

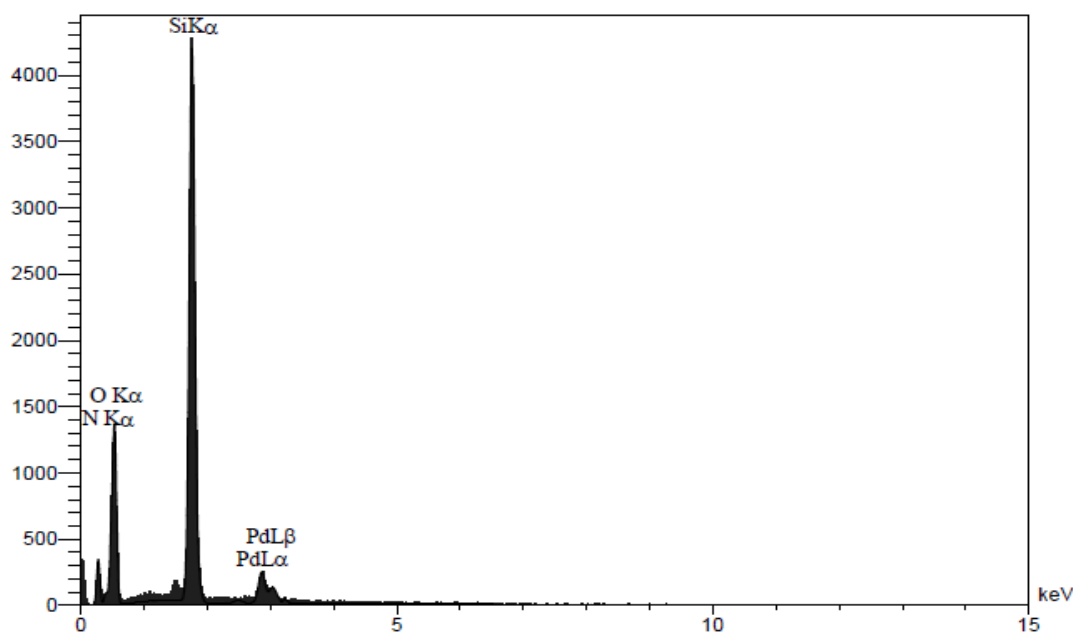
Supporting Information

Pd-functionalized MCM-41 nanoporous silica as an efficient and reusable catalyst for promoting organic reactions

Razieh Nejat^a, Ali Reza Mahjoub^{*,a}, Zahra Hekmatian^b, and Tahereh Azadbakht^b

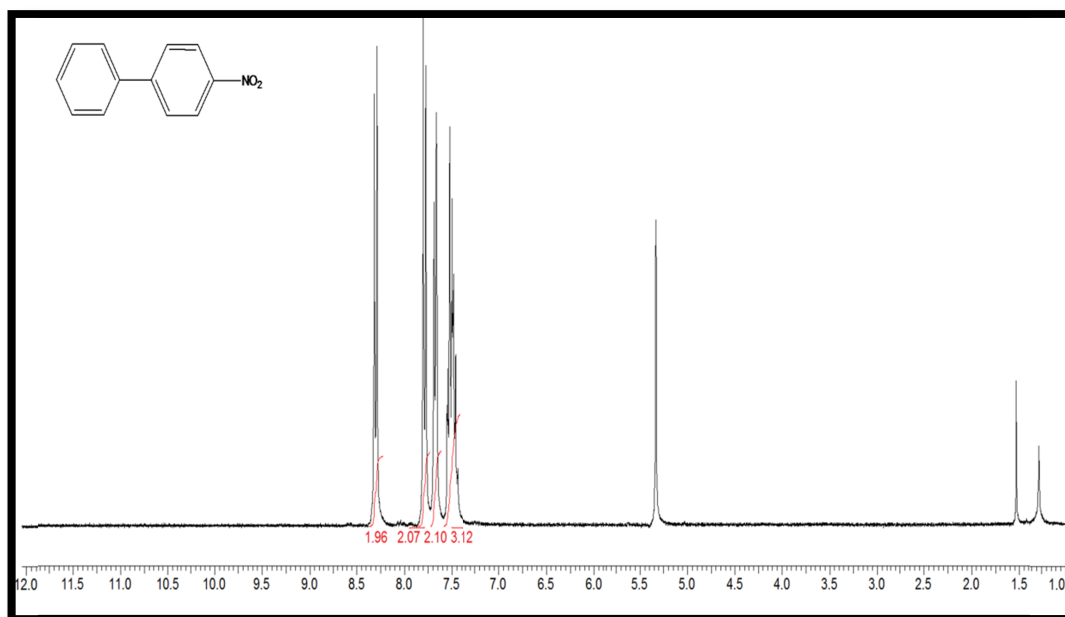
Energy dispersive X-ray (EDX) analysis of MCM(Pd)-41.

Energy dispersive X-ray (EDX) analysis of the catalyst showed expected elements such as, oxygen, silicon, carbon, nitrogen and palladium and spectrum indicated in Fig. 7. The percentage of the Pd was around 5.36 wt%.

