

Supporting Information

Nickel-Catalyzed Decyanation of Inert Carbon-Cyano Bonds

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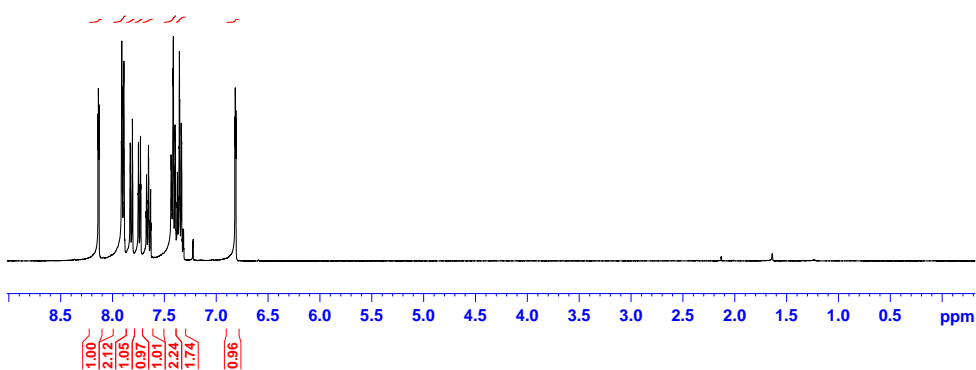
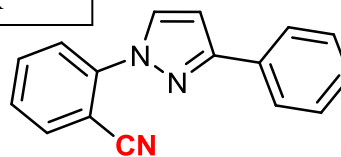
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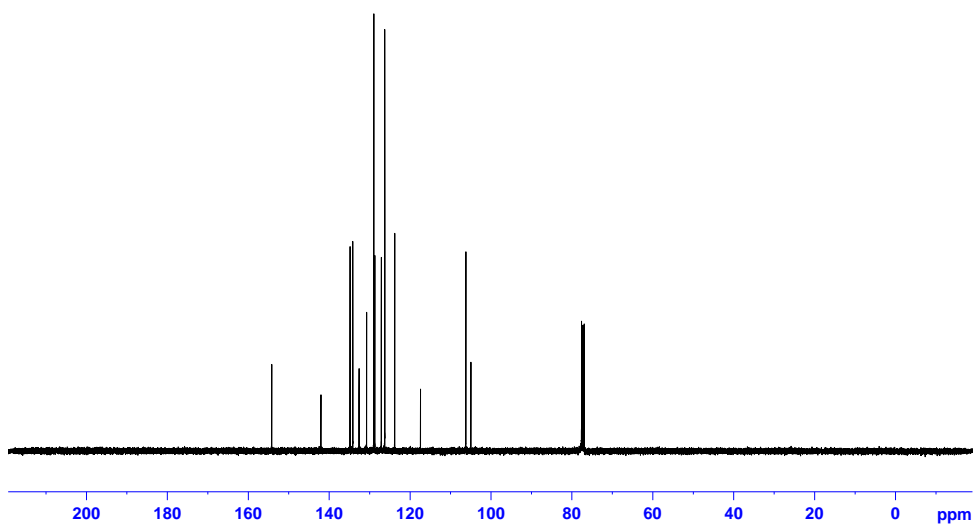
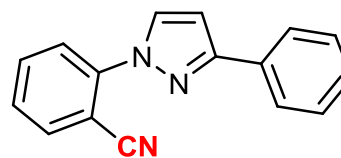
2-(3-Phenyl-1H-pyrazol-1-yl)benzonitrile
(Table 2, entry 2b-SM) ¹H-NMR

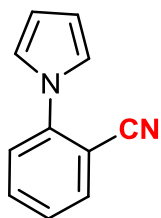
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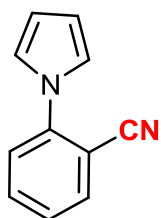
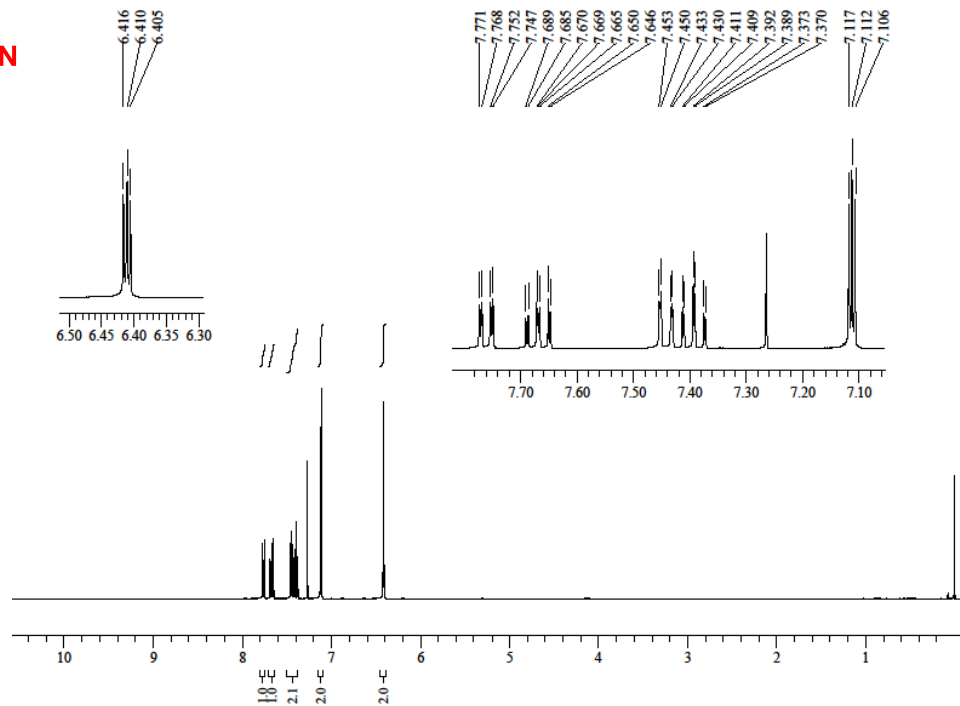
2-(3-Phenyl-1H-pyrazol-1-yl)benzonitrile
(Table 2, entry 2b-SM) ¹³C-NMR

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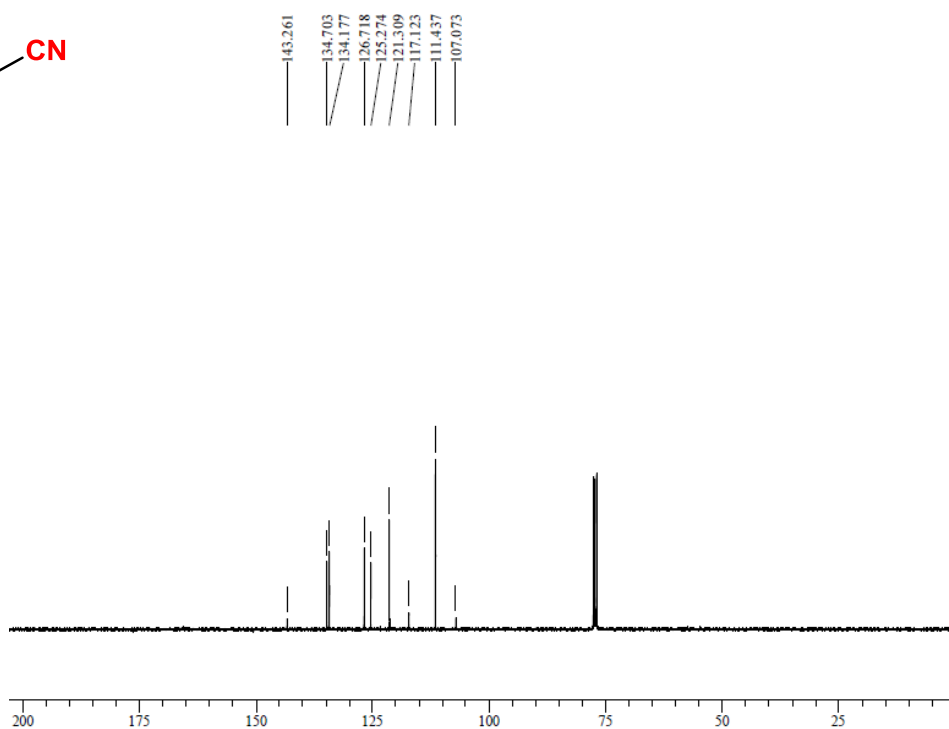




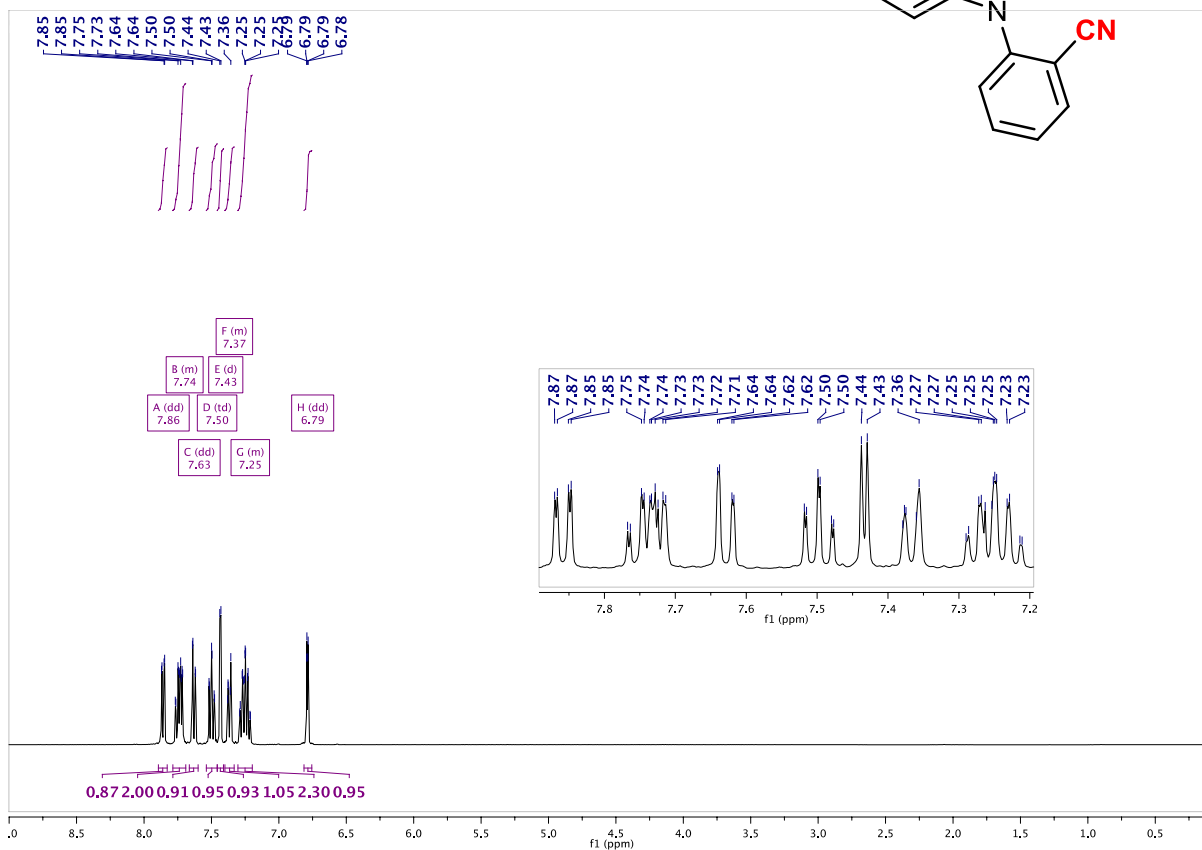
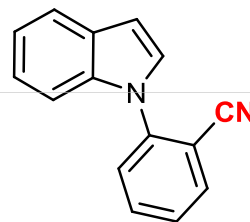
2-(1H-Pyrrol-1-yl)benzonitrile
(Table 2, entry 2d-SM) ¹H-NMR



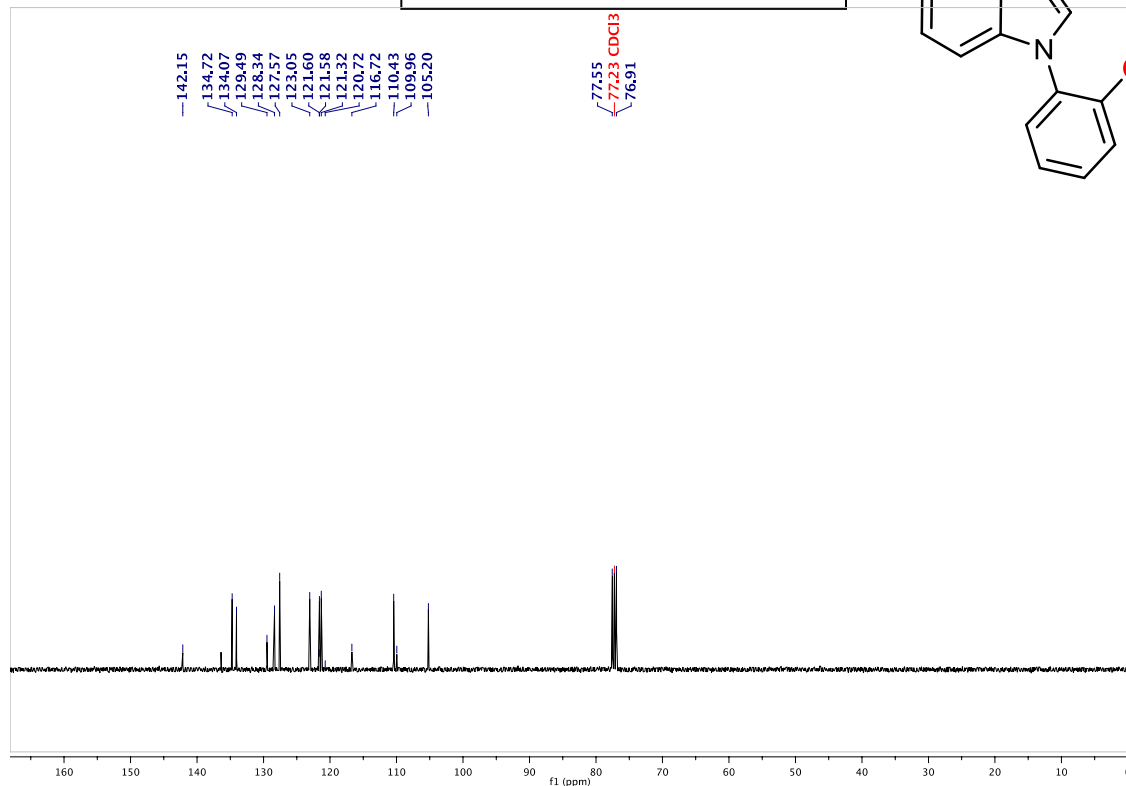
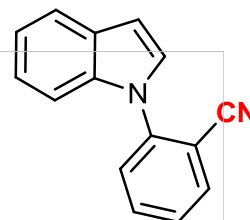
2-(1H-Pyrrol-1-yl)benzonitrile
(Table 2, entry 2d-SM) ¹³C-NMR

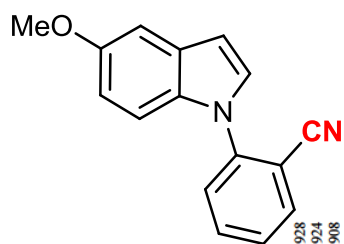


2-(1*H*-Indol-1-yl)benzonitrile
(Table 2, entry 2e-SM) ¹H-NMR

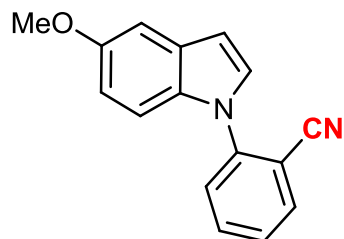
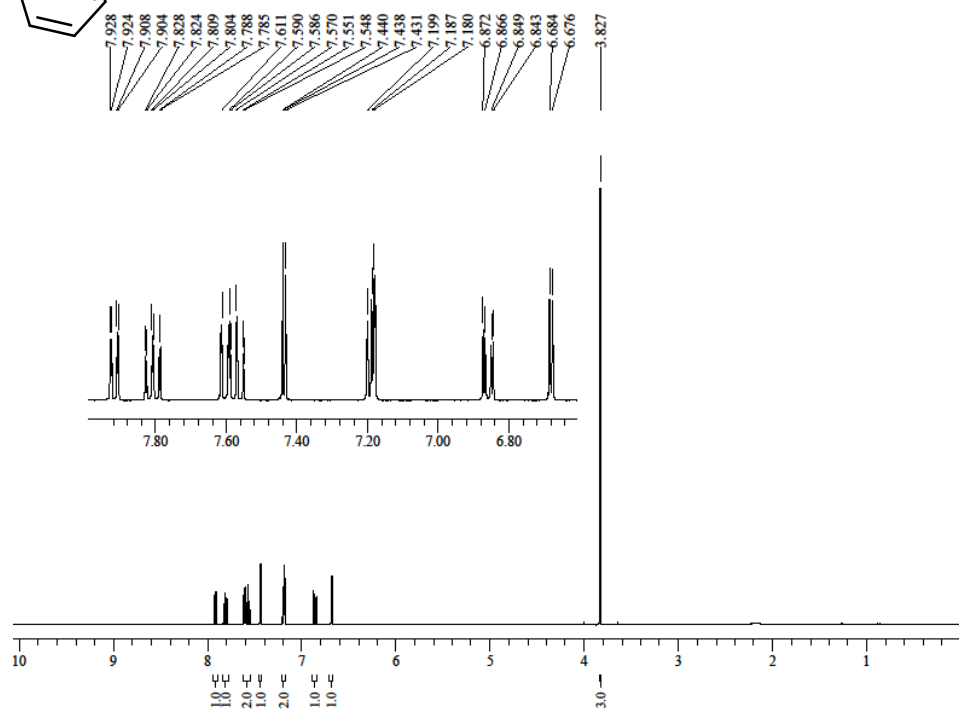


2-(1*H*-Indol-1-yl)benzonitrile
(Table 2, entry 2e-SM) ¹³C-NMR

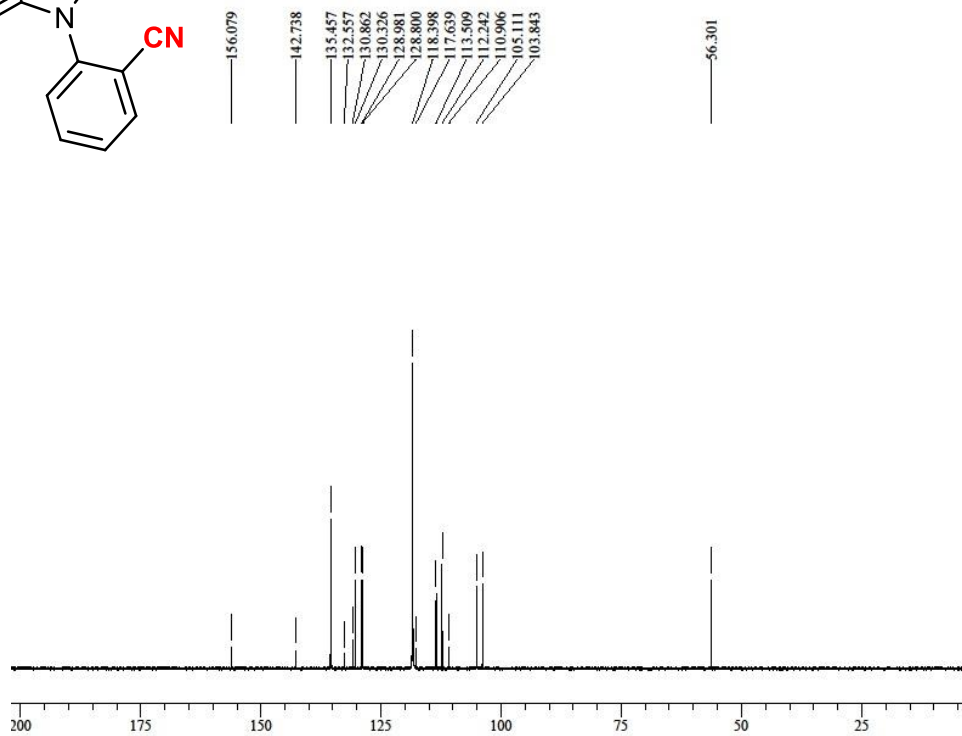


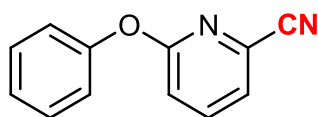


2-(5-Methoxy-1H-indol-1-yl)benzotrile
(Table 2, entry 2f-SM) ¹H-NMR

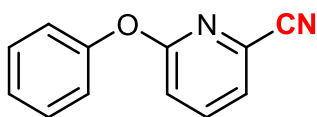
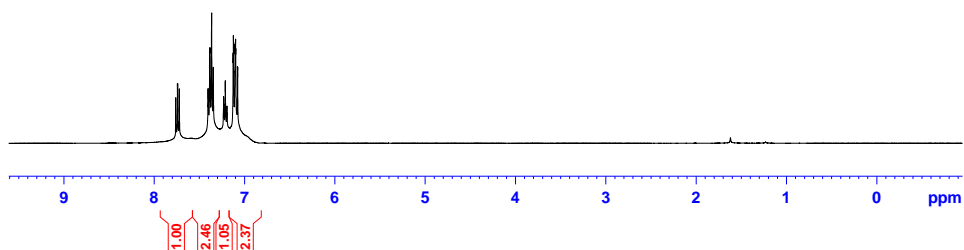


