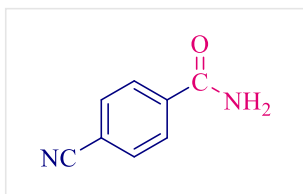


$\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{KIT-6}@2\text{-ATP}@\text{Cu}^{\text{I}}$ as a catalyst for hydration of benzonitriles and reduction of nitroarenes

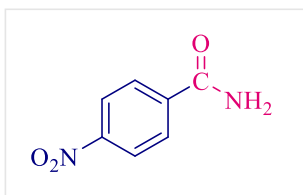
Zahra Moradi, Arash Ghorbani-Choghamarani *

A) 4-Cyanobenzamide (Figure1):



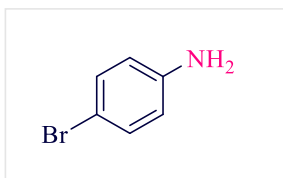
4-Cyanobenzamide: ¹HNMR (300 MHz, DMSO-*d*₆) δ 8.01 (2H, d, J= 8 Hz), 7.95 (2H, d, J= 8 Hz), 7.66 (s, 2H).

B) 4-Nitrobenzamide (Figure 2):



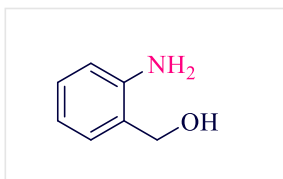
4-Nitrobenzamide: ¹HNMR (300 MHz, DMSO-*d*₆) δ 8.28 (2H, d, J= 8.1), 8.08 (2H, d, J= 8.1), 7.71 (s, 2H).

C) 4-Bromoaniline (Figure 3):



4-Bromoaniline: ¹HNMR (300 MHz, CDCl₃): δ 7.23 (2H, d, J= 7 Hz), 6.57 (2H, d, J= 7 Hz), 3.53 (s, 2H).

D) 2-Aminobenzyl alcohol (Figure 4):



2-Aminobenzyl alcohol: ^1H NMR (300 MHz, CDCl_3): δ 6.93- 7.05 (m, 2H), 6.49- 6.62 (m, 2H), 4.95 (s, 1H), 4.87 (s, 2H), 4.38 (s, 2 H).

^1H NMR:

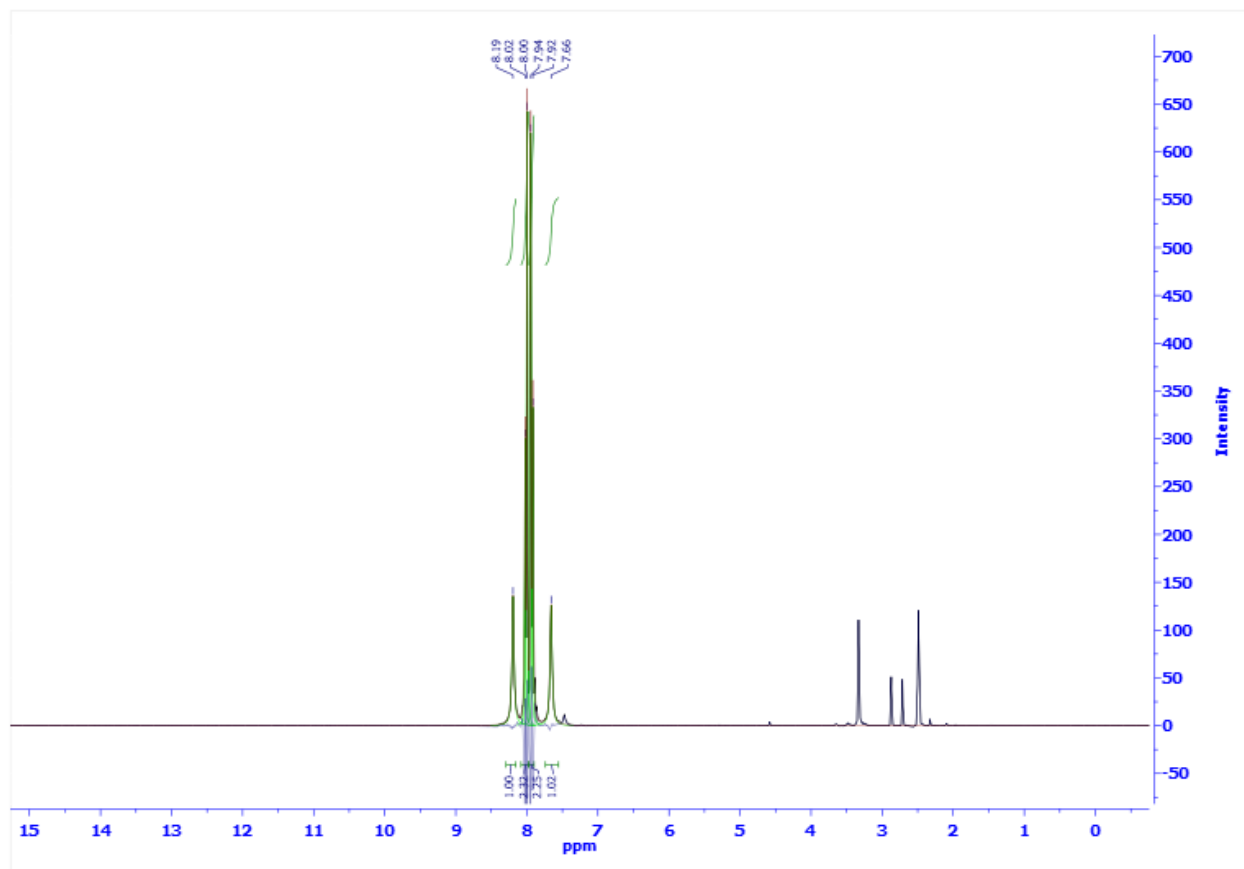


Figure 1. The ^1H NMR A

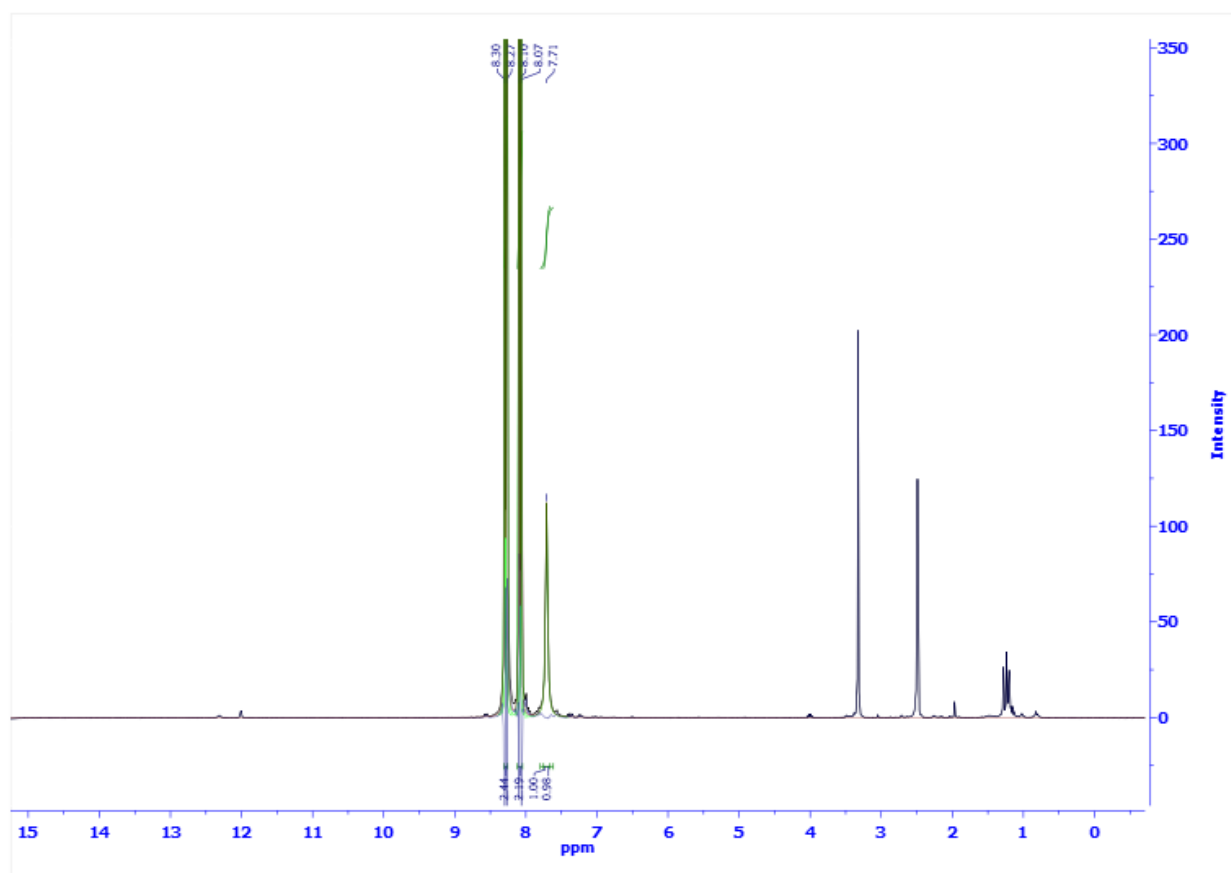


