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#### Tetrahedron Letters Vol. 51, No. 25, 2010

#### **Contents**



The generation of diazirinone: a computational study Robert A. Moss\*, Ronald R. Sauers\*

 $O_2 N \xrightarrow{F^-} O_2 N \xrightarrow{I} O_2 N \xrightarrow{-CI^-} O_2 N \xrightarrow{-F^-} F \xrightarrow{I} O_2 N \xrightarrow{I} O_2$ 

Computational studies indicate that the reaction of *p*-nitrophenoxyfluorodiazirine with fluoride ion should generate diazirinone. However, fluoride ion also catalyzes the decomposition of diazirinone to carbon monoxide and nitrogen, so that the diazirinone will be unstable to the conditions used to generate it.



pp 3266-3268

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AlCl<sub>3</sub>-induced (hetero)arylation of thienopyrimidine ring: a new synthesis of 4-substituted thieno[2,3-d]pyrimidines pp 3269-3273 K. Shiva Kumar, Srinivas Chamakuri, Peddy Vishweshwar, Javed Igbal<sup>\*</sup>, Manojit Pal<sup>\*</sup>



pp 3274-3276

Microwave-promoted, one-pot conversion of alkoxymethylated protected alcohols into their corresponding nitriles, bromides, and iodides using [bmim][InCl<sub>4</sub>] as a green catalyst

Arsalan Mirjafari, Iraj Mohammadpoor-Baltork\*, Majid Moghadam\*, Shahram Tangestaninejad, Valiollah Mirkhani, Ahmad Reza Khosropour





Morteza Bararjanian, Saeed Balalaie\*, Barahman Movassagh, Hamid Reza Bijanzadeh

MeOH. rt  $NH_2$  $R^2$ 

### Structure dependence in the solvolysis kinetics of amino acid esters

John Haseltine\*, Jason W. Runyon

k (10<sup>-5</sup> s<sup>-1</sup>) R :O<sub>2</sub>Et CO<sub>2</sub>Me Н i-Pr<sub>2</sub>NEt Me 0.099 0.044 Et 0.034 i-Pr in CD₂OD 0.00053 t-Bu 21.5°C

Seventeen N-acyl amino acid esters were solvolyzed while monitoring by <sup>1</sup>H NMR. The pseudo-first-order rate constant varies up to 6200-fold. The nature of the structurereactivity relationship is discussed.

pp 3277-3279

pp 3280-3283

#### A formal synthesis of (–)-swainsonine from a chiral aziridine

Hwan Geun Choi, Ji Hye Kwon, Jong Chan Kim, Won Koo Lee\*, Heesung Eum, Hyun-Joon Ha\*



# New fluorescent and colorimetric chemosensors based on the rhodamine and boronic acid groups for the detection of $Hg^{2+}$

Sook Kyung Kim, K. M. K. Swamy, So-Young Chung, Ha Na Kim, Min Jung Kim, Yongsuk Jeong, Juyoung Yoon\*

**Aminoxy-linked rhodamine hydroxamate as fluorescent chemosensor for Fe<sup>3+</sup> in aqueous media** Kyung-Soo Moon, Young-Keun Yang, Seunghee Ji, Jinsung Tae<sup>\*</sup>

-NH-



Yusuke Ogura, Hidenori Watanabe\*





Fe<sup>III</sup>



pp 3286-3289



pp 3284-3285

#### Solvent-free Horner-Wadsworth-Emmons reaction using DBU

Kaori Ando\*, Kyohei Yamada

$$(EtO)_2P(O)CH_2CO_2Et \xrightarrow{RCHO} CO_2Et$$
  
(1.5 equiv) R

no solvent, higher E-selectivity, high yields

The solvent-free Horner–Wadsworth–Emmons reaction with a variety of aldehydes using 1.5 equiv of DBU gave E- $\alpha$ , $\beta$ -unsaturated esters and ketones in high yields. The *E*-selectivity was high and the used DBU was recovered.

