World Journal of Pharmacology & Toxicology

Abstract

Sulfated Polyborate Catalyzed Selective Friedlander Annulation for Synthesis of Highly Functionalized Quinolines

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Abstract:

The scope of sulfated polyborate catalysts was examined for the selective control of Friedlander reaction while reacting 2-amino benzophenone with ethyl acetoacetate. Sulfated polyborate emerged as the most effective catalyst for the selective formation of Friedlander products. The generality of the sulfated polyborate catalyzed Friedlander reaction was demonstrated by the reaction of differently substituted 2-amino aryl ketones with various mono and 1, 3-diketone carbonyl compounds containing active methylene group (viz. β-ketoesters, cyclic/acyclic β-diketones, and cyclic/acyclic ketones). The key advantages of the present method are a solvent-free condition, short reaction time, high yields, easy workup, recyclability of catalyst and ability to tolerate a variety of functional groups that gives ecological as well as economic rewards.

Biography:

Dr. Anil Subhash Mali completed my Ph.D. at the age of 30 years from 2015-2019 at the Institute of Chemical Technology, Matunga, Mumbai, India. I am an Assistant Professor of Institute of Pharmaceutical Sciences and Research (Girls), Dattakala College of Pharmacy, Pune, India. I have published four International peer revived

papers in reputed journals and one revived is submitted to the RSC Medicinal Chemistry.

Recent Publications:

1. Anil S. Mali, et al Organic Preparations and Procedures International, 2020.
2. Anil S. Mali, et al Tetrahedron Letters, 2018.
3. Anil S. Mali, et al Journal of the Iranian Chemical Society, 2018.
4. Anil S. Mali, et al Monatshefte für Chemie - Chemical Monthly, 2017.

Webinar on Pharmaceutical Chemistry | May 22, 2020 | Paris, France

Citation: Anil S. Mali; Sulfated Polyborate Catalyzed Selective Friedlander Annulation for Synthesis of Highly Functionalized Quinolines; Pharmaceutical Chemistry 2020; May 22, 2020; Paris, France