

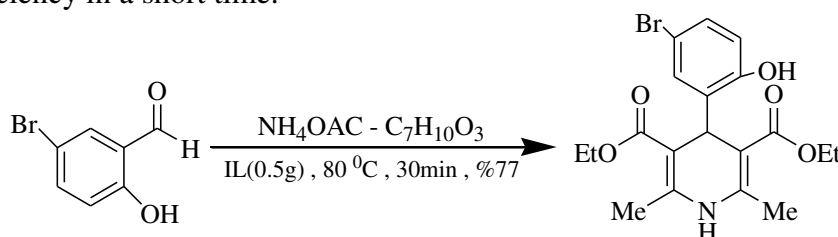
## Synthesis of dihydropyridin of benzaldehyde 5 –Bromo, 2-hydroxybenzaldehyde using diethyl ammonium nitrate ionic liquid catalyst

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At first the diethyl ammonium nitrate ionic liquid catalyst was obtained from diethylamine and nitric acid reaction.<sup>1-2</sup> Then we used this ionic liquid in the presence of aldehydes and ammonium acetate (as nitrogen donor) with beta-D-carbonyl (ethyl aceto acetate) in solvent environment (Scheme 1). Then by providing an appropriate environment for the compound components of the reaction to clash with each other, a variety of products, which their combination is characterized by FT-IR spectrum, can be derived from 4,1- dihydropyridin, with high efficiency in a short time.<sup>3-4</sup>



**Scheme 1.** Synthesis of dihydropyridin of benzaldehyde 5 –Bromo, 2- hydroxybenzaldehyde

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