

Abstract

In this study, we have developed an efficient and selective method for the oxidation of aldehyde using $\text{VO}(\text{acac})_2$ as catalyst and 30% H_2O_2 as green oxidant at room temperature. Various aromatic, conjugated aldehydes were transformed to the corresponding carboxylic acids with 30% H_2O_2 solution (water) in the presence of catalytic amounts (5mol %) of $\text{VO}(\text{acac})_2$. This method possesses functional group compatibility, does not involve cumbersome work-up, exhibits chemoselectivity since other functional groups remain intact and proceeds under mild conditions. The resulting products are obtained in good yields within reasonable times.
