



Vali-e-Asr University
of Rafsanjan



19th Iranian Seminar on Organic Chemistry
Vali-e-Asr University of Rafsanjan, 5 -7 Sep. 2012



An Efficient Protocol for Beckmann Rearrangement of Ketoximes with H₂SO₄ Supported on Charcoal

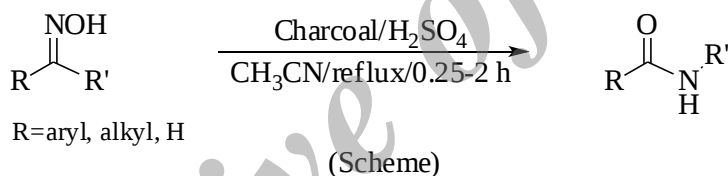
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Amides are one of the most important and prolific functional groups, with a great importance in both research and industrial chemistry due to their prevalence in detergents, lubricants, biologically active compounds and pharmaceuticals. Although, there are many strategies to prepare them [1], however, the enormous amount of wastes' production by standard protocols forces the industry to look forward for better strategies [2].

Rearrangement of a ketoximes to the corresponding amides which is known as Beckmann rearrangement, is one of the most important methods in organic synthesis [3,4]. As a part of our research program, we encouraged to develop some improved procedures for Beckmann rearrangement of ketoximes due to continuing interest and importance in organic chemistry. Herein, we wish to report sulfuric acid supported on charcoal as an efficient promoter for fast and efficient rearrangement of ketoximes to the corresponding amides in terms of simplicity, mildness and eco-friendly aspects (Scheme).



References

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