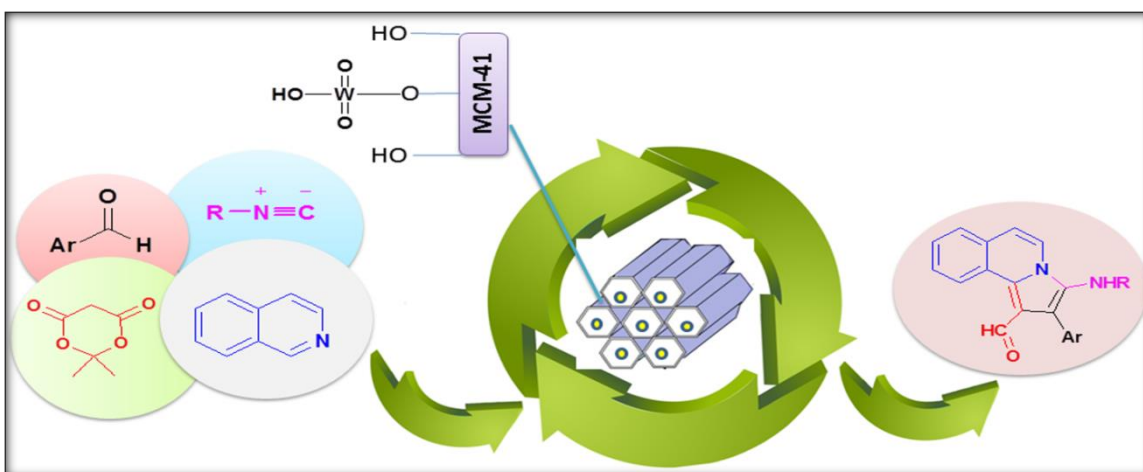


## Supporting Information

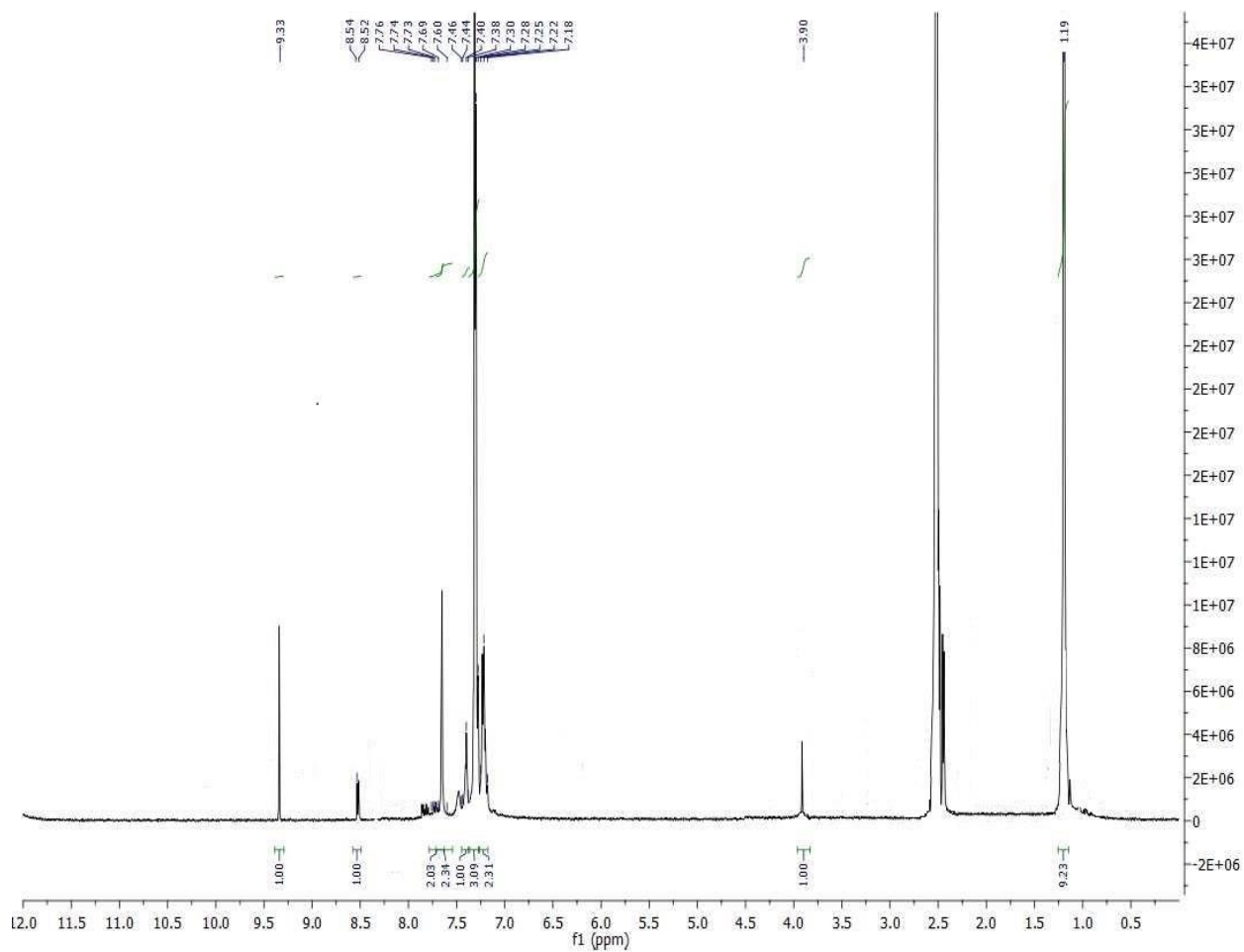
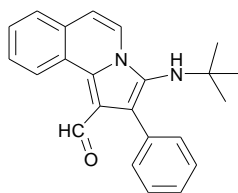
**Tungstic acid-functionalized MCM-41 as a novel mesoporous solid acid catalyst for one-pot synthesis of new pyrrolo[2,1-*a*]isoquinolines**

