



Potassium Dihydrogen Phosphate: An Inexpensive Catalyst for the Synthesis of 2, 4, 5- Trisubstituted Imidazoles under Solvent Free Condition

Jayashri D. Bhirud¹ and Hemant P. Narkhede^{2*}

1. Moolji Jaitha College, Jalgaon, Dist-Jalgaon, (M. S.), 425002, **INDIA**

2. Smt. P. K. Kotecha Mahila Mahavidyalaya, Bhusawal, Dist-Jalgaon, (M. S.), 425201, **INDIA**

Email: narkhede.hemant@rediffmail.com, ingale.jayashri@rediffmail.com

Accepted on 19th August 2016

ABSTRACT

An efficient procedure was described for the synthesis of 2, 4, 5-trisubstituted imidazoles through a three component one pot reaction of benzyl, benzaldehyde and NH₄OAc, in the presence of catalytic amount of potassium dihydrogen phosphate (10 mol %) under solvent-free condition at room temperature. The notable advantages of this method are the experimental simplicity, inexpensive reagents, short reaction times and easy workup procedure.

Keywords: Trisubstituted imidazole, KH₂PO₄, Grinding method, solvent free.