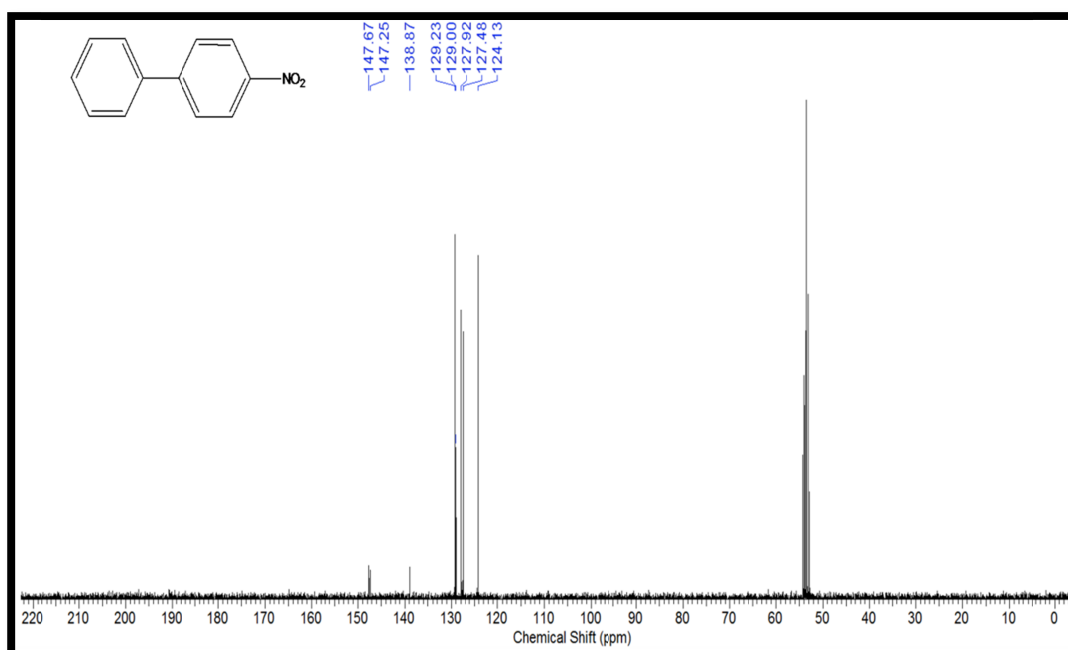


Energy dispersive X-ray (EDX) analysis of MCM(Pd)-41.

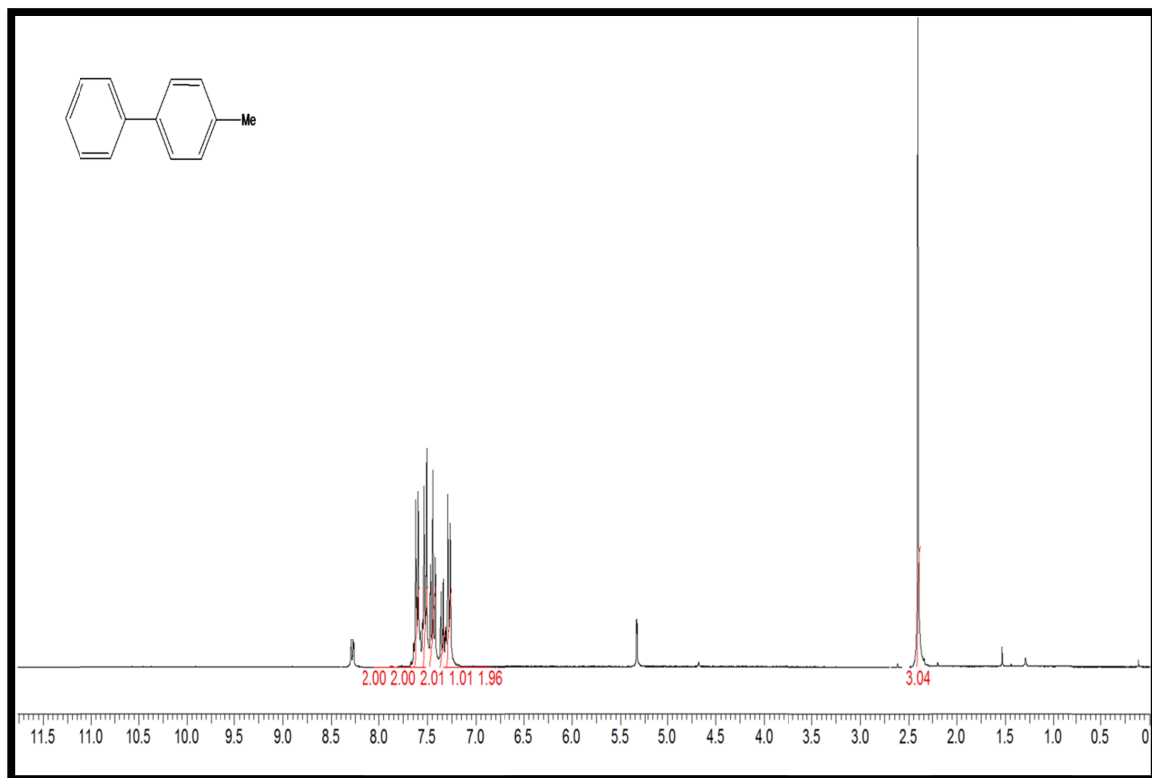
Characterization ^1H NMR and ^{13}C NMR for the products



