

**PALLADIUM-CATALYZED CROSS-COUPLING OF AROYL- AND ACYL CHLORIDES FOR THE SYNTHESIS OF MIXED 1,2 DIKETONES**

The 1,2-diketo compounds are the precursors for the synthesis of various kinds of heterocyclic products including imidazole, Schiff base, benzoin product, quinoxaline. These types of compounds are also response as antibacterial, antifungal, and antimicrobial agents. In our study, we develop palladium-catalyzed microwave irradiated minute reaction for the synthesis of mixed diketone in one step. This new reaction and its mechanism will be presented.