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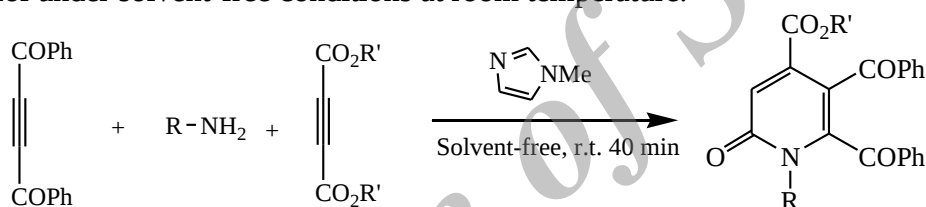
Synthesis of heterocyclic compounds using multicomponent reactions of alkylamines under solvent-free conditions

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The pronounced reactivity of nitrogen-containing heterocycles towards dialkyl acetylenedicarboxylates is well documented [1]. Multi-component reactions (MCRs) have been frequently used by synthetic chemists as a facile means to generate molecular diversity from bifunctional substrates that react sequentially in an intramolecular fashion. The 2-pyridone moiety is found in a large number of pharmaceuticals, agrochemicals, and functional materials [2, 3]. It is also a versatile synthon that can act as a common intermediate for the preparation of a wide variety of alkaloids [4-6]. We wish to report herein the results of our studies on the reaction of activated acetylenic compounds with primary amines in the presence of catalytic amount of *N*-methylimidazol under solvent-free conditions at room temperature.



References

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