**Bahador Karami,\* Mahnaz Farahi, Sedigheh Akrami and Dawood Elhamifar**

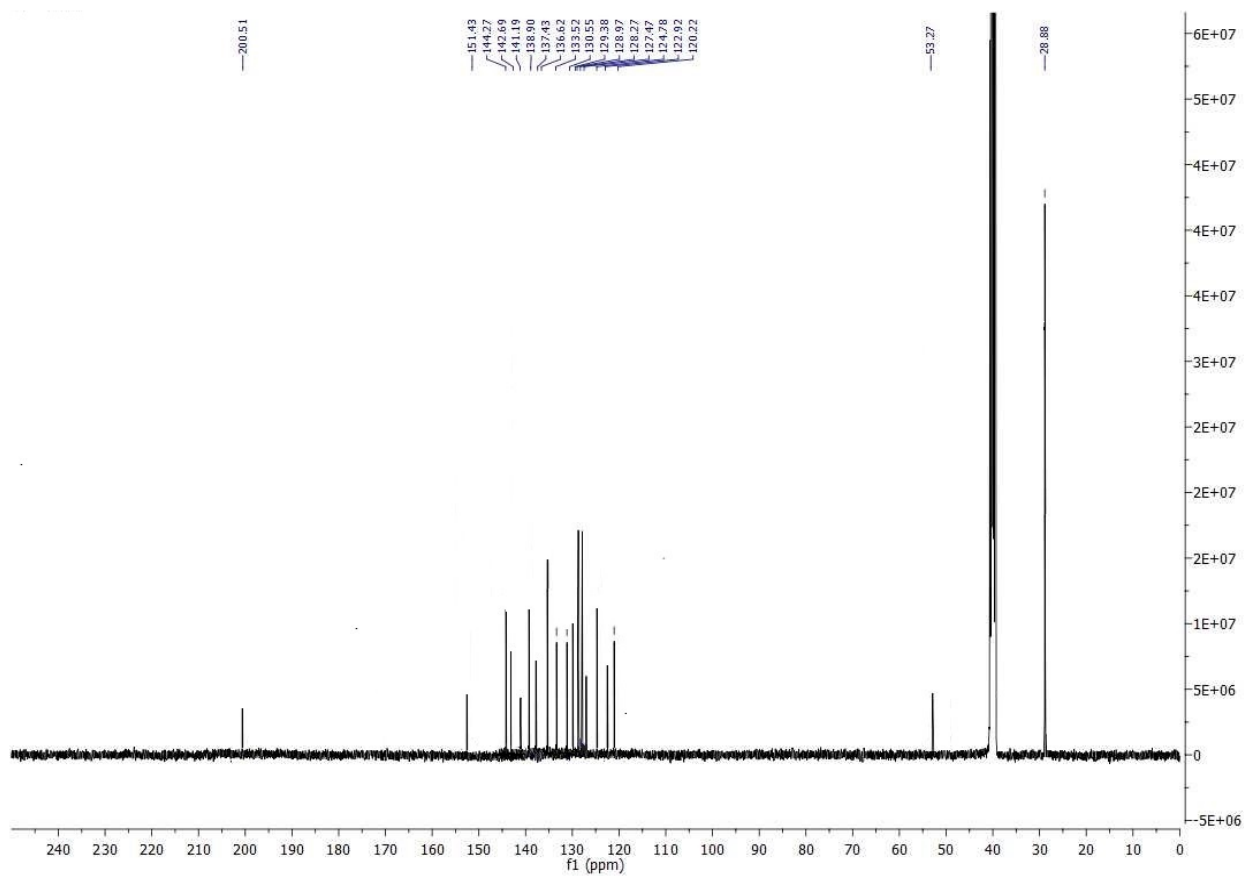
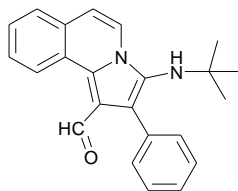
*Department of Chemistry, Yasouj University, Yasouj, Iran, Zip Code: 75918-74831.*



