

Supplementary material

Selectivity and activity in catalytic hydrogenation of azido groups over Pd nanoparticles on aluminum oxy-hydroxide

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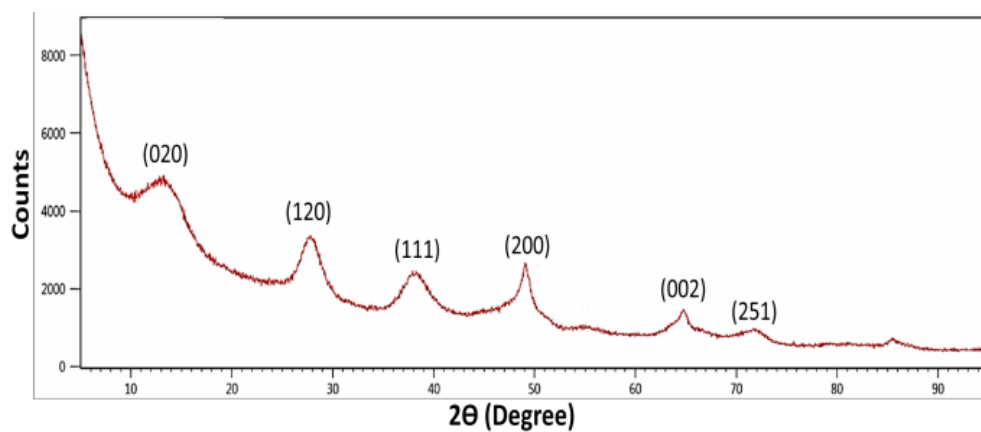


Figure S1 XRD pattern spectrum of Pd/AlO(OH).

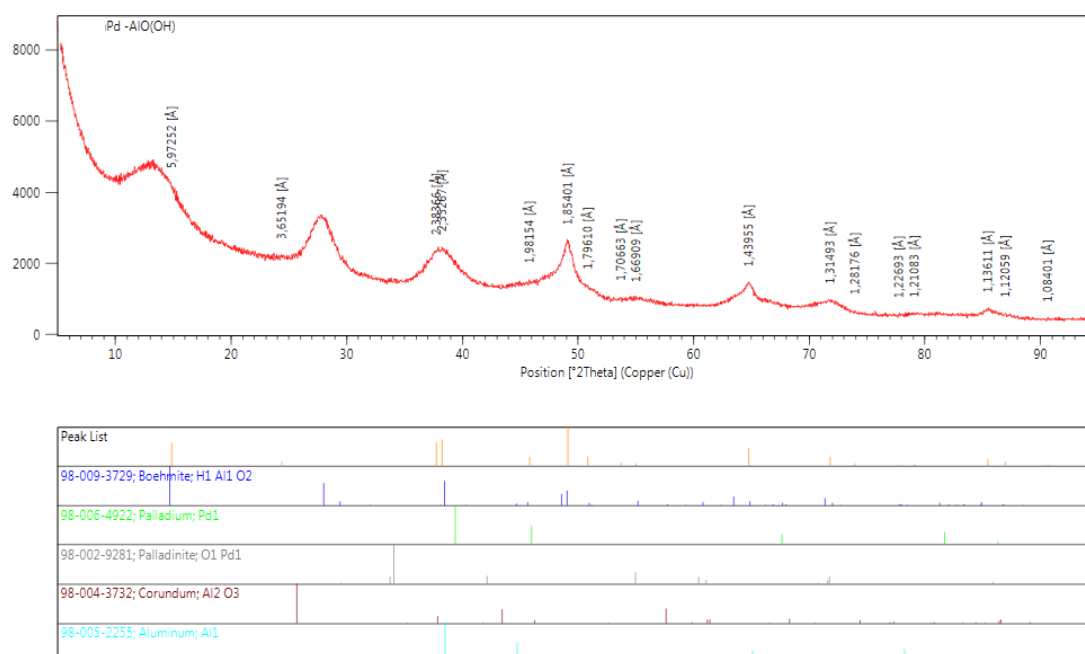
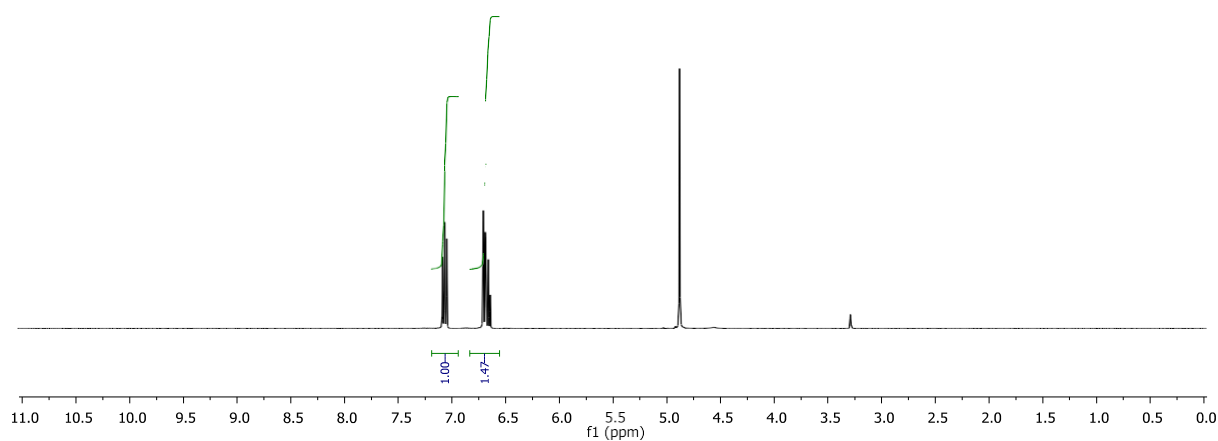
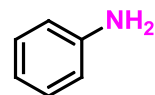


