

Autor: M. Eugenia Martínez Galán

Título : Síntesis y reactividad de complejos dinucleares insaturados de molibdeno con interacciones M-H-C y M-H-P de tipo agóstico

Fecha lectura: 06/02/2009

Publicaciones:

- 1.- “M-P versus M=M Bonds as Protonation Sites in the Organophosphide-Bridged Complexes $[M_2Cp_2(\mu-PR_2)(\mu-PR'_2)(CO)_2]$, (M = Mo, W; R, R' = Ph, Et, Cy).” M. A. Alvarez, M. E. García, M. E. Martínez, A. Ramos, M. A. Ruiz, D. Sáez, J. Vaissermann. *Inorg. Chem.* **2006**, 45, 6965.
- 2.- “Reactivity of the α -Agostic Methyl Bridge in the Unsaturated Complex $[Mo_2(\eta^5-C_5H_5)_2(\mu-\eta^1:\eta^2-CH_3)(\mu-PCy_2)(CO)_2]$: Migratory Behavior and Methylidyne Derivatives.” M. A. Alvarez, D. García-Vivó, M. E. García, M. E. Martínez, A. Ramos, M. A. Ruiz. *Organometallics* **2008**, 27, 1973.
- 3.- “Reactions of the Unsaturated Complex $[Mo_2(\eta^5-C_5H_5)_2(\mu-PEt_2)_2(CO)_2]$ with $[Au(PR_3)]^+$ Cations: Kinetic Preference of the Mo-P Bonds as the Site of Attack of the Gold(I) Electrophile.” M. A. Alvarez, M. E. García, D. García-Vivó, M. E. Martínez, M. A. Ruiz. *Inorg. Chem.* **2009**, 48, 9767.
- 4.- “Migration and Insertion Processes in the Reactions of the Hydrocarbyl-Bridged Unsaturated Complexes $[Mo_2(\eta^5-C_5H_5)_2(\mu-R)(\mu-PCy_2)(CO)_2]$ (R= Me, CH₂Ph, Ph) with CO and NO”. M. A. Alvarez, M. E. García, M. E. Martínez, A. Ramos, M.A. Ruiz. *Organometallics* **2009**, 28, 6293.
- 5.- “Heterometallic derivatives of the unsaturated methyl-bridged complex $[Mo_2(\eta^5-C_5H_5)_2(\mu-CH_3)(\mu-PCy_2)(CO)_2]$. Photochemical generation of methylidyne clusters”. M. A. Alvarez, M. E. García, M. E. Martínez, M. A. Ruiz. *Organometallics* **2010**, 29, 904.
- 6.- “Dehydrogenative formation and reactivity of the unsaturated benzylidyne-bridged complex $[Mo_2Cp_2(\mu-CPh)(\mu-PCy_2)(\mu-CO)]$: C-C and C-P coupling reactions.” M. A. Alvarez, M. E. García, M. E. Martínez, S. Menéndez, M. A. Ruiz. *Organometallics* **2010**, 29, 710.

Autor: Roberto Morán Ramallal
Título: Aziridina-2-carboxamidas y derivados enantiopuros: preparación bacteriana y quimioenzimática, reacciones de apertura y procesos de expansión aparente de sus anillos
Fecha lectura: 23/04/2009

Publicaciones:

1.- "Bacterial preparation of unactivated aziridine-2-carboxamides and their transformation into enantiopure nonnatural amino acids and *vic*-diamines." R. Morán-Ramallal, R. Liz, V. Gotor. *Organic Letters* / 9 / **2007** / 521-524.

2.- "Regioselective and stereospecific synthesis of enantiopure 1,3-oxazolidin-2-ones by intramolecular ring opening of 2-(Boc-aminomethyl)aziridines. Preparation of antibiotic linezolid." R. Morán-Ramallal, R. Liz, V. Gotor. *Organic Letters* / 10 / **2008** / 1935-1938.

