

**B.Sc. Semester-VI  
Organic Chemistry  
Paper-XIV**

**3. Heterocyclic Compounds**

**Special Coverage:**

13. Doebner Quinoline Synthesis : Mechanism and Examples

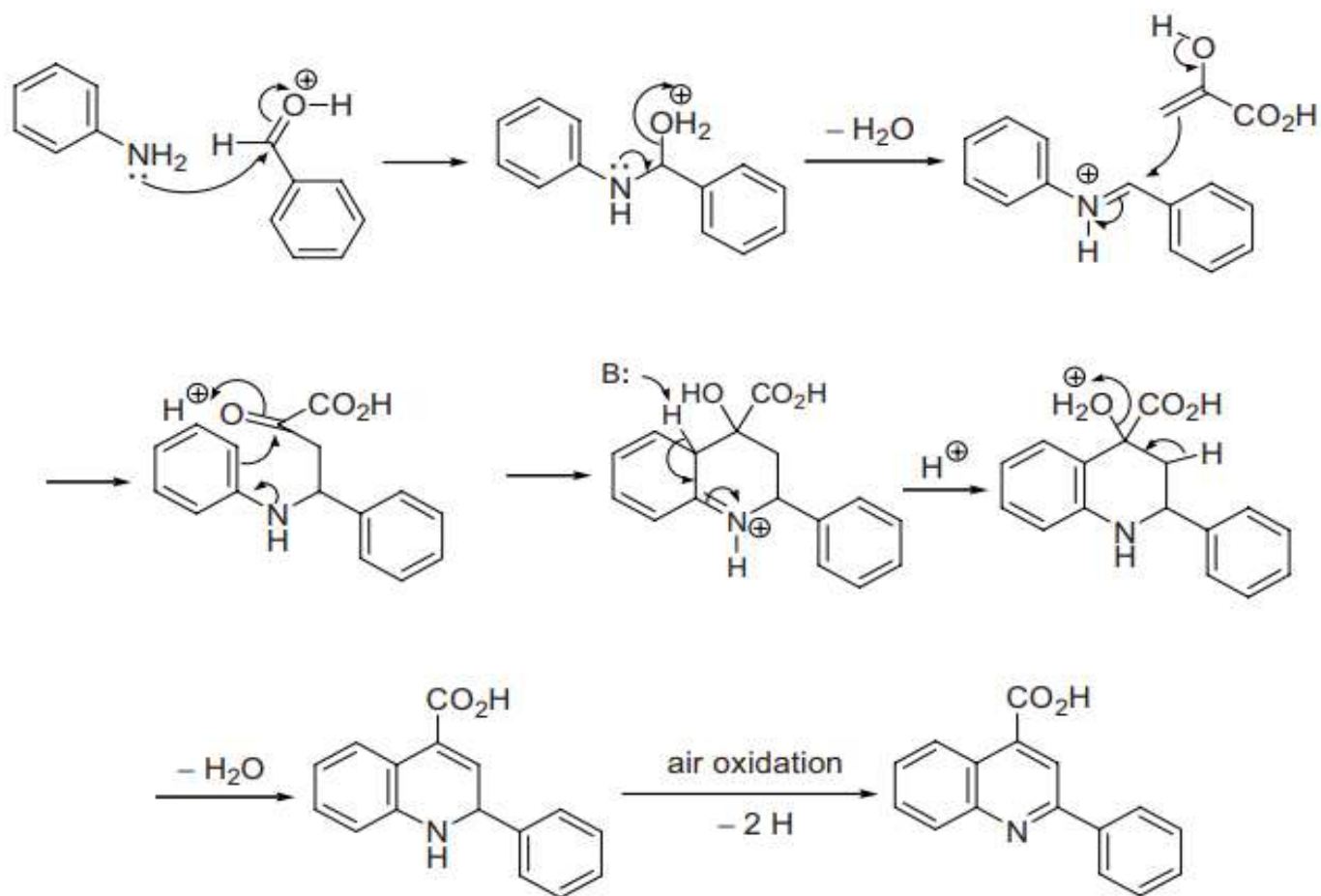
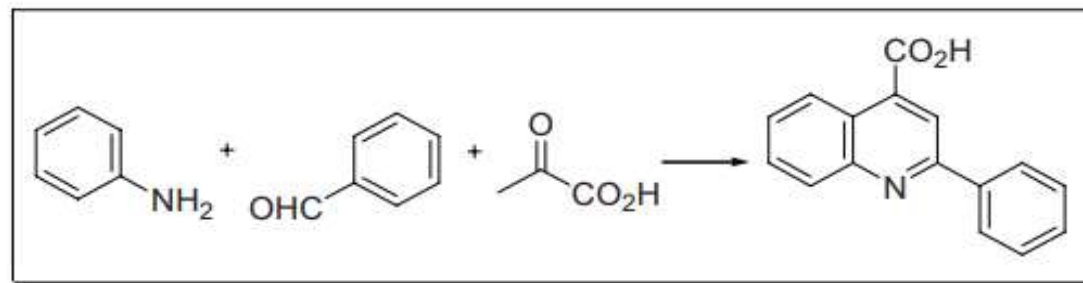