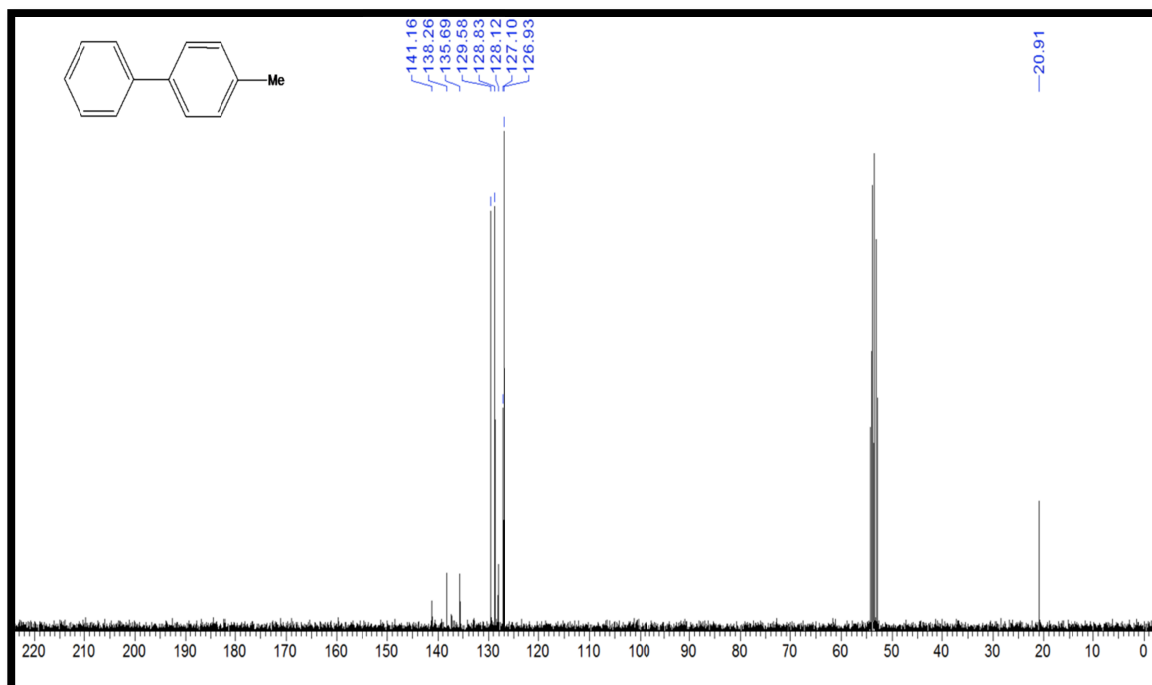
^1H NMR (4-Nitro-biphenyl)



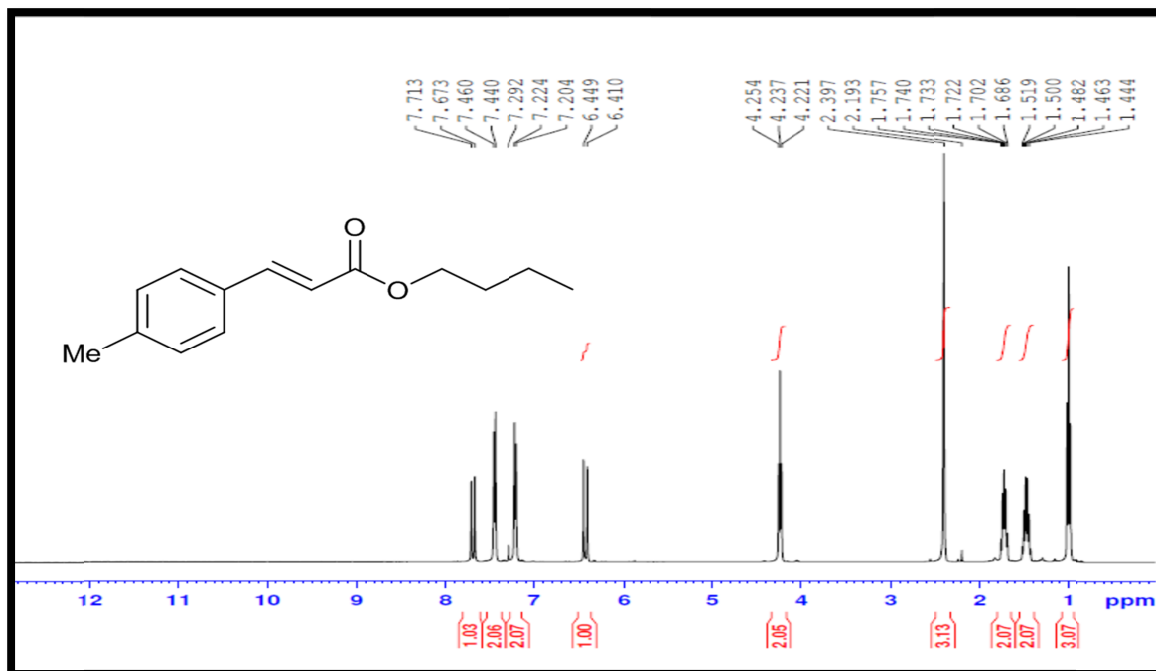
^{13}C NMR (4-Nitro-biphenyl)