Figure S2 XRD patterns of the as boehmite (red) and JCPDS card No. 21-1307 (blue).

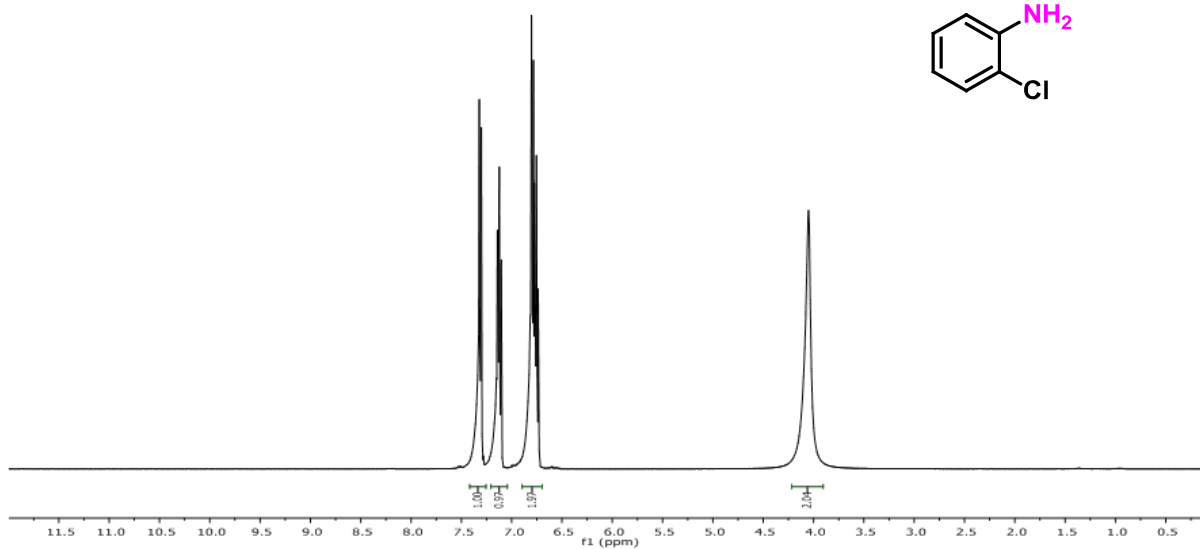
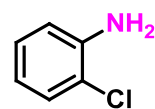
^1H NMR Spectra for Primary Amines

