Catalysis and mechanistic investigation with ionically-tagged reagents

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Abstract Speech

This flash presentation focuses on the concept, development, synthesis and application of new ionically-tagged catalysts applied for cross-coupling, multicomponent reactions, oxidation and reduction reactions. The ionic tags are responsible for the nanoorganisation and nano-effect observed for those new catalysts. The presence of at least one ionic tag allows the direct investigation of the reactions mechanisms via electrospray (tandem) mass spectrometry - ESI-MS(�MS) - with important implications for the biomimetic transformations compared with the enzymatic ones (e.g. Cytochrome P-450 oxidation). The catalysts could be recycled and reused for several times without any notable loss of catalytic activity.

REFERENCES