Supporting Information for

DAST-Promoted Beckmann Rearrangement/Intramolecular Cyclization of Acyclic Ketoximes: Access to 2-Oxazolines, Benzimidazoles and Benzoxazoles

Huiqin Li,[a] Jian Qin,[b] Zonglian Yang,[a] Xiaoxue Guan,[a] Lin Zhang,[a] Peiqiu Liao,[a] Xingqi Li*[,a]

[a] Department of Chemistry, Northeast Normal University, Changchun 130024, China

[b] Department of Chemistry and Environmental Science, Jinzhou Teachers Training College, Jinzhou 121000, China

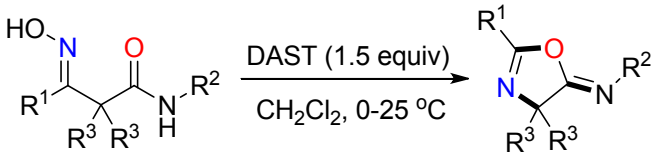
E-mail: lixq653@nenu.edu.cn

Contents

I. General information

All reagents were purchased from commercial sources and used without treatment, unless otherwise indicated. The products were purified by column chromatography over silica gel. ^{1}H-NMR and ^{13}C-NMR spectra were recorded at 25 ºC on a Varian 500 MHz and 125 MHz, respectively, and TMS was used as internal standard. Mass spectra were recorded on BRUKER AutoflexIII Smartbeam MS-spectrometer. High resolution mass spectra (HRMS) were recorded on Bruck microTof by using ESI method.

II. Synthesis and analytical data of compounds 2a-2o



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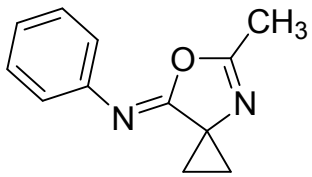
General procedure (with **1a** as an example): The (*E*)-1-(1-(hydroxyimino)ethyl)-*N*-phenylcyclopropanecarboxamide **1a** (0.5 mmol) was dissolved in anhydrous DCM (1.0 mL) at ambient temperature. The solution of oxime in DCM was cooled to 0 °C. The diethylaminosulfur trifluoride (DAST) was added slowly to the solution of **1a** in DCM and the reaction was stirred and allowed to warm to 25 ºC until the **1a** was consumed (monitored by TLC). The reaction mixture was concentrated in vacuo and purified by flash chromatography (petroleum ether : diethyl ether = 15 : 1) to afford compound **2a** in 87% yield.



(**2a**) White solid, m.p. 78-79 ºC; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.52-1.58 (m, 2H), 1.60-1.65 (m, 2H), 2.18 (s, 3H), 7.08-7.14 (m, 3H), 7.28-7.35 (m, 2H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.9, 18.7, 49.5, 122.7, 124.3, 128.7, 145.3, 161.7, 162.2; **HRMS** (ESI) m/z calculated for $C_{12}H_{12}N_2O$ $[M+H]^+$: 201.1028, found: 201.1054.

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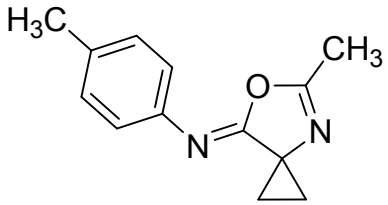

(**2b**) White solid, m.p. 67-68 °C; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.52-1.57 (m, 2H), 1.58-1.63 (m, 2H), 2.19 (s, 3H), 2.32 (s, 3H), 7.03 (d, *J* = 8.0 Hz, 2H), 7.12 (d, *J* = 8.0 Hz, 2H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 15.0, 18.7, 20.9, 49.5, 122.7, 129.3, 134.0, 142.7, 161.3, 162.3; **HRMS** (ESI) m/z calculated for $C_{13}H_{14}N_2O$ $[M+H]^+$: 215.1184, found: 215.1189.

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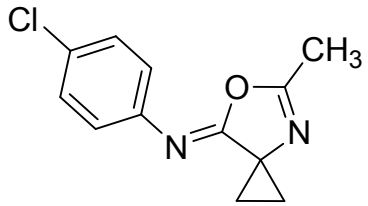

(**2c**) Semisolid; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.50-1.59 (m, 2H), 1.61-1.67 (m, 2H), 2.21 (s, 3H), 7.03-7.10 (m, 2H), 7.24-7.30 (m, 2H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.9, 18.9, 49.7, 124.3, 128.8, 129.6, 143.9, 162.1, 162.5; **HRMS** (ESI) m/z calculated for $C_{12}H_{11}ClN_2O$ $[M+H]^+$: 235.0638, found: 235.0630.

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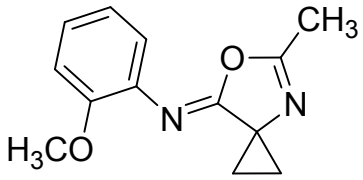

(**2d**) Semisolid; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.59-1.63 (m, 4H), 2.15 (s, 3H), 3.81 (s, 3H), 6.87-6.94 (m, 2H), 6.96-7.01 (m, 1H), 7.04-7.12 (m, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.8, 18.8, 49.3, 55.7, 111.5, 120.5, 122.6, 124.9, 135.0, 151.0, 162.3, 162.8; **HRMS** (ESI) m/z calculated for $C_{13}H_{14}N_2O_2$ $[M+H]^+$: 231.1134, found: 231.1150.

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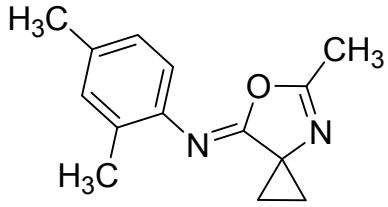

(**2e**) Semisolid; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.53-1.60 (m, 2H), 1.61-1.68 (m, 2H), 2.16 (s, 3H), 2.18 (s, 3H), 2.31 (s, 3H), 6.90 (d, *J* = 8.0 Hz, 1H), 6.97 (d, *J* = 8.0 Hz, 1H), 7.01 (s, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 15.0, 17.7, 18.6, 20.8, 49.1, 121.0, 126.6, 129.9, 130.9, 133.5, 141.7, 160.9, 162.4; **HRMS** (ESI) m/z calculated for $C_{14}H_{16}N_2O$ $[M+H]^+$: 229.1341, found: 229.1349.

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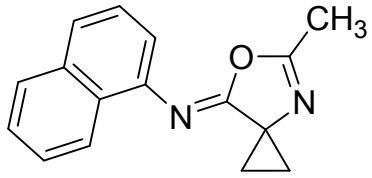

(**2f**) White solid, m.p. 84-85^{o}C; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.68-1.76 (m, 4H), 2.14 (s, 3H), 7.19 (d, *J* = 7.0 Hz, 1H), 7.39-7.49 (m, 3H), 7.61 (d, *J* = 8.0 Hz, 1H), 7.78-7.84 (m, 1H), 8.00-8.06 (m, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.9, 19.0, 49.7, 116.8, 123.4, 124.2, 125.4, 125.6, 126.0, 127.8, 128.0, 134.0, 141.8, 162.4, 162.5; **HRMS** (ESI) m/z calculated for $C_{16}H_{14}N_2O$ $[M+H]^+$: 251.1184, found: 251.1181.

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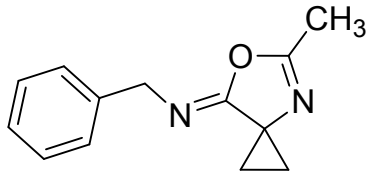

(**2g**) Colorless liquid; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.46-1.51 (m, 2H), 1.52-1.57 (m, 2H), 1.85 (s, 3H), 4.52 (s, 2H), 7.19-7.24 (m, 1H), 7.27-7.35 (m, 4H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 10.0, 18.3, 30.2, 50.6, 126.5, 127.6, 128.2, 140.3, 162.9, 165.1; **HRMS** (ESI) m/z calculated for $C_{13}H_{14}N_2O$ $[M+H]^+$: 215.1184, found: 215.1186.

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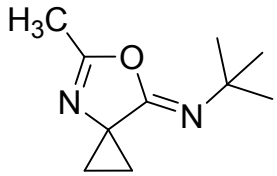

(**2h**) White solid, m.p. 57-58 °C; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.26 (s, 9H), 1.34-1.37 (m, 2H), 1.37-1.39 (m, 2H), 1.82 (s, 3H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 10.1, 18.2, 30.0, 30.7, 53.3, 158.2, 164.4; **HRMS** (ESI) m/z calculated for $C_{10}H_{16}N_2O$ $[M+H]^+$: 181.1341, found: 181.1344.

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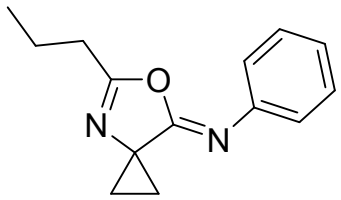

(**2i**) White solid, m.p. 40-41 °C; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.01 (t, *J* = 7.5 Hz, 3H), 1.53-1.59 (m, 2H), 1.62-1.67 (m, 2H), 1.68-1.77 (m, 2H), 2.44 (t, *J* = 7.5 Hz, 2H), 7.08-7.15 (m, 3H), 7.28-7.35 (m, 2H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 13.6, 18.8, 18.9, 30.6, 49.5, 122.9, 124.3, 128.7, 145.3, 161.8, 165.3; **HRMS** (ESI) m/z calculated for $C_{14}H_{16}N_2O$ $[M+H]^+$: 229.1341, found: 229.1337.

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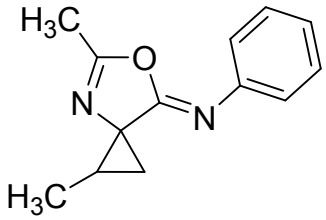

(**2j**) Semisolid; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.32 (dd, *J* = 5.0 Hz, *J* = 8.0 Hz 1H), 1.43 (d, *J* = 6.0 Hz, 3H), 1.80 (dd, *J* = 5.0 Hz, *J* = 9.0 Hz 1H), 1.92-2.01 (m, 1H), 2.13 (d, *J* = 3.0 Hz, 3H), 7.06-7.16 (m, 3H), 7.27-7.35 (m, 2H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 10.2, 14.5, 25.0, 25.7, 52.3, 122.5, 123.9, 128.5, 145.5, 159.3, 161.2; **HRMS** (ESI) m/z calculated for $C_{13}H_{14}N_2O$ $[M+H]^+$: 215.1184, found: 215.1202.

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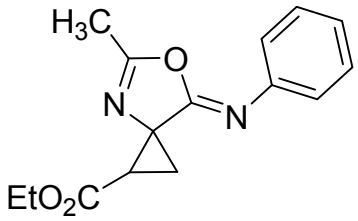

(**2k**) Yellow liquid; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.30 (t, *J* = 7.0 Hz, 3H), 1.86 (dd, *J* = 5.0 Hz, *J* = 8.0 Hz 1H), 2.21 (s, 3H), 2.33 (dd, *J* = 5.0 Hz, *J* = 7.5 Hz 1H), 2.60-2.65 (m, 1H), 4.20-4.28 (m, 2H), 7.10-7.17 (m, 3H), 7.29-7.35 (m, 2H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.1, 15.0, 21.6, 31.9, 55.0, 61.3, 122.9, 124.8, 128.7, 144.5, 158.9, 164.3, 167.9; **HRMS** (ESI) m/z calculated for $C_{15}H_{16}N_2O_3$ $[M+H]^+$: 273.1239, found: 273.1269.

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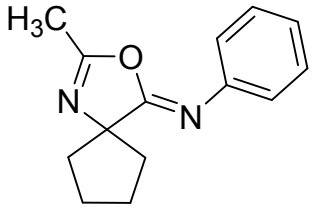

(**2l**) Colorless liquid; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.91-2.00 (m, 6H), 2.08-2.15 (m, 5H), 7.07-7.15 (m, 3H), 7.28-7.35 (m, 2H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.7, 25.5, 40.4, 77.0, 122.5, 124.5, 128.7, 145.6, 160.1, 165.1; **HRMS** (ESI) m/z calculated for $C_{14}H_{16}N_2O$ $[M+H]^+$: 229.1341, found: 229.1324.

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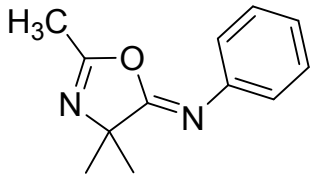

(**2m**) Colorless liquid; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 1.41 (s, 6H), 2.02 (s, 3H), 7.05-7.23 (m, 3H), 7.26-7.35 (m, 2H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 10.5, 23.6, 49.5, 122.9, 124.3, 128.6, 145.4, 165.4, 168.2; **HRMS** (ESI) m/z calculated for $C_{12}H_{14}N_2O$ $[M+H]^+$: 203.1184, found:

203.1170.

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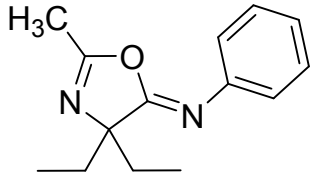

(**2n**) White solid, m.p. 53-54 °C; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 0.81-0.89 (m, 6H), 1.67-1.76 (m, 2H), 1.85-1.94 (m, 2H), 1.99 (s, 3H), 7.05 (t, *J* = 7.5 Hz, 1H), 7.15 (d, *J* = 7.5 Hz, 2H), 7.32 (t, *J* = 7.5 Hz, 2H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 8.9, 10.8, 29.8, 60.5, 122.7, 124.3, 128.7, 145.8, 163.8, 165.7; **HRMS** (ESI) m/z calculated for $C_{14}H_{18}N_2O$ $[M+H]^+$: 231.1497, found: 231.1503.

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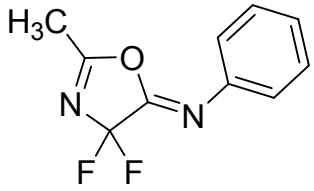
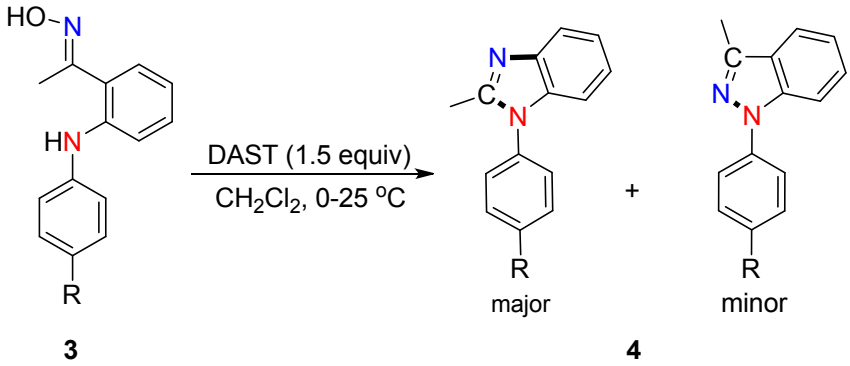


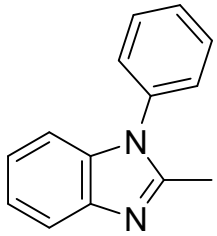
(**2o**) Light yellow liquid; **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 2.14 (t, *J* = 1.5 Hz, 3H), 7.15 (t, *J* = 7.5 Hz, 1H), 7.24-7.32 (m, 2H), 7.36 (d, *J* = 7.5 Hz, 2H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 9.0, 114.8 (t, *J* = 250 Hz), 125.3, 127.4, 128.9, 142.1, 146.0 (t, *J* = 25 Hz), 156.1 (t, *J* = 25 Hz); **HRMS** (ESI) m/z calculated for $C_{10}H_8F_2N_2O$ $[M+H]^+$: 211.0683, found: 211.0663.