### Direct allylation of $\alpha$ -aryl alcohols with allyltrimethylsilane catalyzed by heterogeneous tin ion-exchanged montmorillonite

Jiacheng Wang, Yoichi Masui, Makoto Onaka\*



The direct allylation of  $\alpha$ -aryl alcohols with allyltrimethylsilane efficiently proceeded in the presence of tin ion-exchanged montmorillonite under mild conditions according to the proper addition order of reactants and a catalyst.

#### Water solubilization of xanthene dyes by post-synthetic sulfonation in organic media

Anthony Romieu\*, Delphine Tavernier-Lohr, Stéphane Pellet-Rostaing\*, Marc Lemaire, Pierre-Yves Renard



**Convenient supported recyclable material based on dihydrolipoyl-residue for the reduction of disulfide derivatives** pp 3309–3311 Céline Bienvenu, Jacques Greiner, Pierre Vierling, Christophe Di Giorgio\*



pp 3297-3299



pp 3300-3303



## Solvent-free multicomponent synthesis of pyranopyrazoles: per-6-amino-β-cyclodextrin as a remarkable catalyst pp 3312–3316 and host

Kuppusamy Kanagaraj, Kasi Pitchumani\*



A simple, green and efficient protocol is developed with per-6-amino-β-cyclodextrin (per-6-ABCD) which acts simultaneously as a supramolecular host and as an efficient solid base catalyst for the solvent-free syntheses of various dihydropyrano[2,3-c]pyrazole derivatives involving a four-component reaction. This atom-economical protocol, reported for the first time with ketones also, includes a much milder procedure, does not involve any tedious work-up or purification, avoids hazardous reagents/byproducts and results in near quantitative yields. The catalyst can be reused at least six times without any change in its catalytic activity.

# **Chelation-assisted palladium-catalyzed acyloxylation of benzyl sp<sup>3</sup> C–H bonds using PhI(OAc)<sub>2</sub> as oxidant Shouhui Zhang, Fang Luo, Wenhui Wang, Xiaofei Jia, Maolin Hu<sup>\*</sup>, Jiang Cheng<sup>\*</sup>**



#### **Selenodiazole-fused diacetamidopyrimidine, a selective fluorescence sensor for aliphatic monocarboxylates** Shyamaprosad Goswami<sup>\*</sup>, Anita Hazra, Manas Kumar Das



### Tandem radical cyclization-based strategy for the synthesis of oxa- and aza-cages: a case of fragmentation versus pp 3324–3329 cyclization

Santosh J. Gharpure\*, Suheel K. Porwal



Tandem radical cyclizations involving two successive radical cyclizations result in the formation of the oxa- and aza-cage compounds. Cyclization with the ketones or olefins without stabilizing groups led to oxa-cages via a fragmentation reaction.

pp 3317-3319

pp 3320-3323

**Synthesis and ligation ability of mono-aminooxy-functionalized dendrigraft poly-L-lysine (DGL)** Andrea Molero Bondia, Nicolas Larcher, Laurent Garrelly, Jean Christophe Rossi, Robert Pascal\* pp 3330-3333



A bifunctional linker was prepared and used as an initiator for the synthesis of dendrigraft poly-L-lysine generations and shown to undergo a selective ligation with aldehydes.

**Pd(OAc)<sub>2</sub>-catalyzed C–H activation of indoles: a facile synthesis of 3-cyanoindoles** B. V. Subba Reddy<sup>\*</sup>, Zubeda Begum, Y. Jayasudhan Reddy, J. S. Yadav pp 3334-3336



A tandem oxidative dearomatization/intramolecular Diels–Alder reaction: a short and efficient entry into tricyclic pp 3337–3339 system of maoecrystal V

Vishwakarma Singh\*, Pravin Bhalerao, Shaikh M. Mobin



**Efficient stereocontrolled synthesis of (***S***)-Fmoc**-β**-nitroalanine via oxidation of oxime** Satendra S. Chauhan<sup>\*</sup>, Howard J. Wilk

pp 3340-3343

Fmoc-HN OH

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