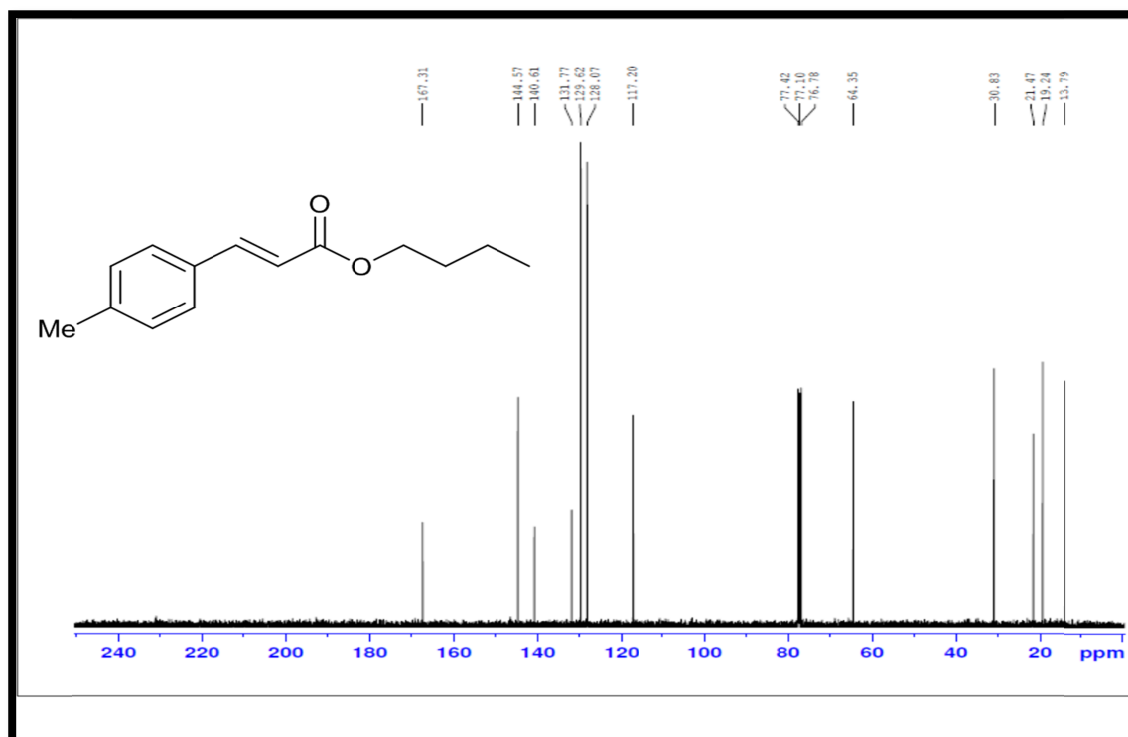
¹H NMR (4-Methylbiphenyl)



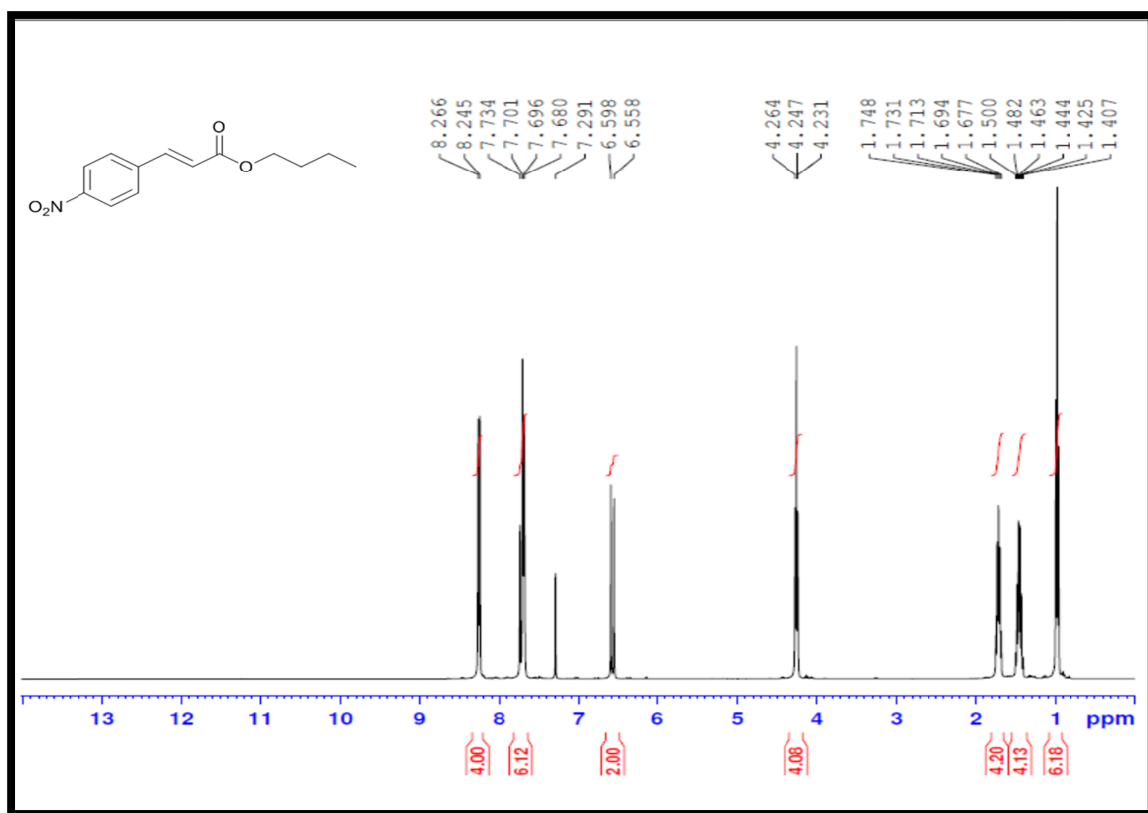
¹³C NMR (4-Methylbiphenyl)