III. Synthesis and analytical data of compounds 4a-4d



General procedure (with **3a** as an example): The (*E*)-1-(2-(phenylamino)phenyl)ethanone oxime

3a (0.5 mmol) was dissolved in anhydrous DCM (1.0 mL). The solution of oxime in DCM was cooled to 0 °C. The diethylaminosulfur trifluoride (DAST) was added slowly to the solution of **3a** in DCM and the reaction was stirred and allowed to warm to 25 °C until the **3a** was consumed (monitored by TLC). The reaction mixture was concentrated in vacuo and purified by flash chromatography (petroleum ether : diethyl ether = 15 : 1) to afford compounds **4aa** and **4ab** in 63% and 21% yield, respectively.



(**4aa**) Yellow solid, **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 2.49 (s, 3H), 7.07-7.37 (m, 5H), 7.45-7.59 (m, 3H), 7.74 (d, *J* = 8.0 Hz, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.2, 109.7, 118.7, 122.2, 122.4, 126.8, 128.6, 129.7, 135.8, 136.2, 142.4, 151.3; **HRMS** (ESI) m/z calculated for $C_{14}H_{12}N_2$ $[M+H]^+$: 209.1079, found: 209.1075.

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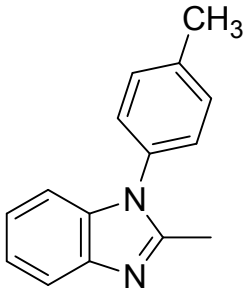

(**4ba**) Yellow solid, **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 2.45 (s, 3H), 2.47 (s, 3H), 7.09 (d, *J* = 8.0 Hz, 1H), 7.12-7.27 (m, 4H), 7.34 (d, *J* = 8.0 Hz, 2H), 7.72 (d, *J* = 8.0 Hz, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.2, 21.1, 109.8, 118.7, 122.1, 122.3, 126.7, 130.3, 133.2, 136.4, 138.7, 142.4, 151.5; **HRMS** (ESI) m/z calculated for $C_{15}H_{14}N_2$ $[M+H]^+$: 223.1235, found: 223.1235.

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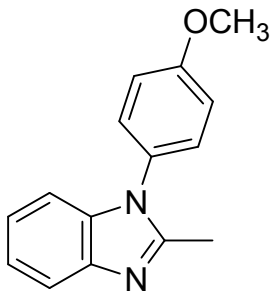

(**4ca**) Tan solid, **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 2.48 (s, 3H), 3.89 (s, 3H), 7.03-7.10 (m, 3H), 7.15-7.20 (m, 1H), 7.22-7.28 (m, 3H), 7.73 (d, *J* = 8.0 Hz, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.2, 55.5, 109.8, 114.9, 118.8, 122.1, 122.3, 128.2, 128.5, 136.7, 142.4, 151.8, 159.6; **HRMS** (ESI) m/z calculated for $C_{15}H_{14}N_2O$ $[M+H]^+$: 239.1184, found: 239.1176.

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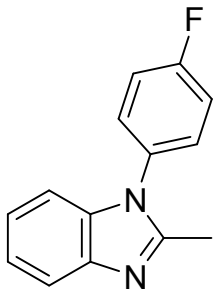

(**4da**) Tan solid, **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 2.48 (s, 3H), 7.07 (d, *J* = 8.0 Hz, 1H), 7.15-7.37 (m, 6H), 7.73 (d, *J* = 8.0 Hz, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.1, 109.5, 116.7 (d, *J* = 22.8 Hz), 118.9, 122.3, 122.6, 128.8 (d, *J* = 8.8 Hz),132.0 (d, *J* = 3.4 Hz), 136.4, 142.3, 151.3, 161.3 (d, *J* = 248 Hz); **HRMS** (ESI) m/z calculated for $C_{14}H_{11}FN_2$ $[M+H]^+$: 227.0985, found: 227.0989.

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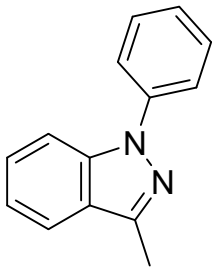

(**4ab**) Yellow solid, **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 2.66 (s, 3H), 7.18-7.23 (m, 1H), 7.29-7.34 (m,

1H), 7.39-7.44 (m, 1H), 7.49-7.54 (m, 2H), 7.67-7.77 (m, 4H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 11.9, 110.3, 120.6, 120.8, 122.4, 125.0, 126.1, 127.1, 129.4, 139.5, 140.3, 144.0; **HRMS** (ESI) m/z calculated for $C_{14}H_{12}N_2$ $[M+H]^+$: 209.1079, found: 209.1075.

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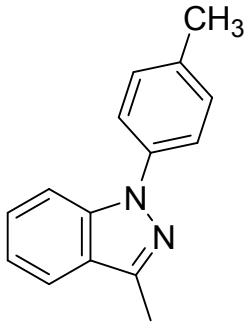
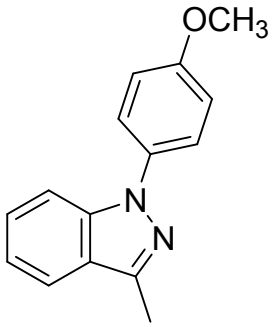


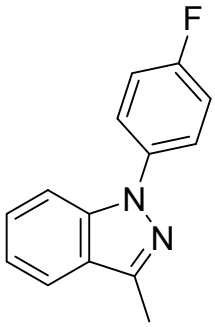
(**4bb**) Yellow solid, **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 2.43 (s, 3H), 2.67 (s, 3H), 7.17-7.22 (m, 1H), 7.32 (d, *J* = 8.0 Hz, 2H), 7.38-7.43 (m, 1H), 7.60 (d, *J* = 8.0 Hz, 2H), 7.68 (d, *J* = 8.0 Hz, 1H), 7.72 (d, *J* = 8.0 Hz, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 11.9, 21.0, 110.2, 120.47, 120.54, 122.3, 124.7, 126.9, 129.9, 135.9, 137.8, 139.4, 143.5; **HRMS** (ESI) m/z calculated for $C_{15}H_{14}N_2$ $[M+H]^+$: 223.1235, found: 223.1235.

……



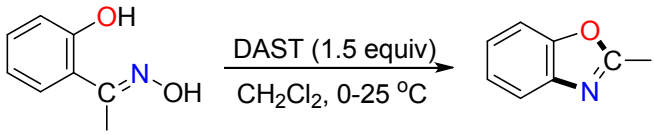
(**4cb**) Yellow solid, **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 2.65 (s, 3H), 3.85 (s, 3H), 7.00-7.06 (m, 2H), 7.17 (t, *J* = 7.0 Hz, 1H), 7.36-7.41 (m , 1H), 7.54-7.61 (m, 3H), 7.70 (d, *J* = 8.0 Hz, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 11.9, 55.5, 110.0, 114.6, 120.4, 120.5, 124.2, 124.4, 126.8, 133.4, 139.6, 143.3, 158.0; **HRMS** (ESI) m/z calculated for $C_{15}H_{14}N_2O$ $[M+H]^+$: 239.1184, found: 239.1186.

……..



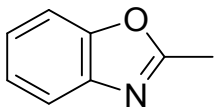
(**4db**) Pale yellow solid, **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 2.64 (s, 3H), 7.16-7.22 (m, 3H), 7.40-7.43 (m, 1H), 7.57-7.66 (m, 3H), 7.69-7.74 (m, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 11.9, 109.9, 116.1 (d, J = 22.6 Hz), 120.6, 120.8, 124.1(d, J = 8.3 Hz), 124.7, 127.2, 136.4, 139.5, 144.0, 159.8 (d, J = 244.5 Hz); **HRMS** (ESI) m/z calculated for $C_{14}H_{11}N_2F$ $[M+H]^+$: 227.0985, found: 227.0989.

IV. Synthesis and analytical data of compound 6



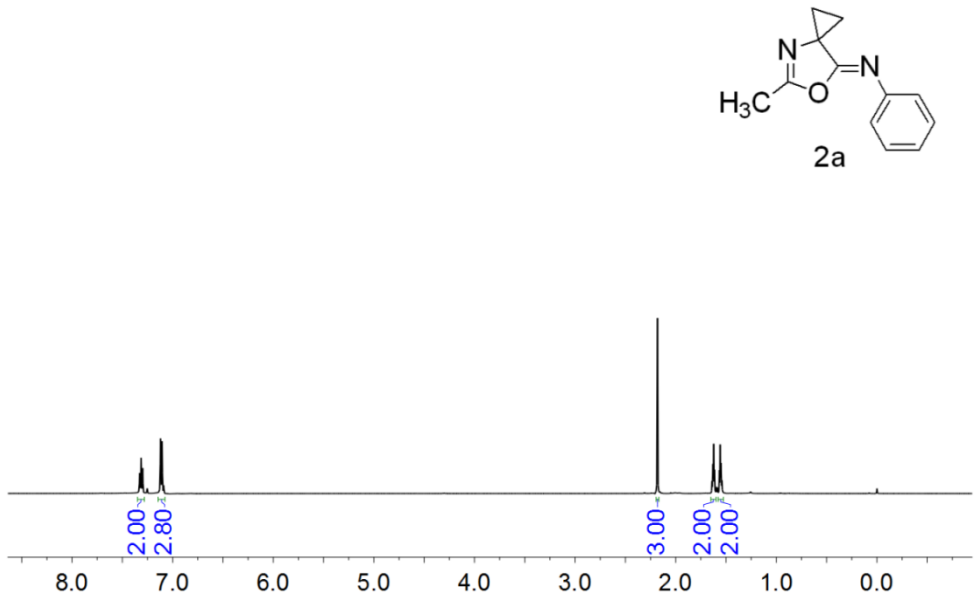
5 **6**

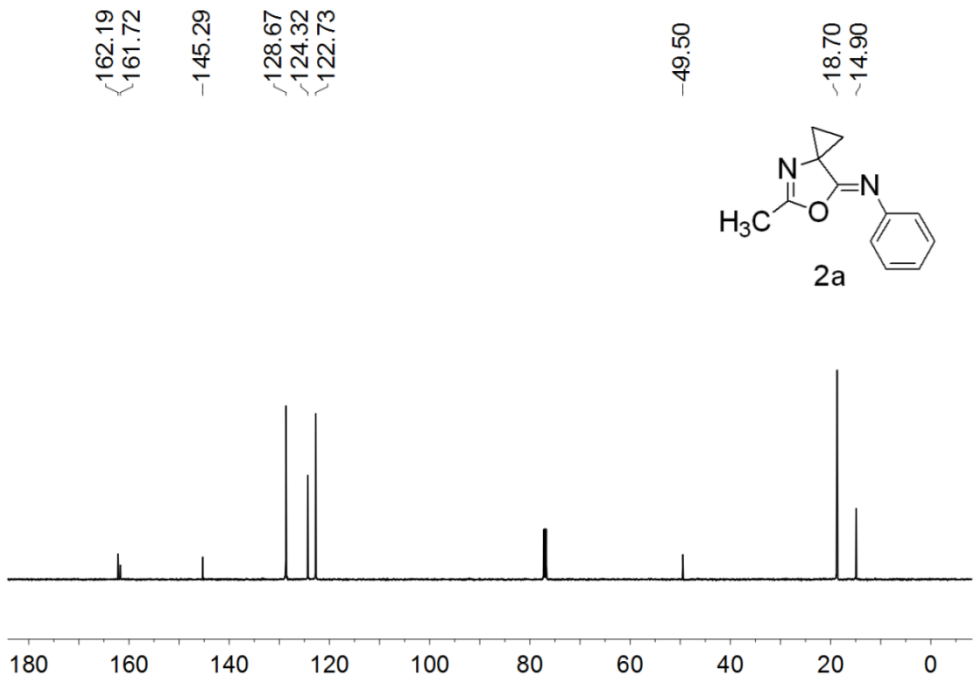
General procedure: The (*E*)-1-(2-hydroxyphenyl)ethanone oxime **5** (0.5 mmol) was dissolved in anhydrous DCM (1.0 mL). The solution of **5** in DCM was cooled to 0 °C. The diethylaminosulfur trifluoride (DAST) was added slowly to the solution of oxime in DCM and the reaction was stirred and allowed to warm to 25 °C until the **5** was consumed (monitored by TLC). The reaction mixture was concentrated in vacuo and purified by flash chromatography (petroleum ether : diethyl ether = 15 : 1) to afford 2-methylbenzoxazole **6** in 41% yield.

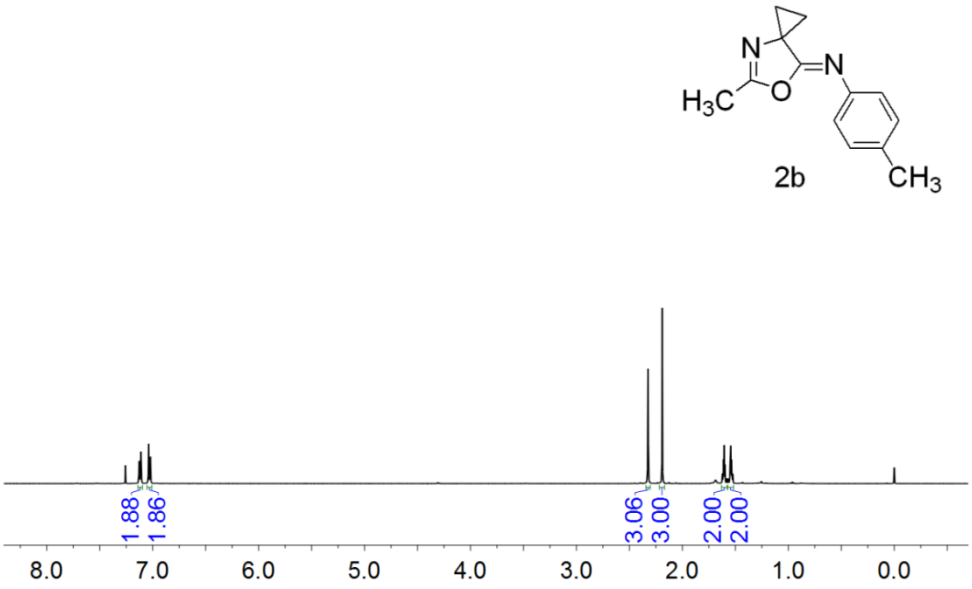


(**6**) Light yellow liquid, **^{1}H-NMR** (500 MHz, $CDCl_3$) δ 2.58 (s, 3H), 7.20-7.26 (m, 2H), 7.37-7.43 (m, 1H), 7.55-7.62 (m, 1H); **^{13}C-NMR** ($CDCl_3$, 125 MHz) δ 14.5, 110.2, 119.4, 124.1, 124.4, 141.4, 150.9, 163.8; **HRMS** (ESI) m/z calculated for C_8H_7NO $[M+H]^+$: 134.0606, found: 134.0607.

