

## Development of new enantioselective processes

**Authors:** L. A. Oro, J. A. Cabeza, C. Cativiela, M. D. Díaz de Villegas, E. Meléndez

**Title:** "Iridium-catalysed homogeneous hydrogenation of prochiral enamides containing tetrasubstituted alkene moieties"

**Journal:** J. Chem. Soc. Chem. Commun., 1383-1384, 1983.

**Authors:** J. Cabeza, C. Cativiela, M. D. Díaz de Villegas, L. A. Oro

**Title:** "Homogeneous hydrogenation of tetrasubstituted alkene moieties in prochiral didehydroamino acid derivatives catalysed by iridium complexes"

**Journal:** J. Chem. Soc. Perkin Trans. I, 1881-1884, 1988.

**Authors:** R. Navarro, E. P. Urriolabeitia, C. Cativiela, M. D. Díaz-de-Villegas, M. P. López, E. Alonso

**Title:** "Chiral Pd organometallic complexes as catalysts in cyclopropanation reactions"

**Journal:** J. Mol. Catal., **105**, 111-116, 1996.

**Authors:** C. Cativiela, J. M. Fraile, J.I. García, M. P. López, J.A. Mayoral, E. Pires

**Title:** Diels-Alder reactions of (E)-2-phenyl-4-[(S)-2,2-dimethyl-1,3-dioxolan-4-ylmethylene]-5(4H)-oxazolone with heterogeneous catalysts

**Journal:** Tetrahedron: Asymmetry, **7**, 2391-2398, 1996.

**Authors:** D. Carmona, C. Cativiela, R. García-Correas, F. Lahoz, M. P. Lamata., J. A. López, M. P. López-Ram de Vú, L. Oro, E. San José, F. Viguri

**Title:** "Chiral rhodium complexes as catalysts in Diels-Alder reaction"

**Journal:** J. Chem. Soc. Chem. Commun., 1247-1248, 1996.

**Authors:** D. Carmona, C. Cativiela, S. Elipe, F. J. Lahoz, M. P. Lamata., M. P. López-Ram de Vú, L. A. Oro, C. Vega, F. Viguri

**Title:** "Chiral ruthenium complexes as catalysts in enantioselective Diels-Alder reactions. Crystal structure of the Lewis acid-dienophile adduct"

**Journal:** J. Chem. Soc. Chem. Commun., 2351-2352, 1997.

**Authors:** D. Carmona, F. J. Lahoz, S. Elipe, L. A. Oro, M. P. Lamata, F. Viguri, C. Mir, C. Cativiela, M. P. López-Ram de Vú

**Title:** "Synthesis, characterization, properties and asymmetric catalytic Diels-Alder reactions of chiral-at-metal imino-iridium (III) complexes"

**Journal:** *Organometallics*, **17**, 2986-2995, 1998.

**Authors:** D. Carmona, C. Vega, F. J. Lahoz, S. Elipe, L. A. Oro, M. P. Lamata, F. Viguri, R. García-Correas, C. Cativiela, M. P. López-Ram de Vú

**Title:** "Imino-rhodium (III) and -ruthenium (II) compounds with stereogenic metal centers"

**Journal:** *Organometallics*, **18**, 3364-3371, 1999.

**Authors:** D. Carmona, F. J. Lahoz, S. Elipe, L. A. Oro, M. P. Lamata, F. Viguri, F. Sánchez, S. Martínez, C. Cativiela, M. P. López-Ram de Vú

**Title:** "Synthesis, characterization, properties and asymmetric catalytic Diels-Alder reactions of chiral-at-meta lphosphinoxazoline-rhodium(III) and iridium(III) complexes"

**Journal:** *Organometallics*, **21**, 5100-5114, 2002.

**Authors:** B.L. Feringa, R. Badorrey, D. Pena, S.R. Harutyunyan, A.J. Minnaard

**Title:** " Copper-catalyzed asymmetric conjugate addition of Grignard reagents to cyclic enones "

**Journal:** *Proc. Natl. Acad. Sci. USA*, **101**, 5834-5838, 2004.

**Authors:** M. Lasa, P. López, C. Cativiela, D. Carmona, L. Oro

**Title:** "Chiral-at-metal ruthenium(II) complexes as catalyst in the asymmetric cyclopropanation reaction"

**Journal:** *J. Mol. Catal. A*, **234**, 129-135, 2005.

**Authors:** S.R. Harutyunyan, F. López, W.R. Browne, A. Correa, D. Peña, R. Badorrey, A. Meetsma, A.J. Minnaard, B.L. Feringa

**Title:** "On the mechanism of the copper-catalyzed enantioselective 1,4-addition of grignard reagents to  $\alpha,\beta$ -unsaturated carbonyl compounds"

**Journal:** J. Am. Chem. Soc., **128**, 9103-9118, 2006.

**Authors:** D. Carmona, R. Medrano, I. T. Dobrinovich, F. J. Lahoz, J. Ferrer, L. A. Oro, M. P. López

**Title:** “Synthesis and structure of chiral-at-metal complexes with the ligand (*S*)-2-[(*S*<sub>p</sub>)-2-(diphenylphosphino)ferrocenyl]-4-isopropylloxazoline”

**Journal:** J. Organometallic Chem., **691**, 5560-5566, 2006.

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**Authors:** P. Etayo, R. Badorrey, M. D. Díaz de Villegas, J. A. Gálvez, P. López-Ram-de-Viú

**Title:** “An expeditious method for the first asymmetric synthesis of dexoxadrol from the chiral pool”

**Journal:** Synlett, 1775-1778, 2010.

**Authors:** G. Jimenez-Oses, E. Vispe, M. Roldan, S. Rodríguez-Rodríguez, P. Lopez-Ram-de-Viú, L. Salvatella, J. A. Mayoral, J. M. Fraile

**Title:** “Stereochemical outcome of copper-catalyzed C–H insertion reactions. An experimental and theoretical study”

**Journal:** J. Org. Chem., **78**, 5851-5857, 2013.