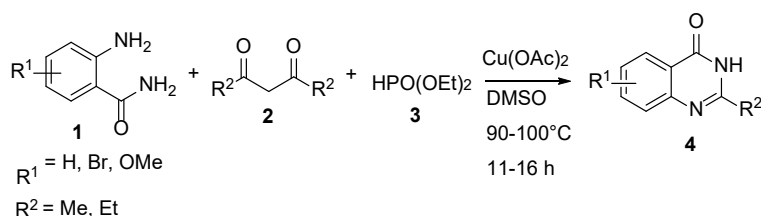


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Three Component Synthesis of Quinazolinone Derivatives in Presence of 1,3-Diketones as Acylation Agent**Shrishnu Kumar Kundu,* Kanchan Mitra***Department of Chemistry, Acharya Prafulla Chandra Roy Government College,
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Abstract. Quinazolinone derivatives are a class of fused nitrogen containing heterocycles that have drawn much attention due to their potential biological and pharmaceutical activities including antifertility, antibacterial, antitumor and monoamine oxidase inhibitory activity [1]. An efficient copper(II)-catalyzed approach has been developed for the synthesis of quinazolinone derivatives in good to excellent yields. A variety of quinazolinones were obtained by the three component reaction between 2-aminobenzamides, 1,3-diketones and diethylphosphite in presence of $\text{Cu}(\text{OAc})_2$ in DMSO solvent under heating conditions (Scheme 1). This methodology is operationally simple, mild, environment friendly, compatibility with various functional groups, high yielding, and applicable to inexpensive and easily available reagents as catalyst.



Scheme 1. Three component synthesis of quinazolinone derivatives in presence of $\text{Cu}(\text{OAc})_2$.

References

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