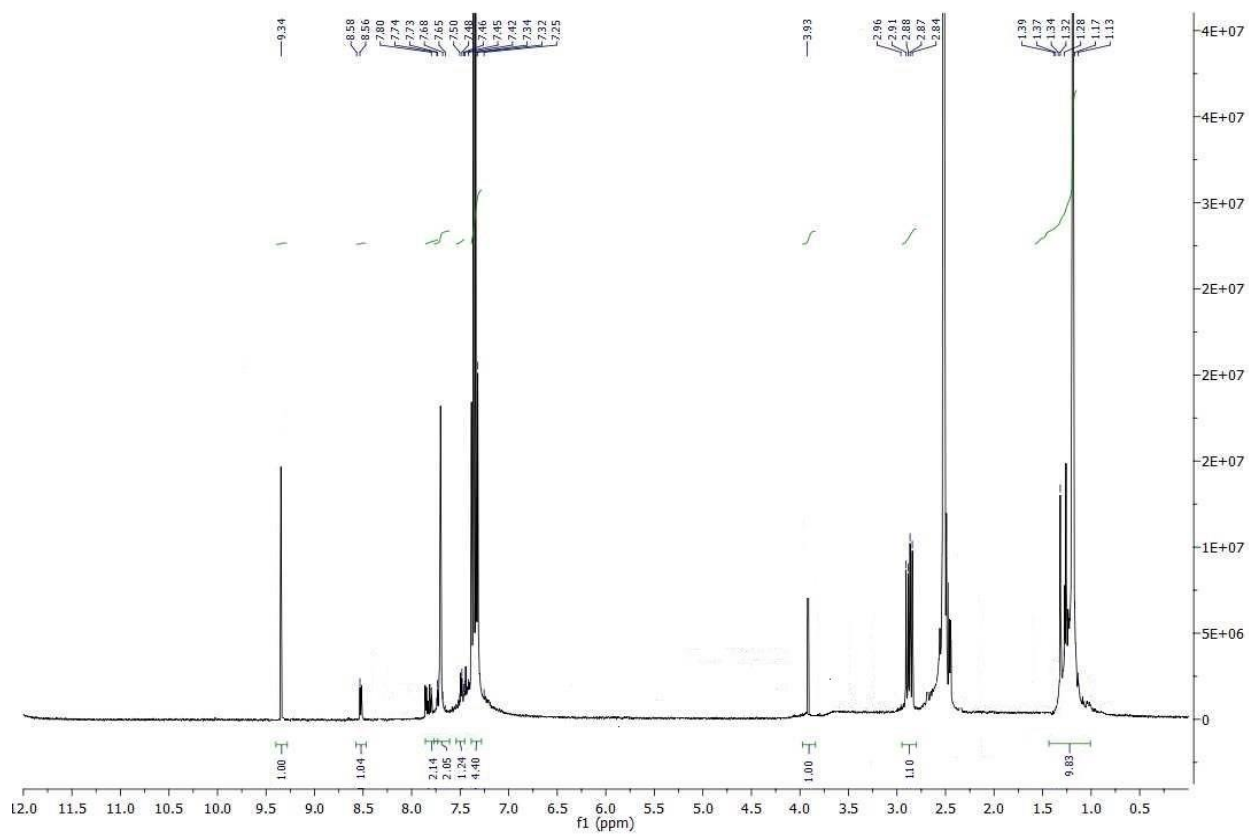
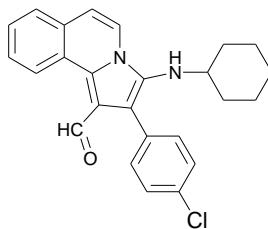
<sup>1</sup>H NMR (400 MHz, DMSO-d<sub>6</sub>)



