#### **ARKIVOC Volume 2011**

#### Part (vii): Regional Issue 'Organic Chemistry in Argentina'

Facilitators: Rolando Angel Spanevello and Elba Bujan Scientific Editor: Panayiotis A. Koutentis

Full Text: PDF (115K)  pp. 1 - 5  published Oct 25 2010;	
2. A Tribute to Prof. Rita H. de Rossi (AG-1455ST) Full Text: PDF (146K) pp. 6 - 12 published Dec 9 2010;	
3. A Tribute to Prof. Oscar Santiago Giordano (AG-1454ST) Full Text: PDF (75K) pp. 13 - 17 published Dec 19 2010;	
4. A Tribute to Prof. Julio César PodestÃi (AG-1453ST) Full Text: PDF (63K) pp. 18 - 22 published Dec 19 2010;	
5. Kinetics and mechanism of the reactions of methyl 2,4,6-trinitrophenyl carbonate with aniling 5488SP)  Enrique A. Castro, Margarita E. Aliaga and Jose G. Santos  Full Text: PDF (117K)	<b>es</b> (AG

pp. 23 - 30

Me-O-C-O-Ar 
$$\xrightarrow{\text{concerted mechanism}}$$
 Me-O-C + Ar-O- $\xrightarrow{\text{H}}$  Ar = 2,4,6-trinitro phenyl

received Jun 4 2010; accepted Oct 6 2010; published Dec 26 2010;

### **6.** Microwave-assisted asymmetric Diels-Alder reaction using chiral auxiliaries derived from biomass (AG-5641SP)

Ariel M. Sarotti, Rolando A. Spanevello and Alejandra G. SuÃjrez

Full Text: PDF (169K)

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received Jul 18 2010; accepted Aug 26 2010; published Dec 30 2010;

# 7. Improved synthesis of phytanyl $\alpha$ -D-cellobiosyldiphosphate as substrate for $\alpha$ -D-mannosyltransferase (AG-5735SP)

Pablo Barrios, Luis Ielpi and Carla Marino

Full Text: PDF (280K)

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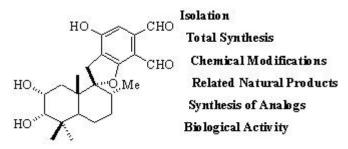
received Aug 9 2010; accepted Nov 29 2010; published Dec 30 2010;

# 8. Isolation, synthesis and complement inhibiting activity of the naturally occurring K-76, its analogues and derivatives (AG-5704SR)

Enrique L. Larghi and Teodoro S. Kaufman

Full Text: PDF (526K)

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Complement Inhibitor K-76

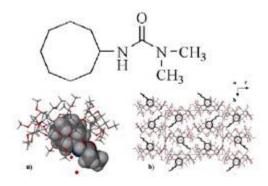
received Jul 30 2010; accepted Oct 16 2010; published Jan 29 2011;

# 9. Solid-state structures and thermal properties of inclusion complexes of the phenylurea herbicide cycluron with permethylated cyclodextrins (AG-5715SP)

Mino R. Caira, Dyanne L. Cruickshank and Susan A. Bourne

Full Text: PDF (547K)

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received Aug 3 2010; accepted Nov 10 2010; published Jan 30 2011;

### **10.** Enantioselective alkylation of β-keto esters promoted by dimeric *Cinchona*-derived ammonium salts as recoverable organocatalysts (AG-6085SP)

Silvia TarÃ, Rafael Chinchilla, Carmen NÃjjera and Miguel Yus

Full Text: PDF (261K)

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received Nov 22 2010; accepted Jan 13 2011; published Feb 4 2011;

## **11.** Enantioselective reduction of prochiral aryl ketones using a novel chiral auxiliary derived from a labdane diterpene (AG-5785SP)

Diego A. Cifuente and Carlos E. Tonn

Full Text: PDF (220K)

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received Aug 24 2010; accepted Sep 29 2010; published Feb 4 2011;

#### 12. Topiramate heterocyclic analogues: synthesis and spectroscopic characterization (AG-6051SP)

Norma Beatriz D'Accorso and Miriam Amelia Martins Alho

Full Text: PDF (559K)

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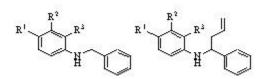
received Nov 10 2010; accepted Dec 26 2010; published Feb 4 2011;

### **13.** Synthesis and antifungal activity of *N*-aryl-*N*-benzylamines and of their homoallyl analogues (AG-6071SP)

Francisco M. Garibotto, Maximiliano A. Sortino, Vladimir V. Kouznetsov, Ricardo D. Enriz and Susana A. Zacchino

Full Text: PDF (1,119K)

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received Nov 15 2010; accepted Jan 13 2011; published Feb 6 2011;