AN
single_pulse

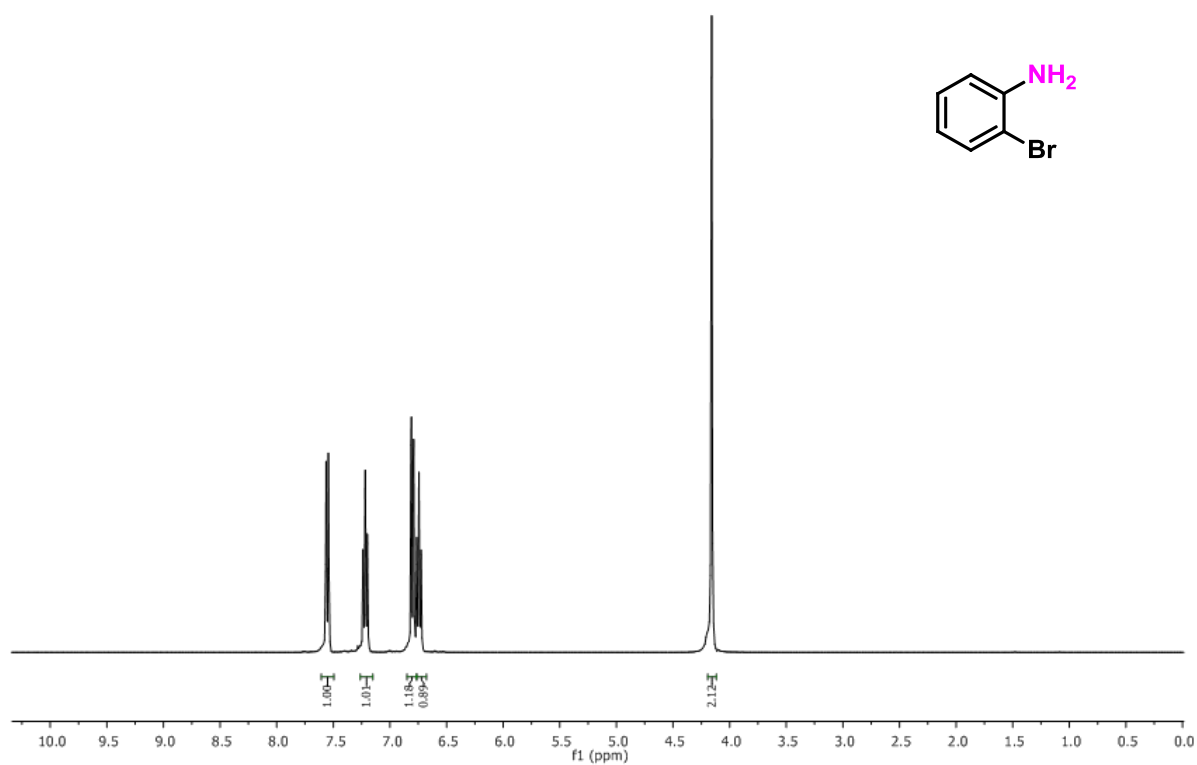
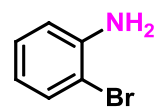
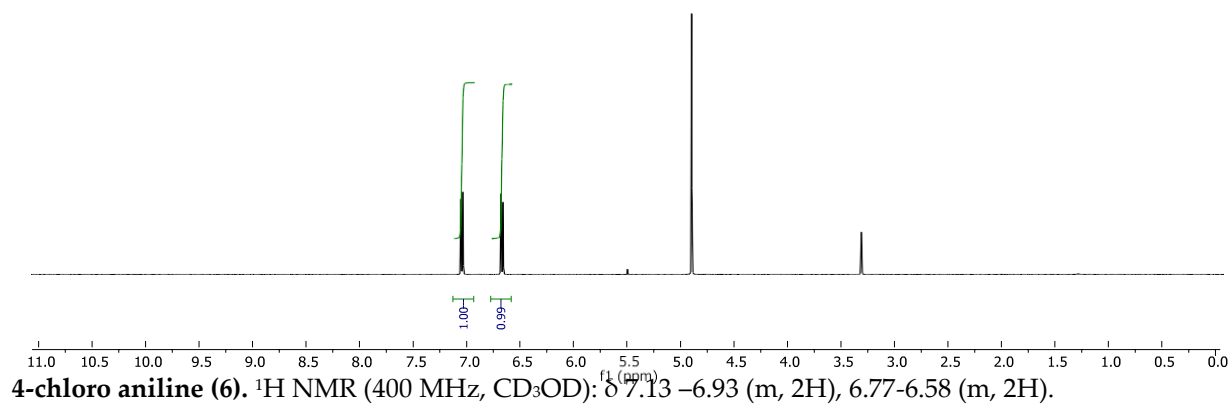
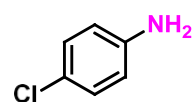


Aniline (2). ^1H NMR (400 MHz, CD_3OD): δ 7.14-6.94 (m, 2H), 6.79-6.56 (m, 3H).