3.- "Enantiopure *trans*-3-arylaziridine-2-carboxamides: preparation by bacterial hydrolysis and ring-openings toward enantiopure, unnatural D-□-amino acids." R. Morán-Ramallal, R. Liz, V. Gotor. *The Journal of Organic Chemistry* / 75 / **2010** / 6614-6624

Autor: Carmen Simal Fernández

Título: Aplicaciones sintéticas de derivados organometálicos de samario y litio funcionalizados: Síntesis de (Z)-alquenos, ácidos ciclopropanocarboxílicos, aziridinas y β -aminoésteres o -amidas

Fecha lectura: 24/04/2009

Publicaciones:

- 1.-“ Photoinduced Metalation of Nonactivated C-Cl Bonds with Samarium Diiodide: Synthesis of Alkenes with High (Z)-Selectivity through β -Elimination Reactions.” José M. Concellón, Humberto Rodríguez-Solla, Carmen Simal, Mónica Huerta. *Organic Letters* / 7 / **2005** / 5833-5835
- 2.-“ A Convenient Synthesis of (Z)-Allylsilanes with High Stereoselectivity Promoted by Samarium Diiodide”. José M. Concellón, Humberto Rodríguez-Solla, Carmen Simal, Cecilia Gómez. *Synlett* / **2007** / 75-78
- 3.-“ The First Cyclopropanation Reaction of Unmasked α,β -Unsaturated Carboxylic Acids: Direct and Complete Stereospecific Synthesis of Cyclopropanecarboxylic Acids Promoted by Sm/CHI₃”. José M. Concellón, Humberto Rodríguez-Solla, Carmen Simal. *Organic Letters* / 9 / **2007** / 2685-2688
- 4.-“Addition Reactions of Iodomethylithium to Imines. A Direct and Efficient Synthesis of Aziridines and Enantiopure Amino Aziridines”. José M. Concellón, Humberto Rodríguez-Solla, Carmen Simal. *Organic Letters* / 10 / **2008** / 4457-4460
- 5.-“ General, Stereoselective Synthesis of (Z)- β,γ -Unsaturated Nitriles Promoted by Samarium Diiodide”. José M. Concellón, Humberto Rodríguez-Solla, Carmen Simal, David Santos, Nieves R. Paz. *Organic Letters* / 10 / **2008** / 4549-4552
- 6.-“Addition Reactions of Chloro- or Iodomethylithium to Imines. Synthesis of Enantiopure Aziridines and β -Chloroamines”. José M. Concellón, Humberto Rodríguez-Solla, Pablo L. Bernad, Carmen Simal. *Journal of Organic Chemistry* / 74 / **2009** / 2452-2459
- 7.-“The Use of Samarium Enolates, A Novel Alternative in the Addition Reactions to Imines. Synthesis of 3-Aminoesters, Amides and Enantiopure 3,4-Diaminoesters”. José M. Concellón, Humberto Rodríguez-Solla, Carmen Simal. *Adv. Synth. Catal.* / **2009** / 351 / 1238-1242
- 8.-“ The Addition Reaction of Samarium Enolates and 2-Haloenolates Derived from Esters, and Amides to Imines. Totally Stereoselective Synthesis of Enantiopure 3,4-Diaminoesters or amides”. José M. Concellón, Humberto Rodríguez-Solla, Carmen Simal, Vicente del Amo, Santiago García-Granda, M. Rosario Díaz. *Adv. Synth. Catal.* / **2009** / 351 / 2991-3000
- 9.-“ Sequential Synthesis of (E)- α,β -Unsaturated Primary Amides with Complete Stereoselectivity”. *Journal of Organic Chemistry* / 75 / **2010** / 2452-2459

10.-“Synthesis and Synthetic Applications of Samarium Enolates of Unmasked Amides: Efficient Synthesis of 3-Aminoamides, and 3-Amino-2-chloroamides”. José M. Concellón, Humberto Rodríguez-Solla, Carmen Concellón, Carmen Simal, Noemí Alvaredo. *Synlett* / **2010** / 2119-2121

Autor: Amadeo Fernández Miranda
Título: Nuevas reacciones en Cascada de ω-Alquinoles Catalizadas por Complejos de Oro y Platino
Fecha lectura: 29/04/2009

Publicaciones:

- 1.-“Gold or Platinum- Catalyzed Tandem Cycloisomerization/Prins Type Cyclization Reactions”. J. Barluenga, A. Diéguez, A. Fernández, F. Rodríguez, F. J. Fañanás. *Angewandte Chemie International Edition* / **2006** / 45 / 2091-2093
- 2.-“Tandem intramolecular hydroalkoxylation-hydroarylation reactions: synthesis of enantiopure benzofused cyclic ethers from the chiral pool”. J. Barluenga, A. Fernández, A. Satrustegui, A. Diéguez, F. Rodríguez, F.J. Fañanás. *Chemistry. A European Journal* / **2008** / 14 / 4153-4156.
- 3.-“Synthesis of bi(indolyl)alkanes by a site-selective gold-catalyzed addition of indoles to butynol derivatives”. J. Barluenga, A. Fernández, F. Rodríguez, F.J. Fañanás. *Journal of Organometallic Chemistry* / **2009** / 694 / 546-550
- 4.-“An expeditious síntesis of Bruguierol A”. F.J. Fañanás, A. Fernández, D. Cevik, F. Rodríguez. *Journal of Organic Chemistry* / **2009** / 74 / 932-934.
- 5.-“A Gold-Catalyzed Cascade Reactions Involving an Inusual Intramolecular Redox Process”. J. Barluenga, A. Fernández, F. Rodríguez, F.J. Fañanás. . *A European Journal* / **2009** / 15 / 8121-8123
- 6.-“Gold- or Platinum-Catalyzed Cascade Processes of Alkynol Derivatives Involving Hydroalkoxylation Followed by Prins-Type Cyclizations”. J. Barluenga, A. Fernández, A. Diéguez, F. Rodríguez, F.J. Fañanás. *Chemistry. A European Journal* / **2009** / 15 / 11660-11667.

Autor: Inmaculada Amor García
Título: Comportamiento químico de complejos dinucleares de molibdeno con ligandos supermesitil y ciclopentadienilidenfosfinideno
Fecha lectura: 05/06/2009

Publicaciones:

- 1.- "Formation and Cleavage of P-C, Mo-C, and C-H Bonds Involving Arylphosphinidene and Cyclopentadienyl Ligands at Dimolybdenum Centers." I. Amor, M. E. García, M. A. Ruiz, D. Sáez, H. Hamidov, J. C. Jeffery. *Organometallics* **2006**, 25, 4857.
- 2.- "Formation of P-H, P-C, and C-H Bonds by Hydride Attack on a Electrophilic Phosphide-Bridged Dimolybdenum Complex. Trapping the Phosphinidene Ligand with Borane". I. Amor, D. García-Vivó, M. E. García, M. A. Ruiz, D. Sáez, H. Hamidov, J. C. Jeffery. *Organometallics* **2007**, 26, 466.
- 3.- "Carbene- and Carbyne-like Behavior of the Mo-P Multiple Bond in a Dimolybdenum Complex Inducing Trigonal Pyramidal Coordination of a Phosphinidene Ligand M. A. Alvarez, I. Amor, M. E. García, D. García-Vivó, Miguel A. Ruiz. *Inorg. Chem.* **2007**, 46, 6230.
- 4.- "Aurophilic Self-Assembly of a Mo₄Au₂ Phosphinidene Complex with an Unprecedented H-Shaped Planar Metal Core M. A. Alvarez, I. Amor, M. E. García, M. A. Ruiz. *Inorg. Chem.* **2008**, 47, 7963.
- 5.- "Structure, Bonding and Reactivity of Binuclear Complexes having Asymmetric Trigonal Phosphinidene Bridges: Addition of 16-electron Metal Carbonyl Fragments to the Dimolybdenum Compounds [Mo₂Cp(μ-κ¹:κ¹,η⁵-PC₅H₄)(CO)₂L] and [Mo₂Cp₂(μ-PH)(CO)₂L] (L = η⁶-1,3,5-C₆H₃^tBu₃)". M. A. Alvarez, I. Amor, M. E. García, D. García-Vivó, M. A. Ruiz, J. Suarez *Organometallics* **2010**, 29, 4384.

Autor: José Antonio Fernández López
Título: Tesis: Materiales Porosos de Carbono en Supercondensadores
Fecha lectura: 26/06/2009

Publicaciones:

1.-“Correlation between capacitances of porous carbons in acidic and aprotic EDLC electrolytes”. T.A. Centeno, M. Hahn, J.A. Fernández, R. Kötz, F. Stoeckli. *Electrochemistry Communications* / 9 / **2007** / 1242-1246

2.-“Performance of mesoporous carbons derived from poly (vinyl alcohol) in electrochemical capacitors”. T.A. Centeno, J.A. Fernández, F. Stoeckli. *Journal of Power Sources* / 175 / **2008** / 675-679.