V. NMR spectra of all compounds



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6.0
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4.0
3.0
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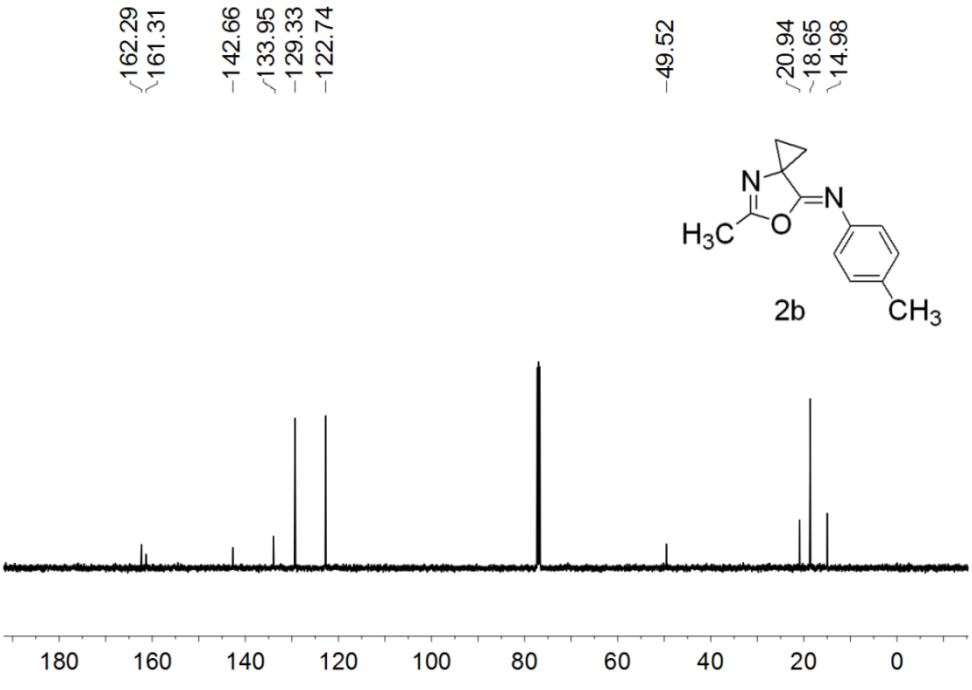
1.0
0.0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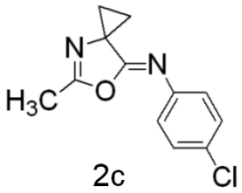
140
120
100
80
60
40
20
0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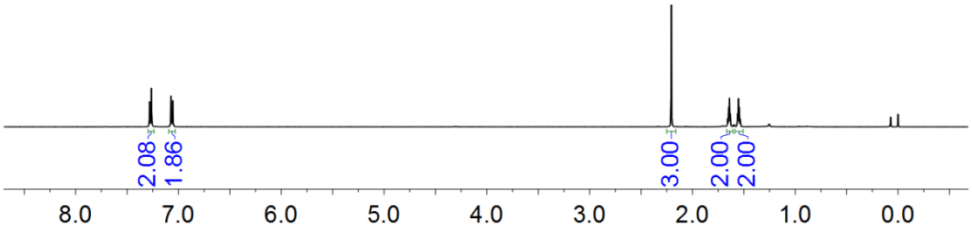
2c
Cl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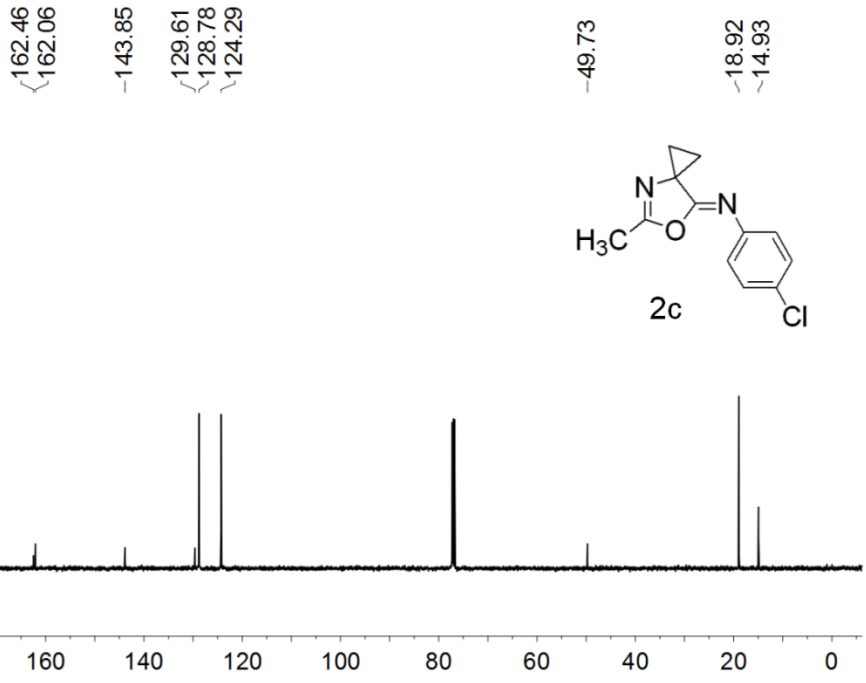
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Cl
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140
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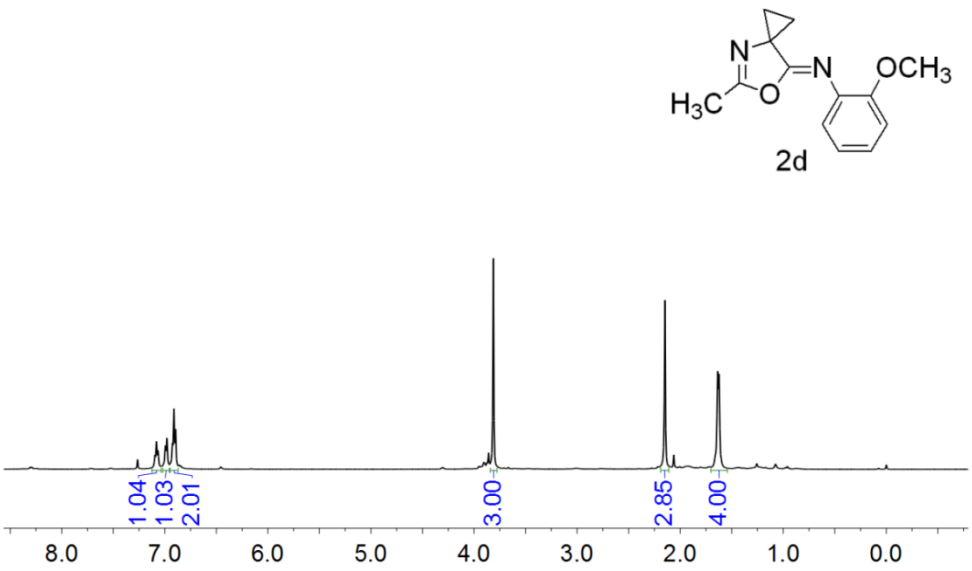
100
80
60
40
20
0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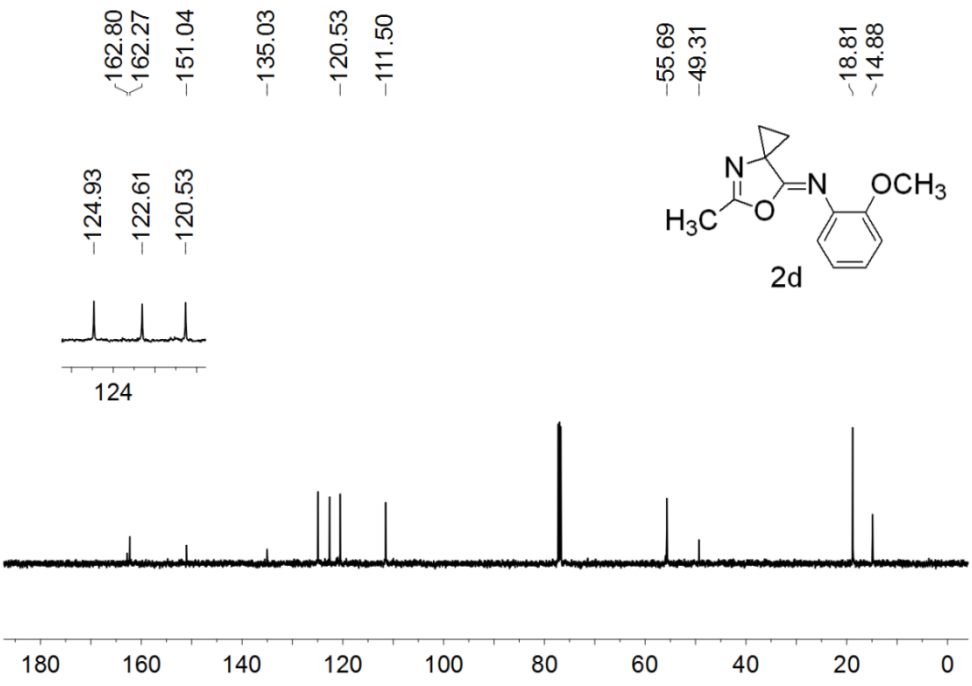
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111.50
55.69
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14.88
124.93
122.61
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H3C
2d
124
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140
120
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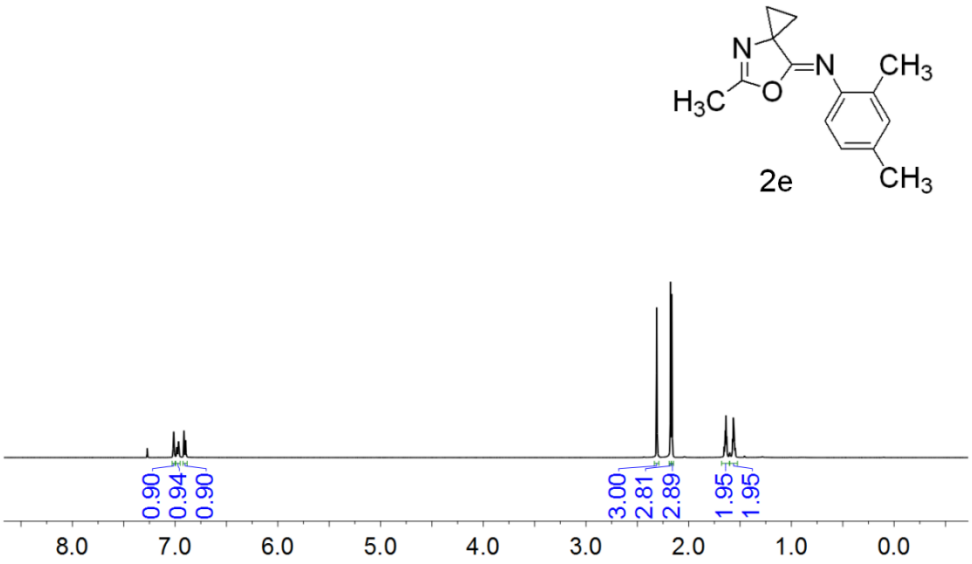
80
60
40
20
0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CH3
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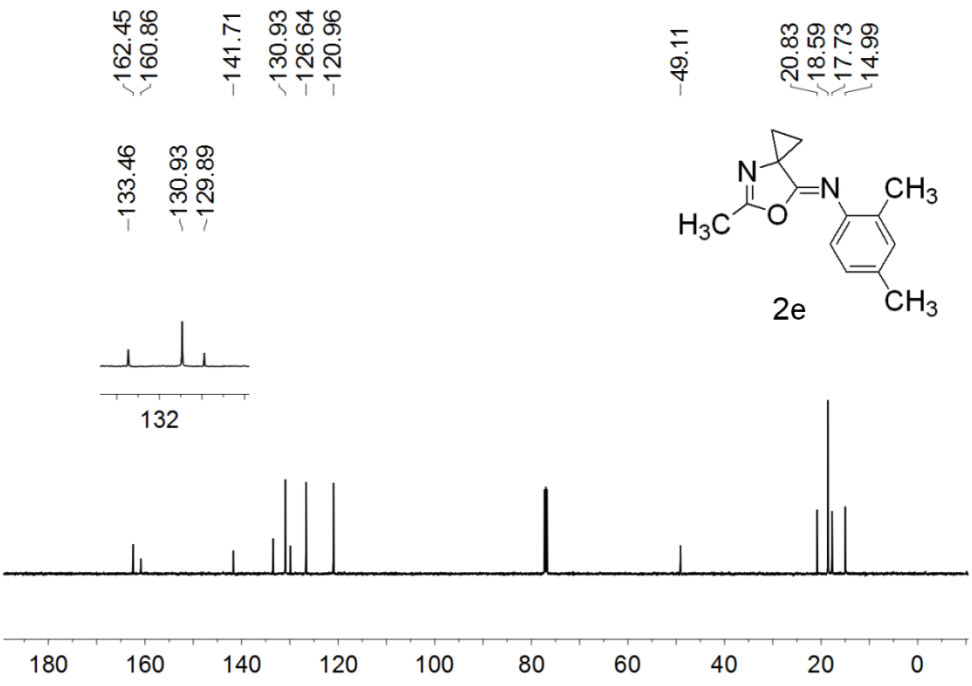
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14.99
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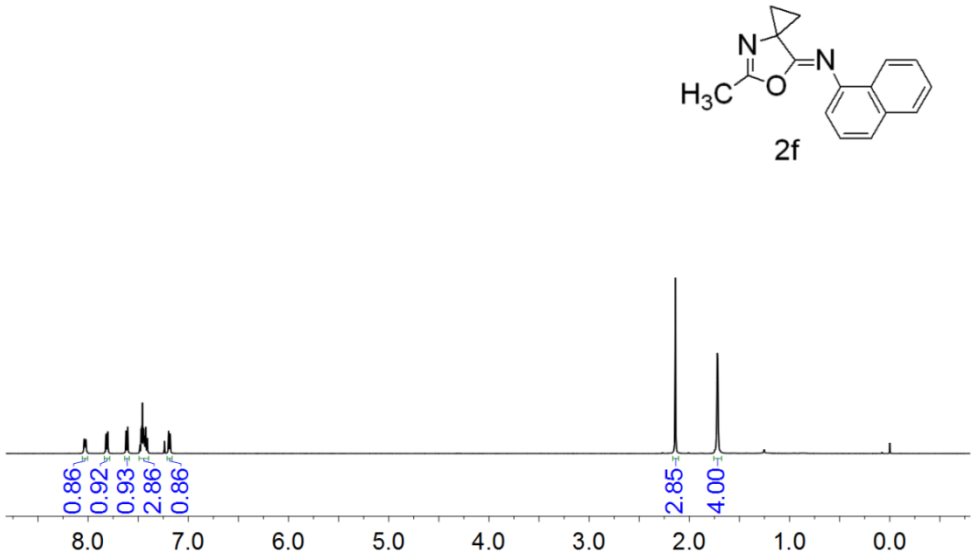
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4.0
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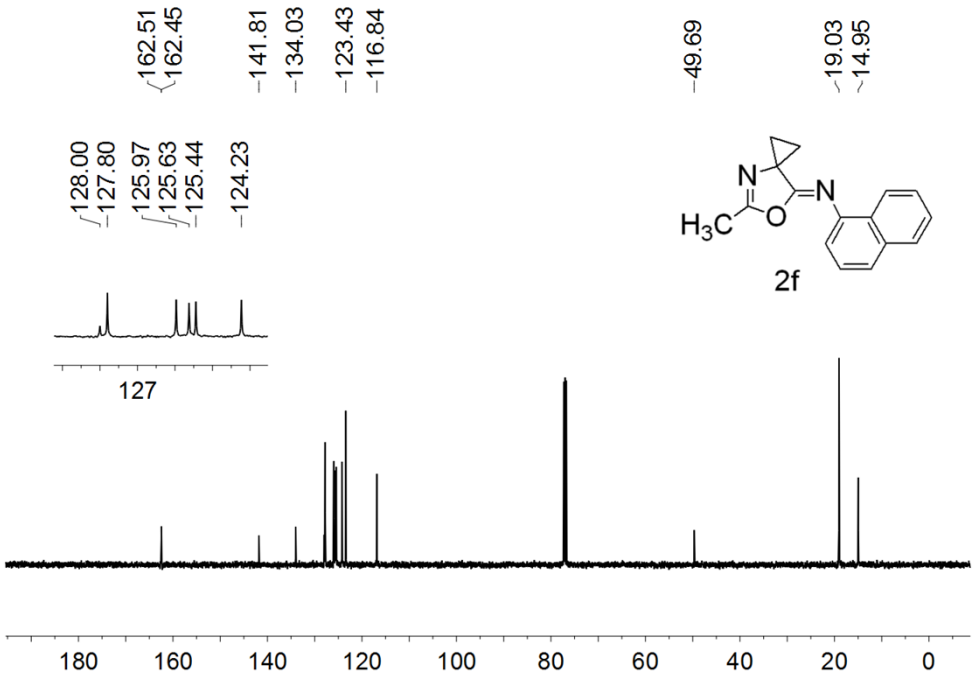
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125.63
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H3C
2f
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140
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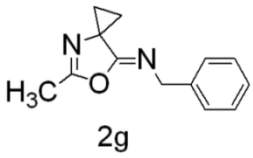
60
40
20
0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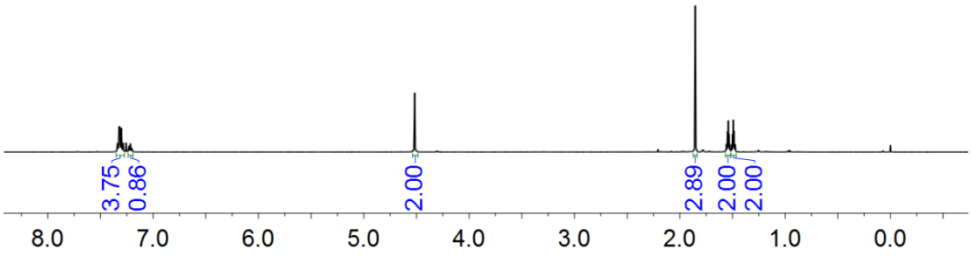
2g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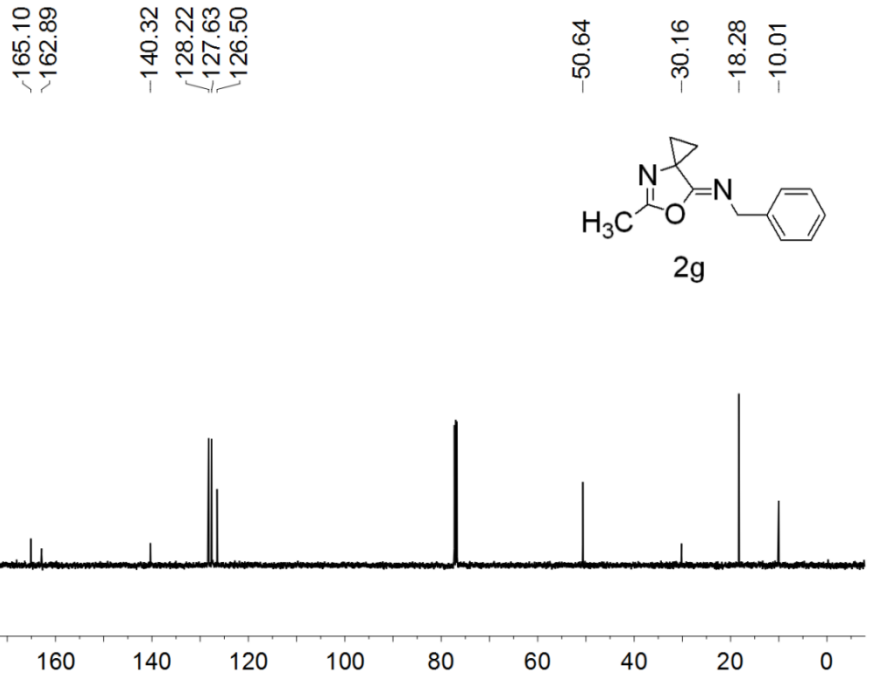
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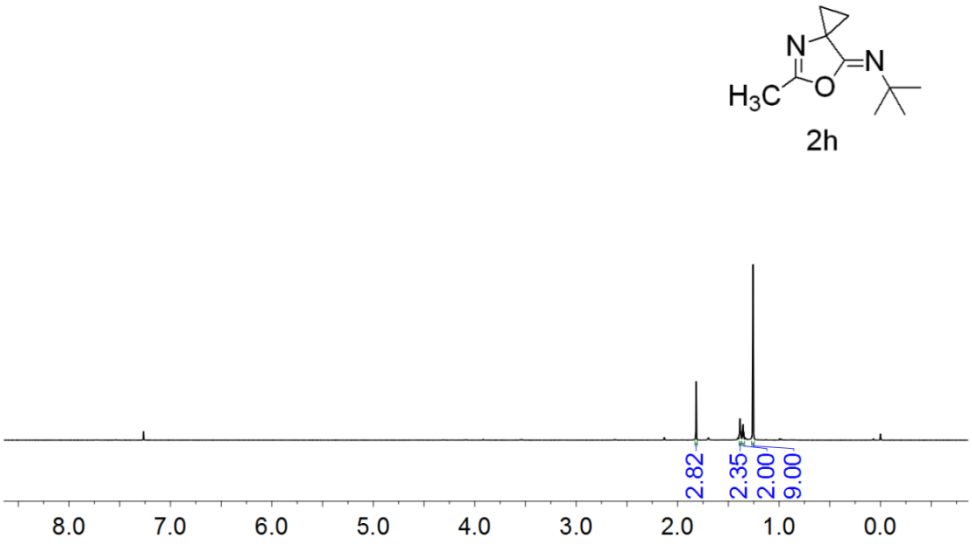
N
H3C