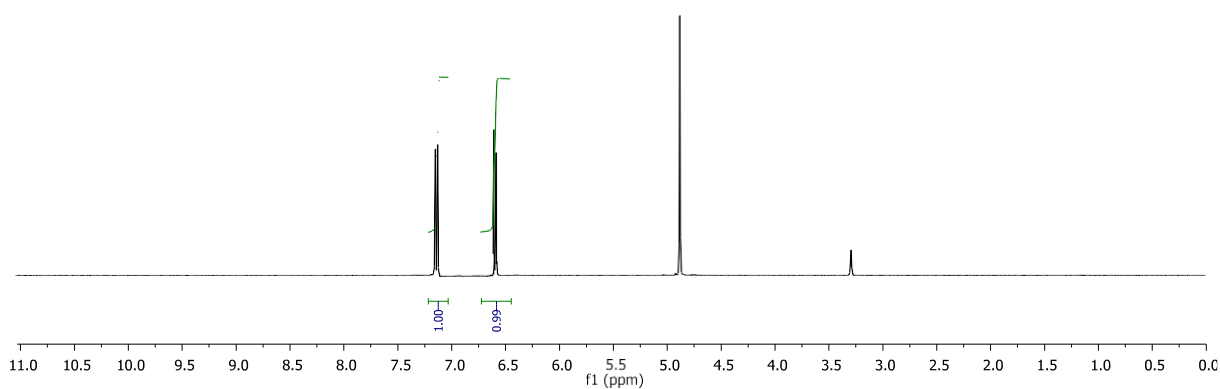
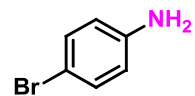
MB-KSL-H1 1H
MB-KSL-H1 1H



2-chloro aniline (4). ^1H NMR (400 MHz, CDCl_3): δ 7.44 – 7.26 (m, 1H), 7.19 – 7.07 (m, 1H), 6.88 – 6.69 (m, 2H), 4.05 (s, 2H).

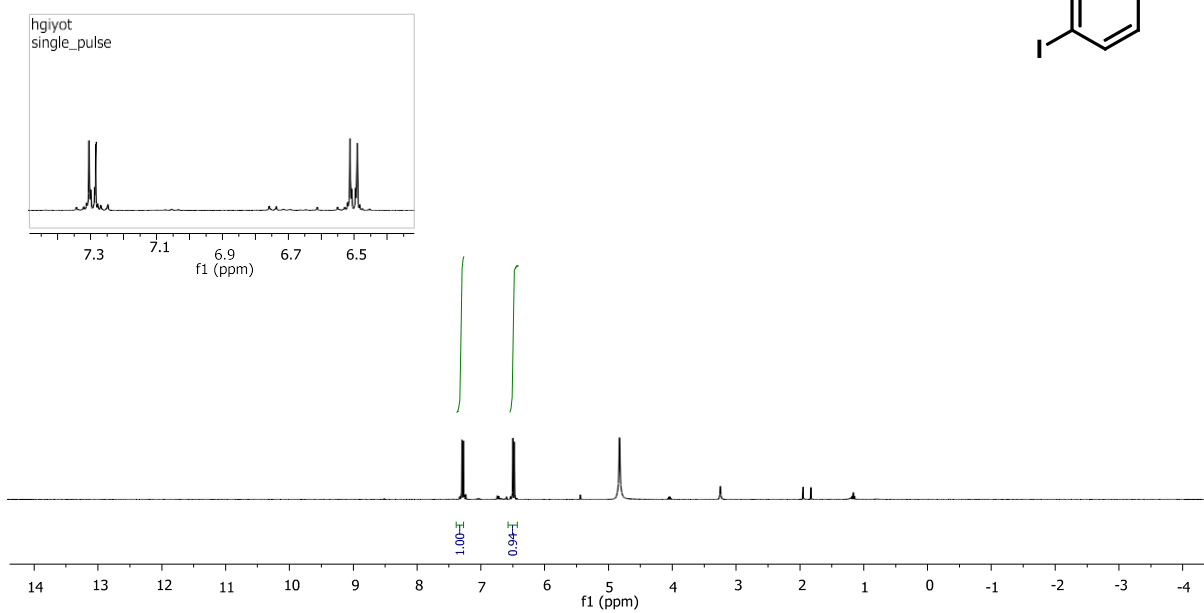
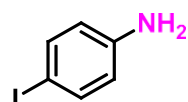