3.-“Correlation between heats of immersion and limiting capacitances in porous carbons”. T.A. Centeno, J.A. Fernández, F. Stoeckli. *Carbon* / 46 / **2008** / 1025-1030.

4.-“EDLC performance of carbide-derived carbons in aprotic and acidic electrolytes”. J.A. Fernández, M. Arulepp, J. Leis, F. Stoeckli, T.A. Centeno. *Electrochimica Acta* / 53 / **2008** / 7111-7116

5.-“Cherry stones as precursor of activated carbons for supercapacitors”. M. Olivares-Marín, J.A. Fernández, M.J. Lázaro, C.Fernández-González, A. Macías-García, V. Gómez-Serrano, F. Stoeckli, T.A. Centeno. *Materials Chemistry and Physics* / 114 / **2009** /323-327

6.-“Effect of mesoporosity on specific capacitance of carbons”. J.A. Fernández, S. Tennison, O.Kozynchenko, F. Rubiera, F. Stoeckli, T.A. Centeno. *Carbon* / 47 / **2009** /1598-1604.

7.-“Poly(ethylene terephthalate)-based carbons as electrode material in supercapacitors”. M. Domingo-García, J.A. Fernández, M. C. Almazán-Almazán, F. J. López-Garzón, F. Stoeckli, T.A. Centeno. *Journal of Power Sources* / 195 / **2010** / 3810–3813

Autor: Bernabé Fernández Perandones
Título: Generación y Reactividad de Ligandos Carbeno N-Heterocíclicos y Diaminocarbenos en Complejos de Manganeso(I).
Fecha lectura: 03/07/2009

Publicaciones:

1.-“Generation of N-Heterocyclic Carbenes by Metal-Mediated Coupling of Propargylamine and Isocyanides”. J. Ruiz, G. García, M. E. G. Mosquera, B. F. Perandones, M. P. Gonzalo, M. Vivanco. *Journal of The American Chemical Society* /127/ **2005**/ 8584-8585.

2.-“Synthesis of N-Heterocyclic Carbene Complexes of Manganese(I) by Coupling Isocyanide Ligands with Propargylamines and Propargylic Alcohols”. J. Ruiz, B. F. Perandones, G. García, M. E. G. Mosquera. *Organometallics*/ 26/ **2007**/ 5678-5695.

3.-“Base-Promoted Tautomerization of Imidazole Ligands to N-Heterocyclic Carbenes and Subsequent Transmetalation Reaction”. J. Ruiz, B. F. Perandones. *Journal of the American Chemical Society* /129/ **2007**/ 9299-9300.

4.-“Acyclic Diamino Carbene Complexes of Manganese(I): Synthesis, Deprotonation, and Subsequent Multiple Insertion Reaction of Alkynes. J. Ruiz, B. F. Perandones, G. García, M. E. G. Mosquera. *Organometallics* /28/ **2009**/ 830-836.

5.-“Metal-induced tautomerization of oxazole and thiazole molecules to heterocyclic carbenes”. J. Ruiz, B. F. Perandones. *Chemical Communications* /**2009**/ 2741-2743.

6.- “NHC-manganese(I) complexes as carbene transfer agents”. J. Ruiz, A. Berros, B. F. Perandones, M. Vivanco. *Dalton Transactions* /**2009**/ 6999-7007.

7.- “On the Existence of an N-Metalated N-Heterocyclic Carbene: A Theoretical Study”. J. Ruiz, B. F. Perandones, J. F. Van der Maelen, S. García-Granda. *Organometallics* /29/ **2010**/ 4639-4642.

