Supporting Information

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

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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.](image)

Energy dispersive X-ray (EDX) analysis of MCM(Pd)-41.
Characterization $^1$HNMR and $^{13}$CNMR for the products

$^1$HNMR (4-Nitro-biphenyl)

$^{13}$CNMR (4-Nitro-biphenyl)
$^1$HNMR (4-Methylbiphenyl)

$^{13}$CNMR (4-Methylbiphenyl)
1H NMR (butyl-3-(p-toly)acrylate)

13C NMR (butyl-3-(p-toly)acrylate)
$^1$HNMR (butyl -3-(4-nitrophenyl)acrylate)
$^{13}$C NMR (butyl-3-(4-nitrophenyl)acrylate)

$^1$H NMR (butyl-3-(pyridin-3-yl)acrylate)
$^{13}$C NMR (butyl-3-(pyridin-3-yl)acrylate)

$^1$HNMR (butyl-3-(o-tolyl)acrylate)
$^1$HNMR (butyl-3-(4-methoxyphenyl)acrylate)
$^1$HNMR (1-styrylnaphthalene)

$^{13}$CNMR (1-styrylnaphthalene)