MICROWAVE-ASSISTED SYNTHESIS OF COUMARINS $VIA\ K_2CO_3$ CATALYZED KNOEVENAGEL CONDENSATION IN 1-n-BUTYL-3-METHYLIMIDAZOLIUM BROMIDE IONIC LIQUID

Hassan Valizadeh and H. Gholipur

Islamic Azad University, Hashtrud, East Azarbaijan, Iran

K₂CO₃ has been utilized as an inexpensive and efficient catalyst for the Knoevenagel condensation of arylaldehydes with acidic methylene compounds such as ethyl cyanoacetate and malononitrile to afford substituted coumarins. 1-*n*-Butyl-3-methylimidazolium bromide has been employed as an alternative reaction medium in this procedure. The reaction proceeds smoothly under mild and solvent-free conditions and the products are obtained in excellent yields. This methodology is more convenient in that milder conditions, inexpensive and shorter reaction times.