Autor: Leire Zubizarreta Sáenz de Zaitegui
Título: Síntesis de materiales carbonosos dopados para el almacenamiento de H₂
Fecha lectura: 10/07/2009

Publicaciones:

- 1.-“Development of microporous carbon xerogels by controlling synthesis conditions”. L. Zubizarreta, A. Arenillas, A. Domínguez, J.A. Menendez, J.J. Pis. *Journal of Non-Crystalline Solids* / 354 / **2008** / 817-825.
- 2.- “Growth of nanofilaments on carbon based materials from microwave-assisted decomposition of CH₄”. B. Fidalgo, Y. Fernández, L. Zubizarreta, A. Arenillas, A. Domínguez, J.J. Pis, J.A. Menéndez. *Applied Surface Science* / 254 / **2008** / 3553–3557.
- 3.-“ Preparation of Ni doped carbon nanospheres with different surface chemistry and controlled pore structure”. L. Zubizarreta, A. Arenillas, J.J. Pis. *Applied Surface Science* / 254 / **2008** / 3993-4000.
- 4.-“ Tailoring the textural properties of activated carbon xerogels by chemical activation with KOH”. : L. Zubizarreta, A. Arenillas, J.P. Pirard, J.J. Pis, N. Job. *Microporous & Mesoporous Materials* / 115 / **2008** / 480-490
- 5.-“ H₂ storage in carbon materials”. L. Zubizarreta, E.I. Gómez, A. Arenillas, C.O. Ania, J.B. Parra, J.J. Pis. *Adsorption* / 14 / **2008** / 557-566
- 6.-“ Microwave drying as an effective method to obtain porous carbon xerogels”. L. Zubizarreta, A. Arenillas, J.A. Menéndez, J.J. Pis, J.P. Pirard, N. Job. *Journal of Non-Crystalline Solids* / 354 / **2008** / 4024-4026
- 7.- “Carbon Materials for H₂ storage”. L. Zubizarreta, A. Arenillas, J.J. Pis. *International Journal of Hydrogen Energy* / 34 / **2009** / 4575-4581
- 8.-“ Effect of carbon support on kinetic behaviour of a metal hydride electrode”. J. Thomas, G. Andreasen, A. Arenillas, L. Zubizarreta, P. Barath, M. Sedlarikova, J. Vondrak, A. Visintin. *Electrochimica Acta* / 54 / **2009** / 2010-2017
- 9.-“ Improving hydrogen storage in Ni doped carbon nanospheres”. L. Zubizarreta, J.A. Menéndez, J.J. Pis, A. Arenillas. *International Journal of Hydrogen Energy* / 34 / **2009** / 3070-3076
- 10.-“ Studying chemical activation in carbon xerogels”. L. Zubizarreta, A. Arenillas, J.J. Pis, J.P. Pirard, N. Job. *Journal of Materials Science* / 44 / **2009** / 6583-6590.
- 11.- “Microwave heating processes involving carbon materials”. J.A. Menéndez, A. Arenillas, B. Fidalgo, Y. Fernández, L. Zubizarreta, E.G. Calvo, J.M. Bermúdez. *Processing Technology* / 91 / **2010** / 1-8

- 12.-“ Ni-doped carbons as carbon support for metal hydride electrodes”. J.E. Thomas, R.M. Humana, L. Zubizarreta, A. Arenillas, J.A. Menéndez, H.L. Corso, A. Visintin. *Energy & Fuels* / 24 / **2010** / 3302-3306
- 13.- “Synthesis of carbon-supported nickel catalysts for the dry reforming of CH₄”. B. Fidalgo, L Zubizarreta, J.M. Bermúdez, A. Arenillas, J.A. Menéndez. *Fuel Processing Technology* / 91 / **2010** / 765-769
- 14.-“ Exploring new routes in the synthesis of carbon xerogels for their application in electric doublelayer capacitors”. E.G. Calvo, C.O. Ania, L. Zubizarreta, J.A. Menéndez, A. Arenillas. *Energy & Fuels* / 24 / **2010** / 3334-3339.
- 15.-“ Ni-doped carbon xerogels for H₂ storage”. L. Zubizarreta, J.A. Menéndez, N. Job, J.P. Marco-Lozar, J.P. Pirard, J.J. Pis, A.Linares Solano, D. Cazorla-Amorós, A. Arenillas. *Carbon* / 48 / **2010** / 2722-2733
- 16.-“ A comparison of physical activation of carbon xerogels with carbon dioxide with chemical activation using hydroxides. M.S. Contreras, C.A. Paez, L. Zubizarreta, A. Leonard, S. Blacher, C.G. Olivera-Fuentes, A. Arenillas, J.P. Pirard, N. Job. *Carbon* / 48 / **2010** / 3157-3168.