2-(5-Methoxy-1H-indol-1-yl)benzotrile
(Table 2, entry 2f-SM) ¹³C-NMR

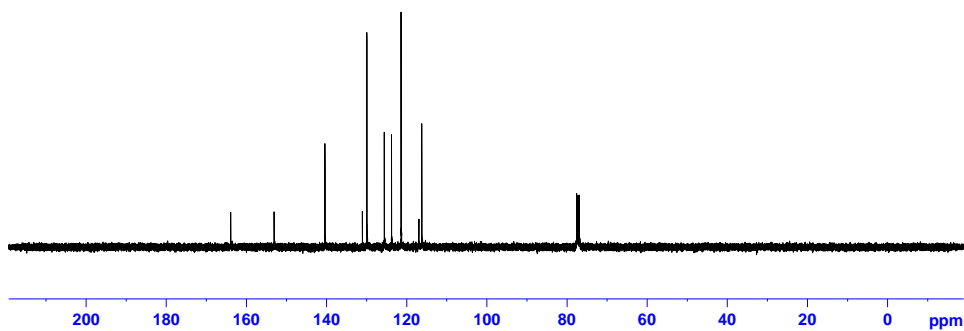
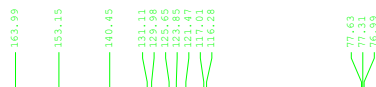


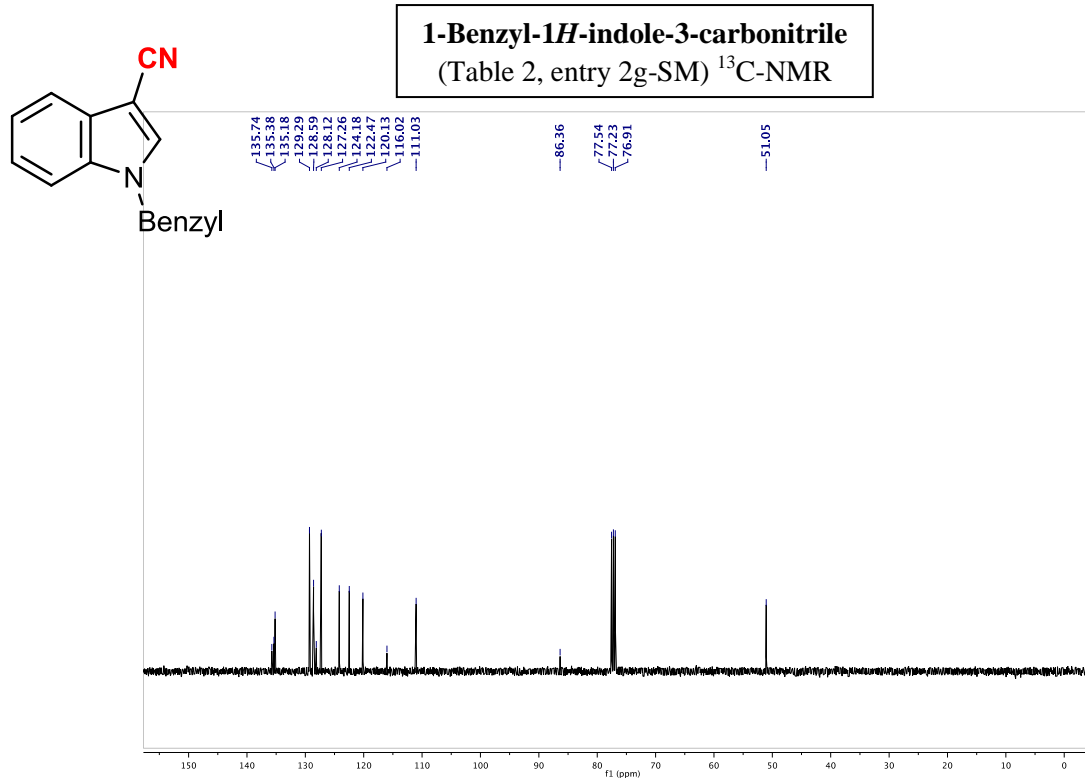
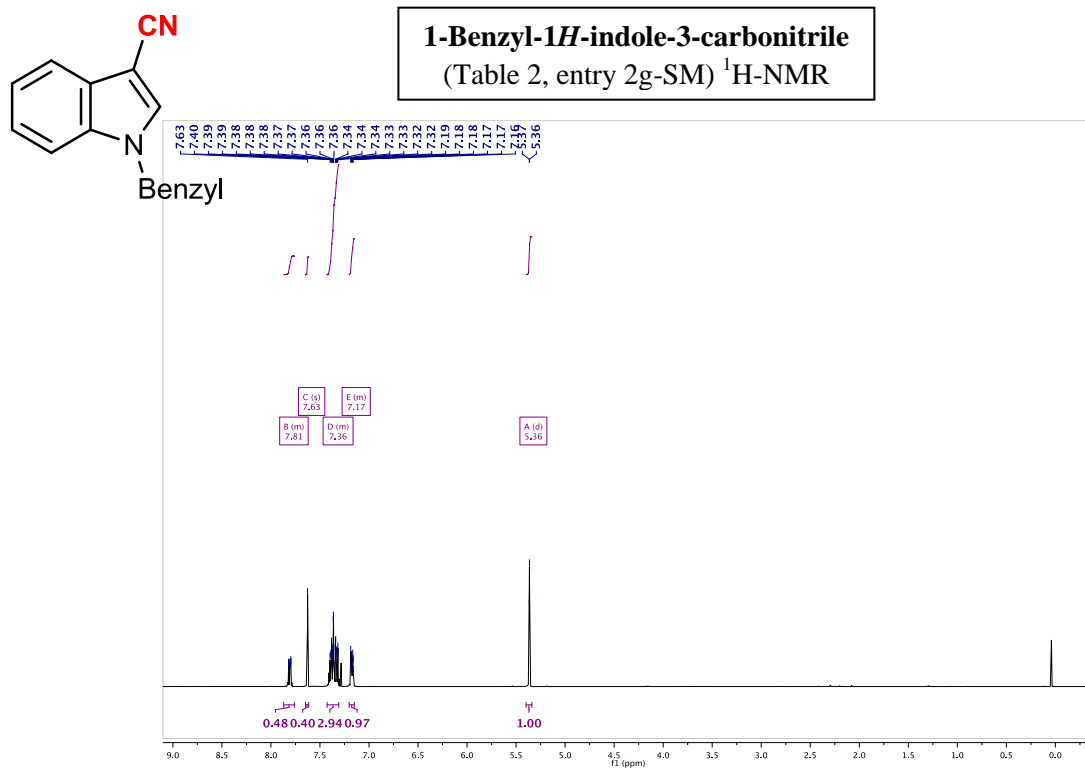


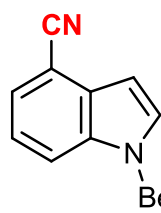
6-Phenoxypicolinonitrile
(Table 2, entry 2c-SM) ¹H-NMR



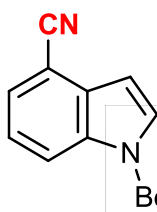
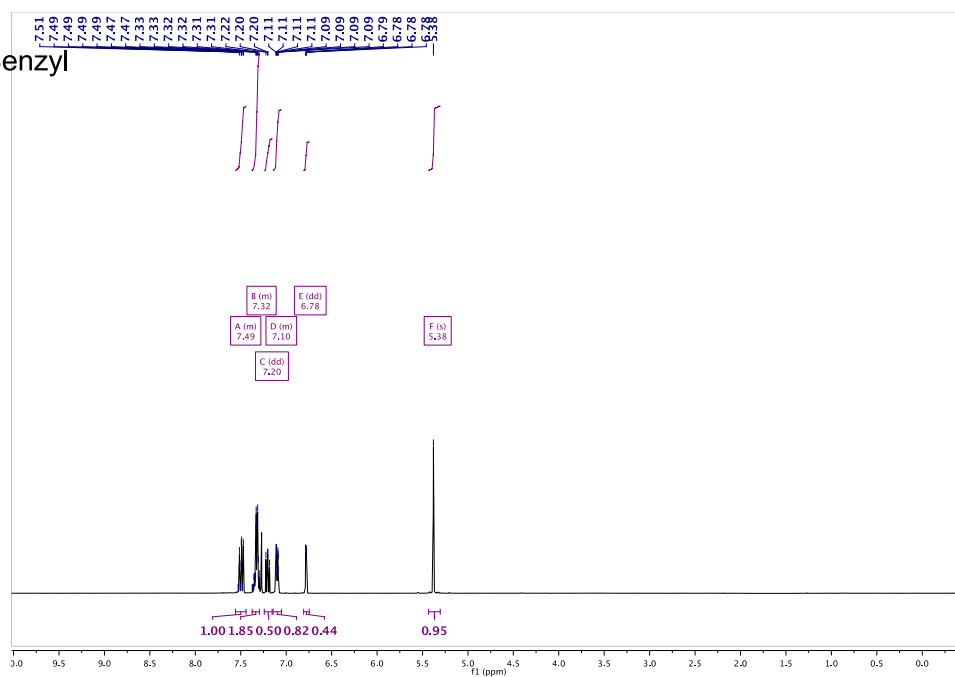
6-Phenoxypicolinonitrile
(Table 2, entry 2c-SM) ¹³C-NMR



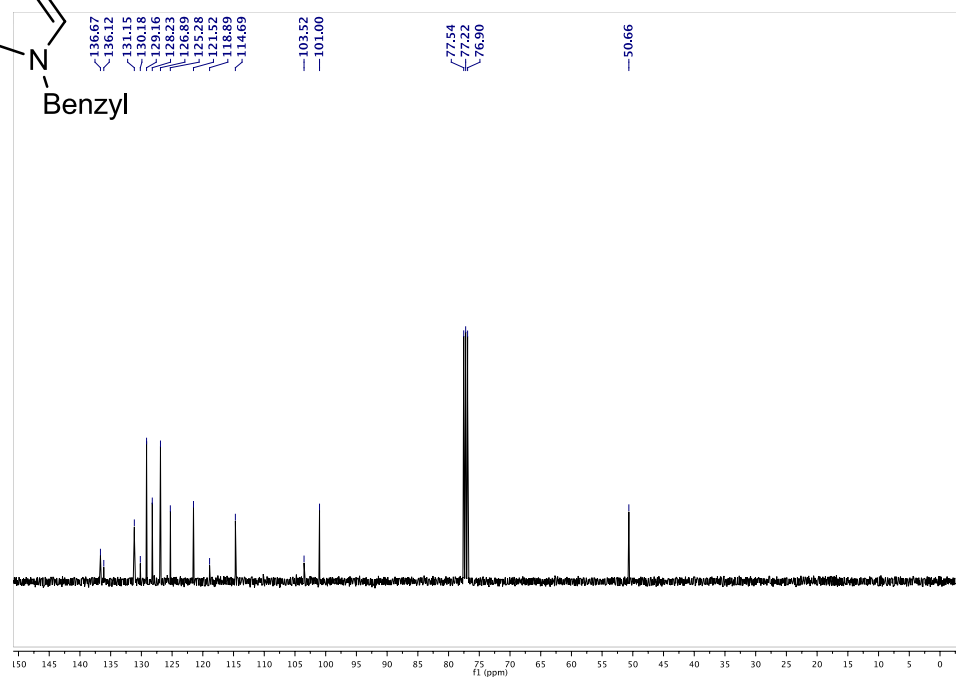


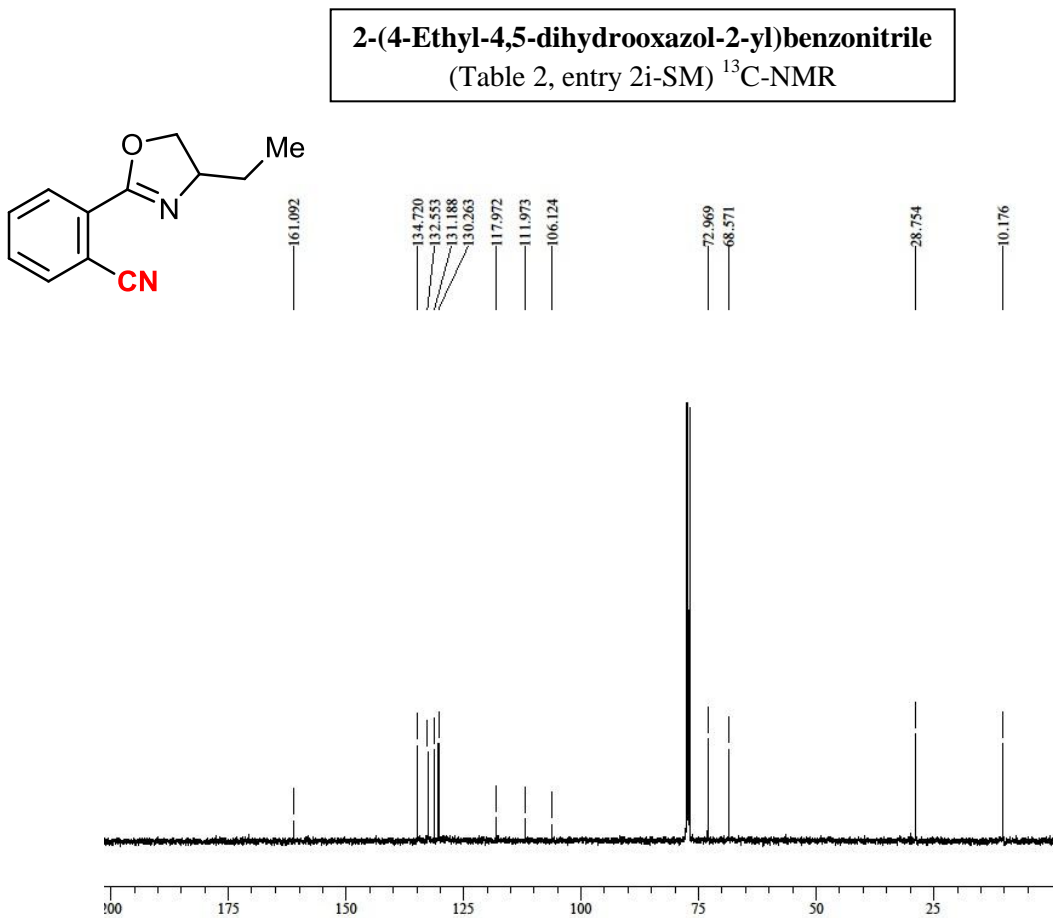
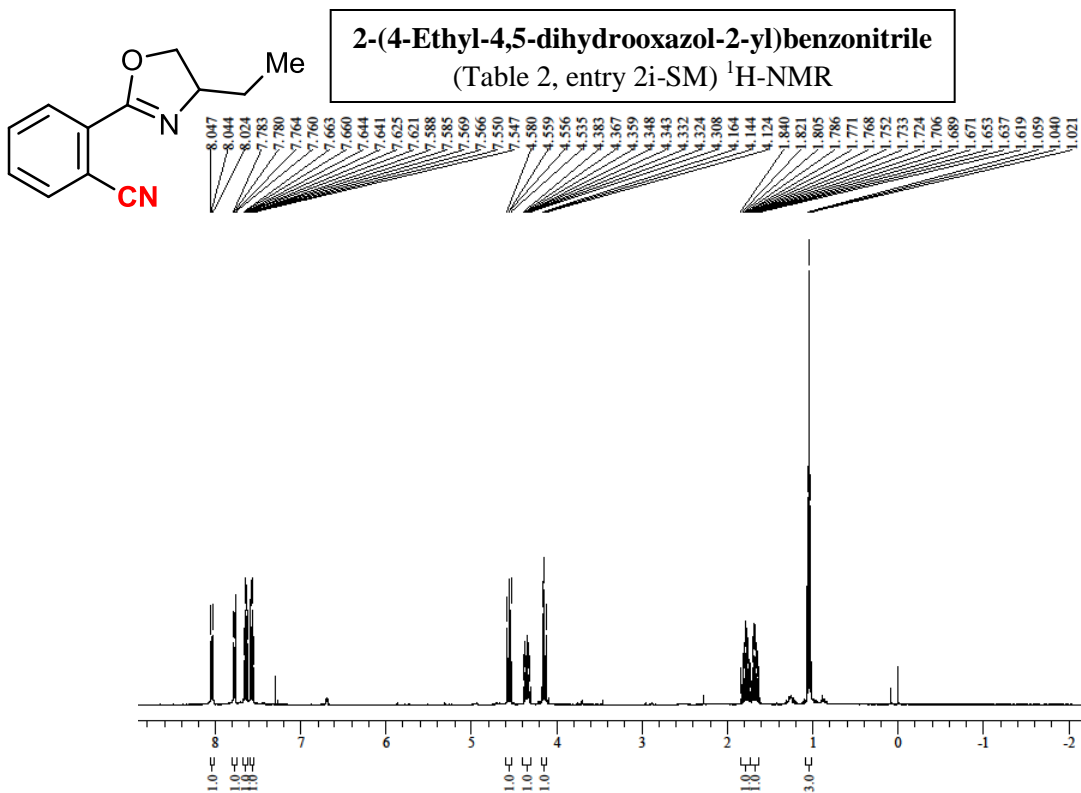


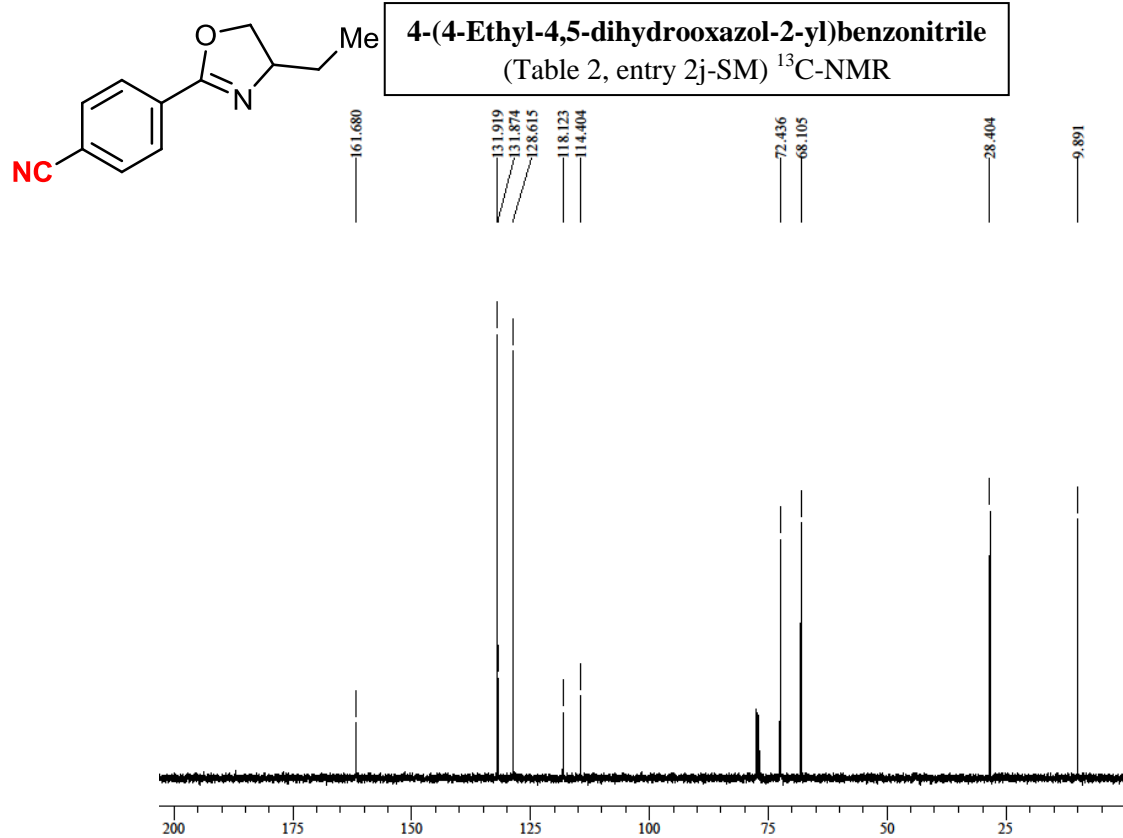
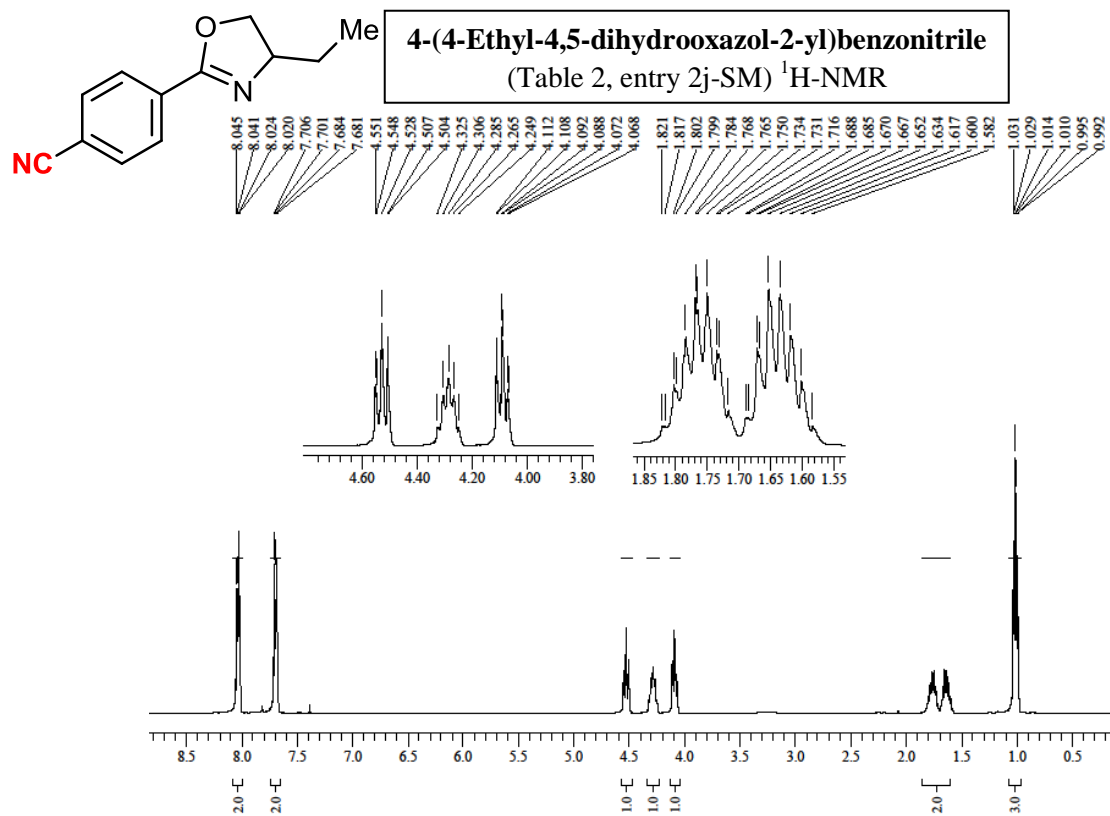
1-Benzyl-1H-indole-4-carbonitrile
(Table 2, entry 2h-SM) ¹H-NMR