Figure 2. The ^1H NMR B

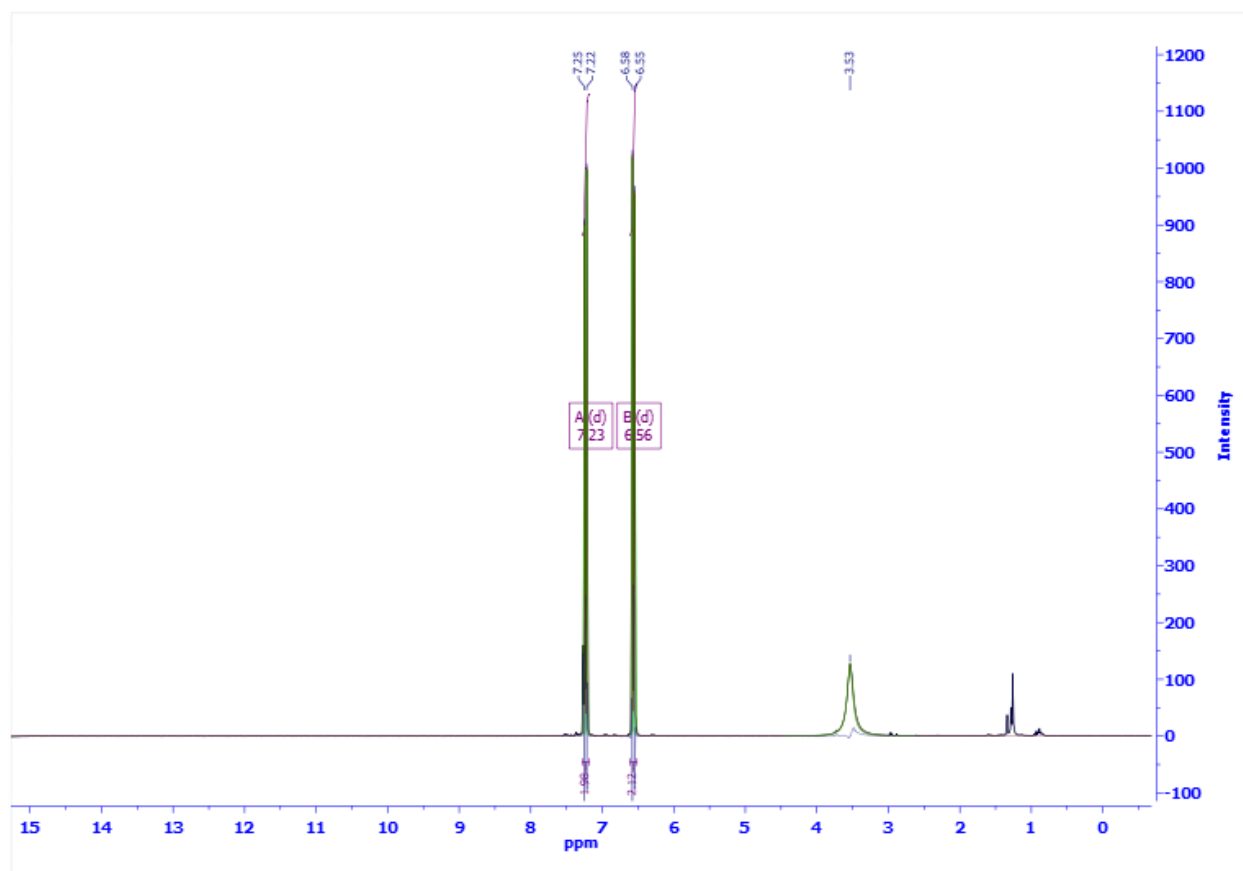