4Br
single_pulse



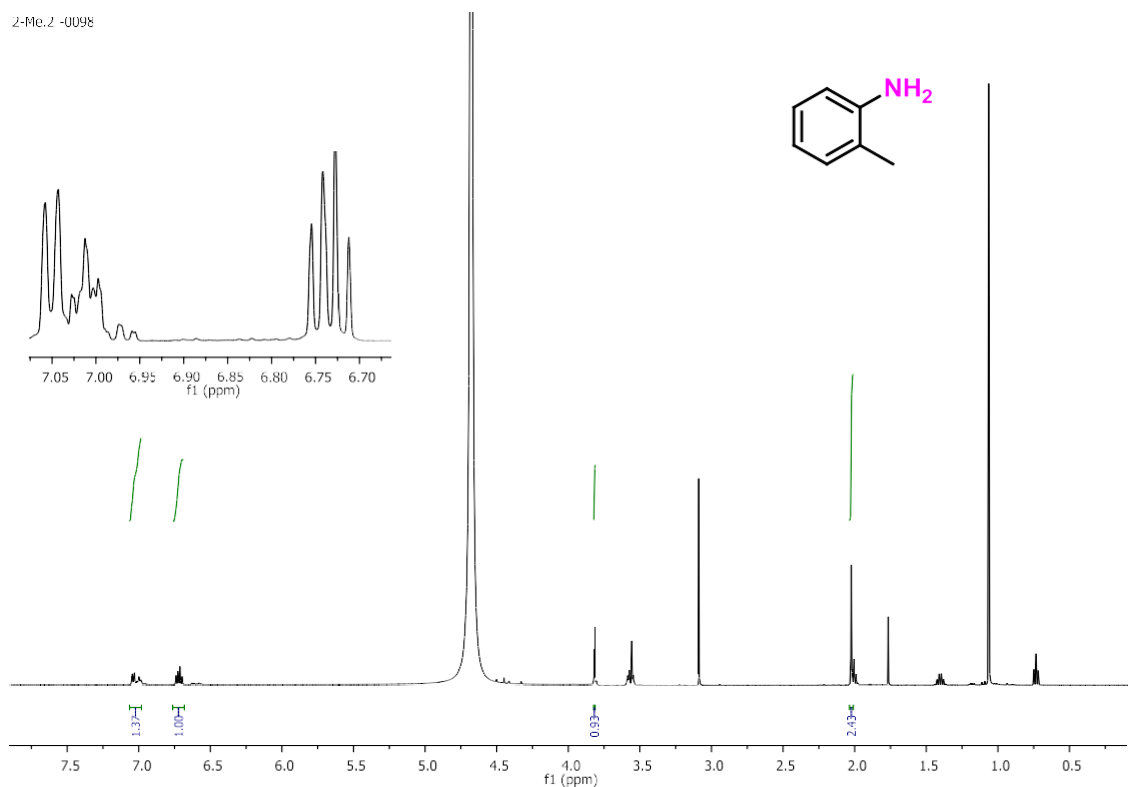
4-Bromoaniline (10). ^1H NMR (400 MHz, CD_3OD): δ 7.21-7.02 (m, 2H), 6.71-6.44 (m, 2H).