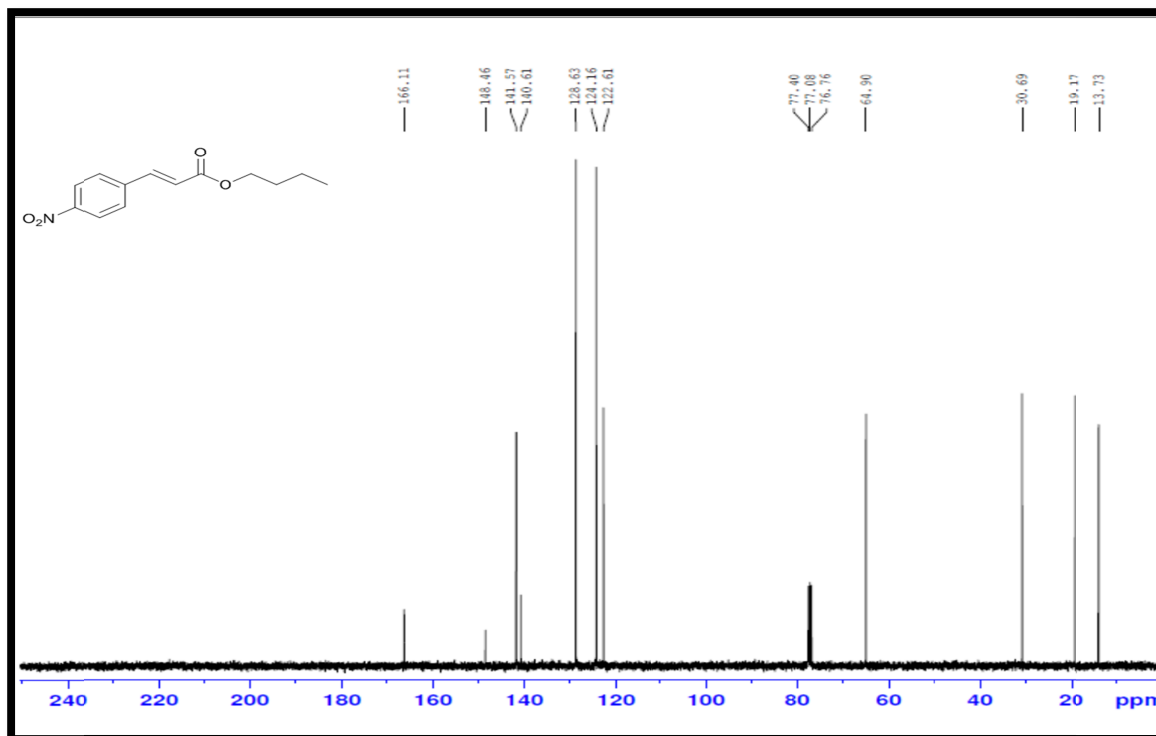
¹H NMR (butyl -3-(p-tolyl)acrylate)