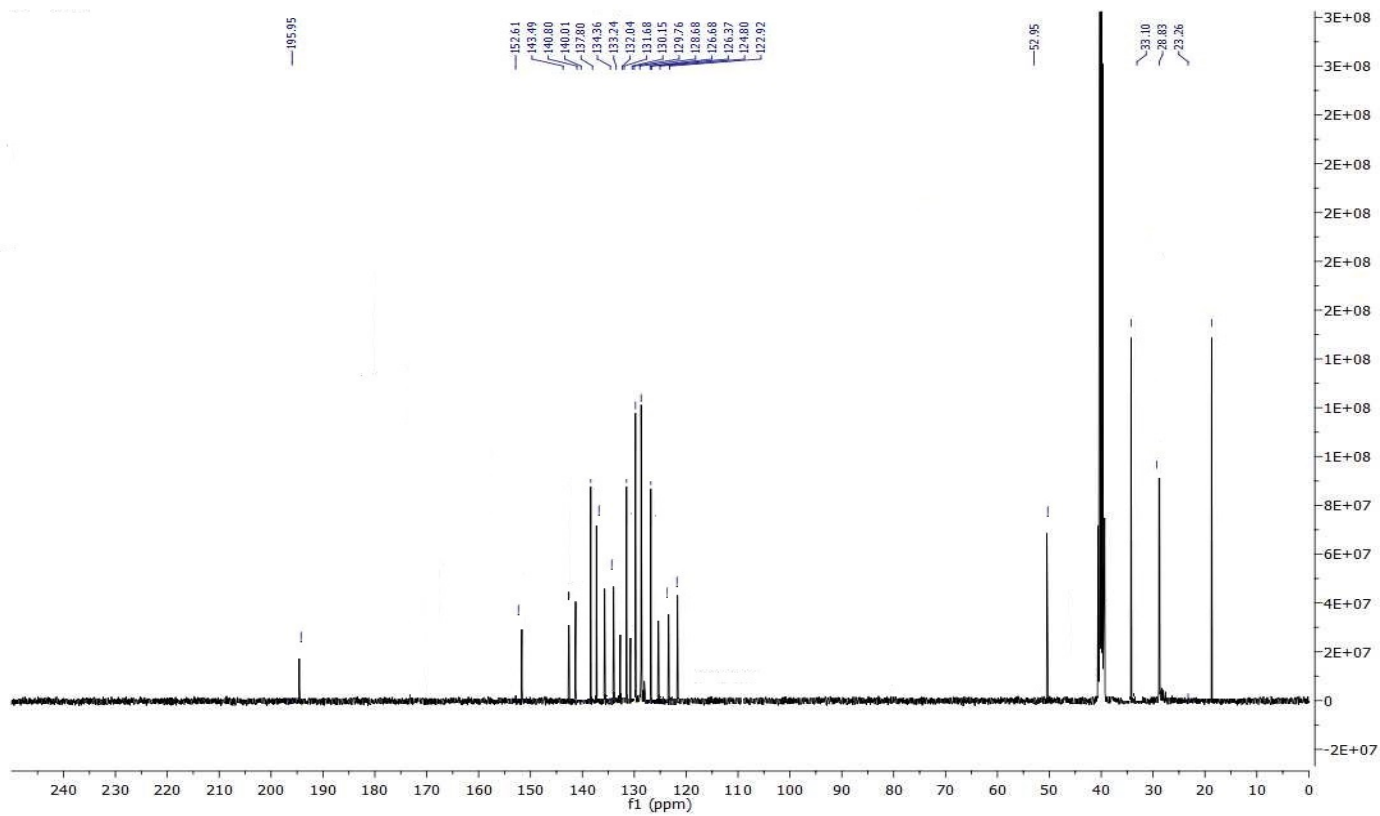
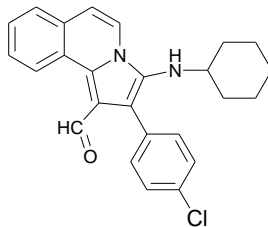
<sup>13</sup>C NMR (100 MHz, DMSO-d<sub>6</sub>)