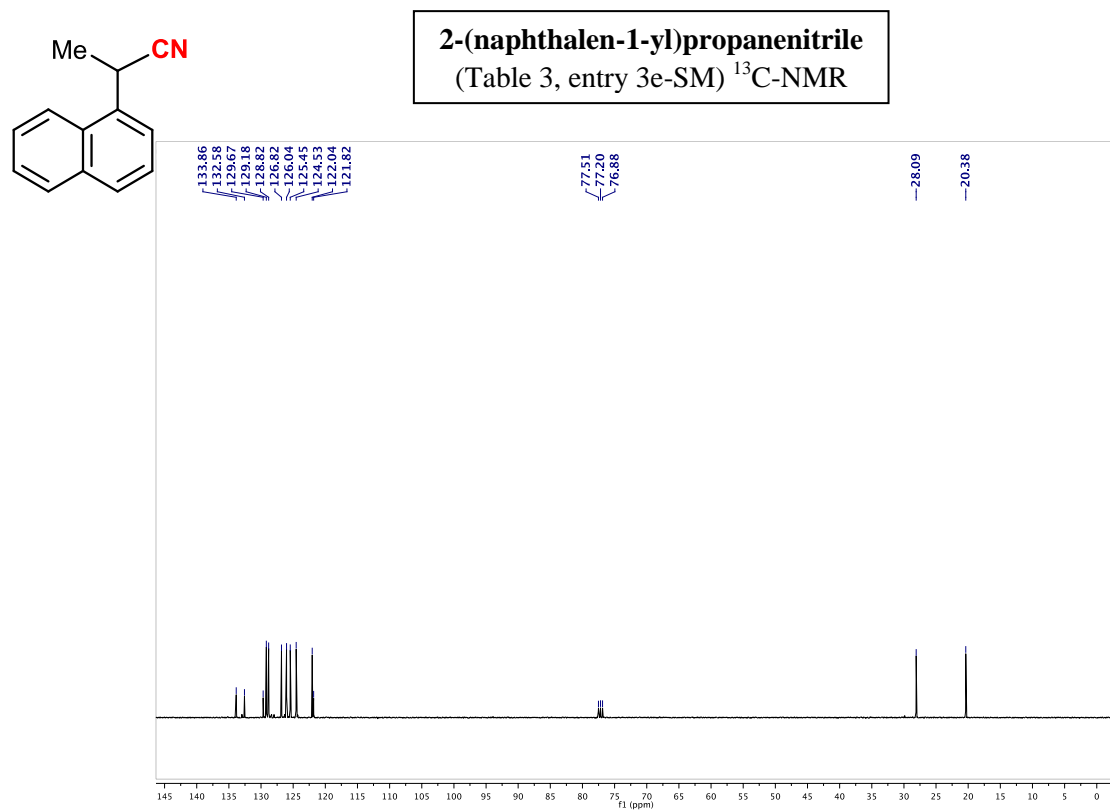
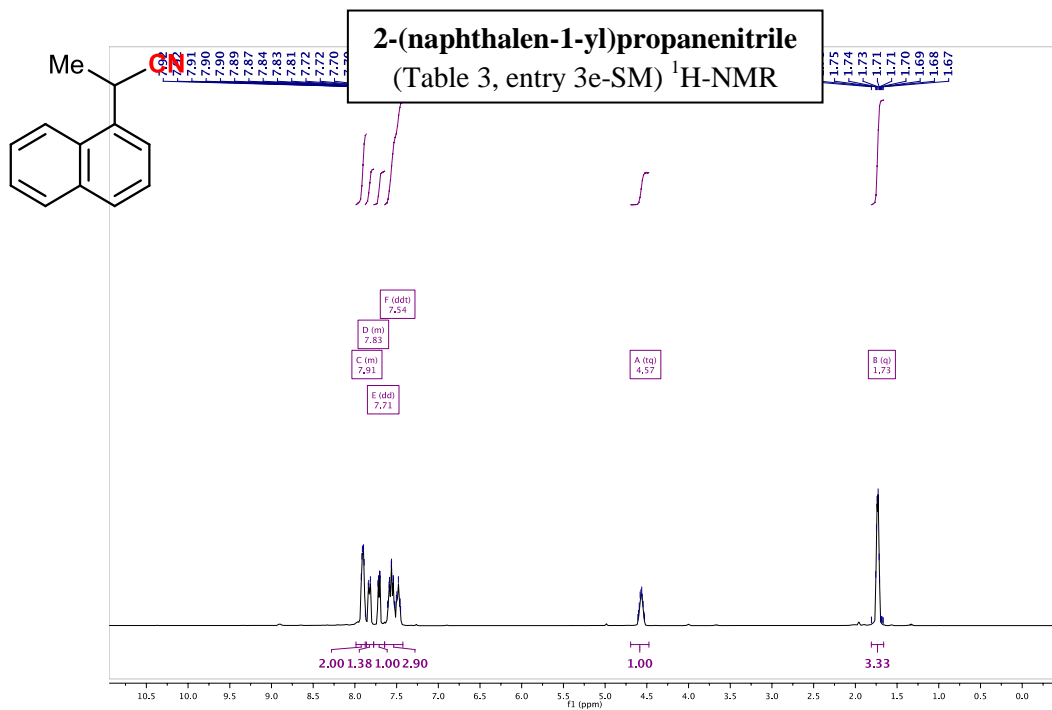


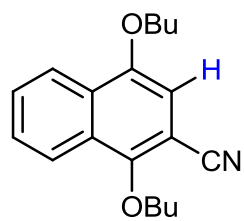
1-Benzyl-1H-indole-4-carbonitrile
(Table 2, entry 2h-SM) ¹³C-NMR



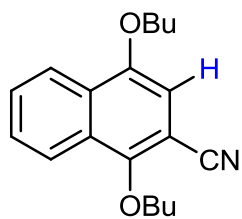
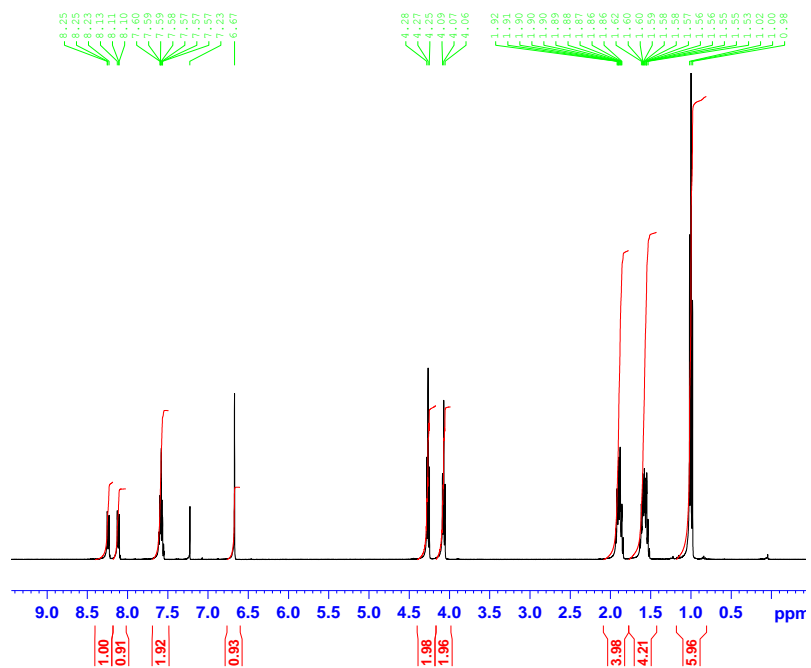




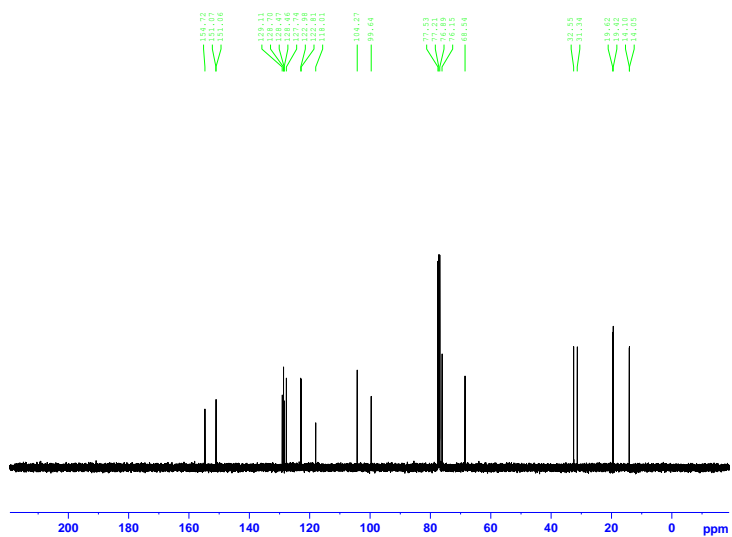


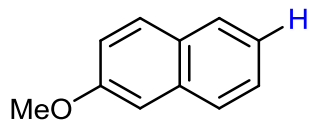


1,4-Dibutoxy-2-naphthonitrile
 (Table 1, entry 1a) ^{13}C -NMR

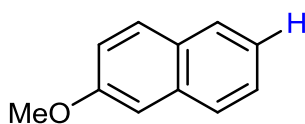
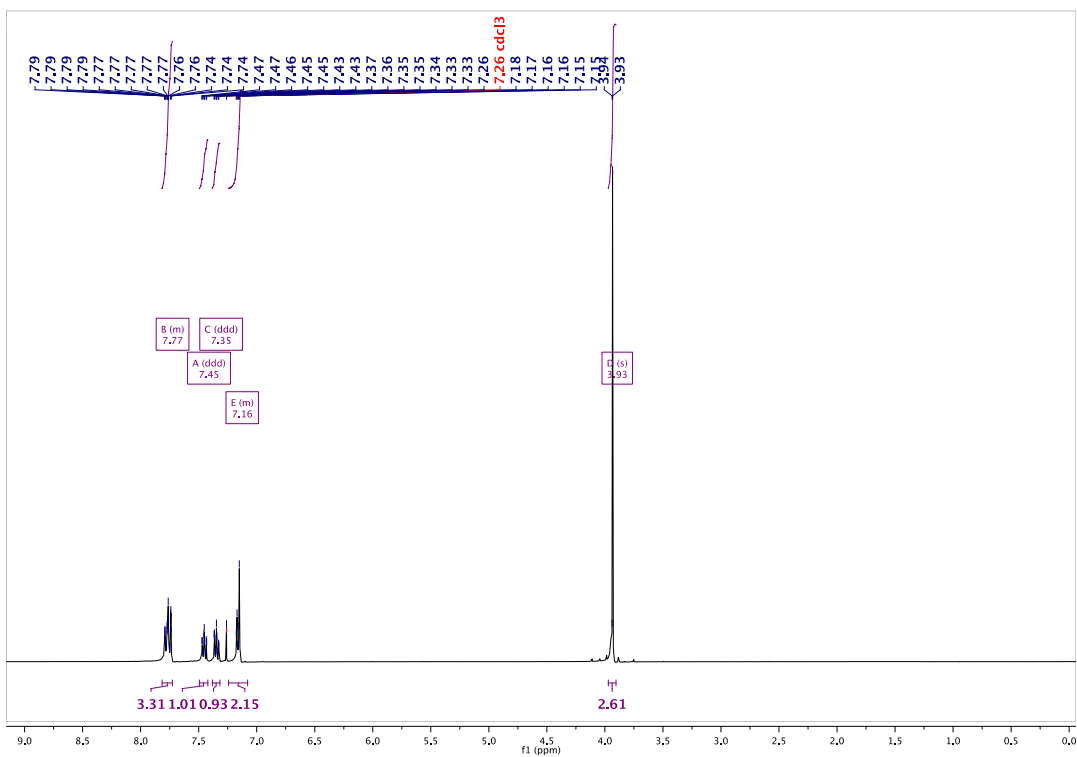


1,4-Dibutoxy-2-naphthonitrile
 (Table 1, entry 1a) ^1H -NMR

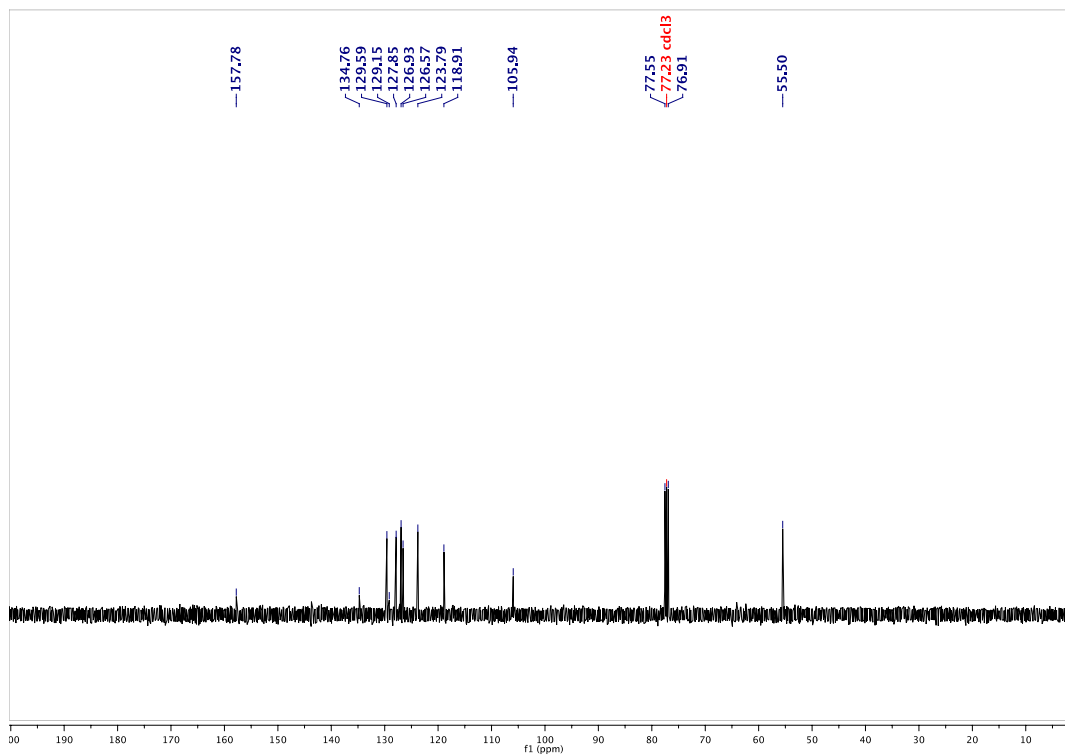


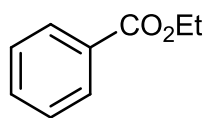


2-Methoxynaphthalene
(Table 1, entry 1b) $^1\text{H-NMR}$

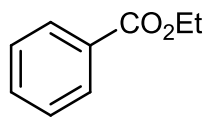
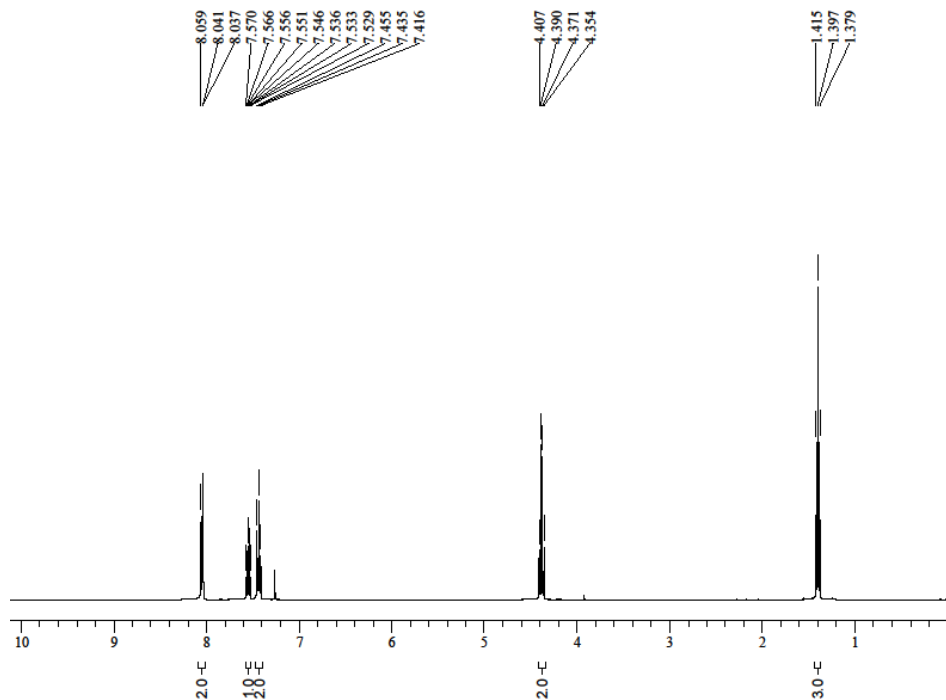