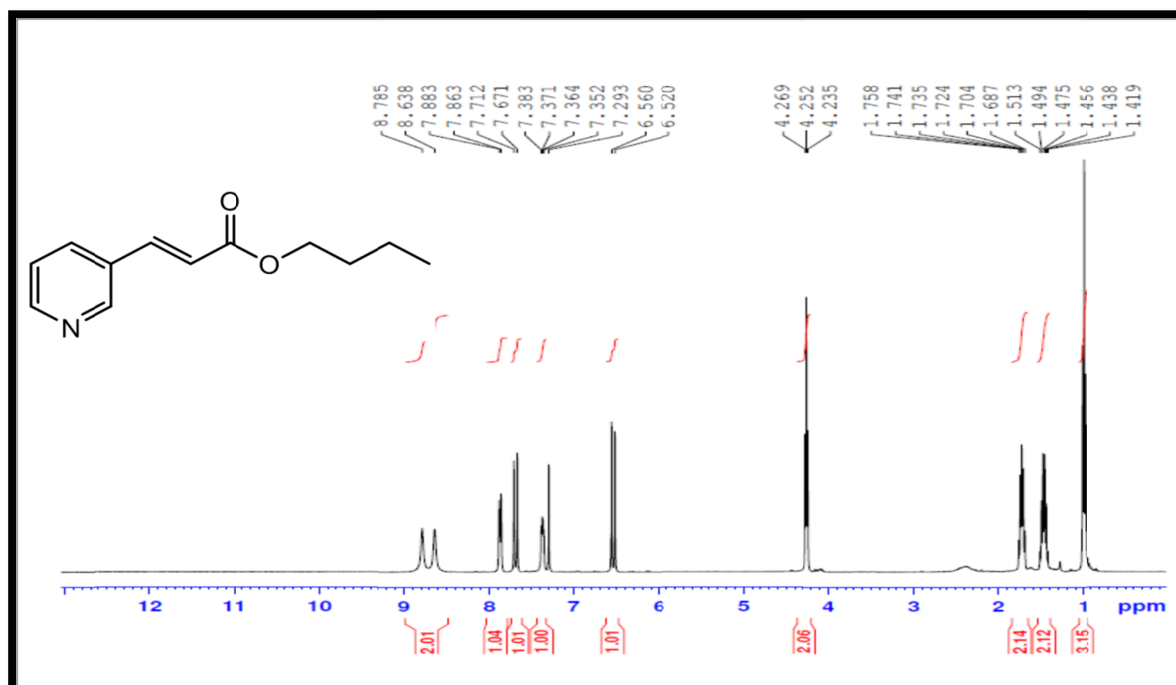
¹³C NMR (butyl -3-(p-tolyl)acrylate)



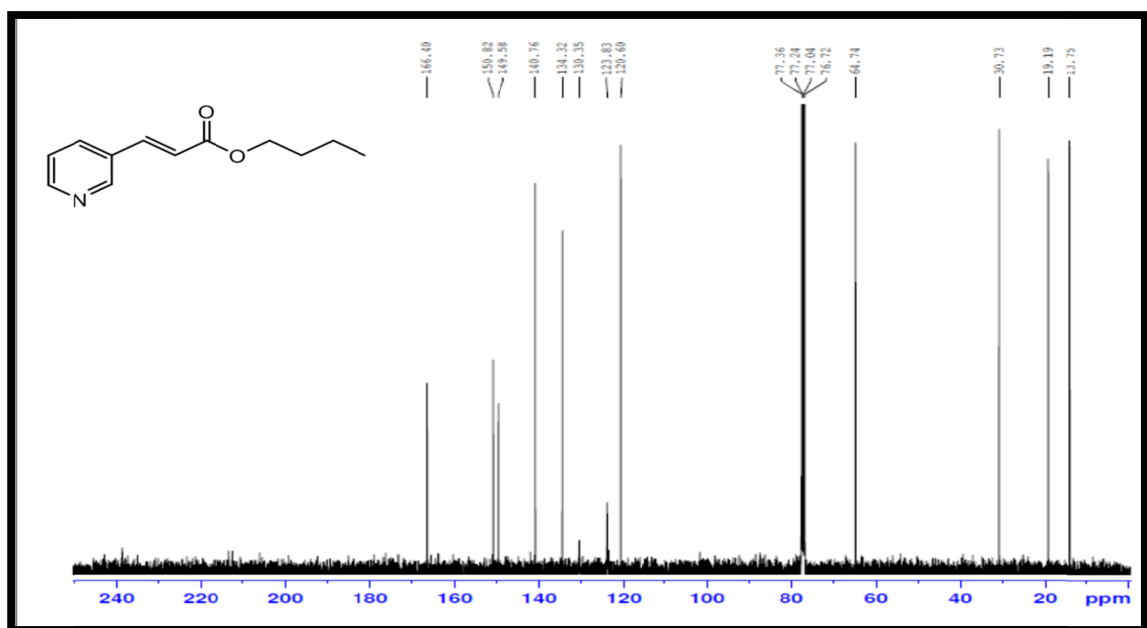
¹H NMR (butyl 3-(4-nitrophenyl)acrylate)