2g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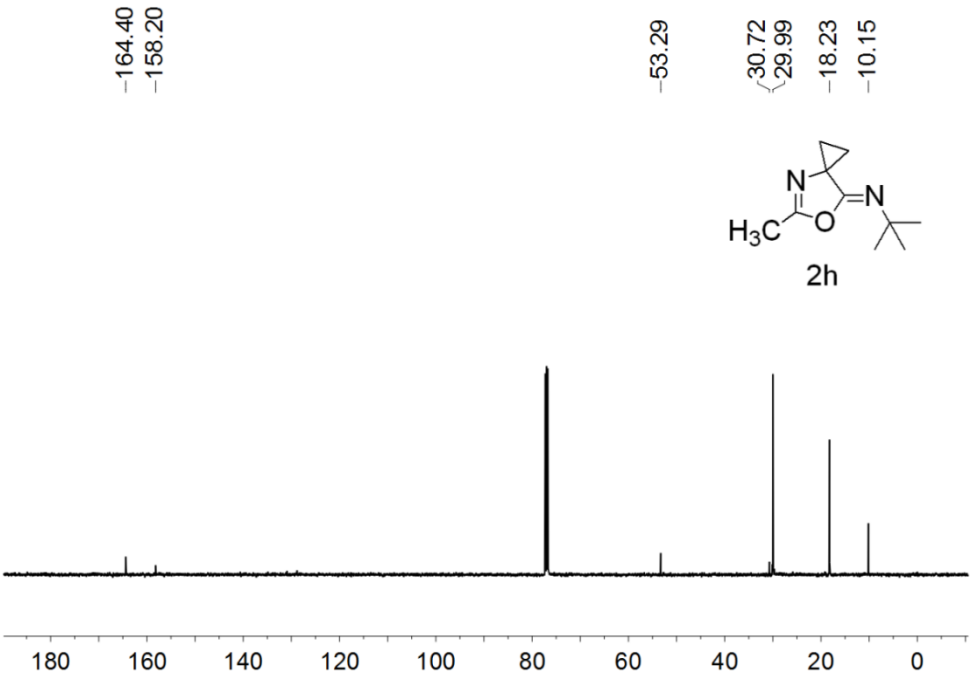
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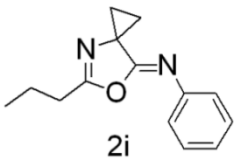
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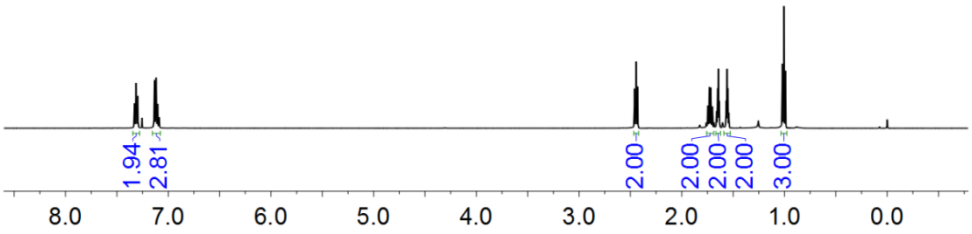
N

2i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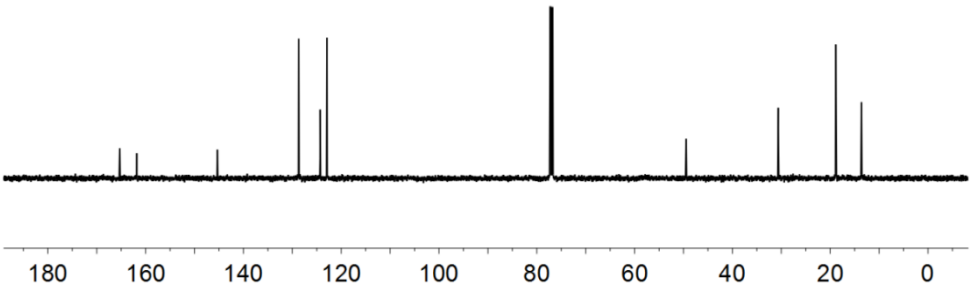
18.80
13.60