#### 14. Structural characterization of strained oxacycles by <sup>13</sup>C NMR spectroscopy (AG-5508SP)

MartÃn J. Riveira, Agustina La-Venia and Mirta P. Mischne

Full Text: PDF (205K)

Supplementary Material: PDF (1,296K)

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#### **15. Biotransformation of dihydrocoumarin by** *Aspergillus niger* **ATCC 11394** (AG-6063SP)

Celeste B. Aguirre-Pranzoni, Gabriela I. Furque, Carlos E. Ardanaz, Adriana Pacciaroni, Virginia Sosa, Carlos E. Tonn and Marcela Kurina-Sanz

Full Text: PDF (575K)

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#### **16.** Usage of α-picoline borane for the reductive amination of carbohydrates (AG-6100SP)

Vanina A. Cosenza, Diego A. Navarro and Carlos A. Stortz

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### **17.** Bicyclic allyltin derivatives through selective "one pot" hydrostannation - Diels-Alder reaction (AG-6072SP)

Romina A. Ocampo, Sandra D. Mandolesi and Liliana C. Koll

Full Text: PDF (289K)

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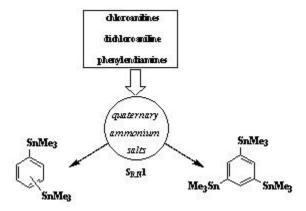
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#### 18. Two-step synthesis of di- and tristannylarenes from anilines via an S<sub>RN</sub>1 mechanism (AG-5952SP)

Gustavo F. Silbestri, MarÃa T. Lockhart and Alicia B. Chopa

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received Oct 12 2010; accepted Dec 3 2010; published Feb 27 2011;

### **19.** Exploring the functional space of thiiranes as gelatinase inhibitors using click chemistry (AG-5839SP)

Sebastian A. Testero, Leticia I. Llarrull, Jed F. Fisher, Mayland Chang and Shahriar Mobashery Full Text: PDF (430K)

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$$\begin{array}{c|c}
 & Click \\
\hline
 & Chemistry \\
\hline
 & R \\
 & N = N
\end{array}$$

received Sep 6 2010; accepted Dec 18 2010; published Feb 27 2011;

### **20.** A convenient synthesis of hexulosonic acids by IBX mediated oxidation of D-glucono-1,5-lactone derivatives (AG-5954SP)

Adriana A. Kolender, Sol C. Parajón Puenzo and Oscar Varela

Full Text: PDF (221K)

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received Oct 13 2010; accepted Feb 20 2011; published Mar 13 2011;

### **21.** Substitution reactions between arenethiolate anions and **1,3**-dihalo-**2,2**-dimethylpropanes. Synthetic scope and mechanistic aspects (AG-5829SP)

Alicia Beatriz Peñéñory, Cecilia Andrea Barrionuevo and Juan Elias Argþello

Full Text: PDF (337K)

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$$X \longrightarrow Y + ArS \xrightarrow{S_N i} tert - BuOK$$

$$X \longrightarrow Y + ArS \xrightarrow{-X} ArS \longrightarrow Y$$

$$1b, X = Y = I$$

$$1c, X = Y = Br$$

$$1d, X = I, Y = CI$$

$$ArS \longrightarrow SAr$$

received Sep 3 2010; accepted Nov 7 2010; published Mar 13 2011;

### **22.** Synthesis of oseltamivir conjugates with lactose analogs for inhibition studies on *Trypanosoma cruzi* trans-sialidase (AG-6092SP)

M. Eugenia Giorgi, Damian Piuselli, Rosalia Agusti and Rosa M. de Lederkremer

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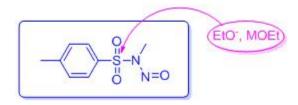
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### **23.** Catalysis of the ethanolysis of *N*-methyl-*N*-nitroso-*p*-toluenesulfonamide by alkali metal ions (AG-5475SP)

Luis Garcia-Rio, Maria Luz Raposo-Barreiro and Pedro Rodriguez-Dafonte

Full Text: PDF (289K)

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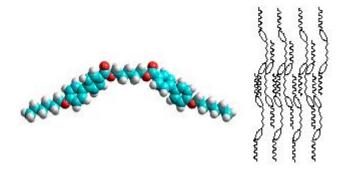
received Jun 2 2010; accepted Dec 18 2010; published Mar 13 2011;

### **24.** Bent-shaped liquid crystal dimers. Influence of the direction of the oxybiphenylenecarboxyl groups on their mesomorphic behavior (AG-6128SP)

Claudia M. Hegguilustoy, Rosana S. Montani, MarÃa B. Darda, Pablo G. Del Rosso and Raúl O. Garay Full Text: PDF (1,373K)