hgiyot
single_pulse

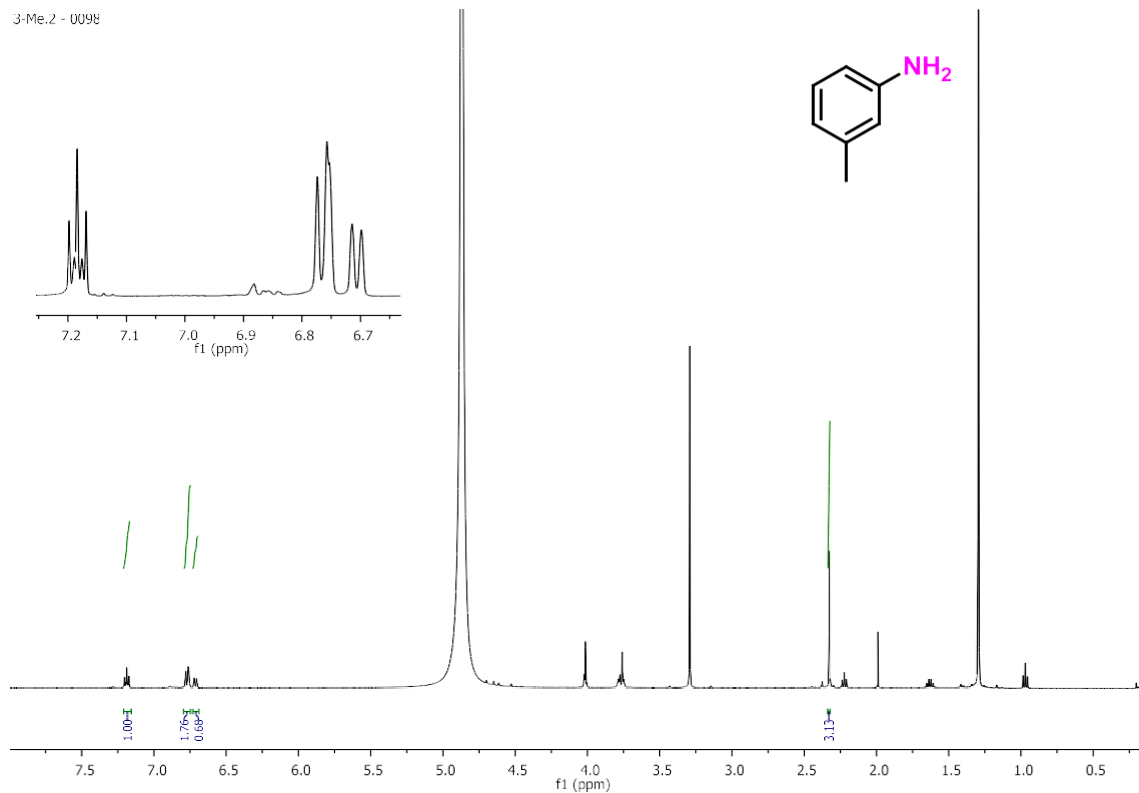


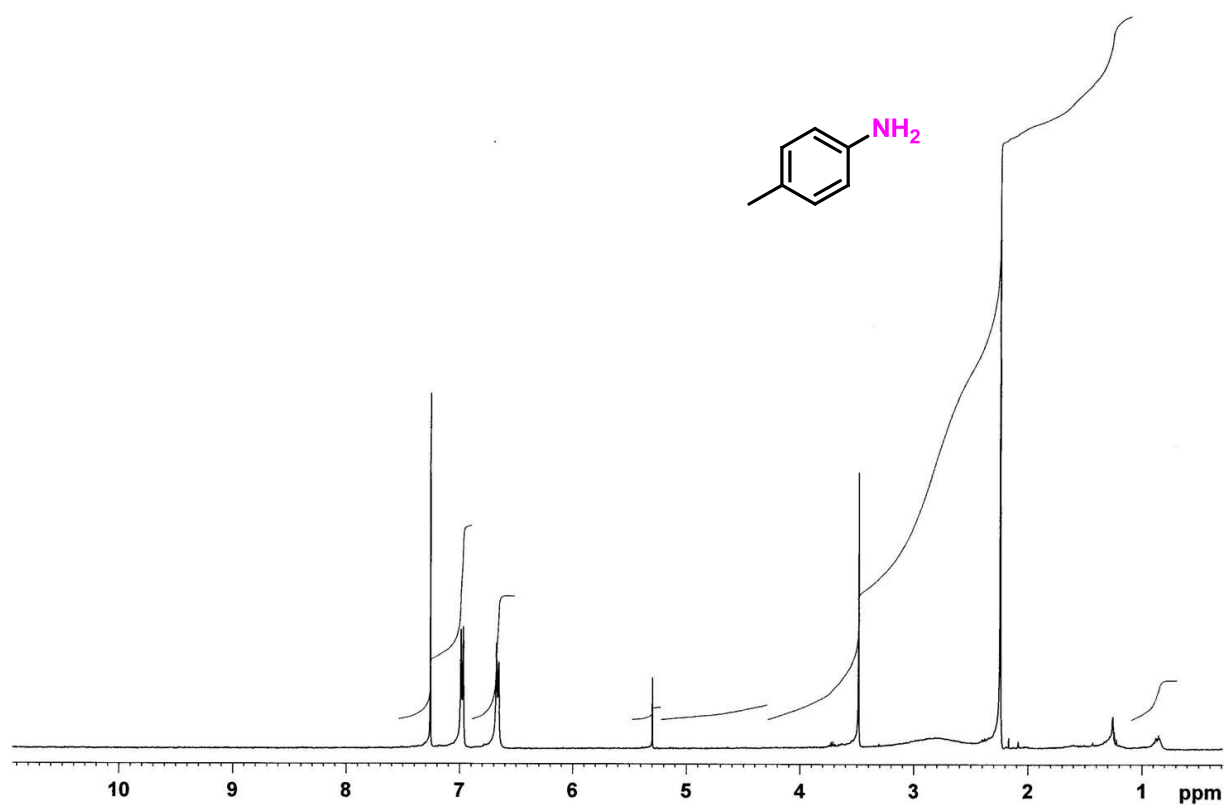
4-Iodoaniline (12). ^1H NMR (400 MHz, CD_3OD): δ 7.31-7.28 (m, 2H), 6.52-6.48 (m, 2H).