N
O
N

2i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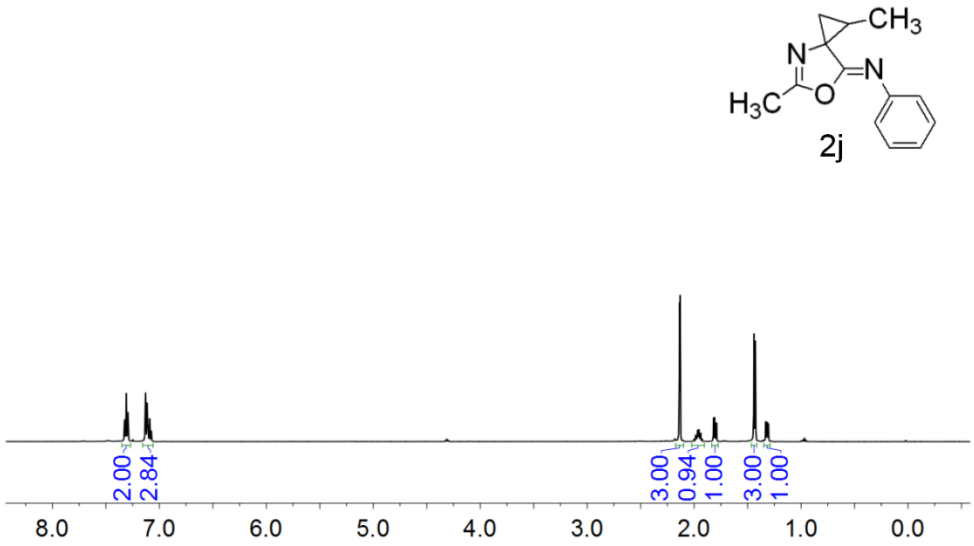
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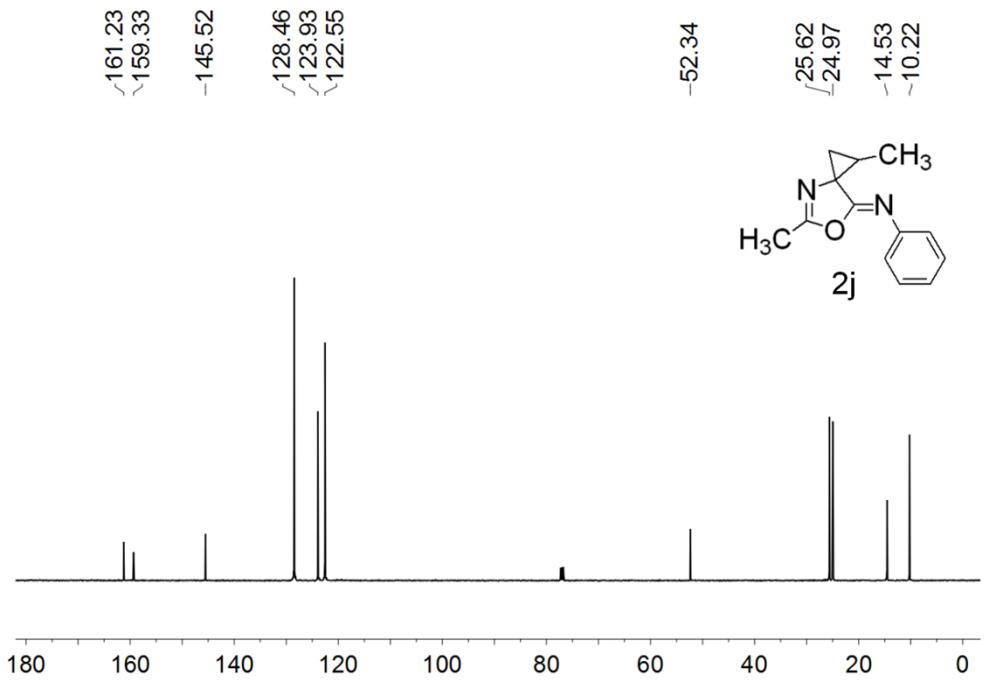
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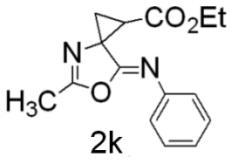
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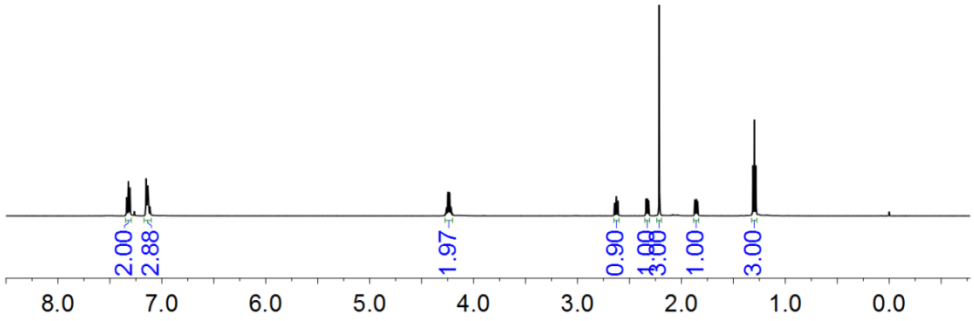
2k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167.89
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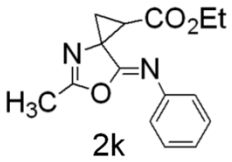
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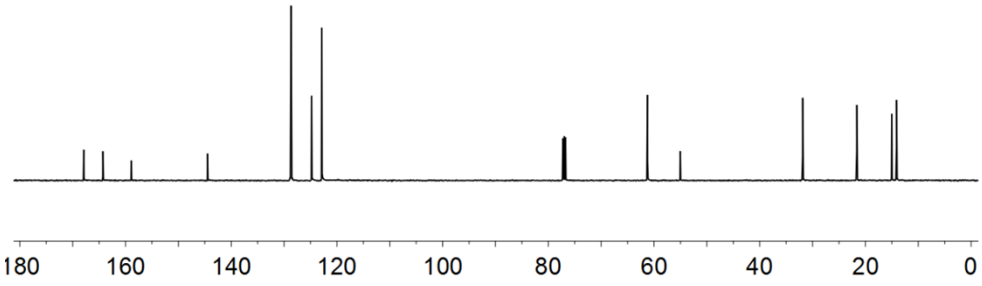
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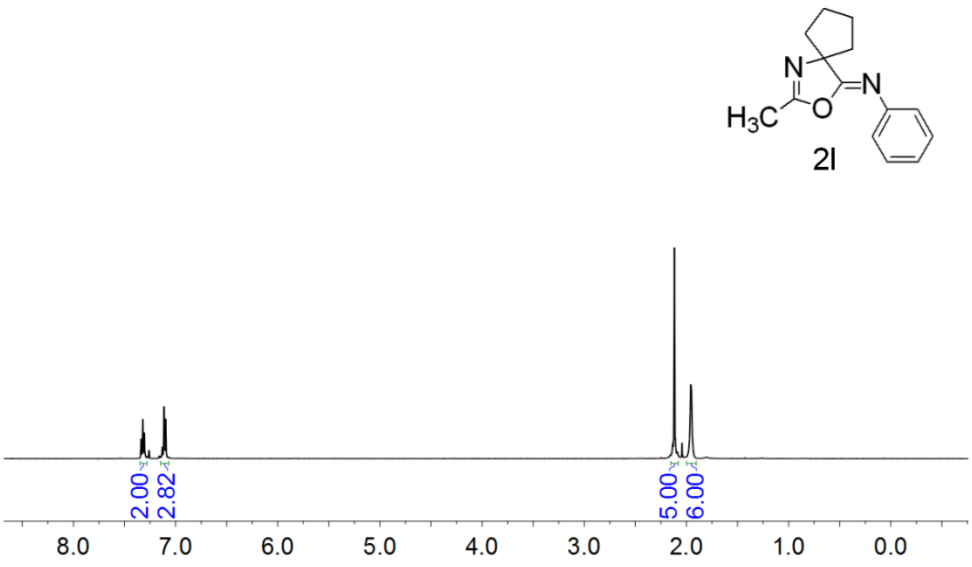
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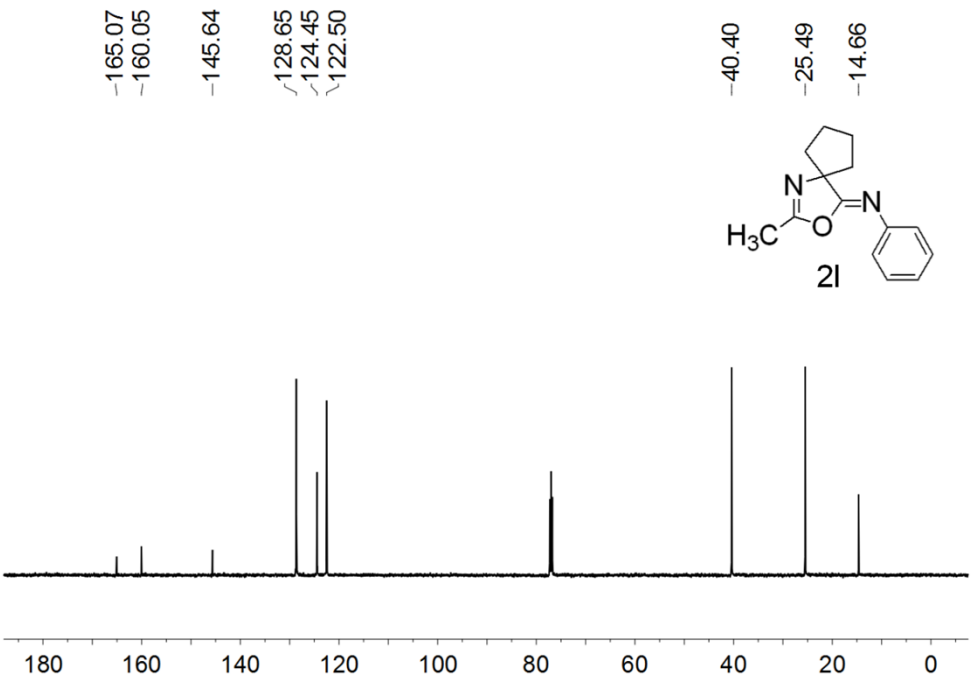
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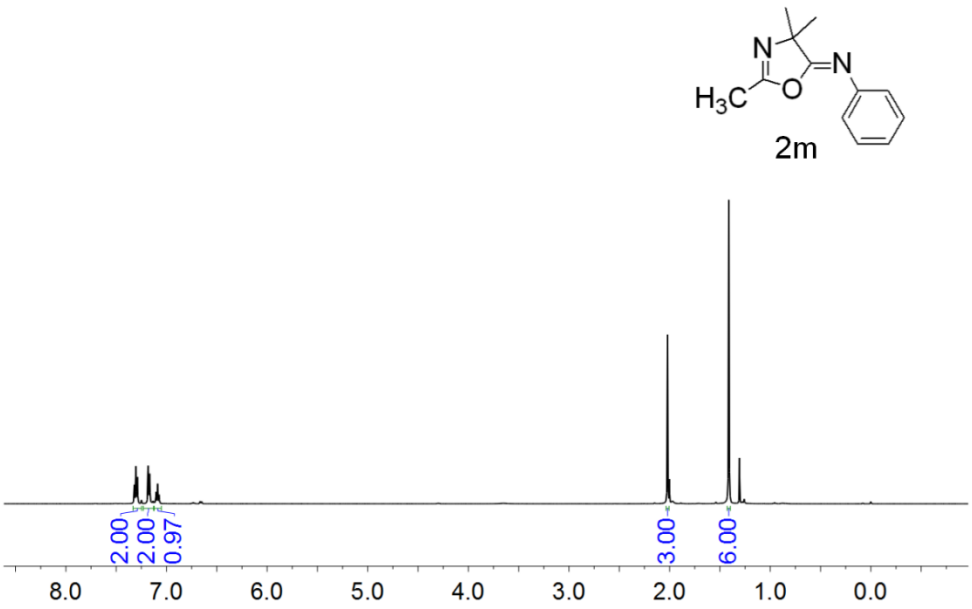
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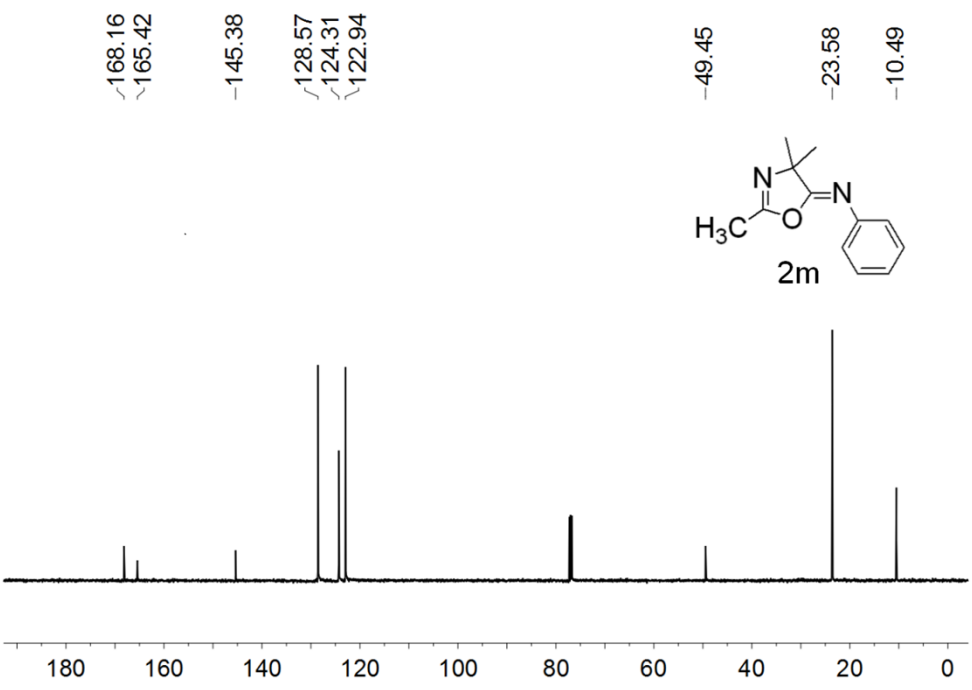
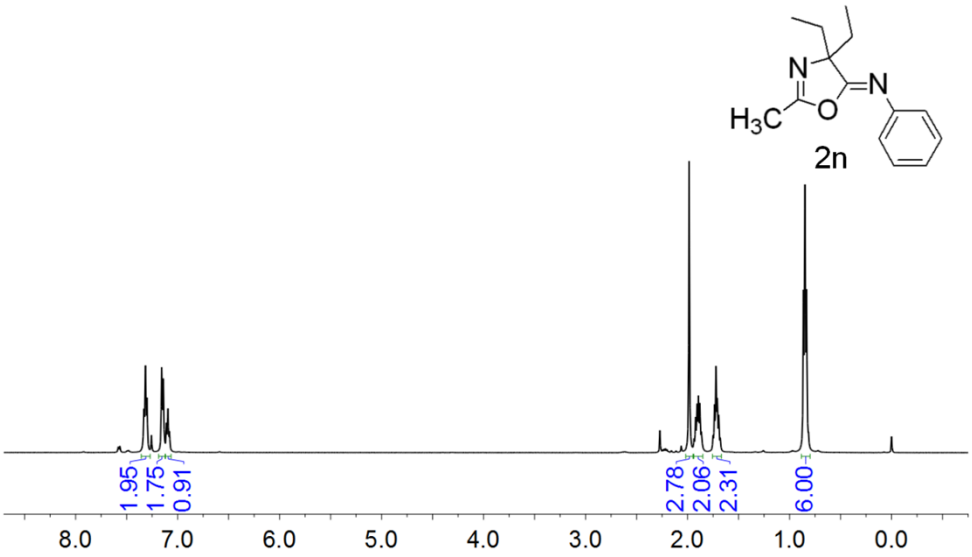