2-Methoxynaphthalene
(Table 1, entry 1b) $^{13}\text{C-NMR}$

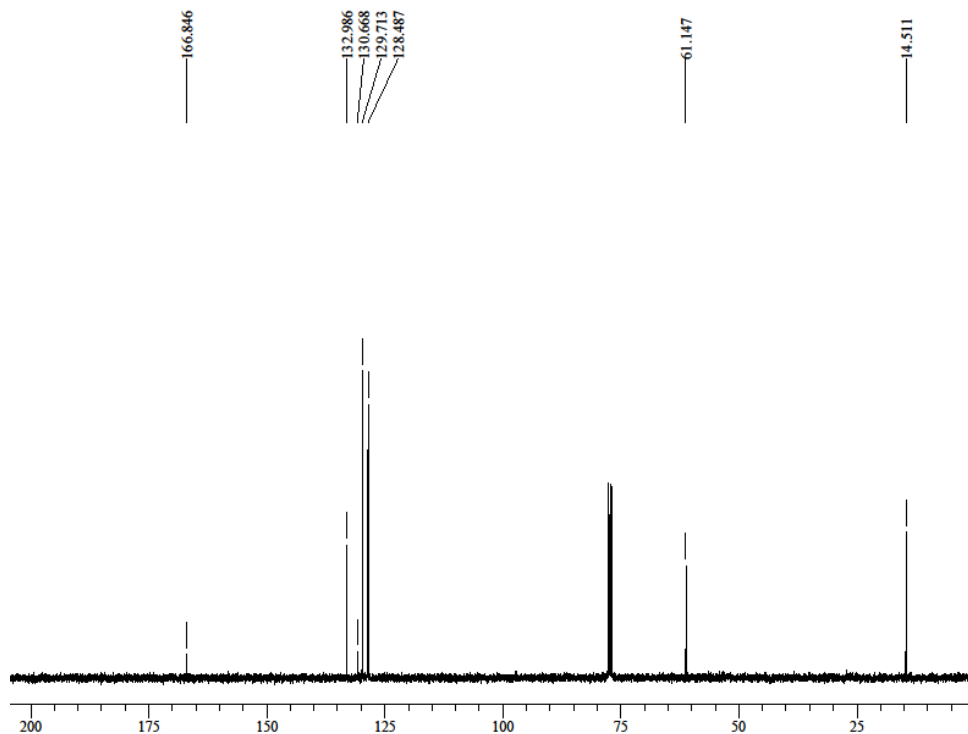


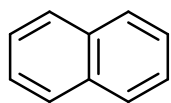


Ethyl benzoate
(Table 1, entry 1c and 1h) ¹H-NMR

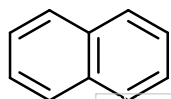
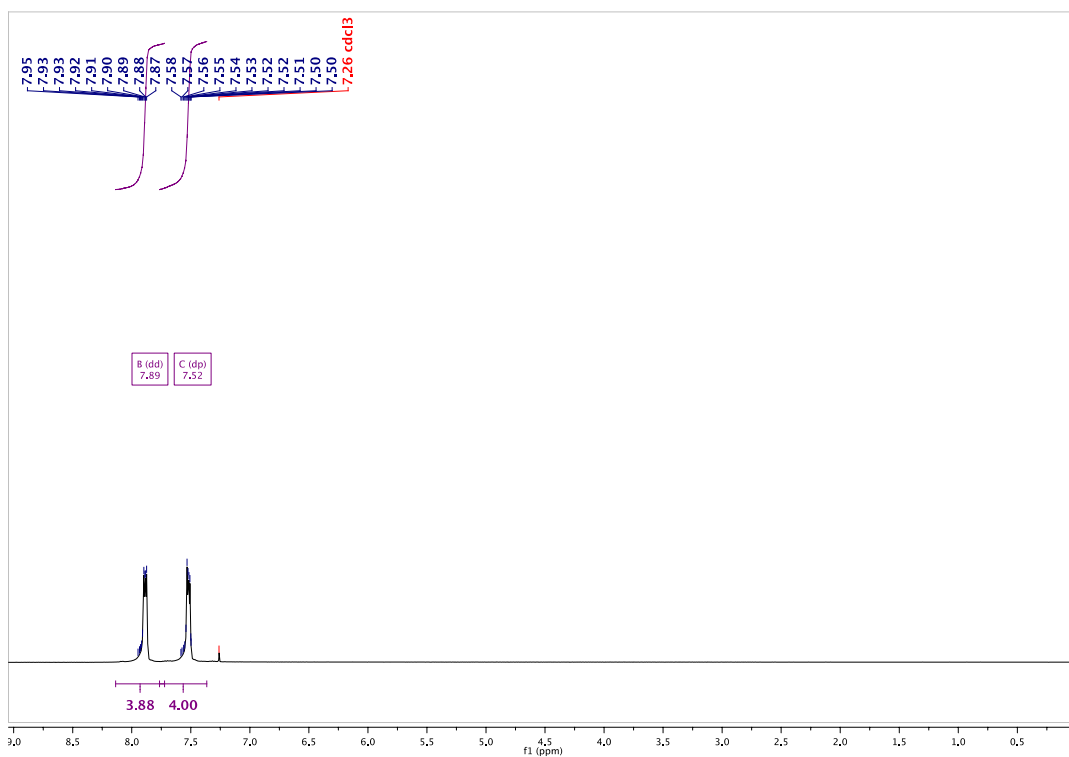


Ethyl benzoate
(Table 1, entry 1c and 1h) ¹³C-NMR

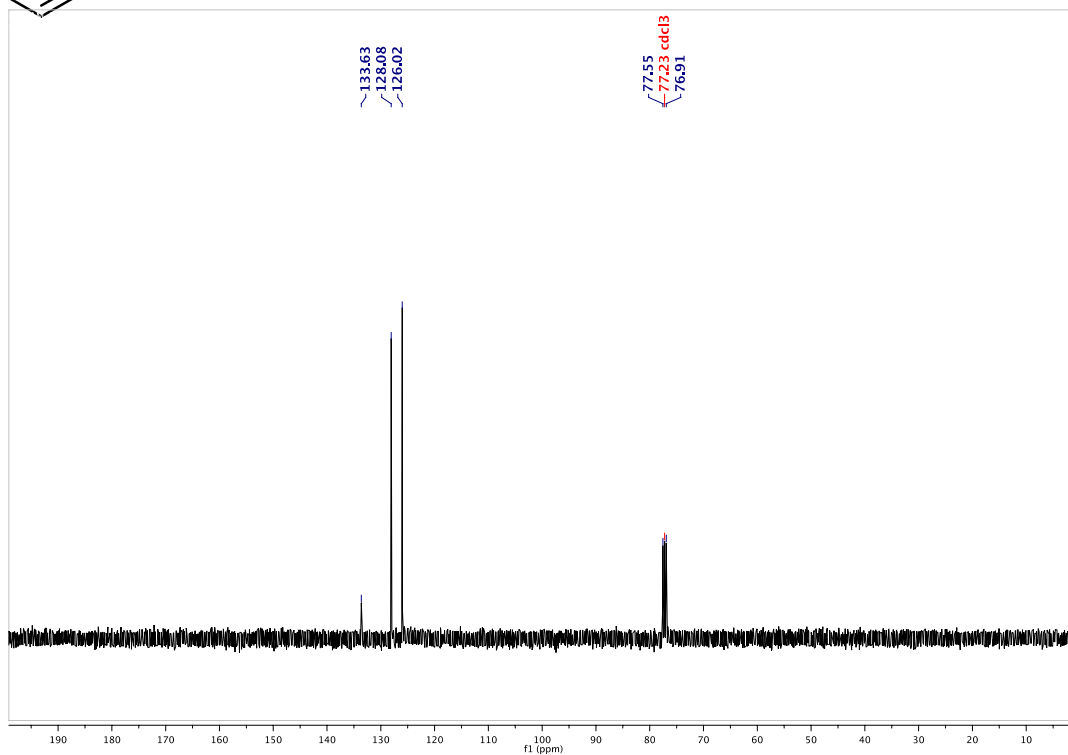


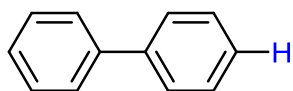


Naphthalene
(Table 1, entry 1d and 1e) ¹H-NMR

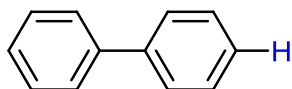
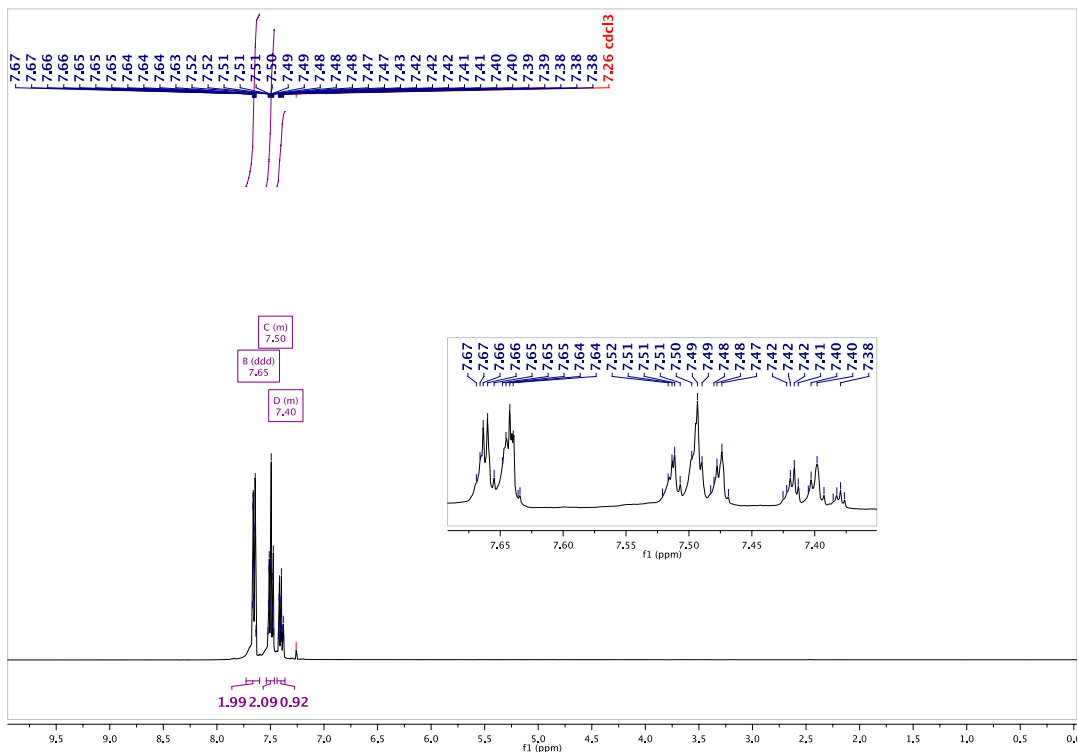


Naphthalene
(Table 1, entry 1d and 1e) ¹³C-NMR

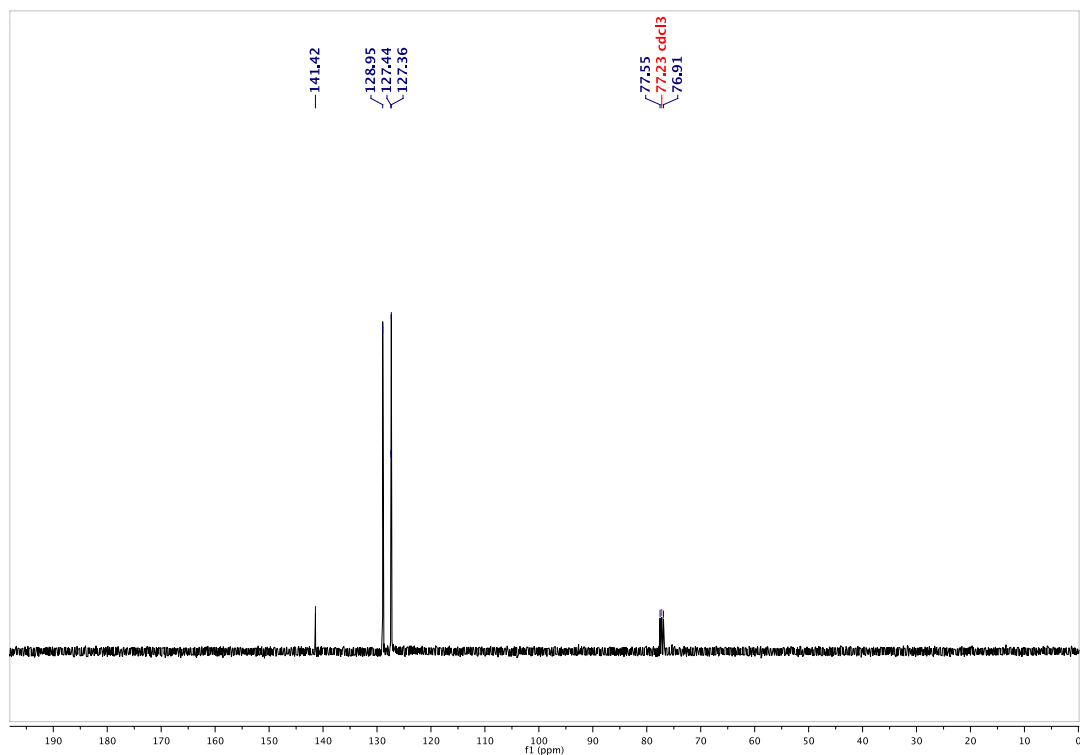




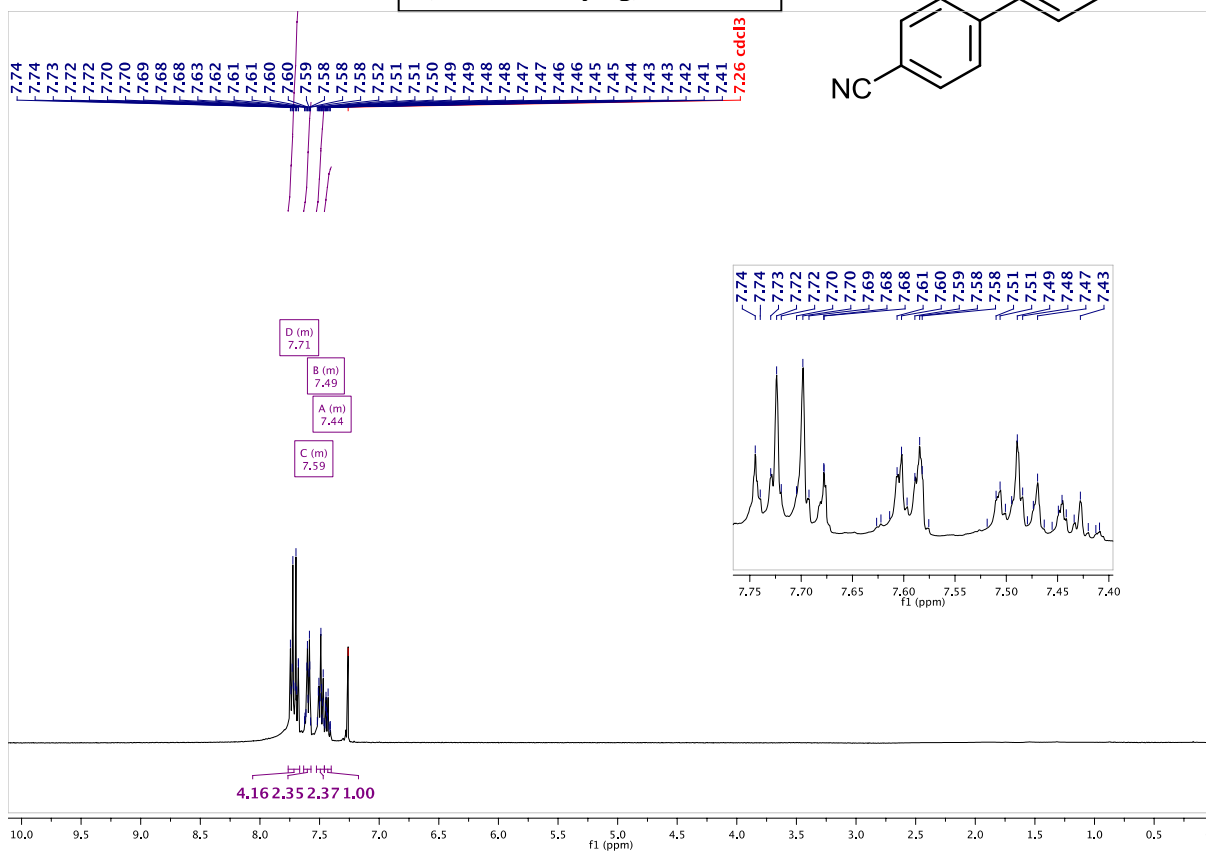
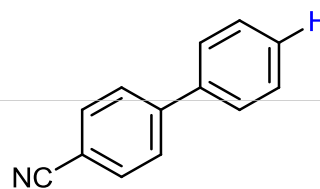
Biphenyl
(Table 1, entry 1f) ¹H-NMR



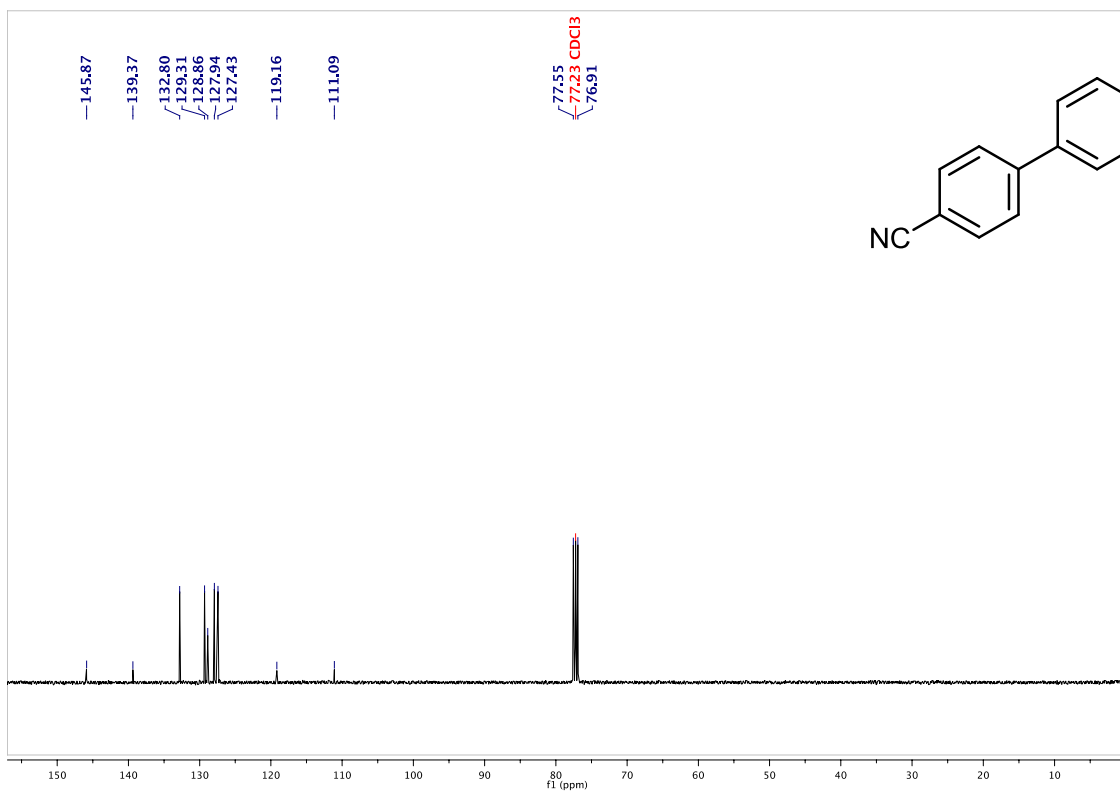
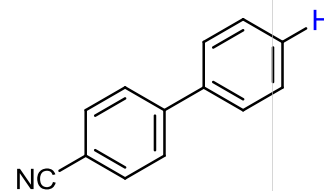
Biphenyl
(Table 1, entry 1f) ¹³C-NMR

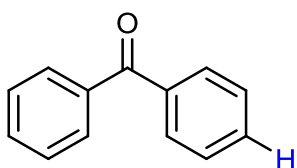


4-Cyanobiphenyl
(Table 1, entry 1g) $^1\text{H-NMR}$

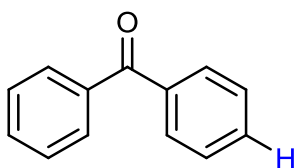
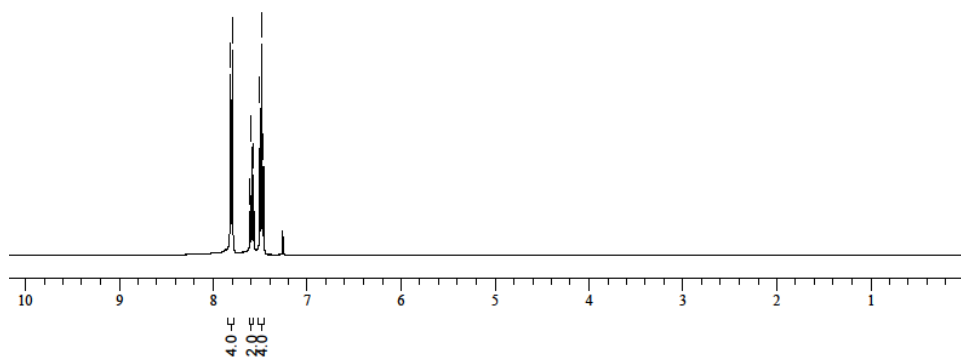