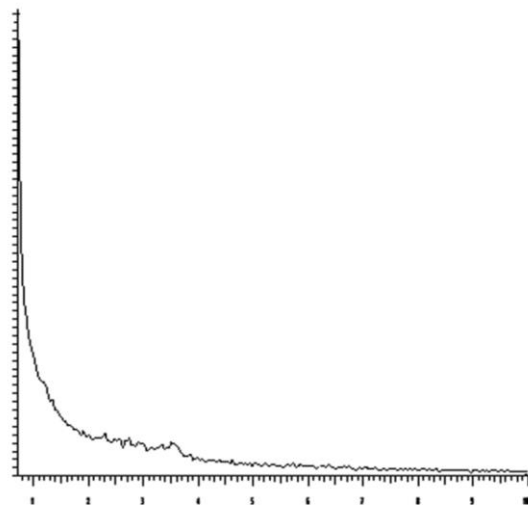


<sup>1</sup>H NMR (400 MHz, DMSO-d<sub>6</sub>)

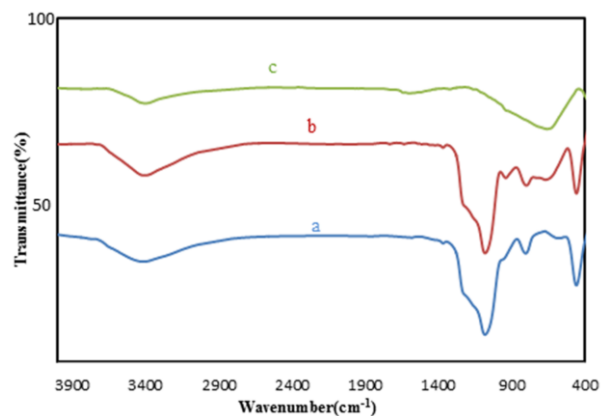


<sup>13</sup>C NMR (100 MHz, DMSO-d<sub>6</sub>)