168.16
165.42
145.38
128.57
124.31
122.94
49.45
23.58
10.49
N
O
N
H3C
2m
180
160
140
120
100
80
60
40
20
0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O
N
H3C
2n
1.95
1.75
0.91
2.78
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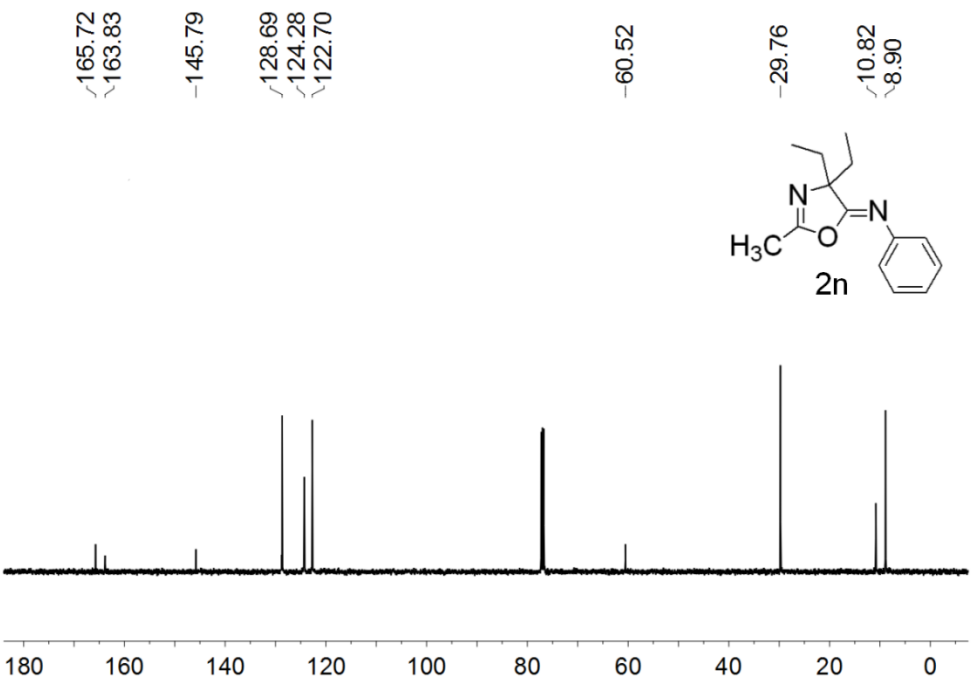
6.00
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0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163.83
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128.69
124.28
122.70
60.52
29.76
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N
H3C
2n
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140
120
100
80
60
40
20
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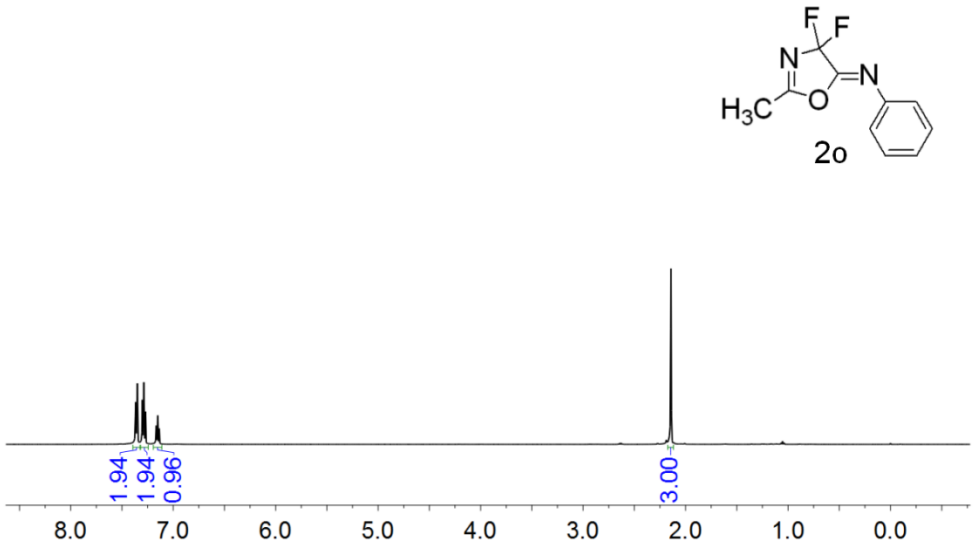
F
F
N
O
N
H3C
2o
1.94
1.94
0.96
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7.0
6.0
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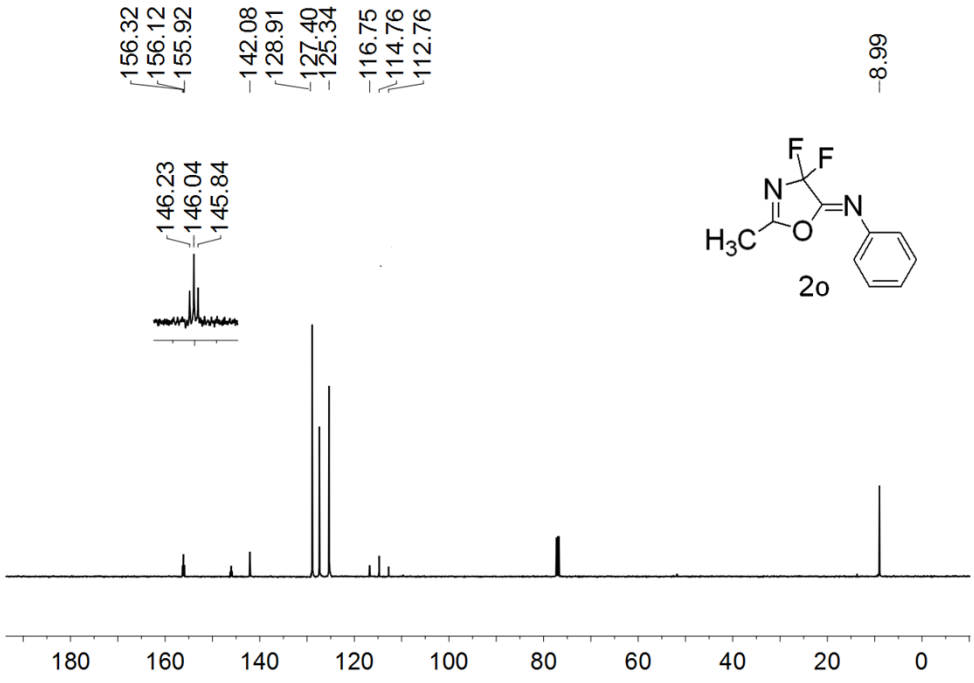
4.0
3.0
2.0
1.0
0.0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156.12
155.92
142.08
128.91
127.40
125.34
116.75
114.76
112.76
8.99
146.23
146.04
145.84
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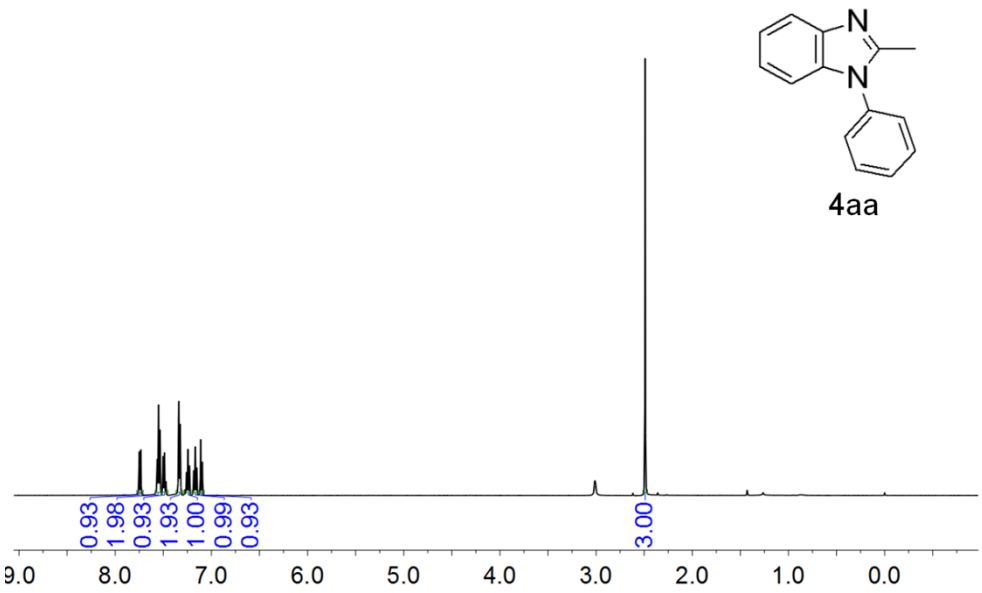
F
N
O
N
H3C
2o
180
160
140
120
100
80
60
40
20
0


4aa
0.93
1.98
0.93
1.93
1.00
0.99
0.93
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6.0
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4.0
3.0
2.0
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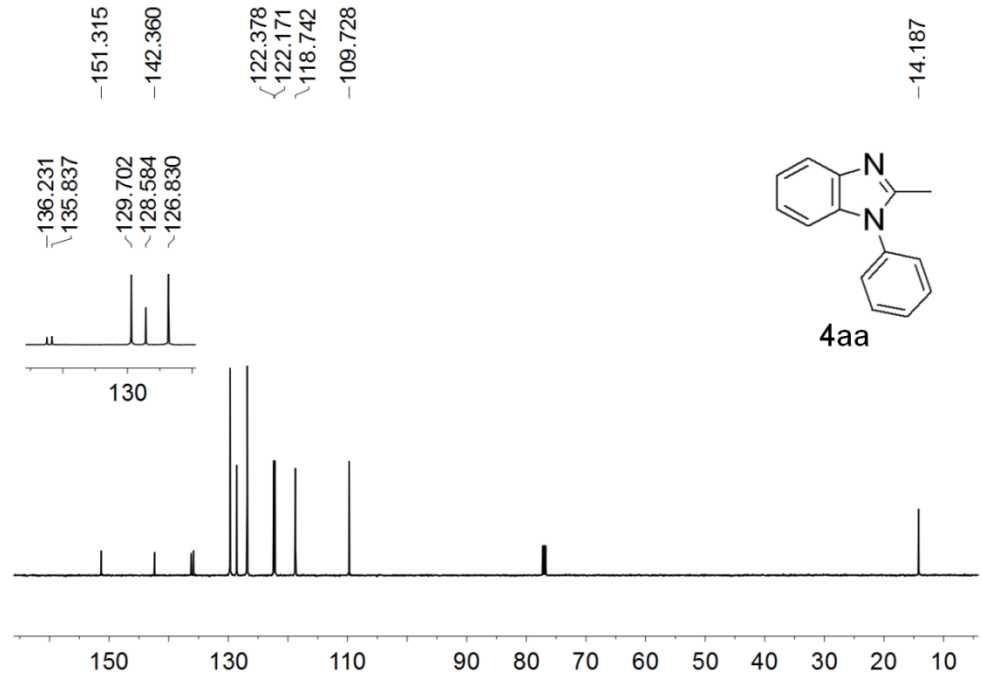
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142.360
122.378
122.171
118.742
109.728
14.187
136.231
135.837
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126.830
4aa
130
150
130
110
90
80
70
60
50
40
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20
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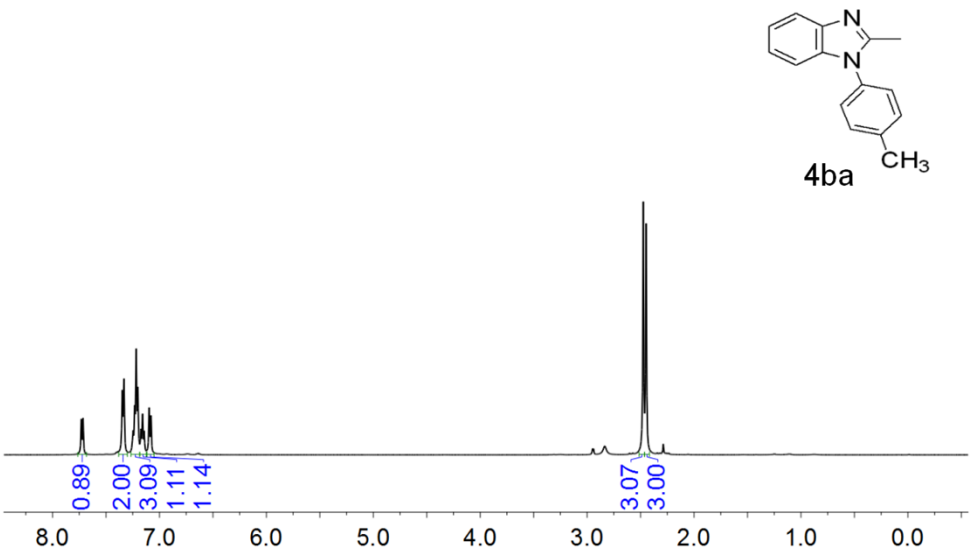
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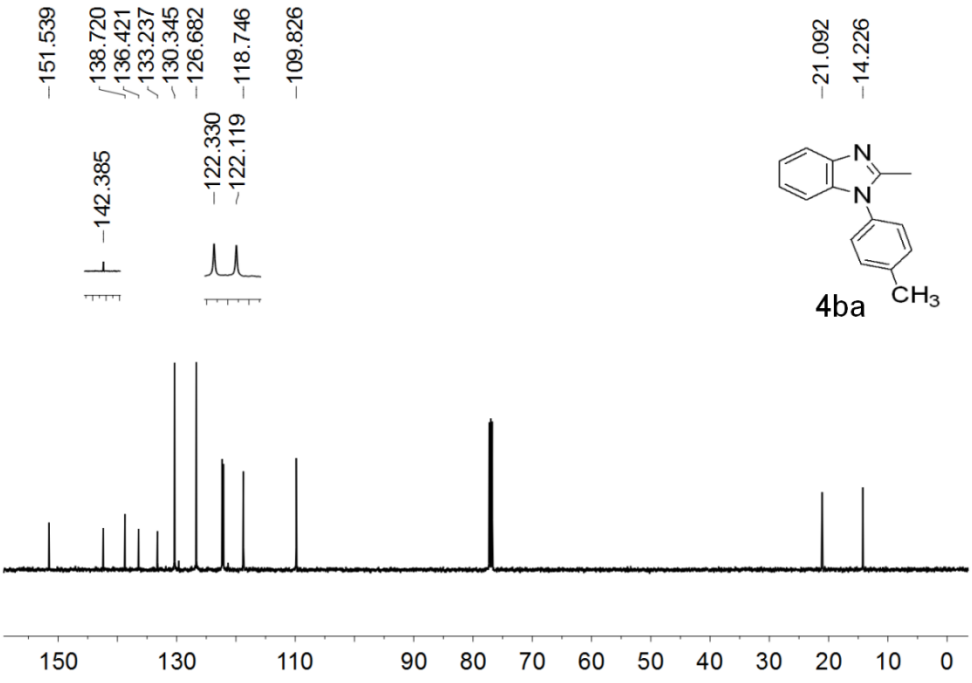
0.89
2.00
3.09
1.11
1.14
3.07
3.00
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0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138.720
136.421
133.237
130.345
126.682
118.746
109.826
142.385
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122.119
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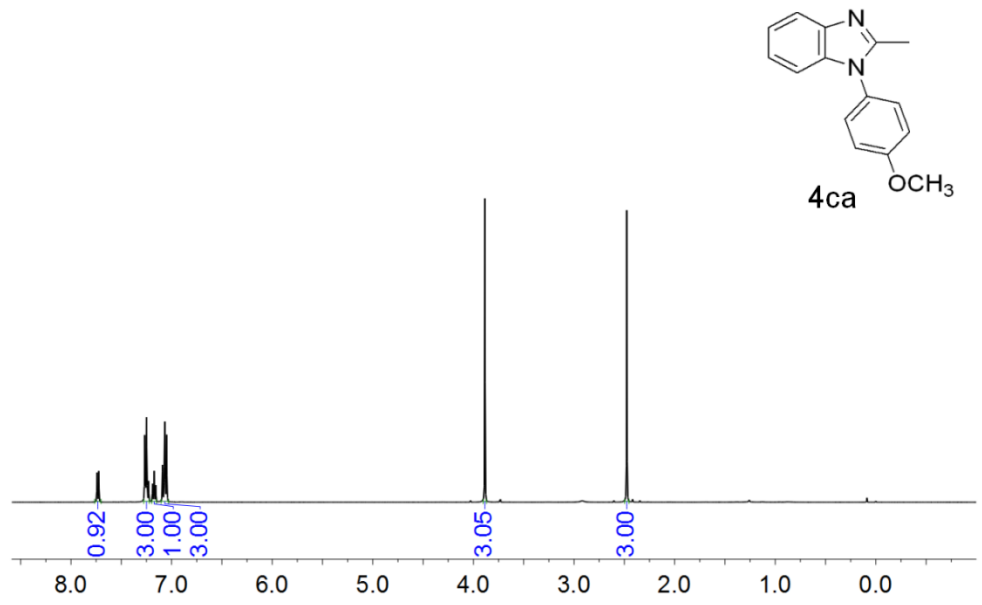
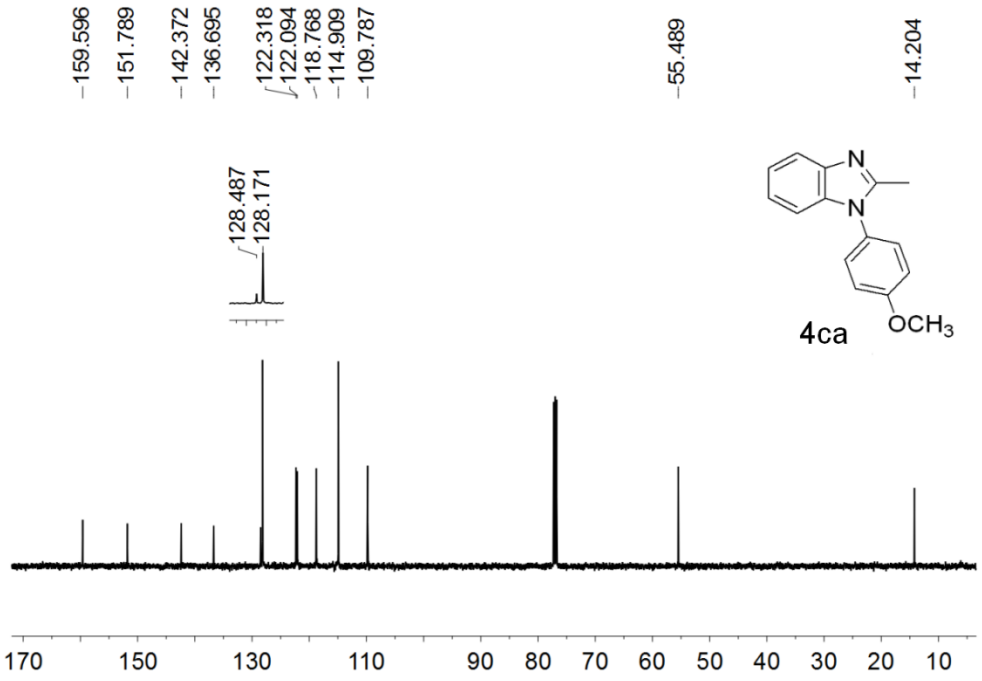
14.226
4ba
150
130
110
90
80
70
60
50
40
30
20
10
0


