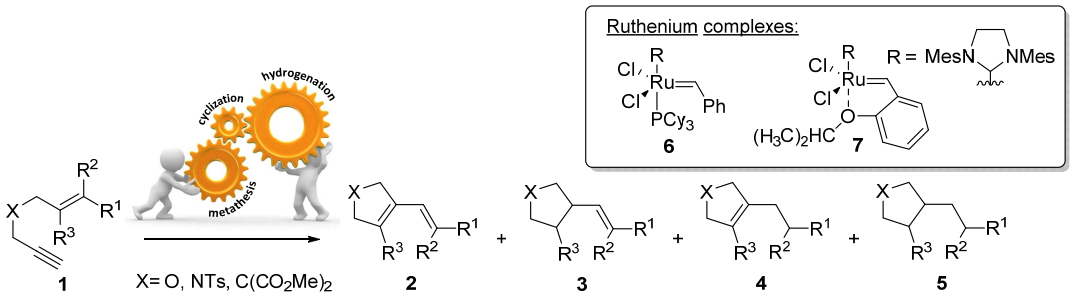
DESIGN OF A SELECTIVE AND TUNABLE RCEYM-HYDROGENATION ONE-POT PROCESS

Denis N. Prada Gori, Caterina Permingeat, Carina M. L. Delpiccolo

Instituto de Química Rosario (IQUIR); Departamento de Química Orgánica, Facultad de Ciencias Bioquímicas y Farmacéuticas, Universidad Nacional de Rosario, Argentina

The carbo- and heterocycles systems play a fundamental role in the development of new compounds with biological activity. The reaction of metathesis, cyclization and hydrogenation of enynes is an attractive alternative towards the obtention of partially or totally saturated cyclic and heterocyclic compounds. In this context, enynes were treated with Ru catalysts in the presence of a hydrogen donor (Scheme 1) allowing us to generate selectivity to the exclusive formation of a family of interesting derivatives. Different solvents, catalysts, temperatures and hydrogen donors were evaluated to determine the influence of these parameters on the reaction outcome.



Scheme 1

[1] Prada Gori, D. N.; Permingeat, C.; Delpiccolo C. M. L., *J. Org. Chem.*, 2018, 83, 20, 12798-12805.