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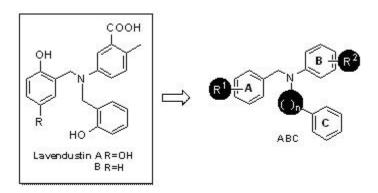


received Dec 1 2010; accepted Feb 10 2011; published Mar 20 2011;

#### 25. Parallel solution synthesis of lavendustin analogs as antileishmanial agents (AG-6137SP)

Diego G. Ghiano, Paulo B. Carvalho, Babu L. Tekwani, Mitchell A. Avery and Guillermo Labadie Full Text: PDF (299K)

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received Dec 3 2010; accepted Feb 7 2011; published Mar 20 2011;

### **26.** Reductive coupling of carbonyl compounds promoted by cobalt or titanium nanoparticles (AG-6079SP)

Fabiana Nador, Evangelina Mascar $\tilde{A}^3$ , Melisa Castro, Cristian Vitale and Gabriel Radivoy

Full Text: PDF (423K)

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$$\mathbb{R}^{1} \stackrel{\bigcirc{\mathsf{CoNPs}}, \, \mathsf{THF}, \, \mathsf{r.t.}}{\underset{\mathsf{reflux}}{\mathsf{CoNPs}}} = \mathbb{R}^{2} \stackrel{\mathsf{OH}}{\underset{\mathsf{HO}}{\mathsf{CP}}} \stackrel{\mathsf{R}^{2}}{\underset{\mathsf{HO}}{\mathsf{CP}}} \stackrel{\mathsf{dilmeso})}{\underset{\mathsf{R}^{2}}{\mathsf{CoNPs}}}$$

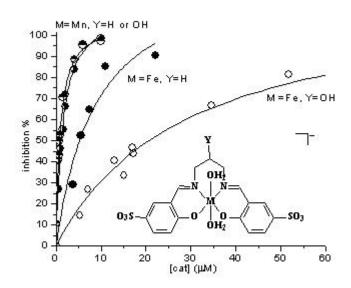
received Nov 19 2010; accepted Feb 7 2011; published Mar 20 2011;

# 27. Properties and antioxidant activity of water-soluble iron catalysts with Schiff base ligands. Comparison with their manganese counterparts (AG-6120SP)

VerÃ<sup>3</sup>nica A. Daier, Claudia M. Palopoli, Christelle Hureau, Ariel De Candia and Sandra R. Signorella Full Text: PDF (426K)

Supplementary Material: PDF (262K)

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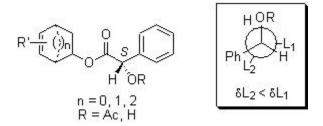
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### 28. Evaluation of the use of mandelate derivatives to determine the enantiomeric purity and the absolute configuration of secondary cyclohexenols (AG-6101SP)

Ariel M. Sarotti, Pablo L. Pisano and Silvina C. Pellegrinet

Full Text: PDF (470K)

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received Nov 26 2010; accepted Feb 7 2011; published Mar 20 2011;

# 29. Attempted synthesis of 2-oxo-*N*-phenyltetracyclo[7.2.1.0<sup>2,6</sup>.0<sup>5,11</sup>]-dodecane-9,10-dicarboximide by intramolecular $\alpha$ -ketocarbene insertion into an unactivated C-H bond (AG-5991SP)

Pelayo Camps, José A. Fernández, Santiago Vázquez, MercÃ" Font-Bardia and Xavier Solans Full Text: PDF (399K)

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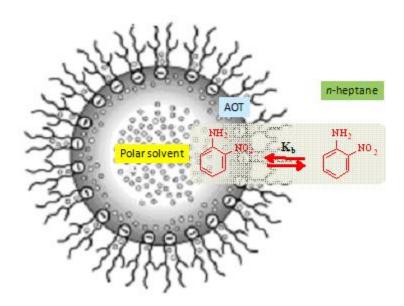
received Oct 25 2010; accepted Dec 29 2010; published Mar 25 2011;

#### **30.** Binding of *o*-nitroaniline to nonaqueous AOT reverse micelles (AG-6090SP)

R. Dario Falcone, Juana J. Silber, M. Alicia Biasutti and N. Mariano Correa

Full Text: PDF (547K)

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received Nov 23 2010; accepted Feb 7 2011; published Apr 19 2011;

### **31.** Barbier allylation of aldehydes and ketones with aluminium and catalytic indium metal: an **economical alternative** (AG-6109SP)

Marcelo D. Preite, Hugo A. Jorquera-Geroldi and Andrés Pérez-Carvajal

Full Text: PDF (208K)

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received Nov 29 2010; accepted Mar 3 2011; published Apr 21 2011;

32. Synthesis of  $\epsilon$ -oxo acids by photostimulated reactions of 2-(2-iodophenyl)acetate ion with carbanions by the  $S_{RN}1$  mechanism. Synthesis of novel 3-benzazepin-2-ones (AG-6077SP)