4-Cyanobiphenyl
(Table 1, entry 1g) $^{13}\text{C-NMR}$

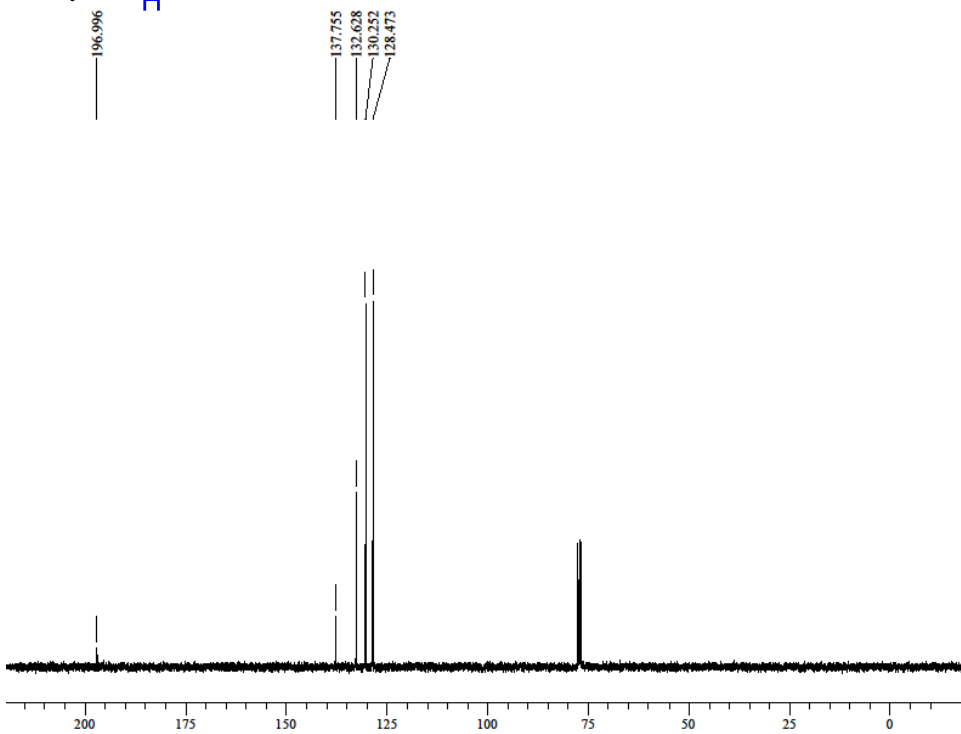
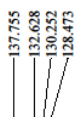


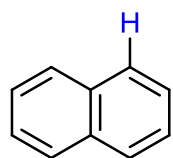


Benzophenone
(Table 1, entry 1i) $^1\text{H-NMR}$

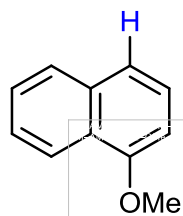
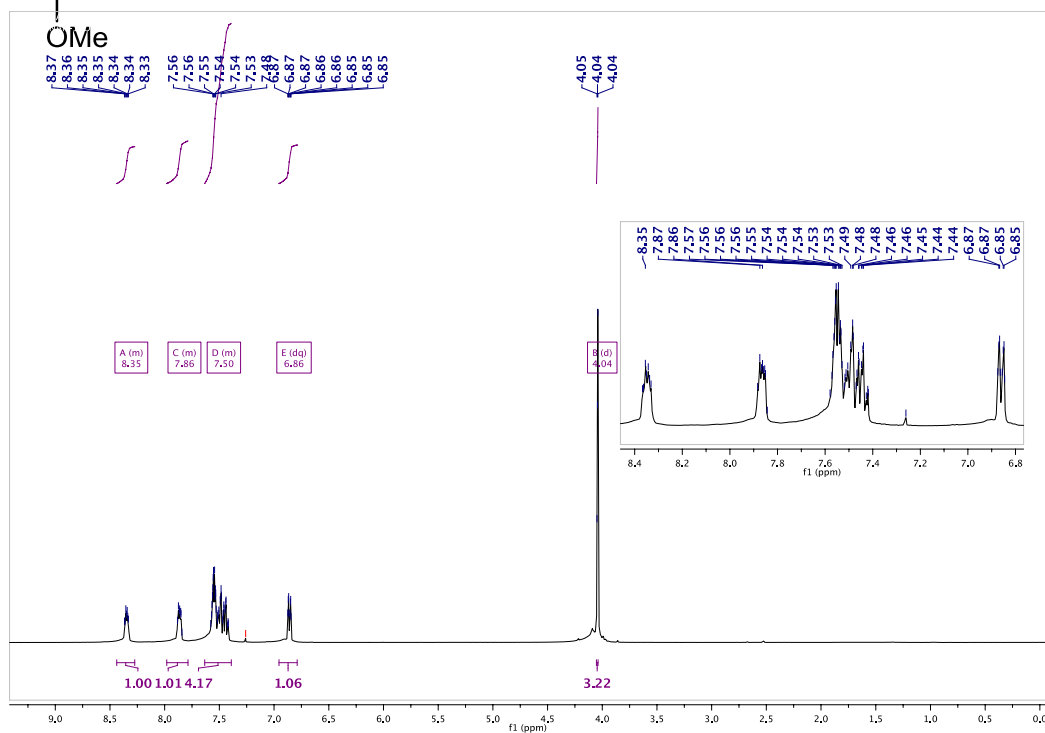


Benzophenone
(Table 1, entry 1i) $^{13}\text{C-NMR}$

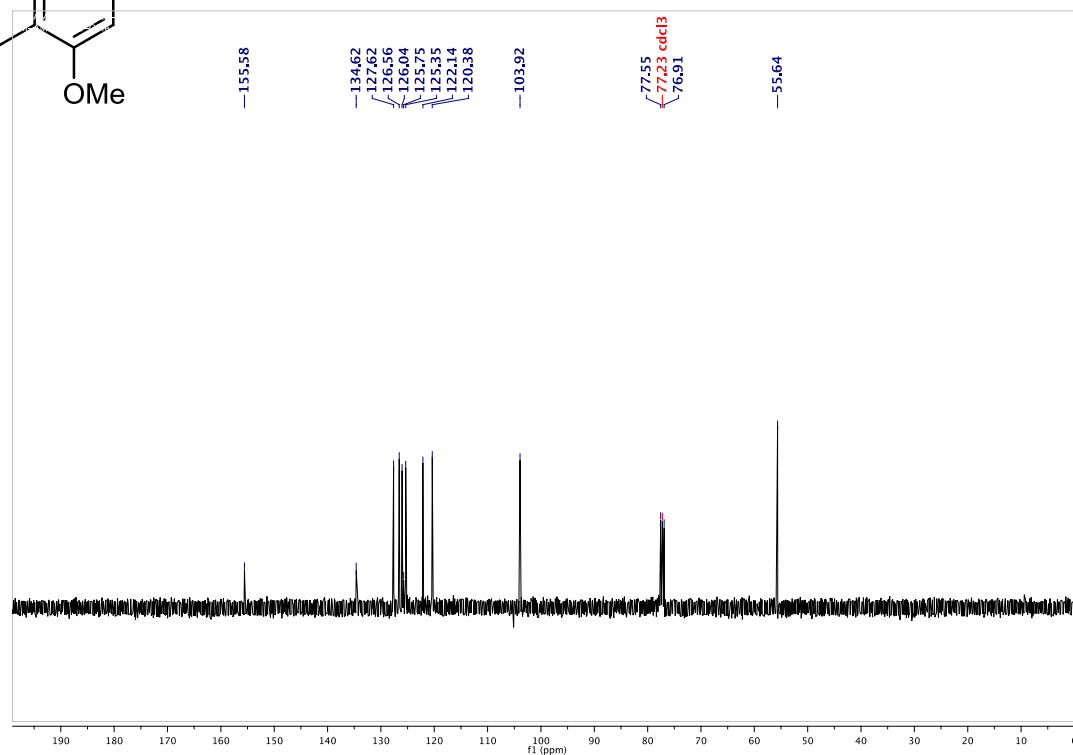


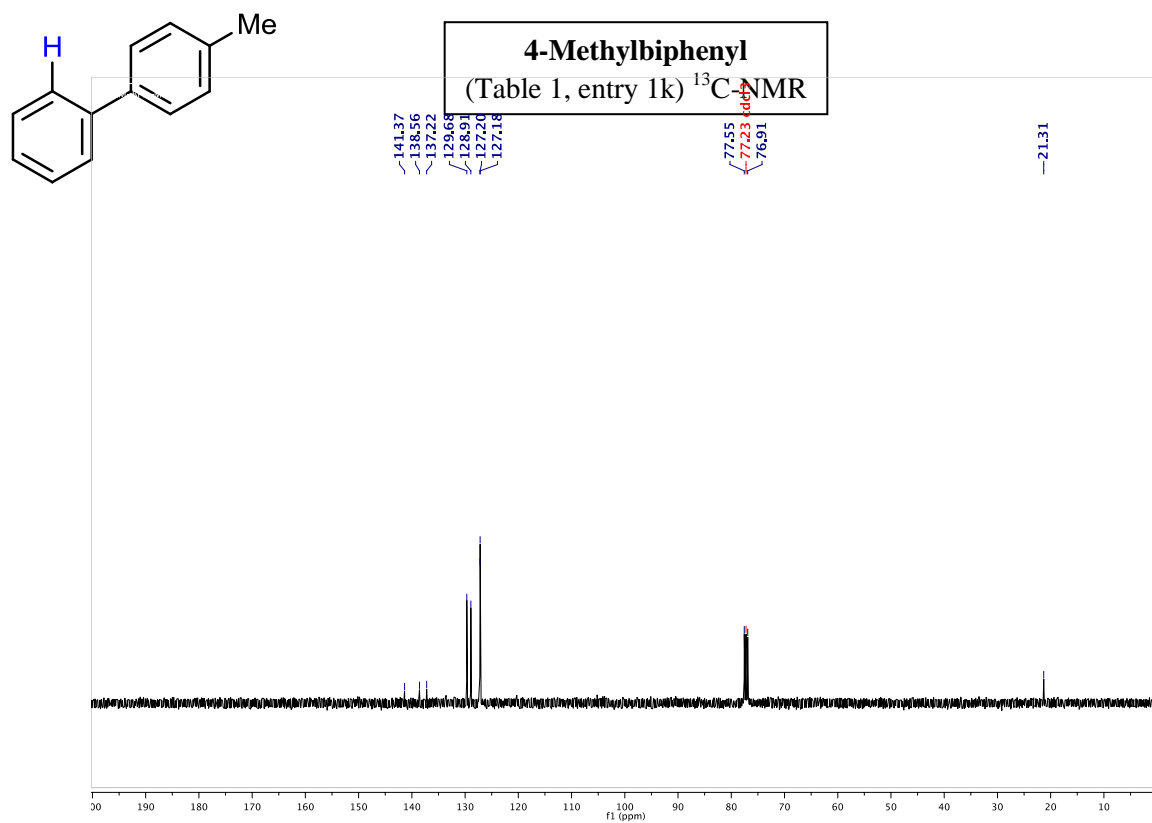
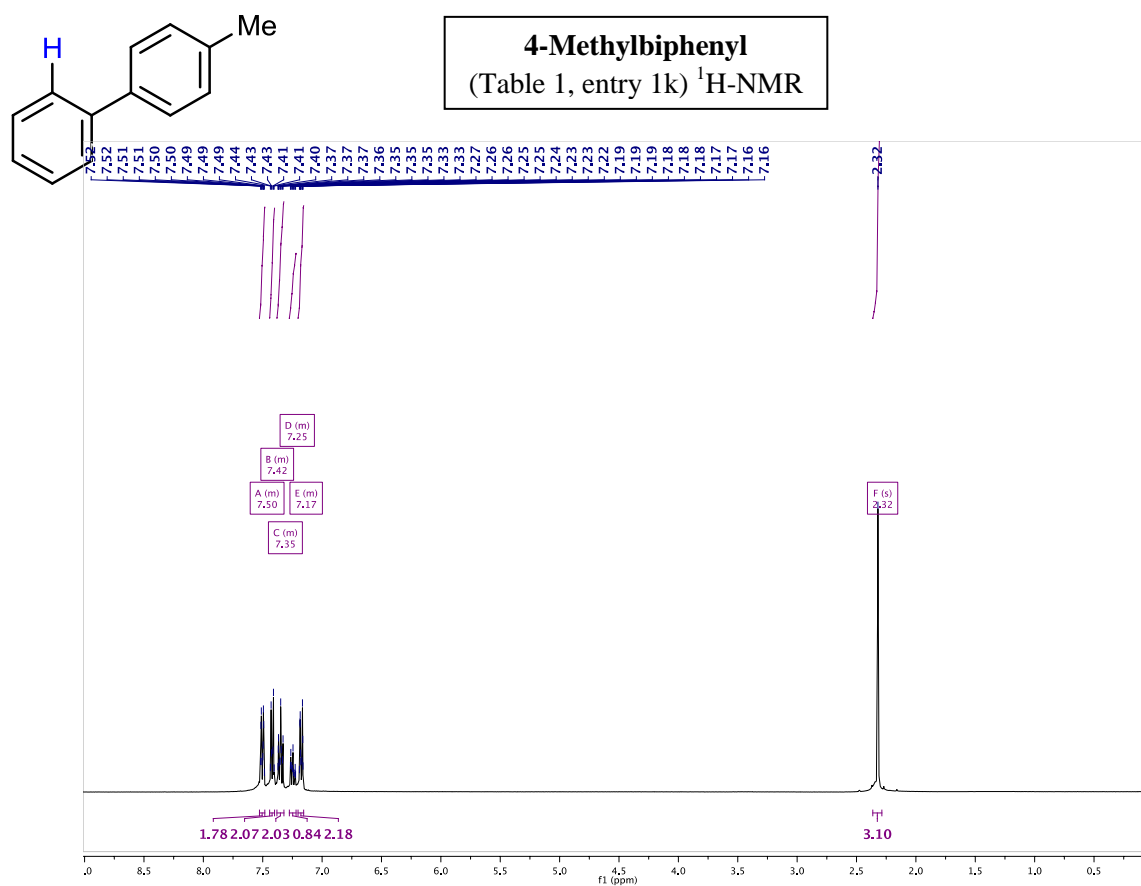


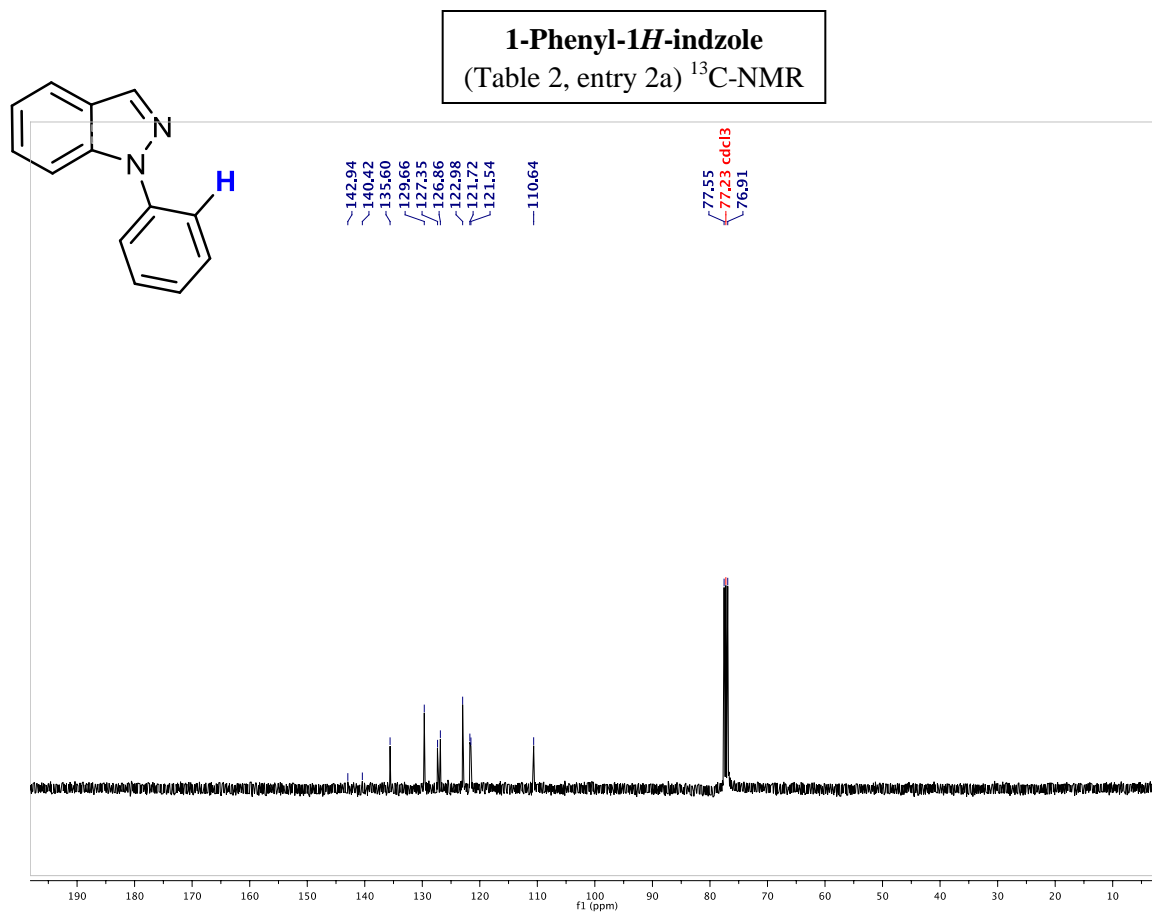
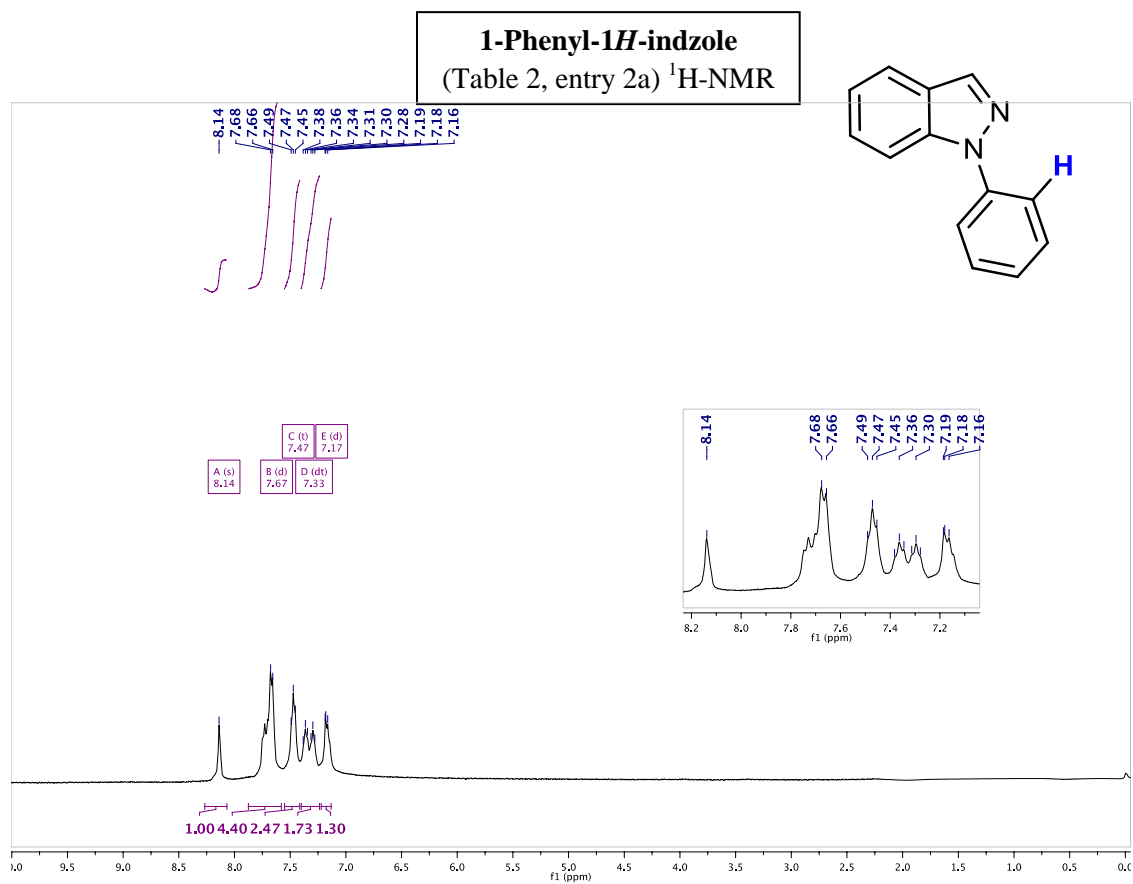
1-Methoxynaphthalene
(Table 1, entry 1j) ¹H-NMR



