

The synthesis of β -enaminones using trialkylamines and a Pd/DNA catalyst.

Autorzy

Mehmet Mart

Anna M. Trzeciak

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A new one-pot procedure leading to β -enaminones has been developed. The elaborated methodology involves the cascade sequencing of carbonylative Sonogashira coupling of aryl iodide with a terminal alkyne and the oxidative dealkylation of tertiary amines. The efficient syntheses of β -enaminones were performed with a Pd/DNA catalyst, with NEt_3 , NPr_3 and NBu_3 used as amine sources. The catalyst was successfully recovered and used in several subsequent tests with the same results. The reaction mechanism, summarizing the activity of immobilized Pd NPs (palladium nanoparticles), was proposed.

Słowa kluczowe

Palladium nanoparticles, Carbonylative coupling, Enaminones, Oxidative amine dealkylation

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