



QUINALDINIUM FLUOROCHROMATE CATALYZED OXIDATION OF ALCOHOLS TO ALDEHYDES AND KETONES WITH PERIODIC ACID

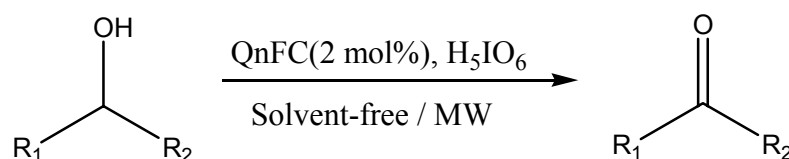
H.B. Ozgun, M. Canbulat

Gazi University

beytiye@gazi.edu.tr

Our laboratory has been engaged in the exploration of oxidative transformations by using practical green chemistry procedures [1,2]. Although we have previously reported quinaldinium fluorochromate (QnFC) as a versatile reagent for various oxidative transformations [3], the need to use an excess or at least a stoichiometric amount of QnFC to perform the oxidations is a drawback, due to all the known disadvantages of chromium based compounds. Therefore, new oxidation protocols that only require catalytic amount of chromium based reagent and generate less chromium waste are still in much demand.

We report herein QnFC catalyzed oxidation of primary and secondary alcohols to the corresponding aldehydes and ketones with H₅IO₆ in high yields under solvent-free conditions and microwave irradiation.



References

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