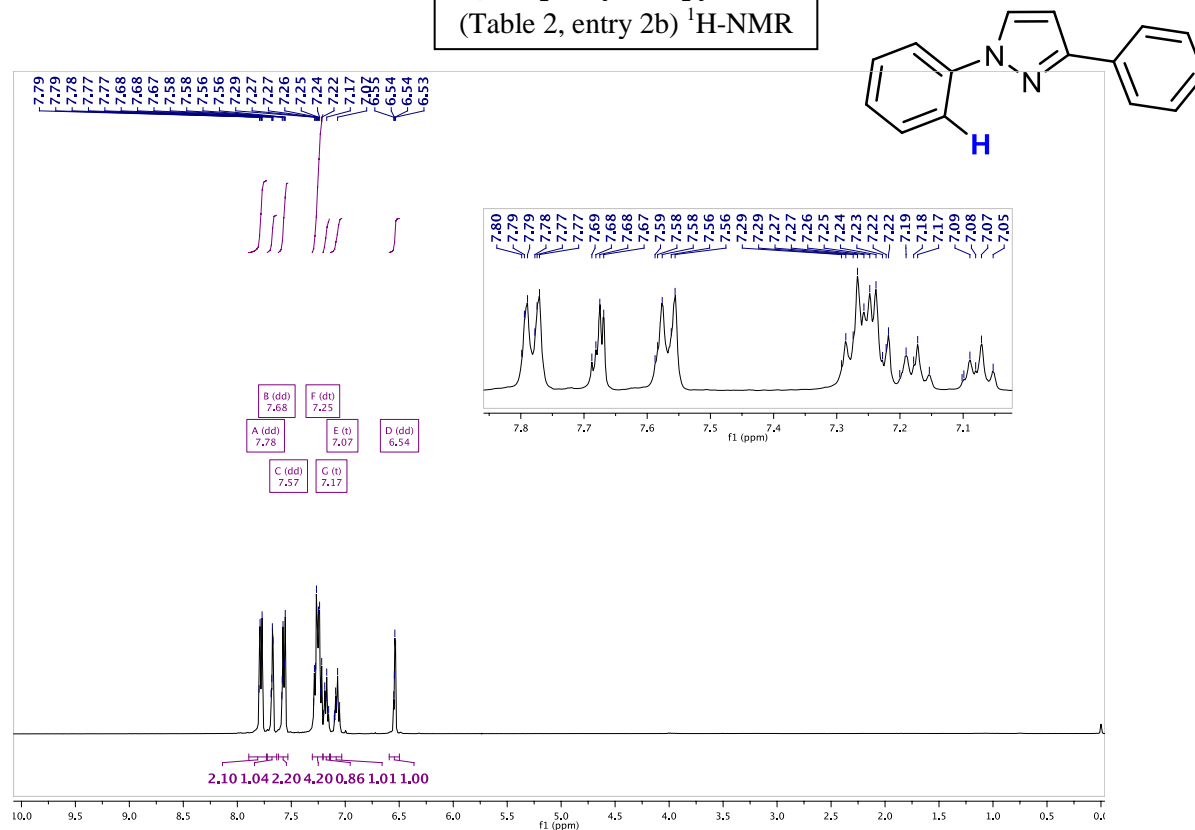
1-Methoxynaphthalene
(Table 1, entry 1j) ¹³C-NMR



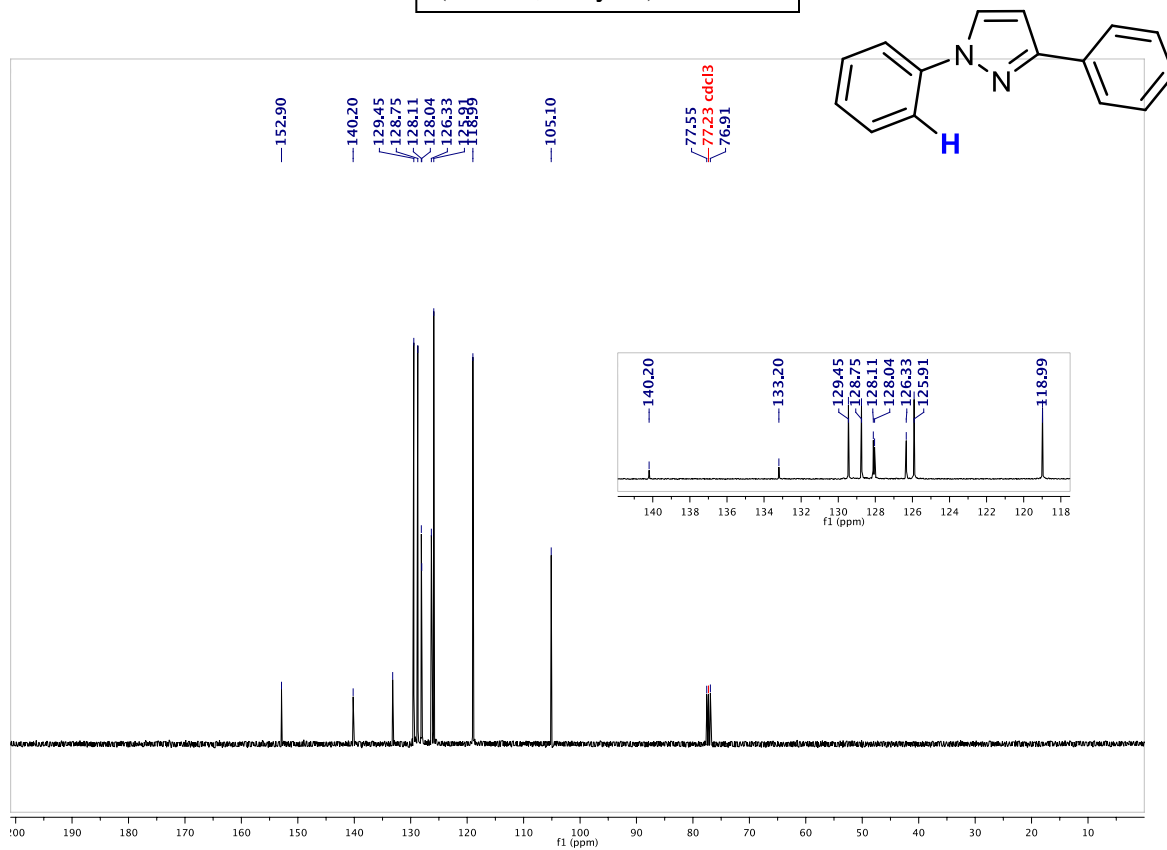


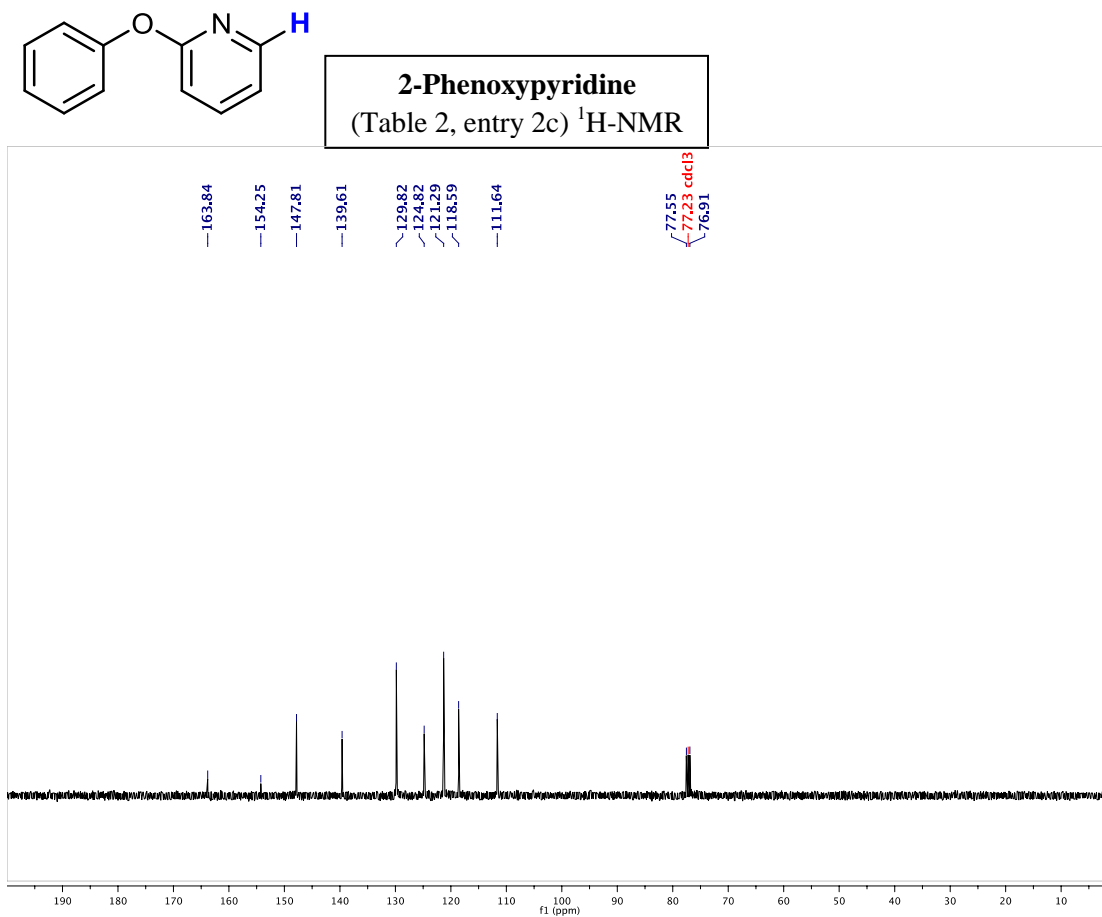
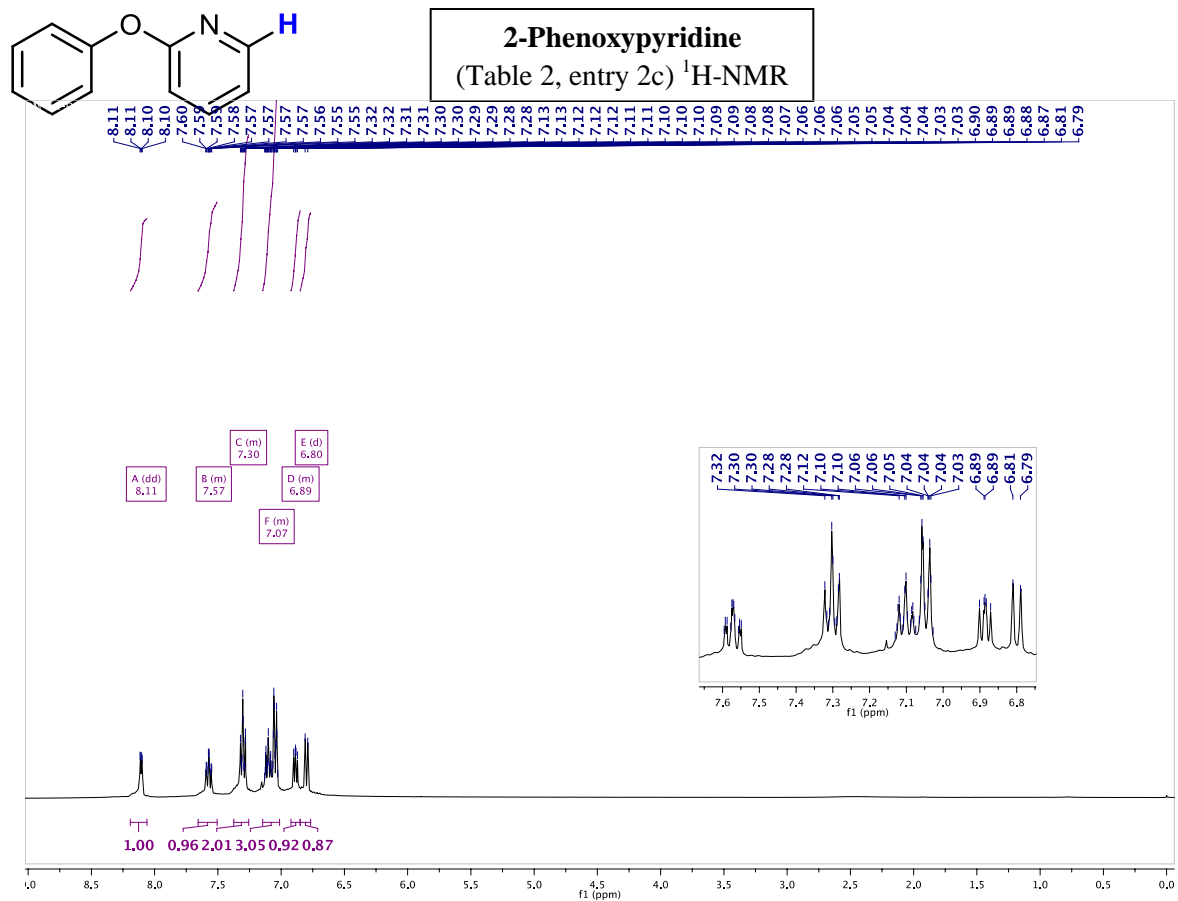


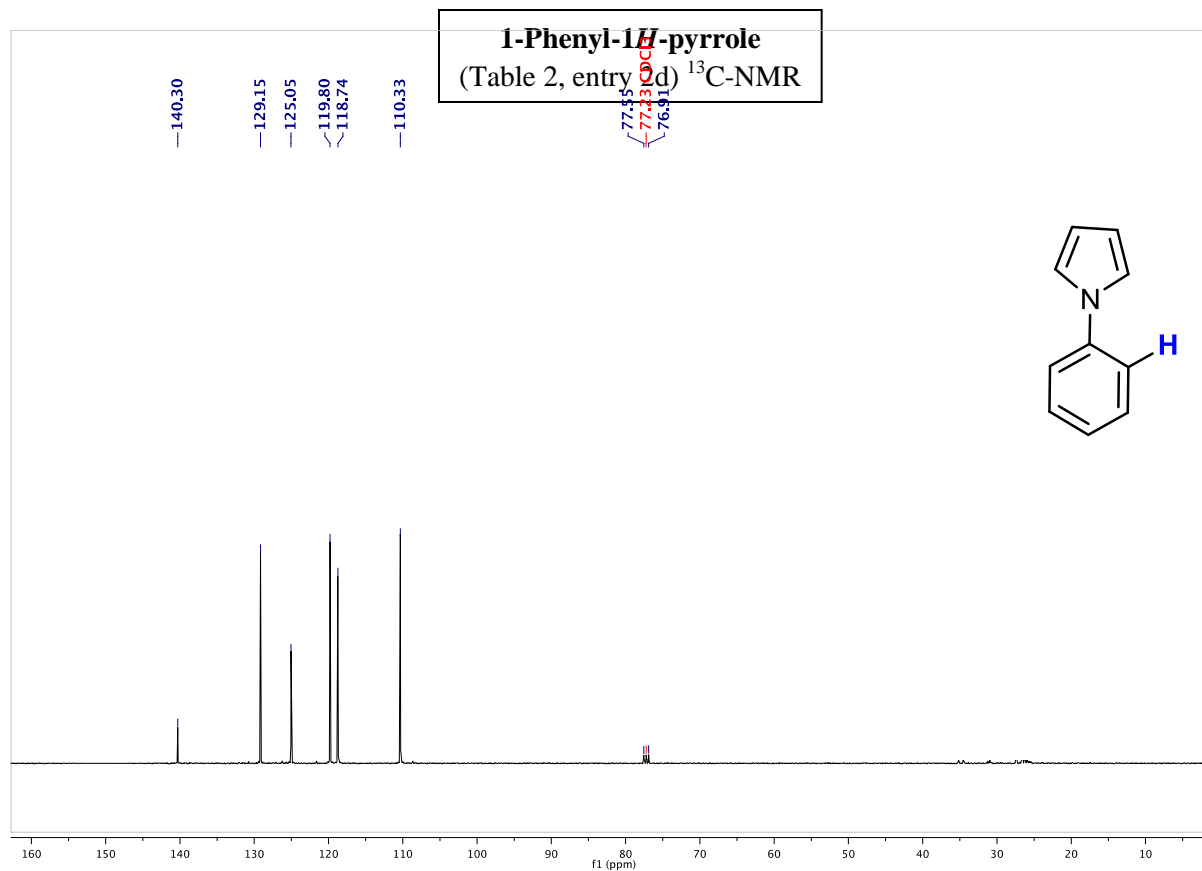
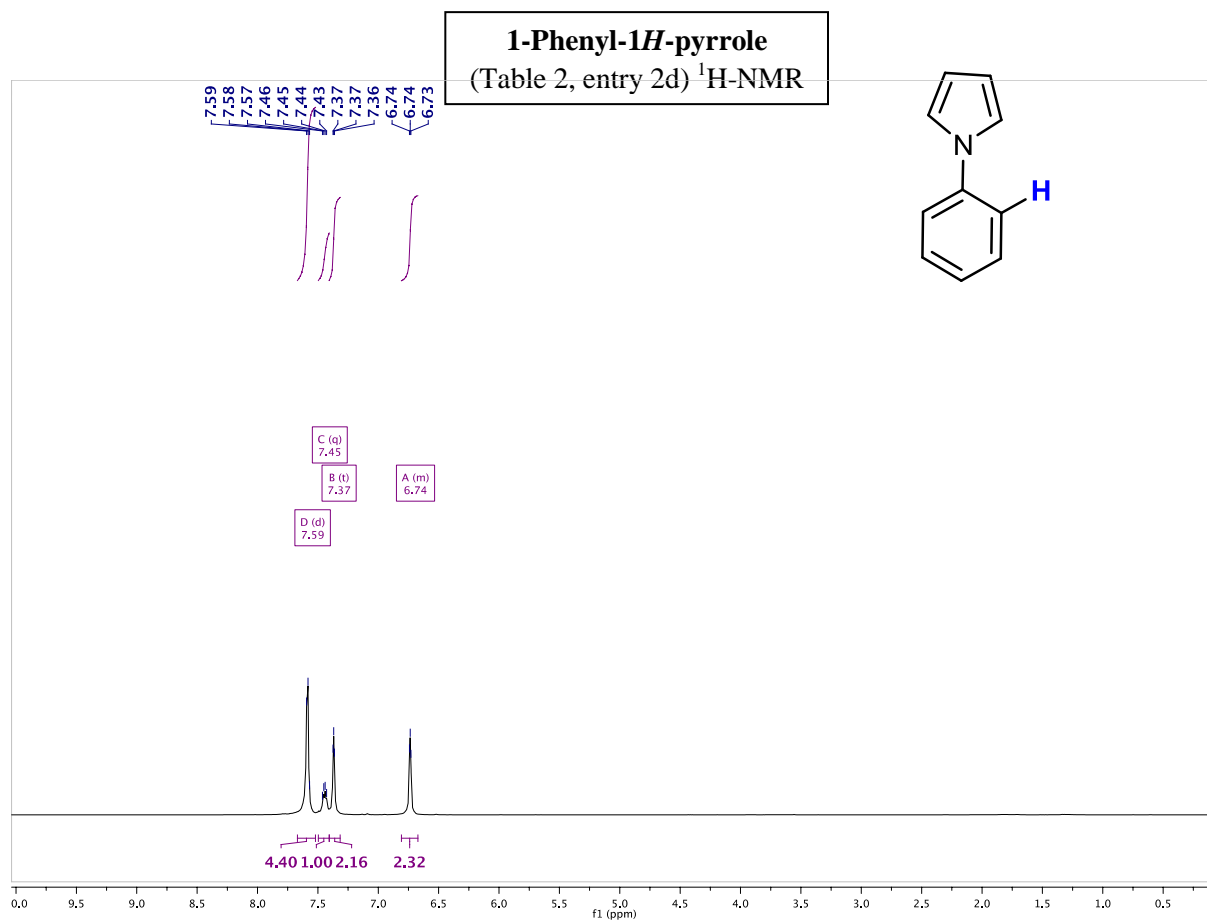
1,3-Diphenyl-1H-pyrazole
(Table 2, entry 2b) ¹H-NMR

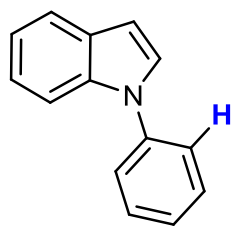


1,3-Diphenyl-1H-pyrazole
(Table 2, entry 2b) ¹³C-NMR

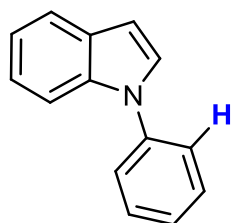
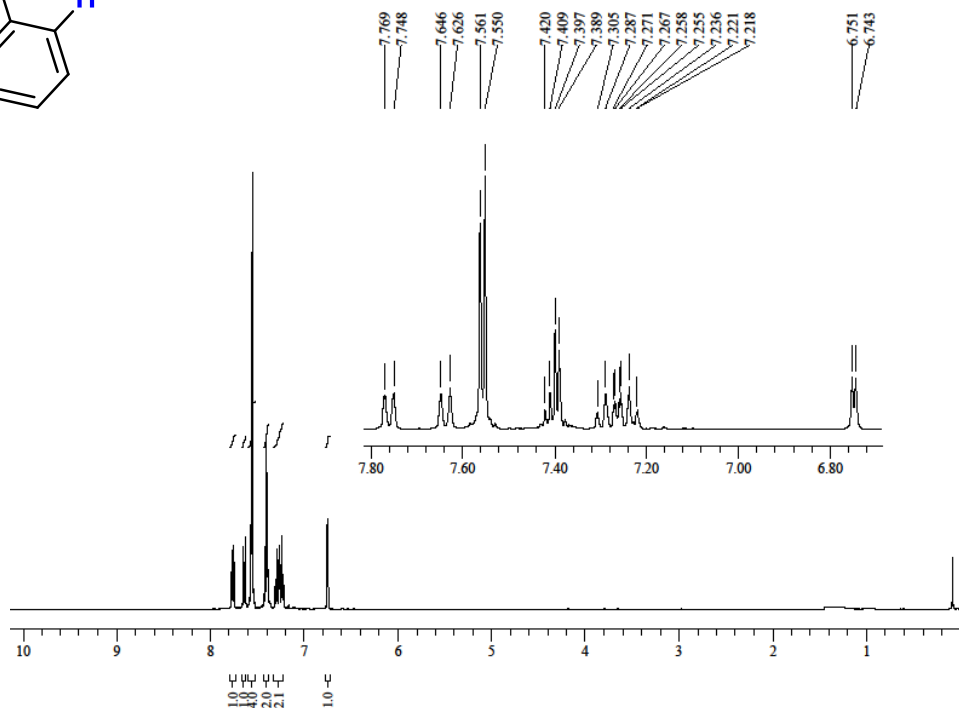