N
N
OCH3
4ca
0.92
3.00
1.00
3.00
3.05
3.00
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0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142.372
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122.318
122.094
118.768
114.909
109.787
55.489
14.204
128.487
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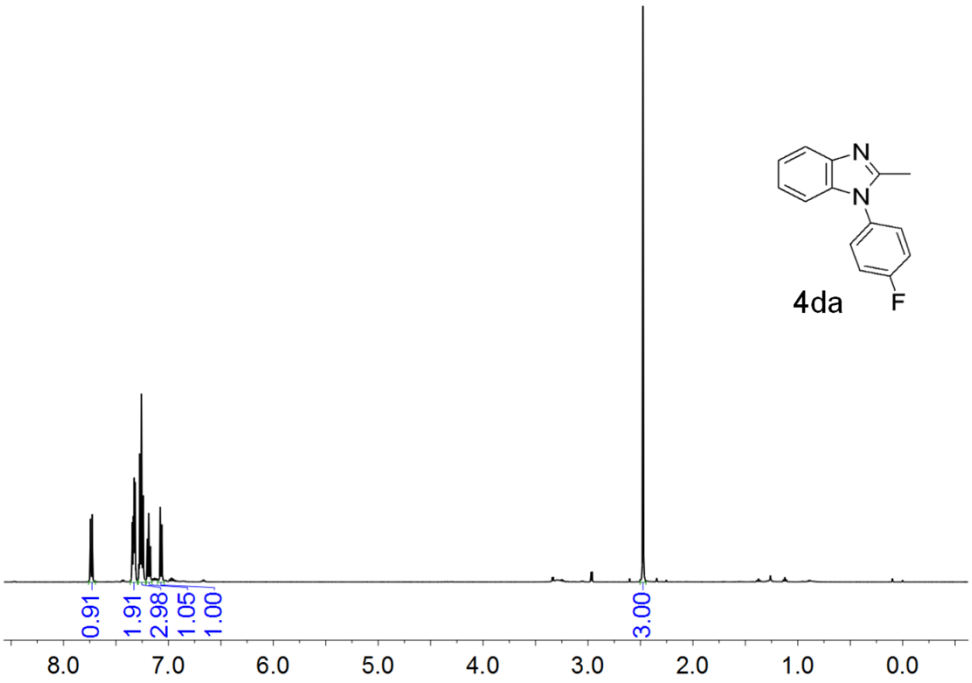
N
N
OCH3
4ca
170
150
130
110
90
80
70
60
50
40
30
20
10


4da
F
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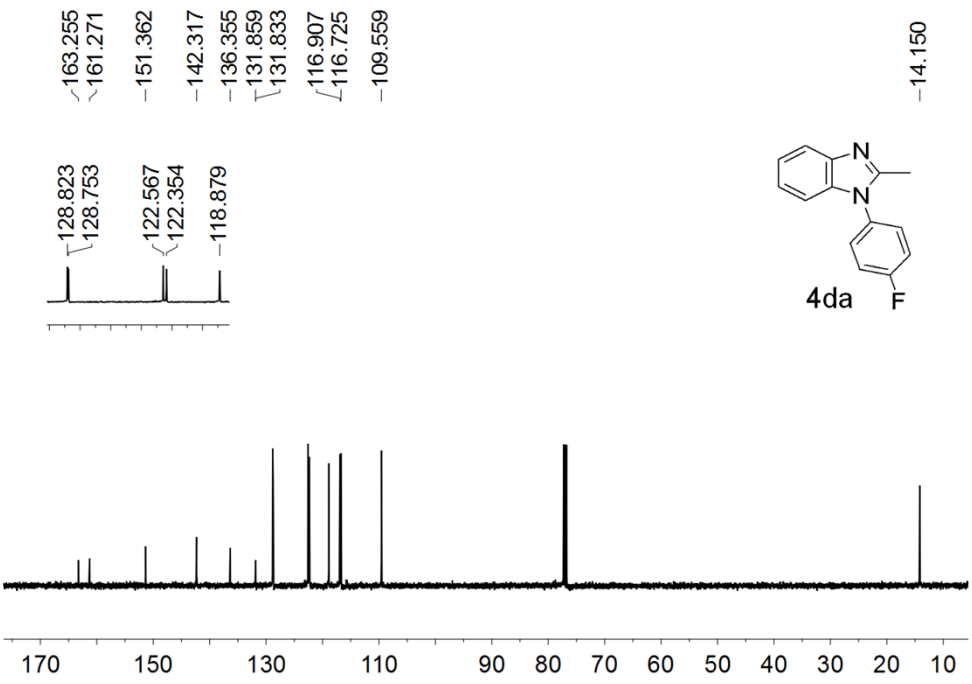
1.91
2.98
1.05
1.00
3.00
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0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151.362
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131.859
131.833
116.907
116.725
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14.150
128.823
128.753
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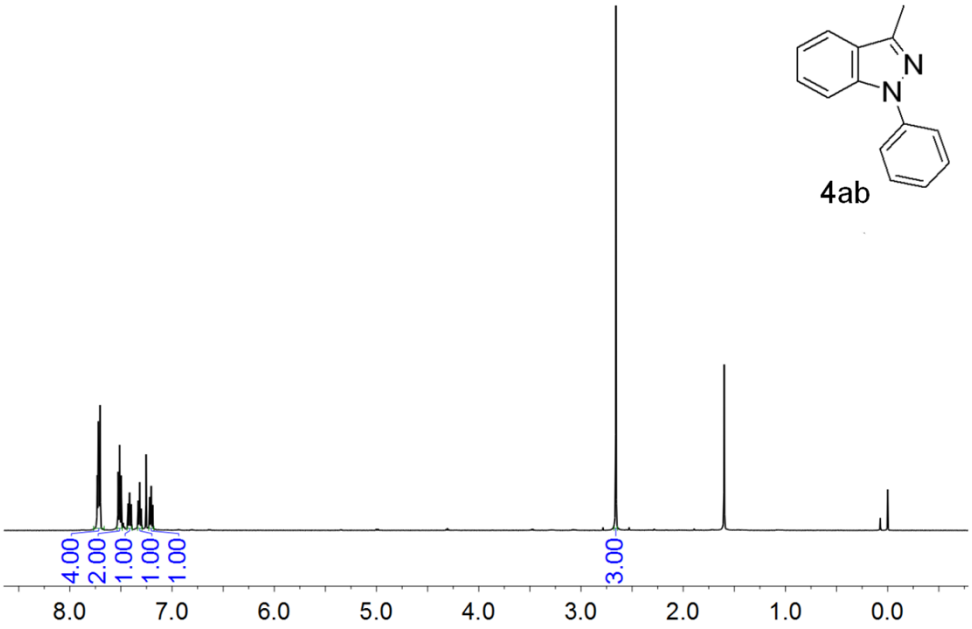
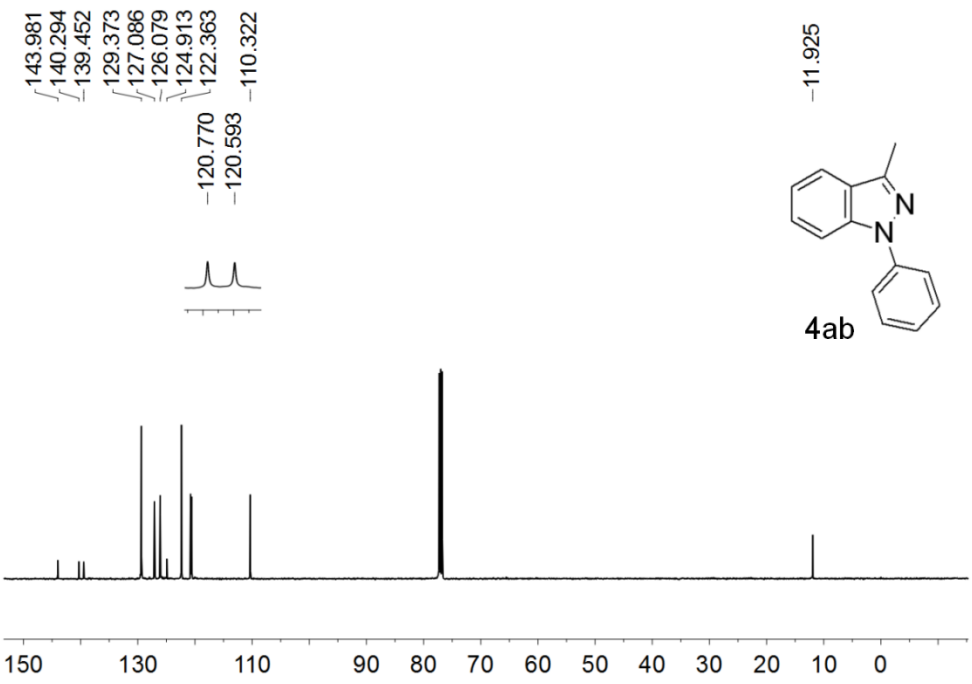
4da
F
170
150
130
110
90
80
70
60
50
40
30
20
10


4ab
4.00
2.00
1.00
1.00
1.00
3.00
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0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139.452
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127.086
126.079
124.913
122.363
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11.925
4ab
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130
110
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70
60
50
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30
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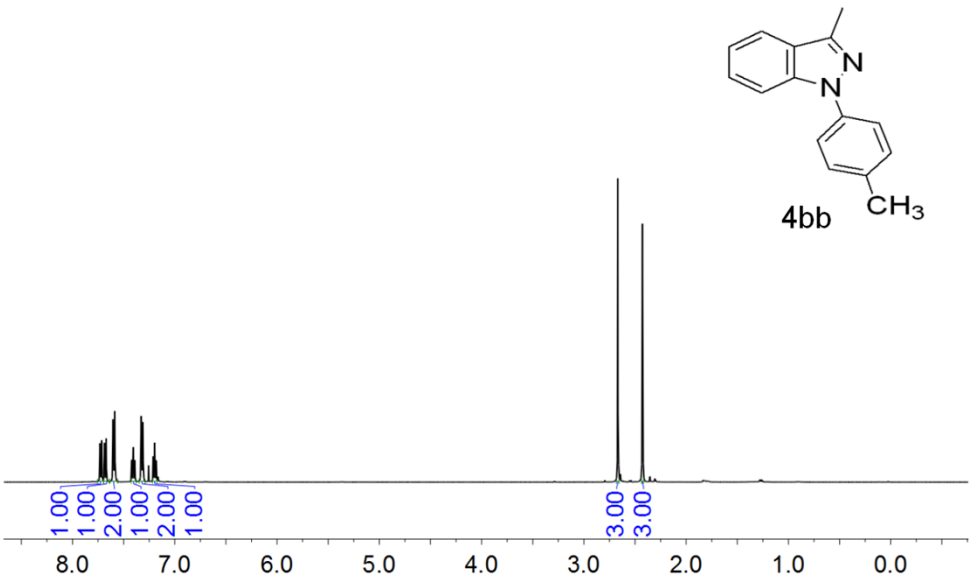
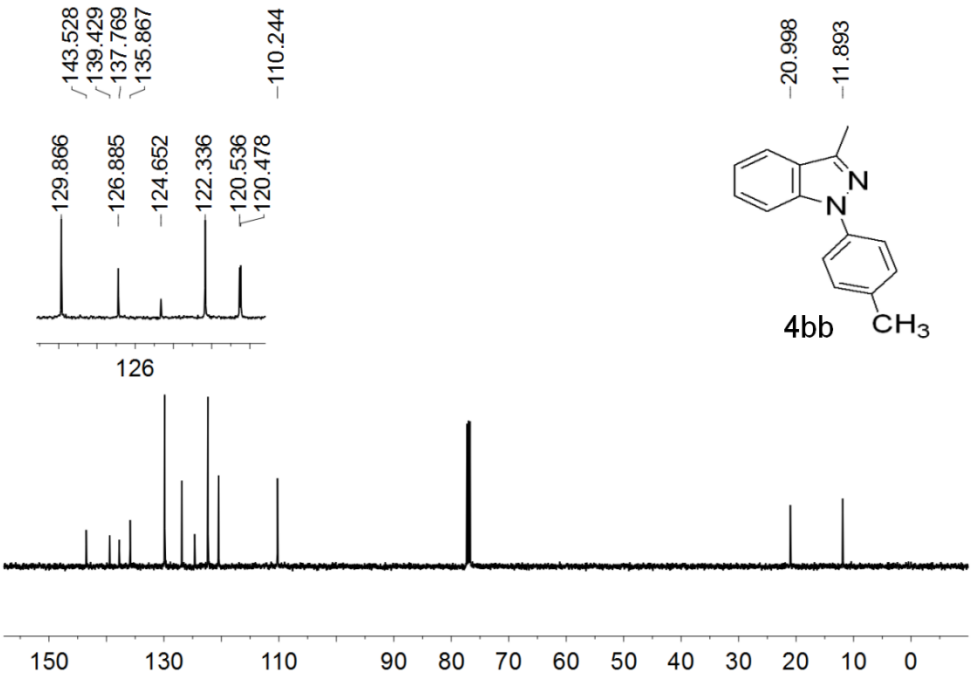
10
0