Figure 3. The ^1H NMR C

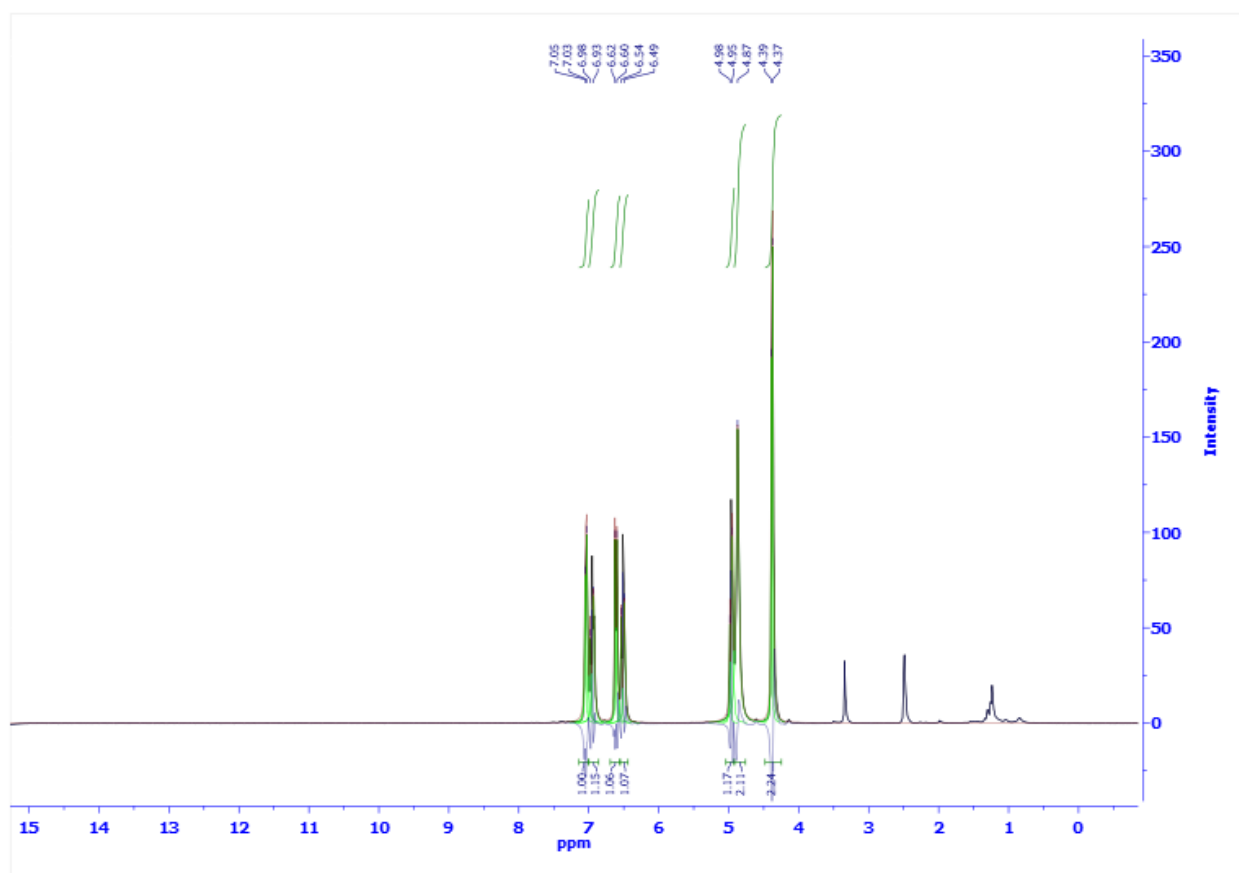


Figure 4. The ^1H NMR D