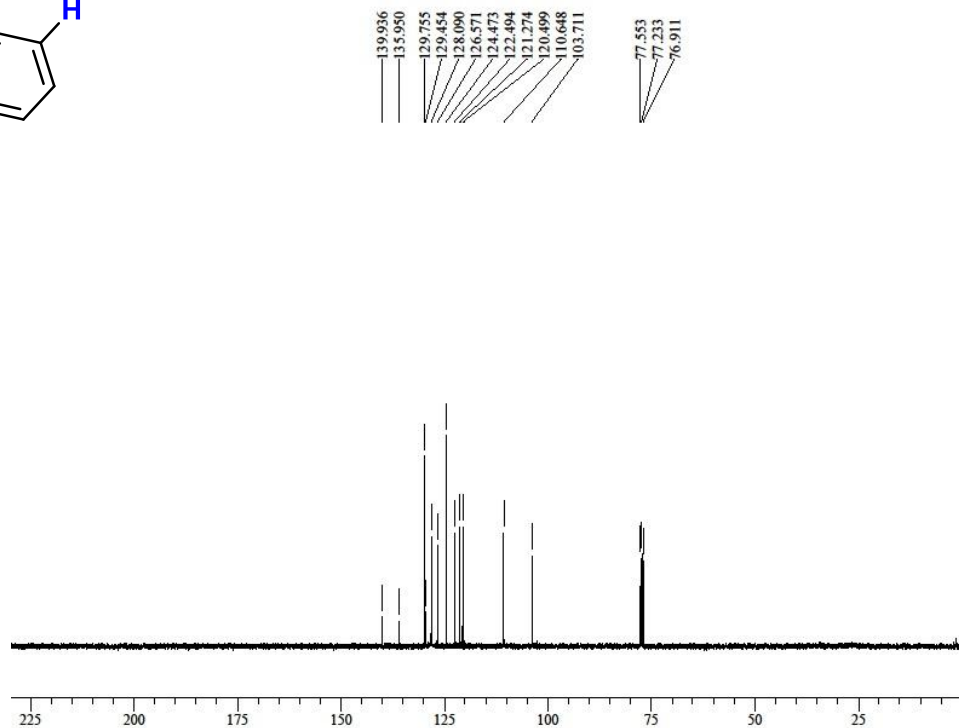


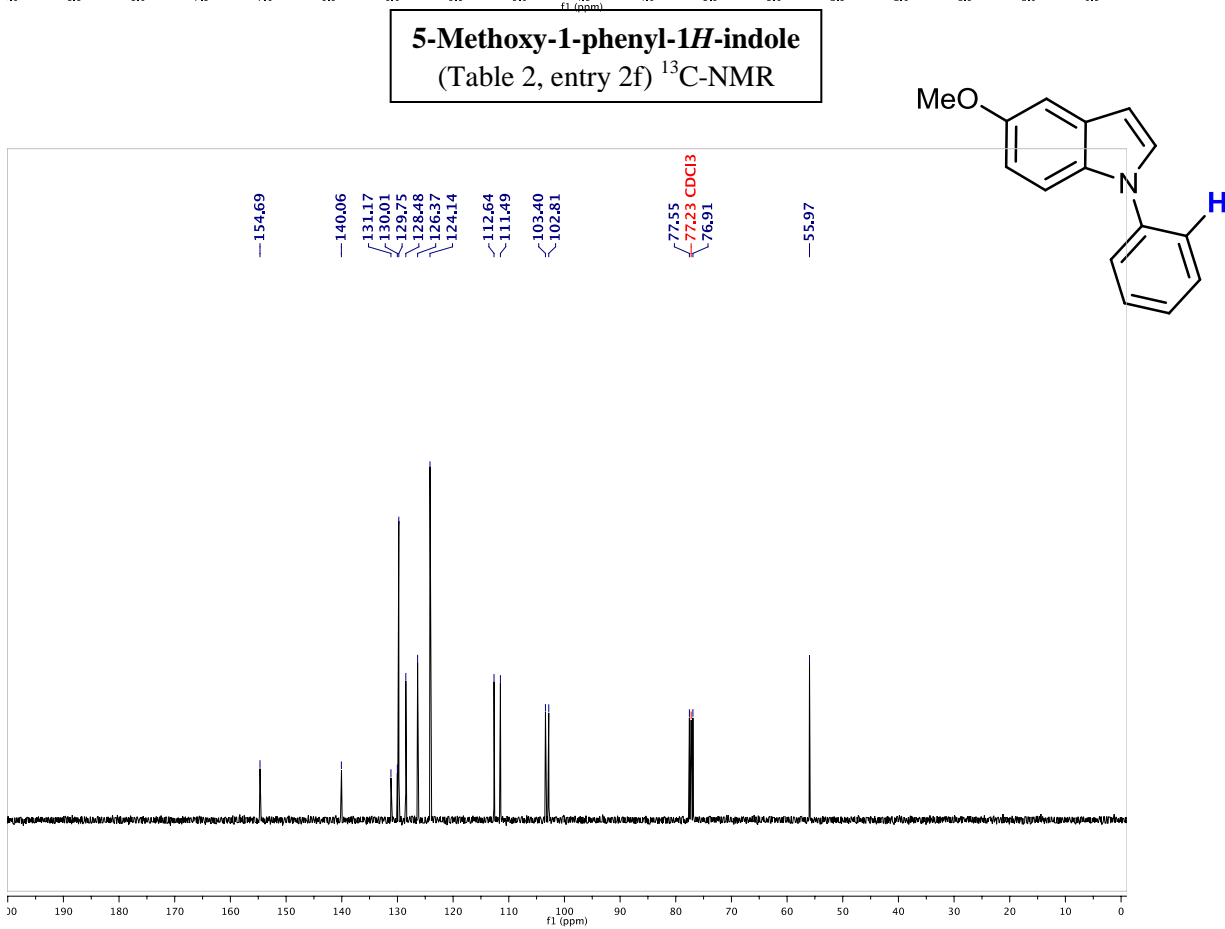
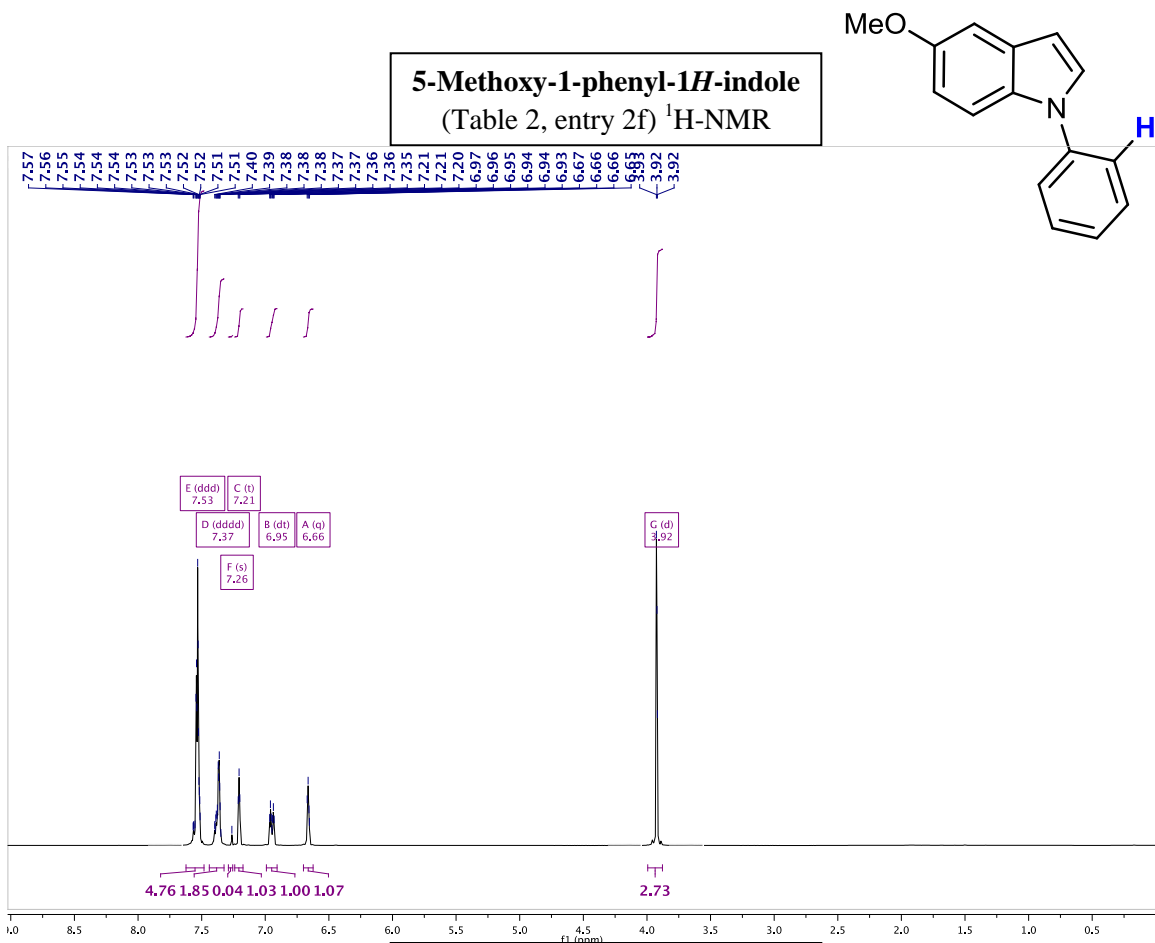


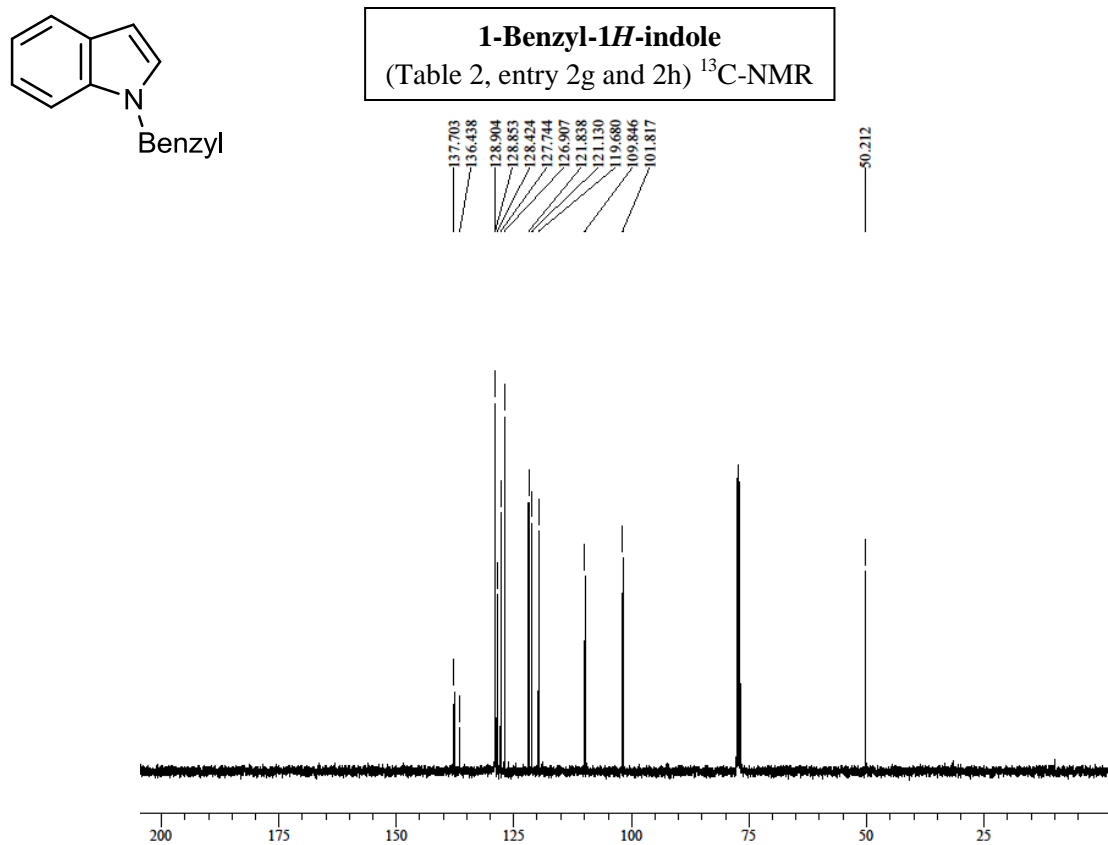
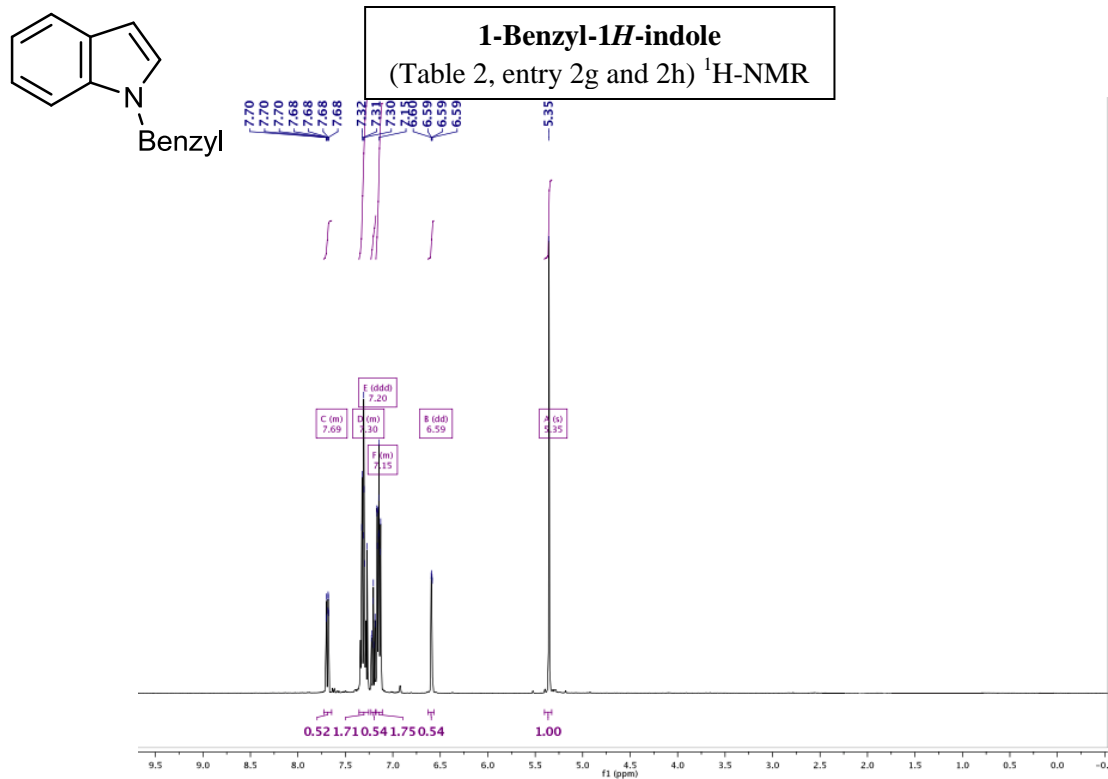
1-Phenyl-1H-indole
(Table 2, entry 2e) ¹H-NMR



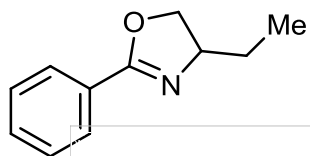
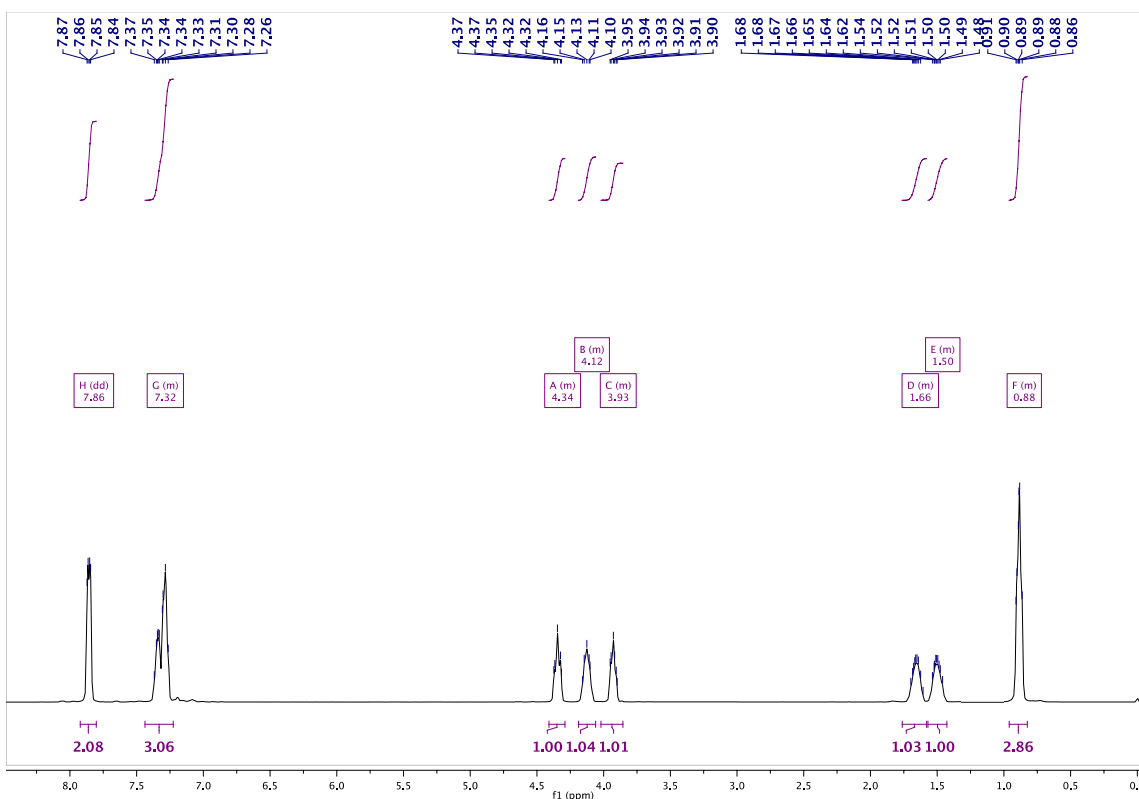
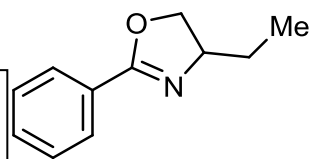
1-Phenyl-1H-indole
(Table 2, entry 2e) ¹³C-NMR