4bb
1.00
1.00
2.00
1.00
2.00
1.00
3.00
3.00
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0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135.867
110.244
129.866
126.885
124.652
122.336
120.536
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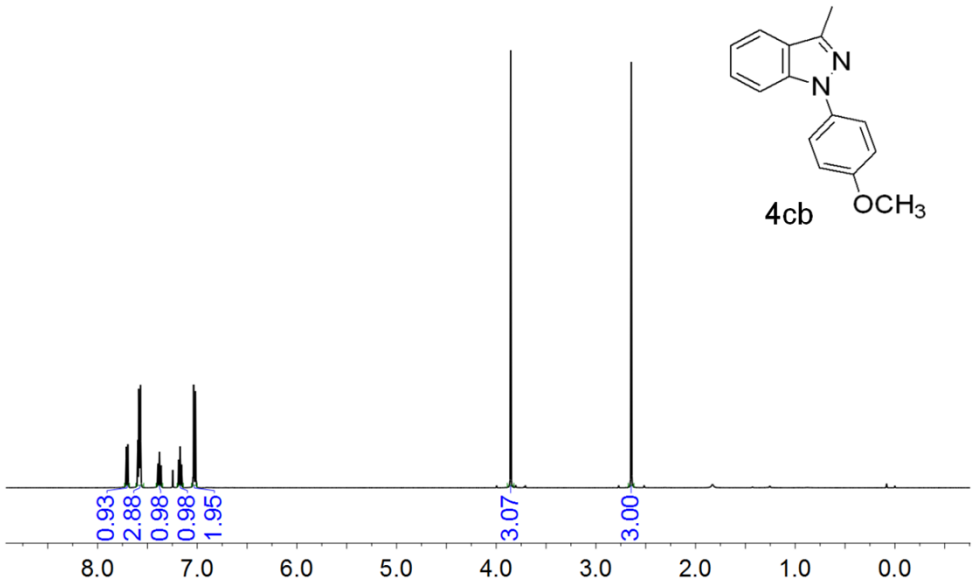
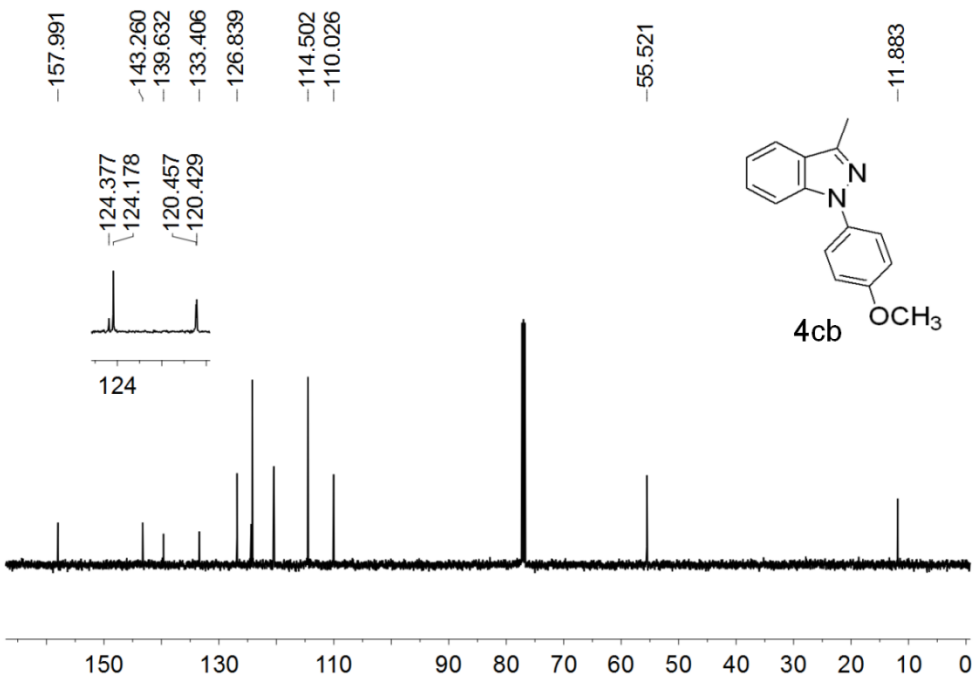
20.998
11.893
4bb
126
150
130
110
90
80
70
60
50
40
30
20
10
0


4cb
OCH3
0.93
2.88
0.98
0.98
1.95
3.07
3.00
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0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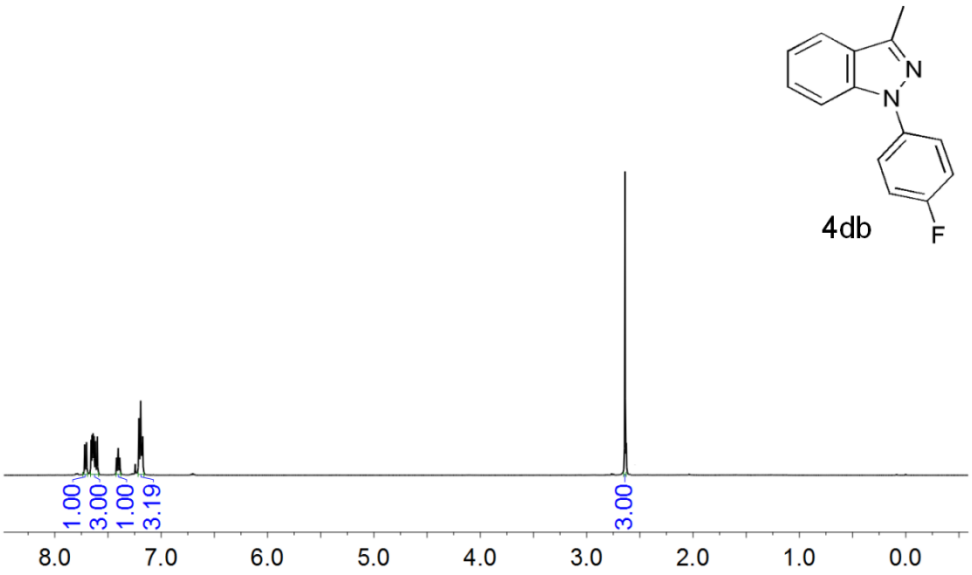
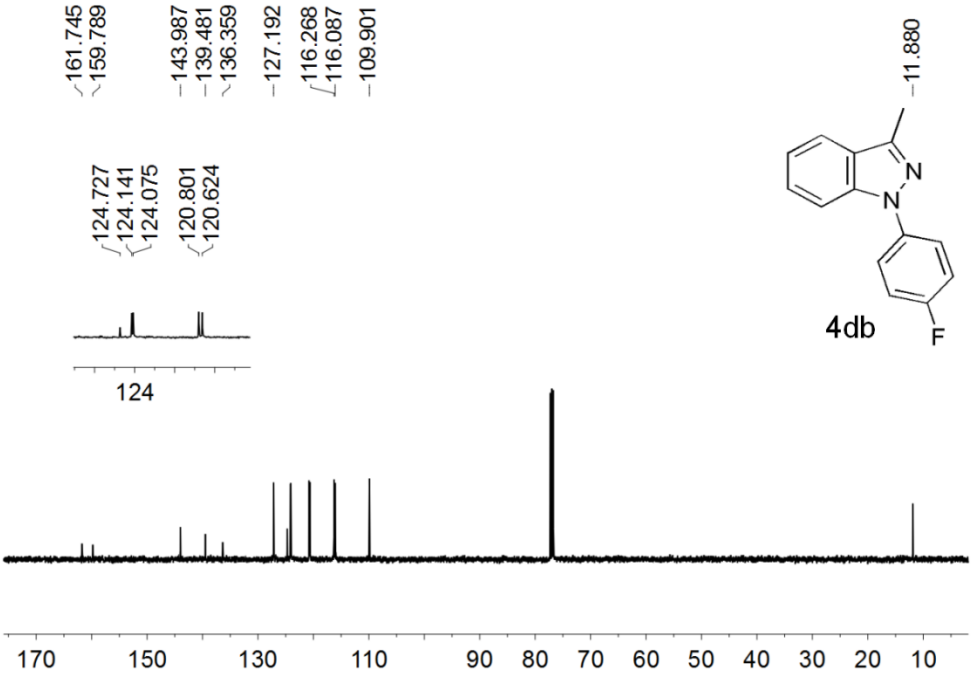
114.502
110.026
55.521
11.883
124.377
124.178
120.457
120.429
124
4cb
OCH3
150
130
110
90
80
70
60
50
40
30
20
10
0


4db
F
1.00
3.00
1.00
3.19
3.00
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0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116.087
109.901
124.727
124.141
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120.801
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4db
F
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80
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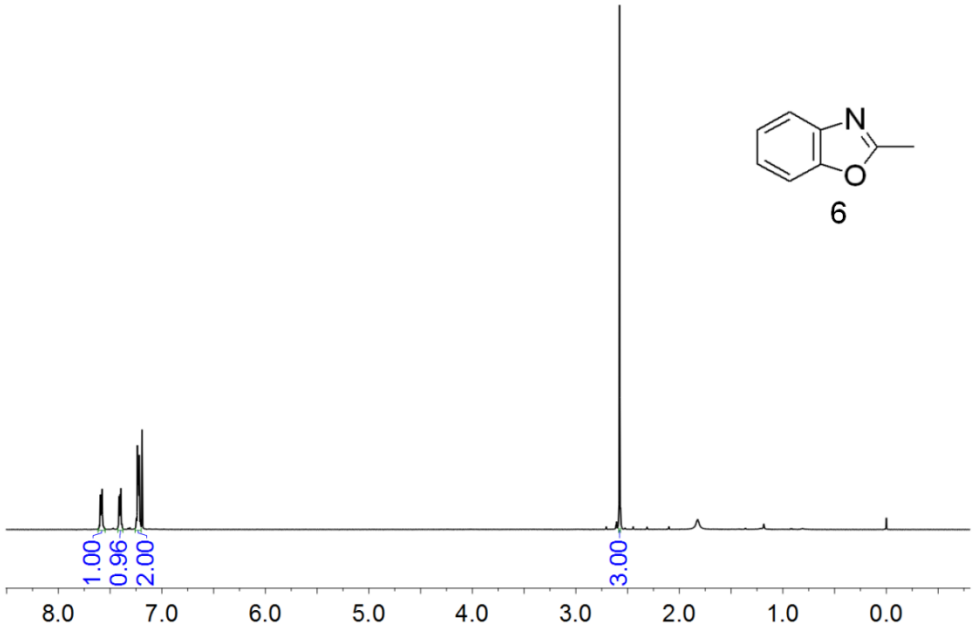
10


N
O
6
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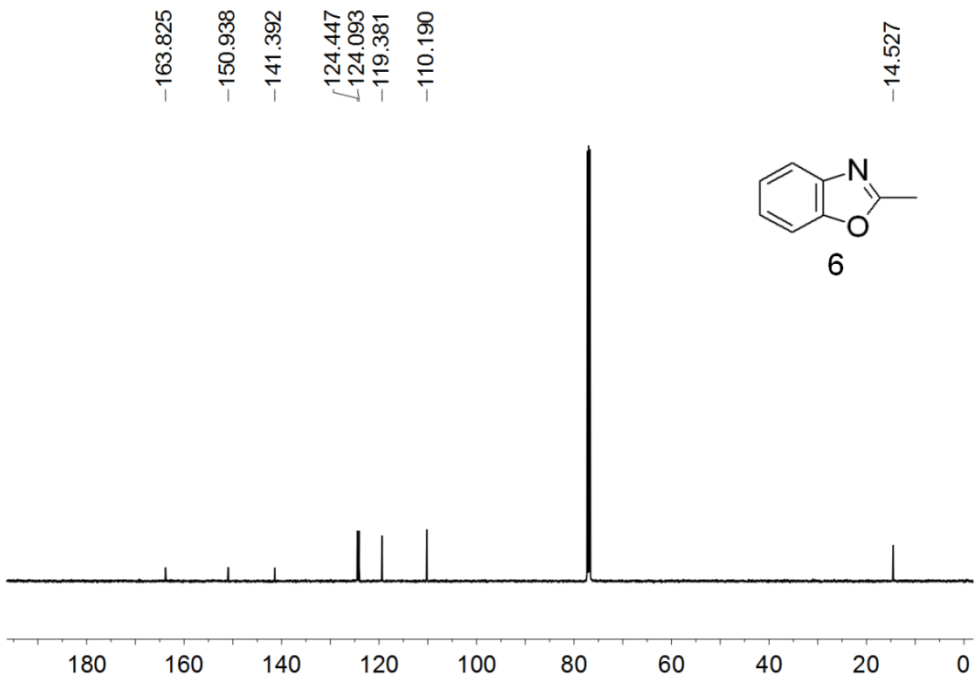
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0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141.392
124.447
124.093
119.381
110.190
14.527
N
O
6
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140
120
100
80
60
40
20
0