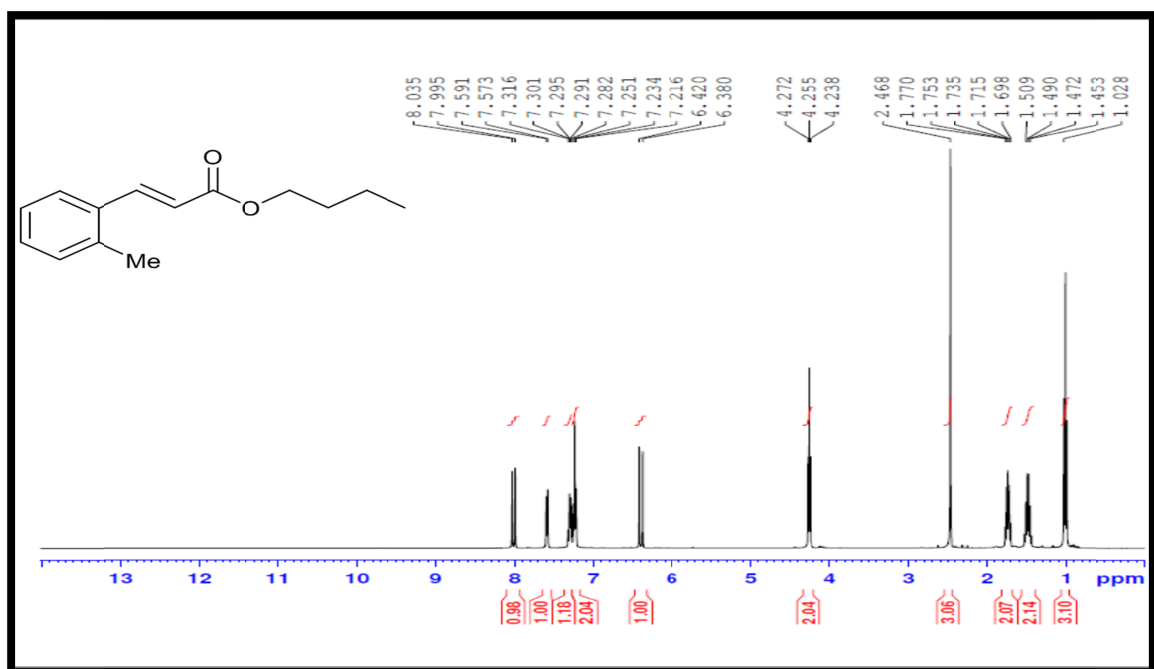
¹³CNMR (butyl 3-(4-nitrophenyl)acrylate)



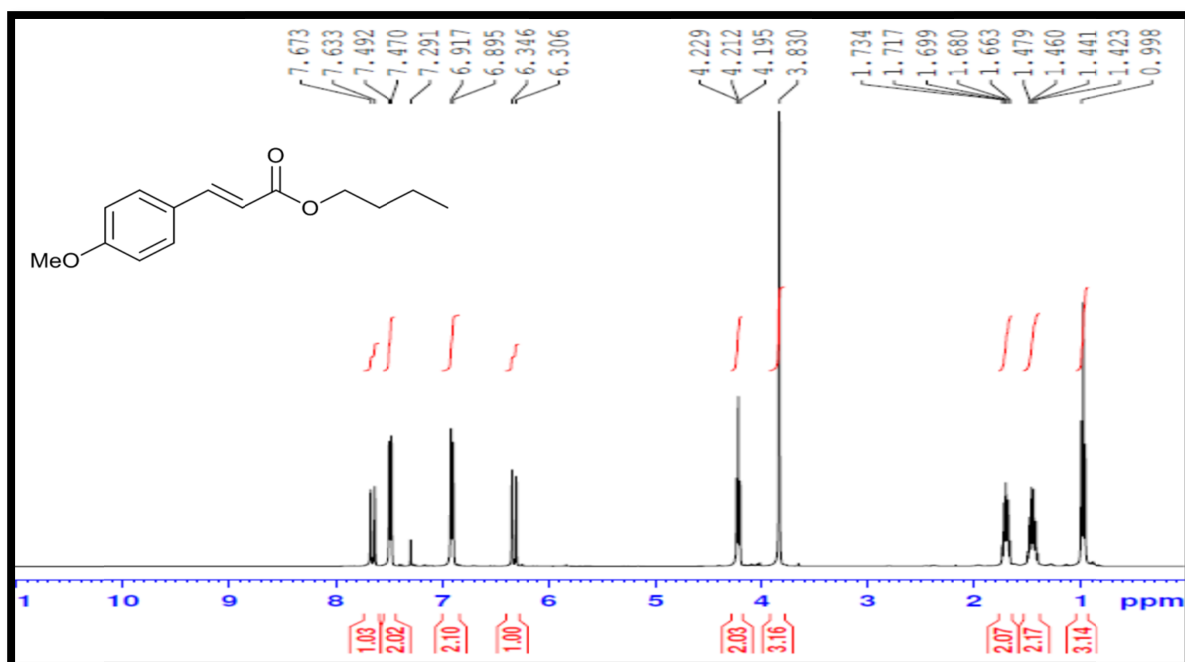
¹H NMR (butyl 3-(pyridin-3-yl)acrylate)