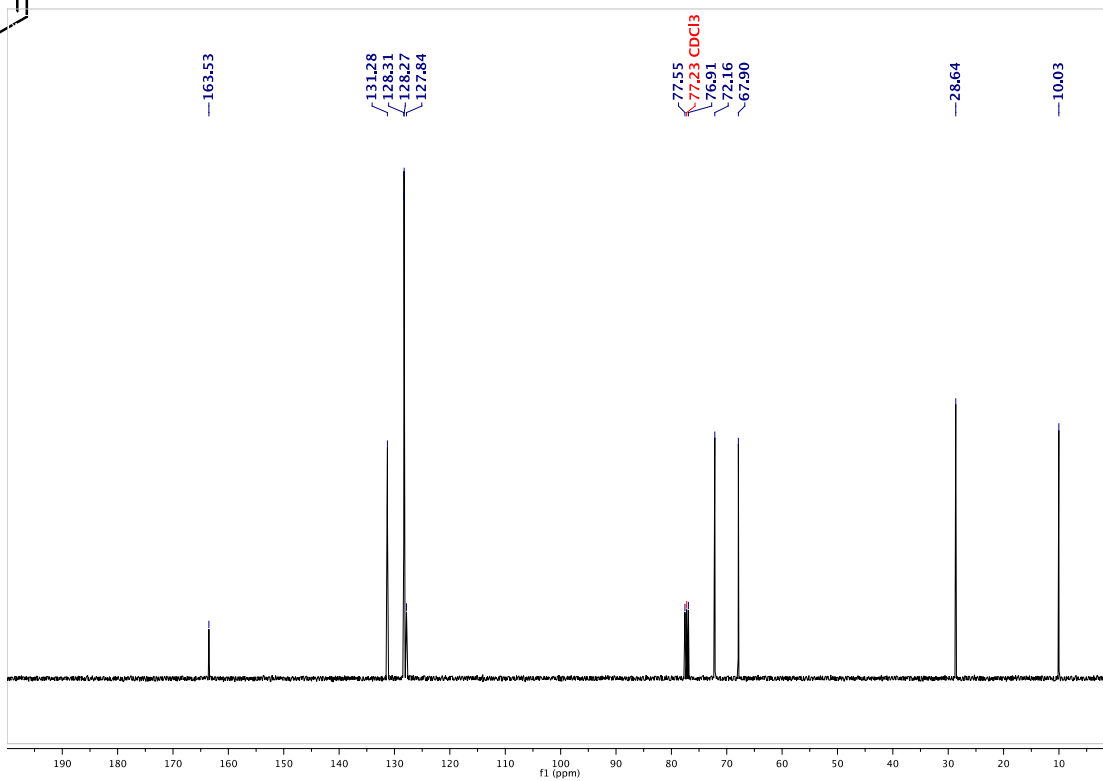


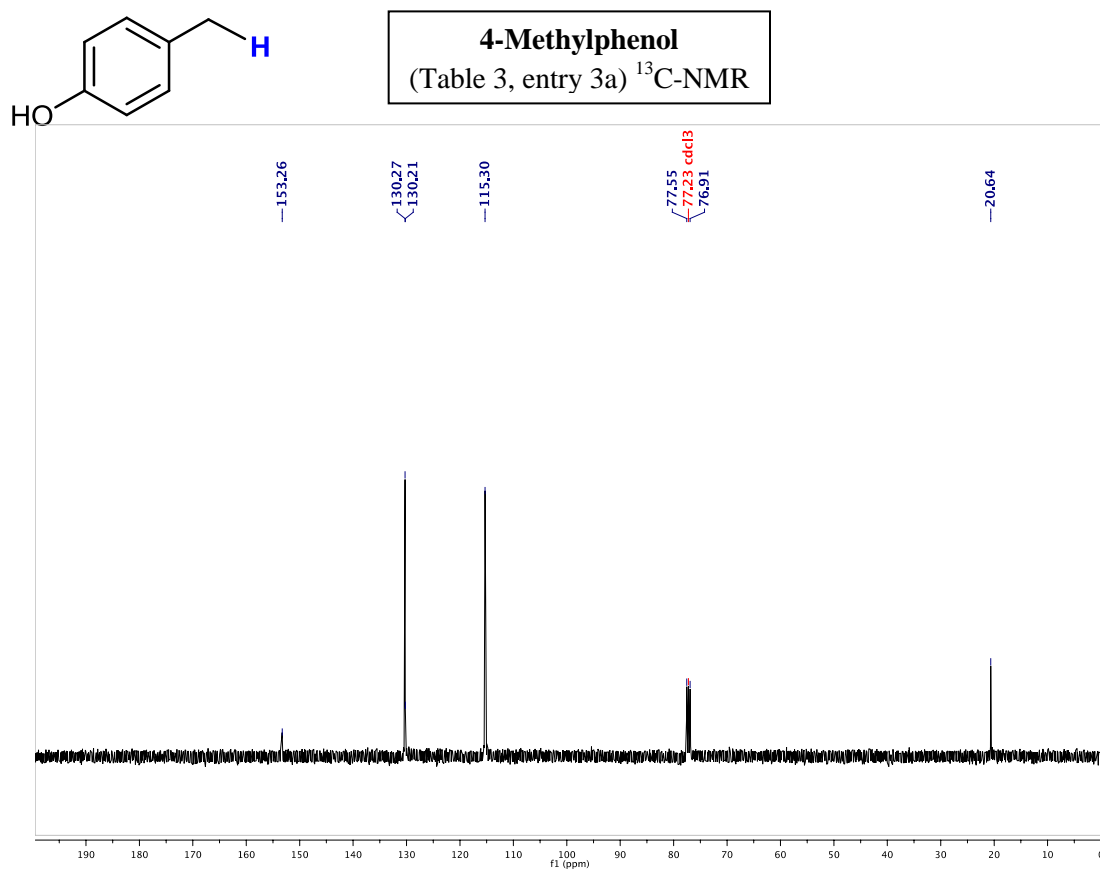
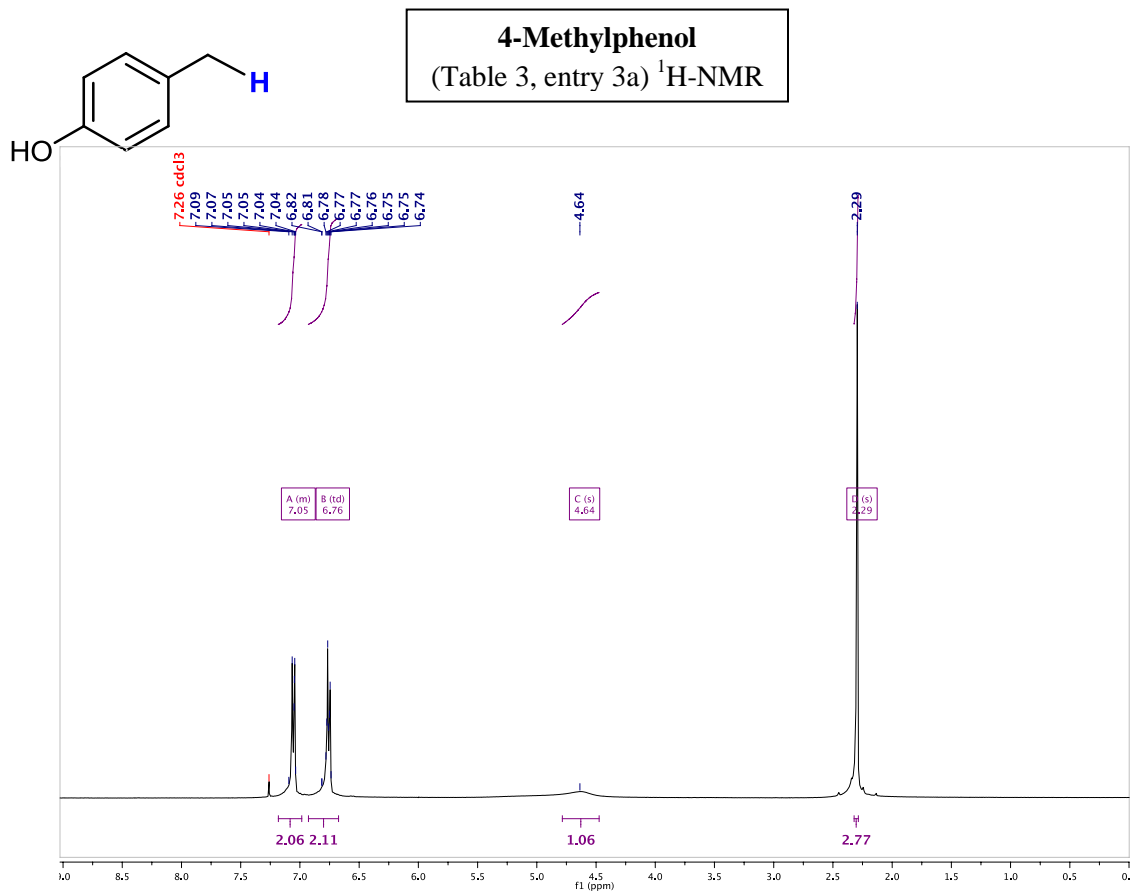


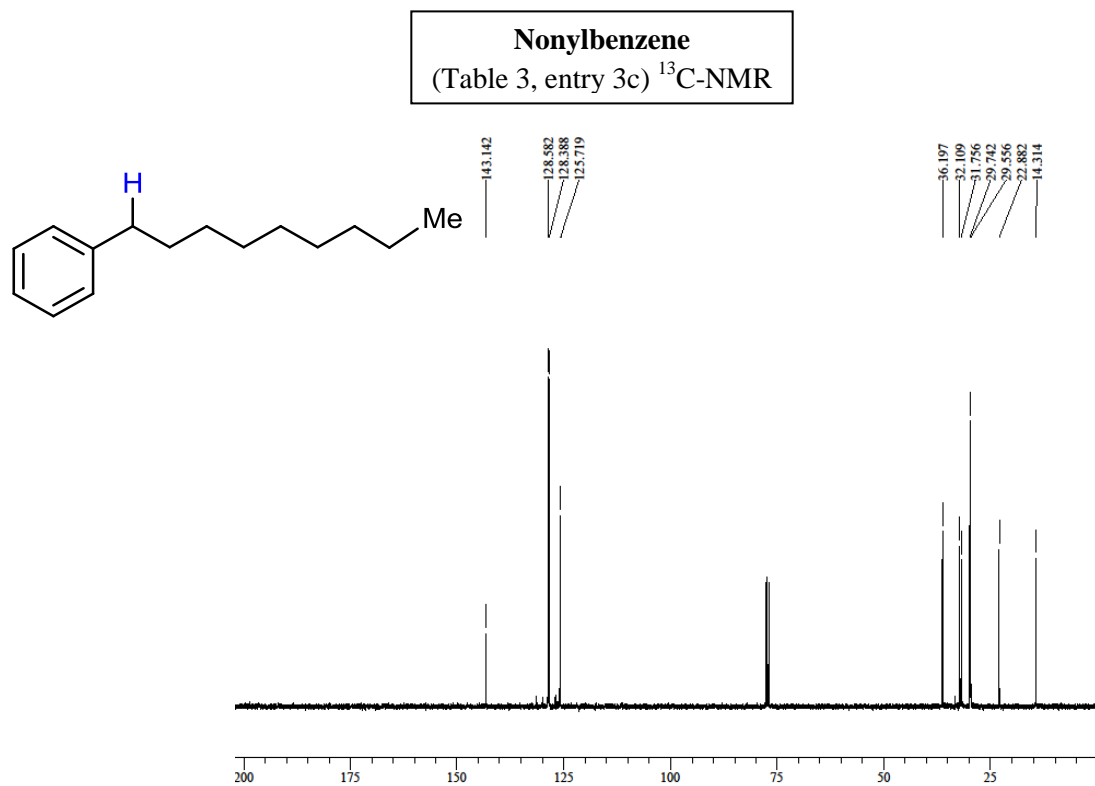
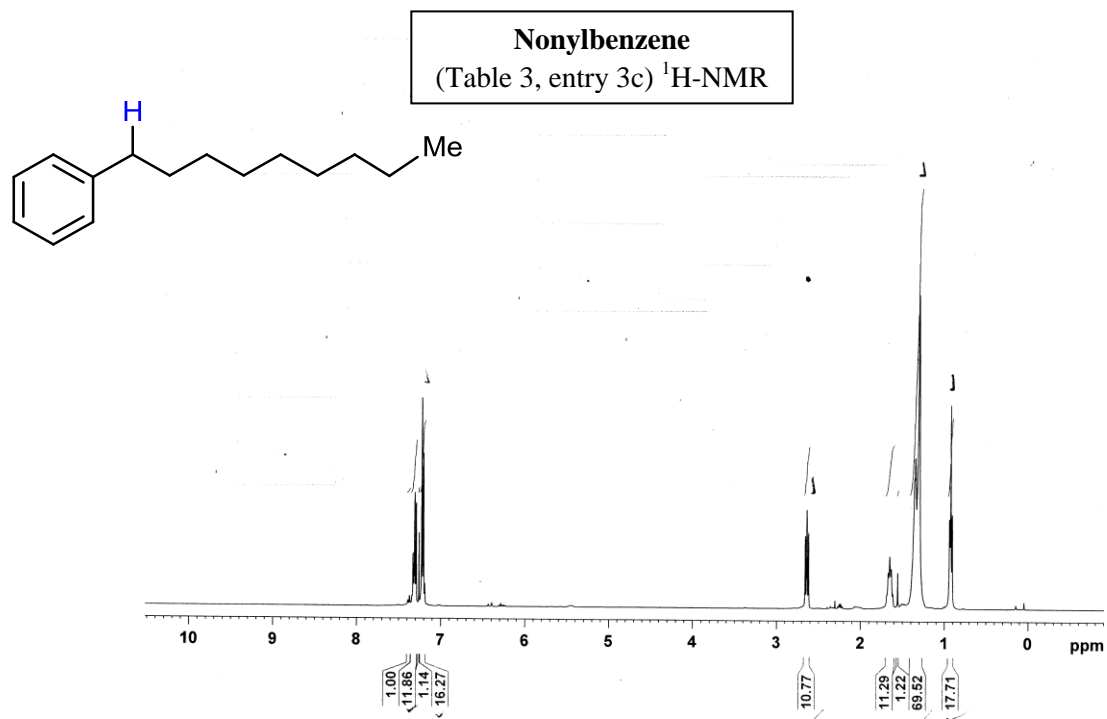
4-Ethyl-2-phenyl-4,5-dihydrooxazole
(Table 2, entry 2i and 2j) $^1\text{H-NMR}$



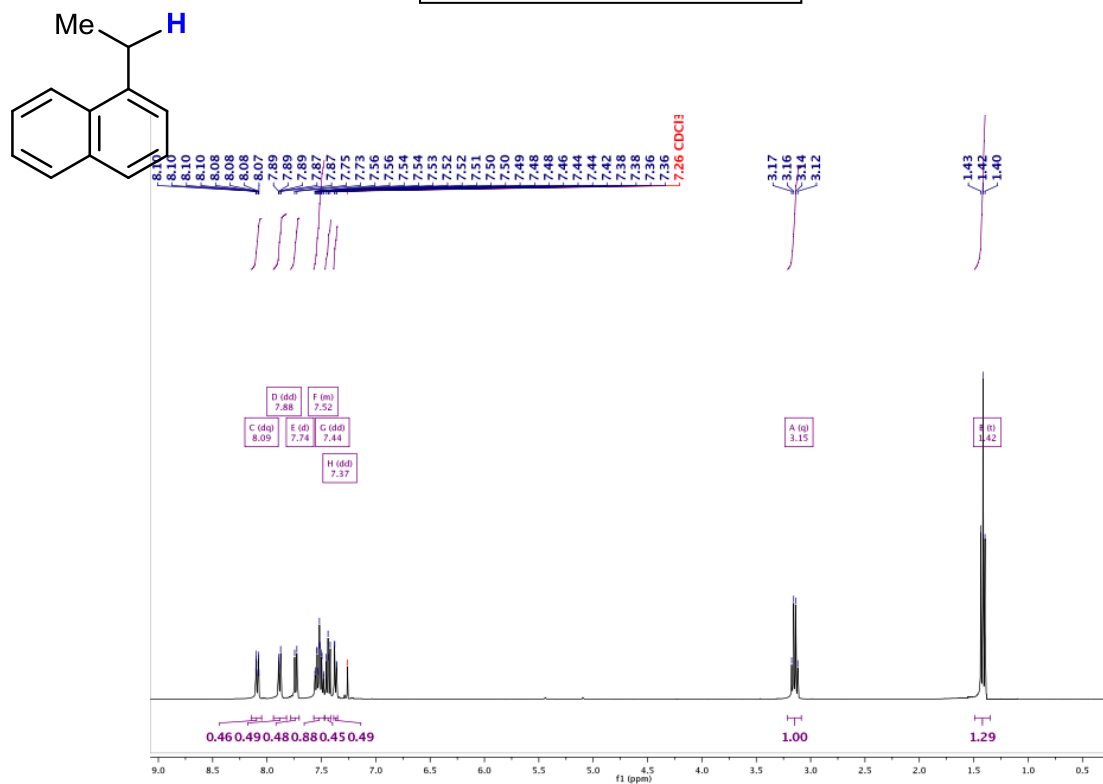
4-Ethyl-2-phenyl-4,5-dihydrooxazole
(Table 2, entry 2i and 2j) $^{13}\text{C-NMR}$



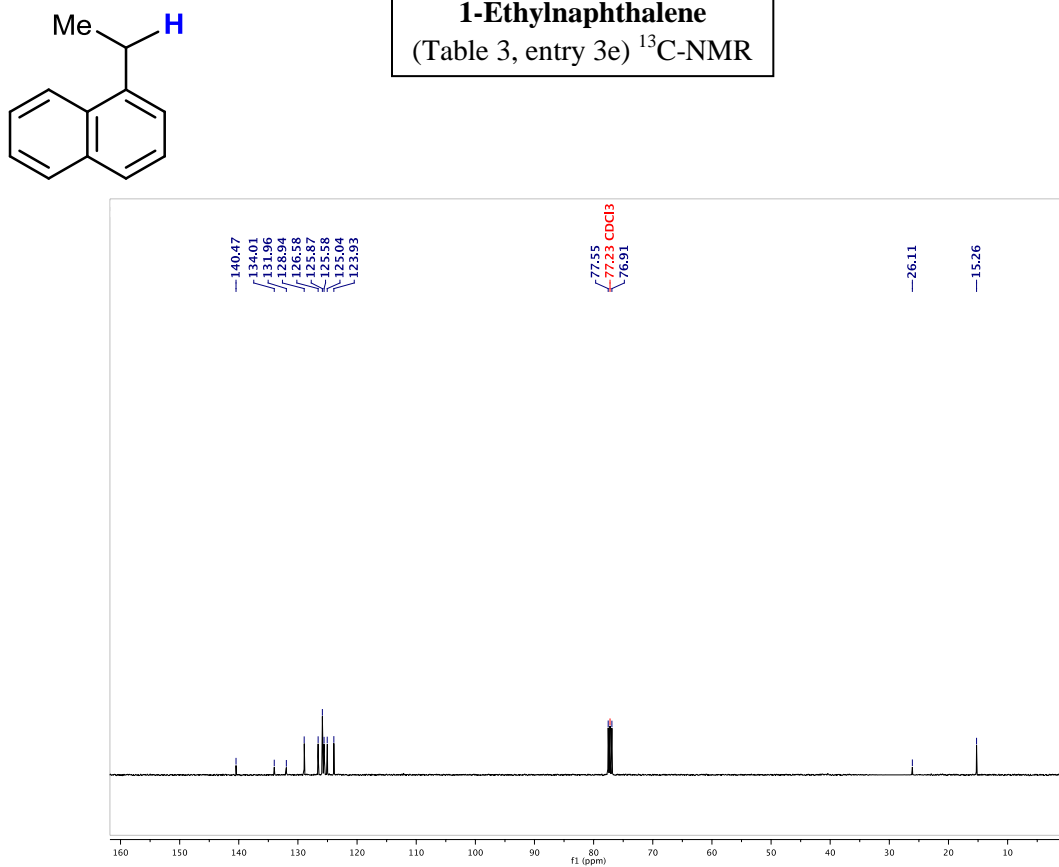




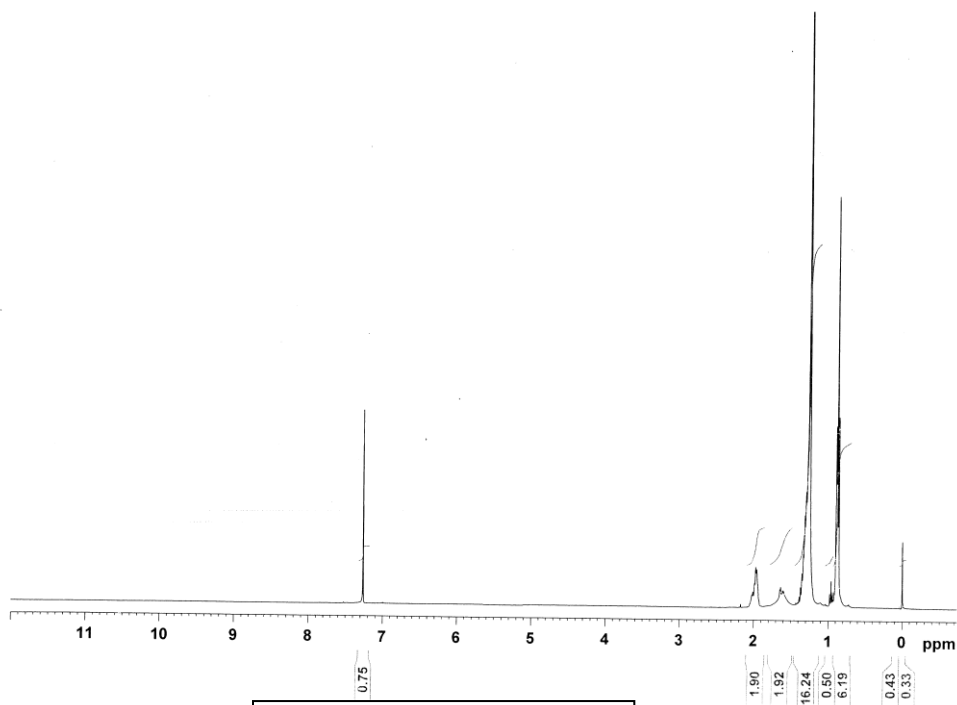
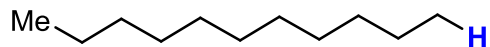
1-Ethynaphthalene
(Table 3, entry 3e) ¹H-NMR



1-Ethynaphthalene
(Table 3, entry 3e) ¹³C-NMR



Undecane
(Table 3, entry 3f) $^1\text{H-NMR}$



Undecane
(Table 3, entry 3f) $^{13}\text{C-NMR}$

