

## $\beta$ -Enamino Diketone: a Powerful Precursor for the Synthesis of Polyfunctionalized Aza-Heterocycles

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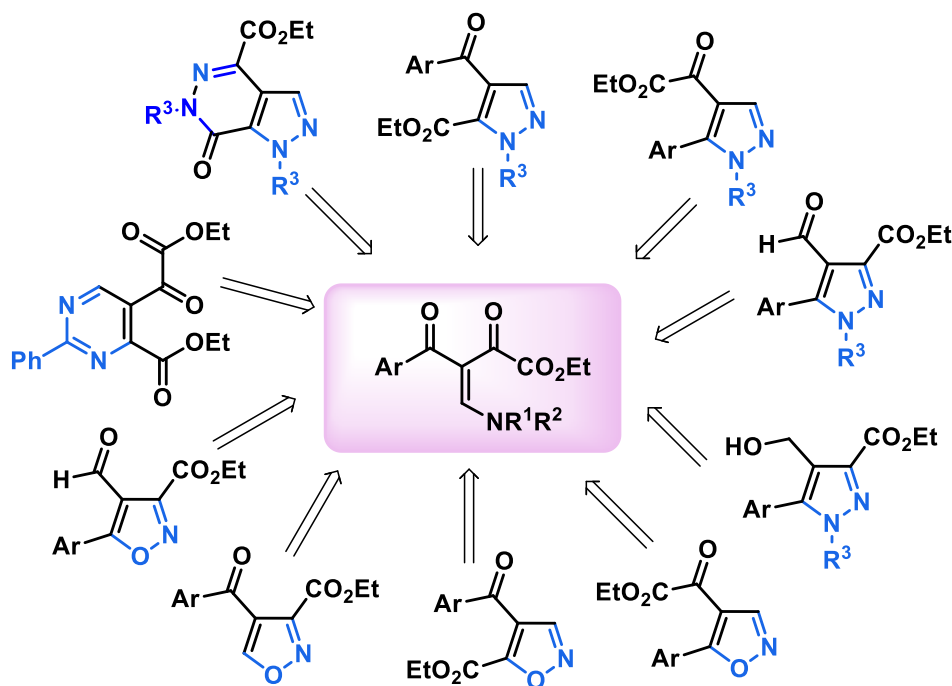
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### ABSTRACT

$\beta$ -enamino diketones (BED) may be describe as a system  $\beta$ -dicarbonyl and  $\beta$ -enamino ketone hybrids. However, BED present a more complex reactivity. The reactivity scope makes BED valuable building blocks with application in organic synthesis. The versatility of these compounds has been exemplified mainly by their applications as 1,3-dielectrophiles. Thus, our research group has been interested in the reactivity of these molecules, studying the different electrophilic centers present in the BED system in the attempt to develop a straightforward and regioselective methods for the synthesis of aza-heterocycles. The results obtained have encouraged us to believe in the synthetic potential of BED as a useful precursor for the regioselective construction of polyfunctionalized five and six-membered heterocycles, such as, pyrazoles,<sup>1-3</sup> isoxazoles,<sup>4</sup> pyrimidines<sup>5</sup> and pyrazolo-pyridazinones.<sup>1</sup>

### GRAPHICAL ABSTRACT



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