2-Me.2 -0098

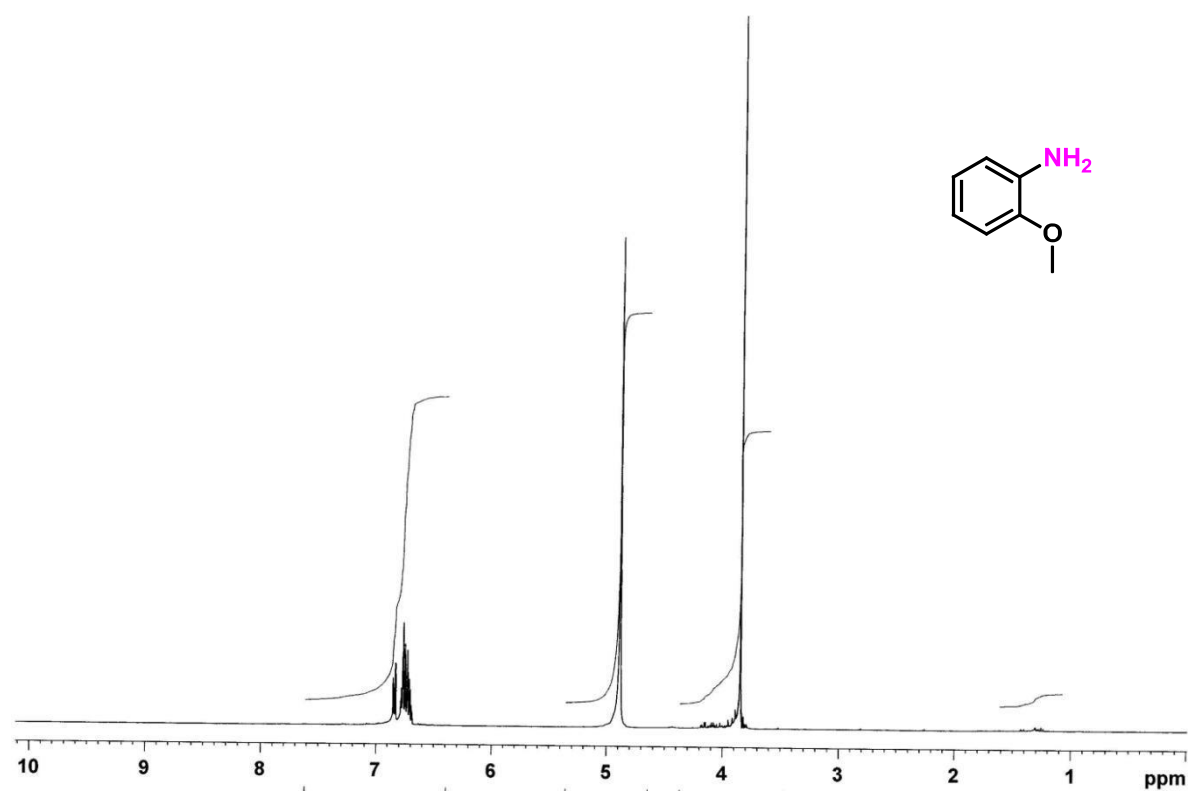


3-Me.2 - 0098



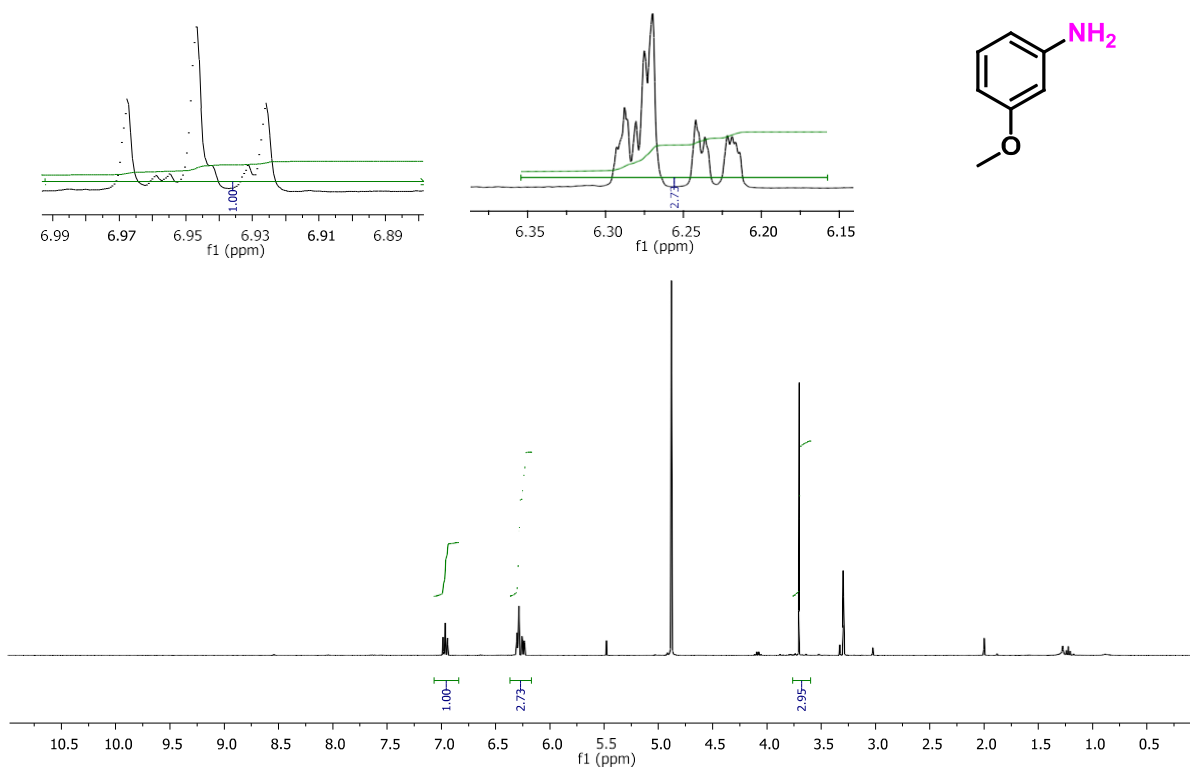


4-Aminotoluene (18). ^1H NMR (400 MHz, CDCl_3): δ 7.00 (t, J = 8.0 Hz, 2H), 6.63 (t, J = 6.4 Hz, 2H), 2.26 (s, 3H).



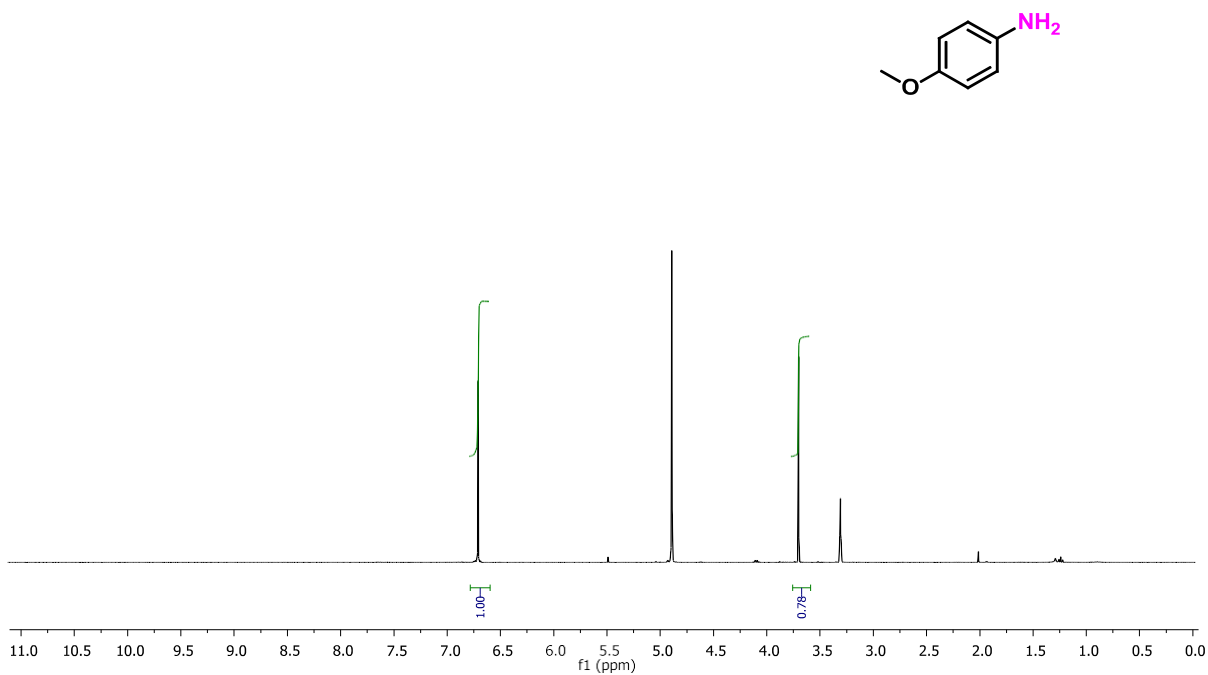
2-Methoxy aniline (20). ^1H NMR (400 MHz, D_2O) δ 6.85-6.77 (m, 2H), 6.77-6.68 (m, 2H), 3.85 (s, 3H).

3AN
single_pulse



3-Methoxy aniline (22). ^1H NMR (400 MHz, CD_3OD) δ 7.43-6.66 (m, 1H), 6.25 (m, 3H), 3.69 (s, 3H).

4an
single_pulse



4-Methoxy aniline (24). ^1H NMR (400 MHz, CD_3OD) δ 6.69 (m, 4H), 3.67 (s, 3H).

