ENZYMATIC CHIRAL RESOLUTIONS AND CHROMATOGRAPHIC MONITORING - NEW INSIGHTS

Florin Dan Irimie,* Csaba Paizs, Monica Ioana Toșa

Department of Chemistry, Faculty of Chemistry and Chemical Engineering, University"Babeş-Bolyai" of Cluj - Napoca, Str. Arany Janos 11, Cluj Napoca, RO-400028, Romania E-mail: irimie@chem.ubbcluj.ro

Besides chiral pool strategies (which use enantiopure starting materials provided by nature) and enantioselective synthesis (synthesis from achiral precursors using chiral reagents or catalysts), the resolution of racemates is a valuable option in the preparation of optically active compounds.

Based on recent experimental results of our research group, actial applications of kinetic and dynamic resolutios of some racemates in order to obtain useful products in high enantiopurity are presented.

The research was supported by a grant of the Romanian National Authority for Scientific Research, CNCS–UEFISCDI, Project number PN-II-ID-PCE-2011-3-0775.

References

Hapău, D., Jürgen B., Moisă, M. Toşa, MI, Irimie, FD. and Valentin Zaharia. *Journal of Molecular Catalysis B: Enzymatic* **94**, *no. 0 (2013): 88-94*.
Radu, A., Moisă, ME, Toşa, MI, Dima, N., Zaharia, V., and Irimie, FD. *Journal of Molecular Catalysis B: Enzymatic*, in press (2014).
Pop,L., Lassalas, P, Bencze, LC, Toşa, MI, Nagy, B., Irimie, FD, Hoarau, C. *Tetrahedron: Asymmetry* **23** (6),(2012), 474-481