Autor: Tatiana Rodríguez Pérez
Título: Síntesis quimioenzimática de pronucleótidos y precursores de oligonucleotidos
Fecha lectura: 21/07/2009

Publicaciones:

- 1.-“ Novel and Efficient Chemoenzymatic Synthesis of D-Glucose 6-Phosphate and Molecular Modeling Studies on the Selective Biocatalysis”. T. Rodríguez-Pérez, I. Lavandera, S. Fernández, Y. S. Sanghvi, M. Ferrero, V. Gotor. *Eur. J. Org. Chem.* / **2007** / 2769-2778
2. -“ Preparation of Nucleoside-Carbohydrate Phosphodiester Prodrug Analogues by Chemoenzymatic Procedure”. T. Rodríguez-Pérez, S. Fernández, Y. S. Sanghvi, V. Gotor, M. Ferrero. *Nucleic Acids Symp. Ser.* / 52 / **2008** / 101-102
3. -“Improved Synthesis and Isolation of 2'-O-Methyladenosine: Effective and Scalable Enzymatic Separation of 2'/3'-O-Methyladenosine Regioisomers”. S. Martínez-Montero, S. Fernández, T. Rodríguez-Pérez, Y. S. Sanghvi, K. Wen, V. Gotor, M. Ferrero. *Eur. J. Org. Chem.* / **2009** / 3265-3271
4. -“ Chemoenzymatic Synthesis of 3'-O-Acetal-Protected 2'-Deoxynucleosides as Building Blocks for Nucleic Acid Chemistry”. T. Rodríguez-Pérez, S. Fernández, S. Martínez-Montero, T. González-García, Y. S. Sanghvi, V. Gotor, M. Ferrero. *Eur. J. Org. Chem.* / **2010** / 1736-1744
5. -“ Chemoenzymatic Syntheses and Anti-HIV-1 Activity of Glucose-Nucleoside Conjugates as Prodrugs”. T. Rodríguez-Pérez, S. Fernández, Y. S. Sanghvi, M. Detorio, R. F. Schinazi, V. Gotor, M. Ferrero. *Bioconjugate Chem.* / 21 / **2010** / 2239-2249

Autor: Benjamín Eduardo Busto García
Título: Síntesis quimioenzimática de derivados enantioméricamente puros de 4-(N,N-dimetilamino)piridina, aminoalcoholes y diaminas ópticamente activas: aplicaciones en organocatálisis
Fecha lectura: 18/09/2009

Publicaciones:

- 1.-“ Computational Study of the Lipase-Mediated Desymmetrisation of 2-Substituted-Propane-1,3-Diamines”. Garcia-Urdiales, Eduardo; Busto, Eduardo; Rios-Lombardia, Nicolas; Gotor-Fernandez, Vicente; Gotor, Vicente. *ChemBioChem*/ 10/ **2009**/ 2875-2883
- 2.- “Development of a chemoenzymatic strategy for the synthesis of optically active and orthogonally protected polyamines”. Busto, Eduardo; Gotor-Fernandez, Vicente; Montejo-Bernardo, Jose; Garcia-Granda, Santiago; Gotor, Vicente. *Tetrahedron*/ 65/ **2009**/ 8393-8401
- 3.-“ Chemoenzymatic synthesis of optically active pyridine derivatives”. Gotor-Fernandez, Vicente; Busto, Eduardo; Gotor, Vicente. *Targets in Heterocyclic Chemistry*/ 12/ **2008**/ 414-437
- 4.-“Chemoenzymatic Synthesis of Rivastigmine Based on Lipase-Catalyzed Processes”. Mangas-Sanchez, Juan; Rodriguez-Mata, Maria; Busto, Eduardo; Gotor-Fernandez, Vicente; Gotor, Vicente. *Journal of Organic Chemistry*/ 74/ **2009**/ 5304-5310.
- 5.-“ Enzymatic Desymmetrization of Prochiral 2-Substituted-1,3-Diamines: Preparation of Valuable Nitrogenated Compounds”. Rios-Lombardia, Nicolas; Busto, Eduardo; Garcia-Urdiales, Eduardo; Gotor-Fernandez, Vicente; Gotor, Vicente. *Journal of Organic Chemistry*/ 74/ **2009**/ 2571-2574
- 6.-“ Enzymatic Desymmetrization of 1,3-Propanodiamine Derivatives. New Routes for the Preparation of Enantiomerically Pure Amines”. Busto, Eduardo; Gotor-Fernandez, Vicente; Montejo-Bernardo, Jose; Garcia-Granda, Santiago; Gotor, Vicente. *Organic Letters* / 9/ **2007**/ 4203-4206
- 7.-“ Simple and straightforward synthesis of novel enantiopure ionic liquids via efficient enzymatic resolution of (±)-2-(1H-imidazol-1-yl)cyclohexanol”. Busto, Eduardo; Gotor-Fernandez, Vicente; Rios-Lombardia, Nicolas; Garcia-Verdugo, Eduardo; Alfonso, Ignacio; Garcia-Granda, Santiago; Menendez-Velazquez, Amador; Burguete, M. Isabel; Luis, Santiago V.; Gotor, Vicente. *Tetrahedron Letters* / 48/ **2007**/ 5251-5254
- 8.-“ Enzymatic preparation of novel aminoalkylpyridines using lipases in organic solvents”. Torre, Oliver; Busto, Eduardo; Gotor-Fernandez, Vicente; Gotor, Vicente. *Advanced Synthesis & Catalysis*/ 349/ **2007**/ 1481-1488
- 9.-“Enantioselective synthesis of 4-(dimethylamino)pyridines through a chemical oxidation-enzymatic reduction sequence. Application in asymmetric catalysis”.

