TRANSITION METALS POWERFUL TOOLS TO ACCESS FUNCTIONALIZED HETEROCYCLES

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Heterocycles are present in a great diversity of natural products and/or bioactive compounds. They are also present in ligands, dyes, materials, etc. It is worth mentioning that, in the literature, two third of the publications are related to heterocycles. Due to the importance of the heterocycles, the development of chemoselective, efficient and versatile methods is one of our main area of research.

In this lecture, different methods will be presented to acess functionalized heterocycles containing oxygen and nitrogen. We will show that transition metals such as gold, iron, cobalt and rhodium are appropriate to realize the functionalization and the construction of heterocycles (Scheme).

$$(M)$$

$$X = O, N, S$$

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$$(M)$$

$$R-Y$$

$$X = O, N, S$$

Scheme: General scheme