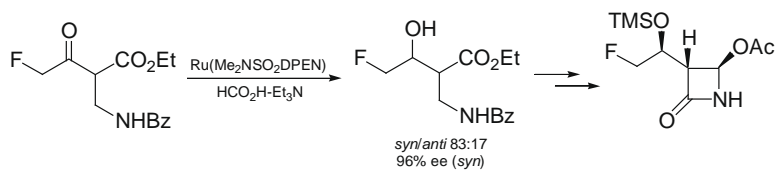
The synthesis, conformational assignment and biological analysis of novel 1,2-annulated adamantane cyclic sulfite 5 are undertaken and the susceptibility of oxetane 4 to nucleophilic attack and ring opening, which leads to useful precursors for the synthesis of bioactive adamantane derivatives, is examined.



**Stereoselective synthesis of (1*S*,3*R*,4*R*)-4-acetoxy-3-(2'-fluoro-1'-trimethylsilyloxyethyl)-2-azetidinone**

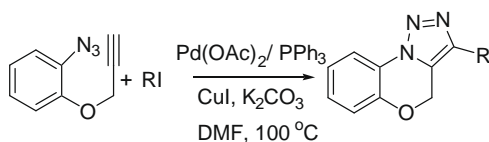
pp 2676–2677

Ivan Plantan, Michel Stephan, Uroš Urleb, Barbara Mohar \*

**Efficient synthesis of [1,2,3]triazolo[5,1-c][1,4]benzoxazines through palladium–copper catalysis**

pp 2678–2681

Chinmay Chowdhury \*, Anup Kumar Sasmal, Pradeep Kumar Dutta

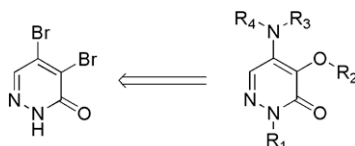


A wide variety of [1,2,3]triazolo[5,1-c][1,4]benzoxazines were synthesized through palladium-copper catalyzed reactions of 1-azido-2-(prop-2-ynoxy)benzene with aryl/vinyl iodides. A plausible reaction mechanism has also been proposed.

**Facile synthesis of 4,5-disubstituted-3(2*H*)-pyridazinones**

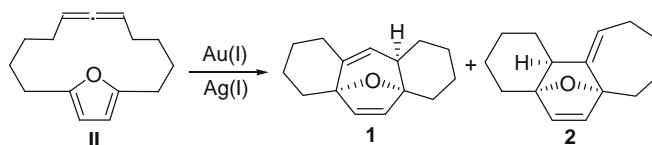
pp 2682–2684

Paul S. Humphries \*, Robert M. Oliver

**Gold-catalyzed transannular [4+3] cycloaddition reactions**

pp 2685–2687

Benjamin W. Gung \*, Derek T. Craft



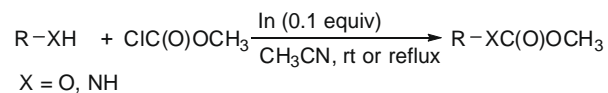
In the presence of a catalytic amount of Au(I) and Ag(I) salts, furanocyclophane **II** undergoes transannular cycloadditions to give tetracyclic compounds **1** and **2** in 38% and 34% yields, respectively.



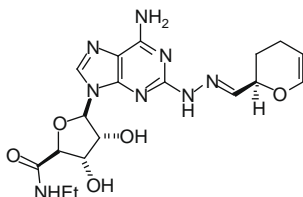
**Indium-catalyzed reaction for the synthesis of carbamates and carbonates: selective protection of amino groups**

pp 2688–2692

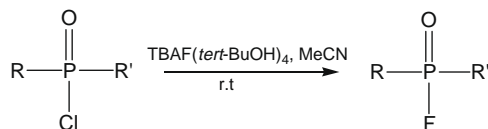
Joong-Gon Kim, Doo Ok Jang \*

**Synthesis of (*R*)-3,4-dihydro-2*H*-pyran-2-carboxaldehyde: application to the synthesis of potent adenosine A<sub>2A</sub> and A<sub>3</sub> receptor agonist**

Prakash G. Jagtap \*, Zhiyu Chen, Karsten Koppetsch, Elizabeth Piro, Paula Fronce, Garry J. Southan, Karl-Norbert Klotz

Synthesis of potent adenosine A<sub>2A</sub> and A<sub>3</sub> receptor agonist from the modification of adenosine-5'-*N*-ethylcarboxamide (NECA) has been reported.**Tetrabutylammonium tetra (*tert*-butyl alcohol) coordinated fluoride-an efficient reagent for the synthesis of fluorine derivatives of phosphorus(V) compounds**

Hemendra K. Gupta, Deepak Pardasani, Avik Mazumder, Ajay Kumar Purohit, Devendra K. Dubey \*

**OTHER CONTENT**

Corrigendum

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Announcement

p 2701

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\*Corresponding author

+ Supplementary data available via ScienceDirect

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