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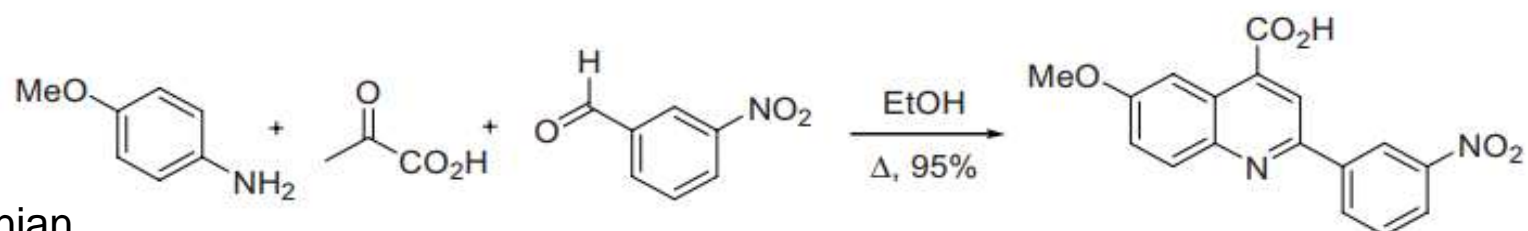
# Doebner Quinoline Synthesis : Mechanism and Examples

## Mechanism

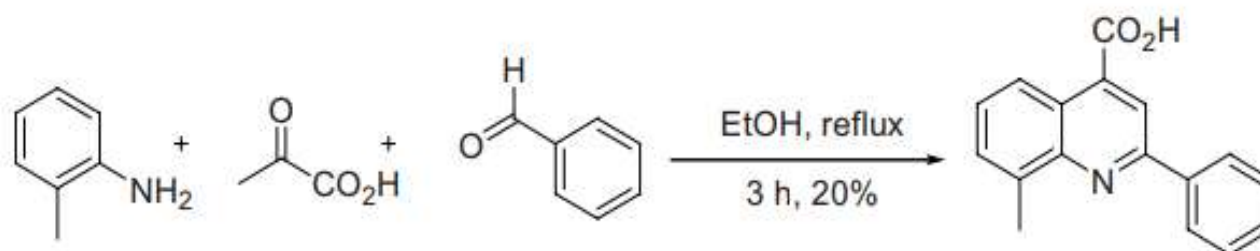
Three-component coupling of an aniline, pyruvic acid, and an aldehyde to provide a quinoline-4-carboxylic acid.



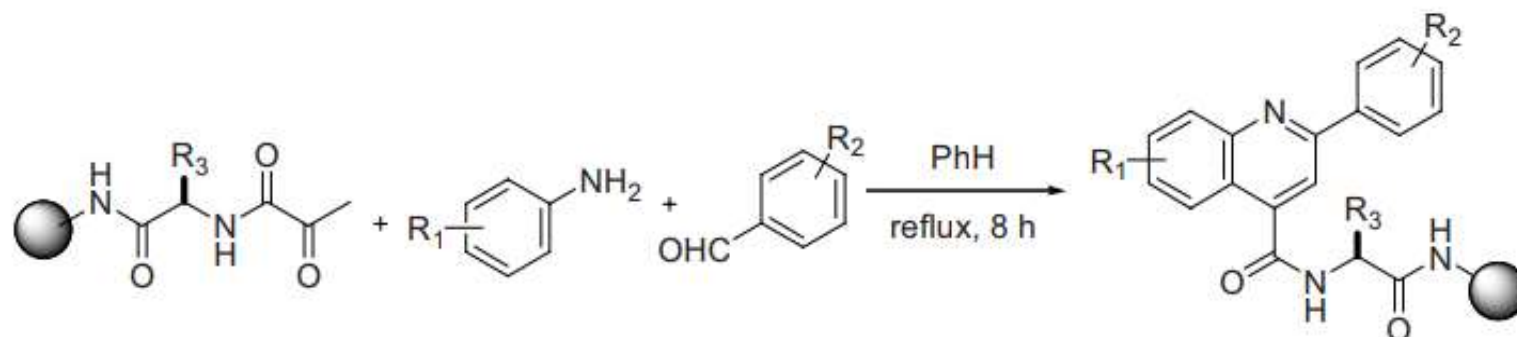
## Example 1<sup>2</sup>



## Example 2<sup>6</sup>



## Example 3, Combinatorial Doebner reaction<sup>7</sup>



## References

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THANK YOU