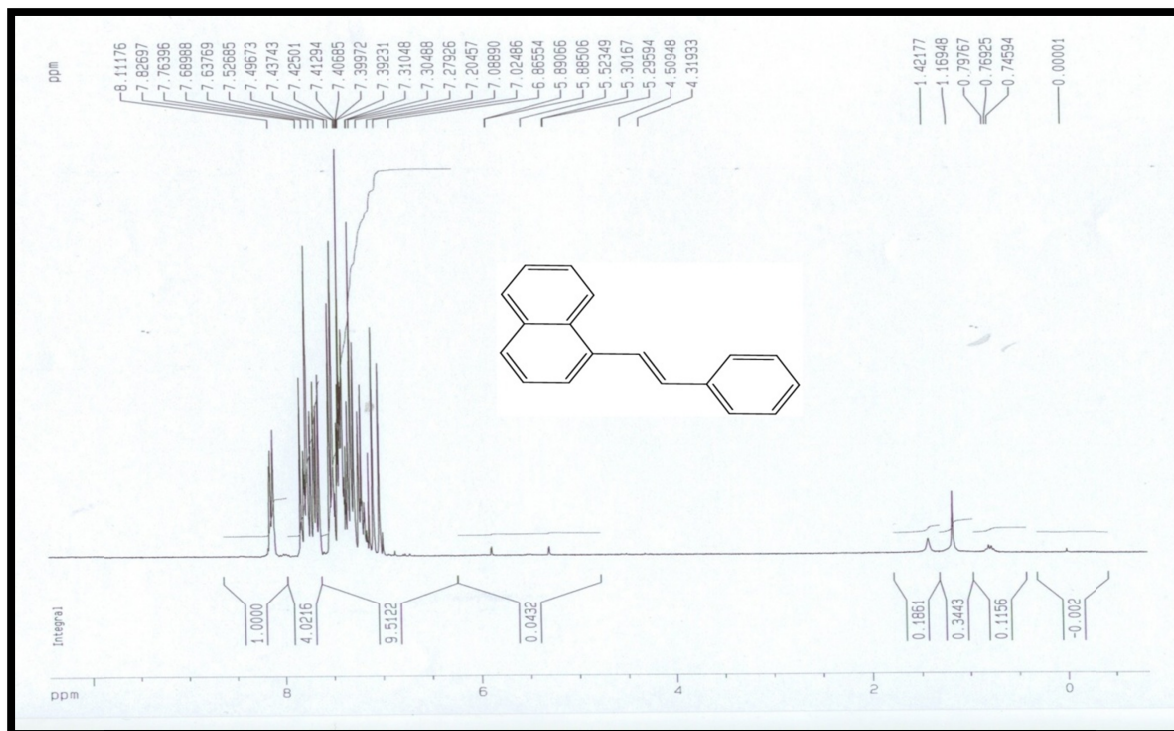
¹³ CNMR (butyl-3-(pyridin-3-yl)acrylate)



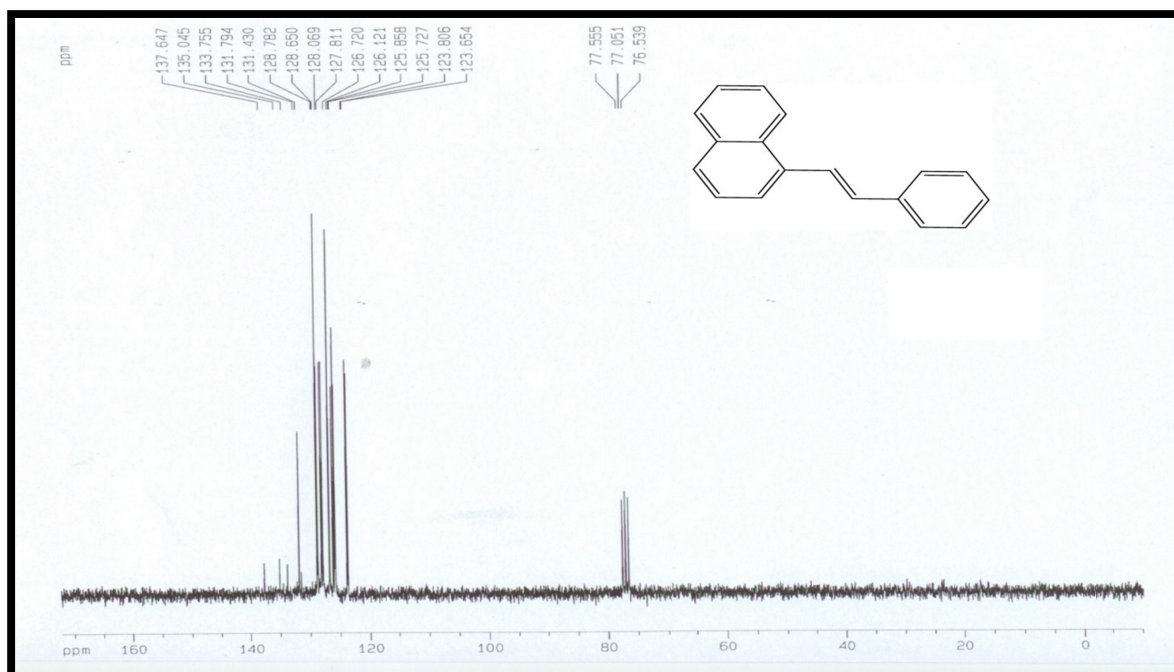
¹HNMR (butyl -3-(o-tolyl)acrylate)



¹H NMR (butyl-3-(4-methoxyphenyl)acrylate)



¹H NMR (1-styrylnaphthalene)



¹³C NMR (1-styrylnaphthalene)