Busto, Eduardo; Gotor-Fernandez, Vicente; Gotor, Vicente. *Advanced Synthesis & Catalysis*/ 348/ **2006**/ 2626-2632.

10.-“ Kinetic resolution of 4-chloro-2-(1-hydroxyalkyl)pyridines using *Pseudomonas cepacia* lipase”. Busto, Eduardo; Gotor-Fernandez, Vicente; Gotor, Vicente . *Nature Protocols*/ 1/ **2006**/ 2061-2067

11.-“ Candida antarctica lipase B: an ideal biocatalyst for the preparation of nitrogenated organic compounds”.Gotor-Fernandez, Vicente; Busto, Eduardo; Gotor, Vicente. *Advanced Synthesis & Catalysis*/ 348/ **2006**/ 797-812

12.-“ Biocatalytic preparation of optically active 4-(N,N-dimethylamino)pyridines for application in chemical asymmetric catalysis” Busto, Eduardo; Gotor-Fernandez, Vicente; Gotor, Vicente. *Tetrahedron: Asymmetry*/ 17/ **2006**/ 1007-1016

13.-“Chemoenzymatic synthesis of chiral 4-(N,N-dimethylamino)pyridine derivatives” . Busto, Eduardo; Gotor-Fernandez, Vicente; Gotor, Vicente. *Tetrahedron: Asymmetry*/ 16/ **2005**/ 3427-3435

Autor: Rocío González Alvarez
Título: Síntesis y reactividad de complejos binucleares de hierro con ligandos fosfinideno
Fecha lectura: 11/12/2009

Publicaciones:

- 1.- “High-yield Synthesis and Reactivity of Stable Diiron Complexes with Bent-Phosphinidene Bridges”. C. M. Alvarez, M. A. Alvarez, M. E. García, R. González, M. A. Ruiz, H. Hamidov y J. C. Jeffery. *Organometallics* **2005**, *24*, 5503.
- 2.- “Nucleophilic and Electrophilic Behavior of the Phosphinidene-Bridged Complex $[\text{Fe}_2(\eta^5\text{-C}_5\text{H}_5)_2(\mu\text{-PCy})(\mu\text{-CO})(\text{CO})_2]$ ”. M. A. Alvarez, M. E. García, R. González, M. A. Ruiz.. *Organometallics* **2008**, *27*, 1037.
- 3.- “Chemical and Structural Effects of Bulkiness on Bent-Phosphinidene Bridges: Synthesis and Reactivity of the Diiron Complex $[\text{Fe}_2\text{Cp}_2\{\mu\text{-P}(2,4,6\text{-C}_6\text{H}_2\text{tBu}_3)\}(\mu\text{-CO})(\text{CO})_2]$ ”. M. A. Alvarez, M. E. García, R. González, A. Ramos, M. A. Ruiz. *Organometallics* **2010**, *29*, 1875.
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