Javier F. Guastavino, MarÃa E. Budén, Carolina S. GarcÃa and Roberto A. Rossi

Full Text: PDF (310K)

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received Nov 18 2010; accepted Feb 7 2011; published May 9 2011;

#### 33. Hydrogenation of cinnamaldehyde with heterogeneous catalyst in the presence of cyclodextrins

(AG-6114SP)

Mohamad Jahjah, Benoit Caron, Stéphane Menuel, Eric Monflier, Laurent Djakovitch and Catherine Pinel

Full Text: PDF (348K)

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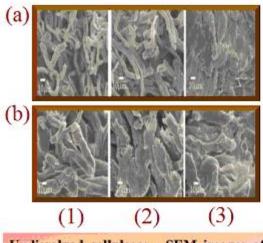
### 34. A physical organic chemistry approach to dissolution of cellulose: effects of cellulose mercerization on its properties and on the kinetics of its decrystallization (AG-6318SP)

Ludmila A. Ramos, Daniella L. Morgado, Fergus Gessner, Elisabete Frollini and Omar A. El Seoud

Full Text: PDF (235K)

Supplementary Material: PDF (177K)

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First steps of cellulose dissolution involve → penetration of the solvated LiCl/DMAc complex into the amorphous regions, decrystallization of the crystalline domains → both processes are accompanied by fiber disintegration → advances as a function of increasing contact time, and decreasing temperature.

Undissolved celluloses - SEM images of (a) mercerized sisal (M4h) and (b) mercerized linters (M4h) celluloses - withdrawn from the dissolution medium:

1) at the beginning (150 °C); 2) after 90 min from the start (150 °C); 3) after 160 min from the start (78 °C)

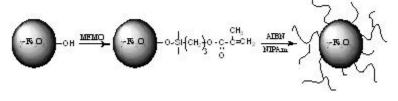
received Feb 4 2011; accepted May 5 2011; published May 24 2011;

**35.** Synthesis and characterization of thermo-sensitive magnetic maghemite nanoparticles (AG-6156SP)

Ariel L. Cappelletti, Julieta I. Paez and Miriam C. Strumia

Full Text: PDF (2,995K)

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received Dec 8 2010; accepted May 5 2011; published May 24 2011;

# **36.** Supramolecular analytical chemistry: spectrofluorimetric determination of 6-hydroxymelatonin with hydroxypropyl-*6*-cyclodextrin (AG-6129SP)

A. Guillermo Bracamonte, Guadalupe G. Miñambres and Alicia V. Veglia

Full Text: PDF (273K)

pp. 439 - 449

received Dec 1 2010; accepted Mar 22 2011; published May 31 2011;

#### 37. Acylphloroglucinols from the fern *Elaphoglossum lindbergii* (AG-6108SP)

Cecilia Socolsky, Elena Cartagena, Yoshinori Asakawa and Alicia Bardón

Full Text: PDF (273K)

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#### **38.** The reaction of hydroxylamine with aspirin (AG-6007SP)

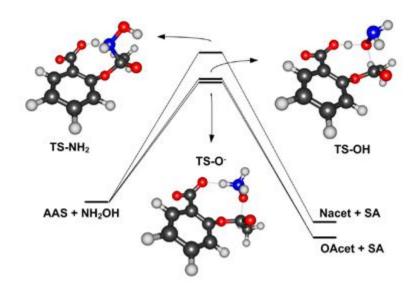
Michelle Medeiros, Bruno S. Souza, Elisa S. Orth, Tiago A.S. Brandão, Willian Rocha, Anthony J. Kirby

and Faruk Nome

Full Text: PDF (683K)

Supplementary Material: PDF (94K)

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received Oct 28 2010; accepted May 19 2011; published Jul 18 2011;

#### 39. Simplified tricycle model of quassinoids with in vitro antiparasitic activity (AG-5658SP)

Maria Fernanda Plano, Guillermo Roberto Labadie, Babu L. Tekwani and Raquel Maria Cravero

Full Text: PDF (539K)

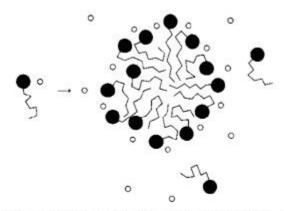
pp. 477 - 489

received Jul 22 2010; accepted Nov 23 2010; published Jul 17 2011;

**40. Micellar rate effects-assumptions and approximations** (AG-6086SU) *Clifford A. Bunton* 

Full Text: PDF (204K)

pp. 490 - 504



The micelle binds substrate and reactive counter ion and accelerates their reaction

received Nov 22 2010; accepted Mar 3 2011; published Jul 24 2011;