Synthesis of fully-substituted pyridin-2(1H)-one in a highly chemoselective approach utilize multicomponent reaction (MCRs) strategy

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PURPOSE OF THE ABSTRACT
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Advantageous medicinal heterocyclic scaffolds based on the core structures of pyridin-2(1H)-one derivative has been prepared using piperidinium acetate and ethanol within 2-3 hrs. The corresponding pyridin-2(1H)-one derivative has been synthesized in a highly chemo-selective approach utilizing multi-component reaction (MCRs) strategy using readily available aldehydes, malononitrile and prepared 2-cyano-N-phenylacetamide derivatives. These procedures provide a divergent but straightforward access to a wide range of fully substituted pyridin-2(1H)-one derivative via amide based chemo-selective strategy. The applicability to a wide range of substrates (5) with the finger of chemo-selectivity makes this present protocol more original from existing. This reaction does not involve any perilous organic solvent and noxious catalyst.
FIGURES

KEYWORDS
Heterocyclic scaffolds | Pyridin-2(1H)-one Derivatives | Chemoselective approach | Multicomponent reactions

BIBLIOGRAPHY