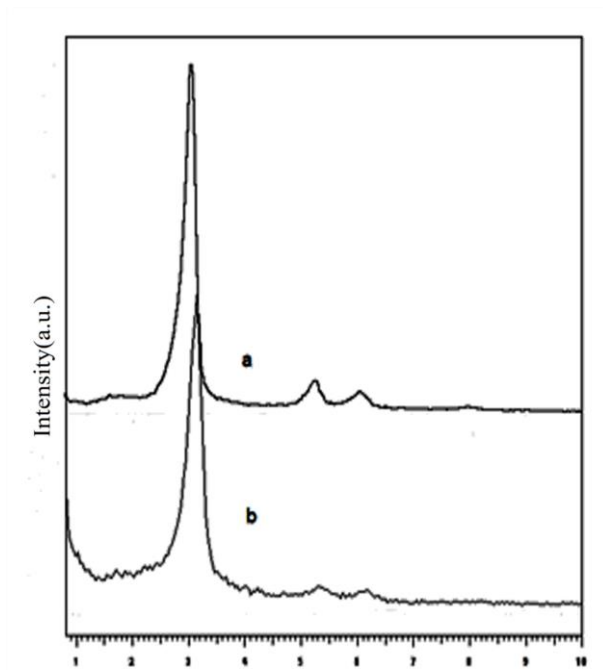




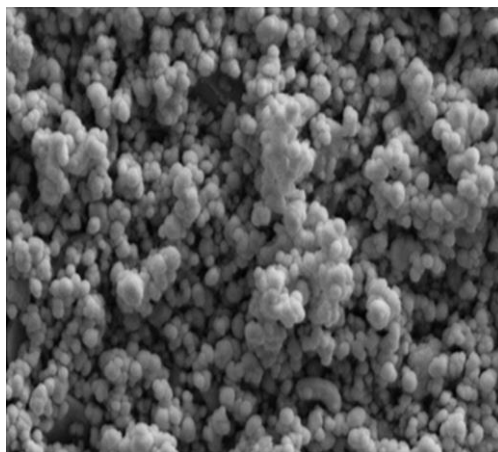
**Fig 1** XRD patterns of MCM-41-chloride.



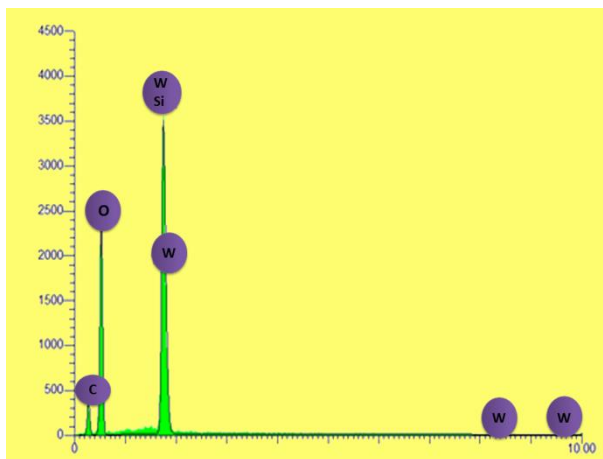
**Fig. 2** FT-IR spectra of a) MCM-41, b) MCM-41- $\text{H}_2\text{WO}_4$  and c)  $\text{H}_2\text{WO}_4$ .



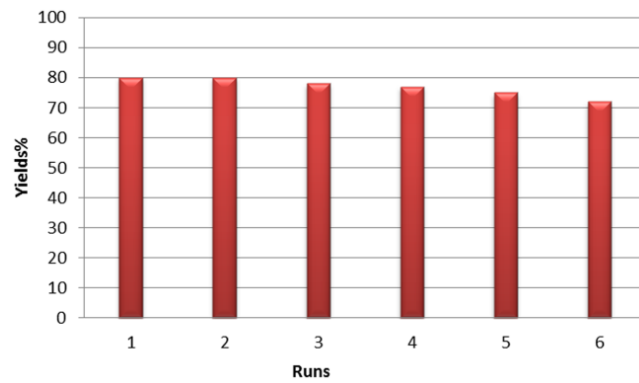
**Fig. 3** XRD patterns of a) MCM-41 and b) MCM-41-HWO<sub>4</sub>.



**Fig. 4** SEM image of MCM-41-HWO<sub>4</sub>.



**Fig. 5** EDX spectrum of MCM-41-HWO<sub>4</sub>.



**Fig. 6** Reusability of the MCM-41-HWO<sub>4</sub> catalyst in the reaction of benzaldehyde, meldrum's acid, isoquinoline and *t*-butyl isocyanide.