

Electronic Supplementary Information for

A new functionalized mesoporous matrix supported Pd(II)-Schiff base complex: an efficient catalyst for the Suzuki-Miyaura coupling reaction

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Spectroscopic Characterization (^1H , ^{13}C) of cross-coupled products:

All ^1H NMR (300 MHz), ^{13}C NMR (75 MHz) spectra were recorded on a Bruker-Avance DPX300 for a CDCl_3 solution and reported in ppm (δ).

Compound 1a:¹ (Table 2, entry 1) ^1H NMR (CDCl_3) δ 7.45-7.53 (m, 3H), 7.63 (d, $J = 9.0$ Hz, 2H), 7.74 (d, $J = 9.0$ Hz, 2H), 8.30 (d, $J = 9.0$ Hz, 2H); ^{13}C NMR (CDCl_3) δ 124.04, 127.34, 127.74, 128.89, 129.12, 138.69, 147.04, 147.56.

Compound 1b:² (Table 2, entry 2) ^1H NMR (CDCl_3) δ 7.43-7.54 (m, 3H), 7.59-7.64 (m, 3H), 7.93 (d, $J = 7.61$ Hz, 1H), 8.21 (d, $J = 8.25$ Hz, 1H), 8.45 (s, 1H); ^{13}C NMR (CDCl_3) δ 122.27, 122.42, 127.54, 128.98, 129.59, 130.15, 133.43, 138.99, 143.21, 149.12.

Compound 1c:² (Table 2, entry 3) ^1H NMR (CDCl_3) δ 7.41-7.51 (m, 3H), 7.62-7.65 (m, 2H), 7.70 (d, $J = 8.4$ Hz, 2H), 7.95 (d, $J = 8.22$ Hz, 2H), 10.06 (s, 1H); ^{13}C NMR (CDCl_3) δ 127.79, 128.11, 128.89, 129.43, 130.69, 135.60, 140.13, 147.62, 192.37.

Compound 1d:¹ (Table 2, entry 4) ^1H NMR (CDCl_3) δ 7.38-7.51 (m, 3H), 7.59-7.65 (m, 3H), 7.86 (dd, $J = 7.68, 1.53$ Hz, 2H), 8.11 (s, 1H), 10.09 (s, 1H); ^{13}C NMR (CDCl_3) δ 127.28, 128.14, 128.33, 128.75, 129.13, 129.62, 133.18, 137.06, 139.83, 142.30, 192.44.

Compound 1e:² (Table 2, entry 5) ^1H NMR (CDCl_3) δ 7.39-7.69 (m, 8H), 8.06 (d, $J = 7.80$ Hz, 1H), 10.01 (s, 1H); ^{13}C NMR (CDCl_3) δ 127.66, 127.87, 128.22, 128.53, 130.20, 130.87, 133.66, 133.82, 137.85, 146.07, 192.53.

Compound 1f:² (Table 2, entry 6) ^1H NMR (CDCl_3) δ 2.64 (s, 3H), 7.38-7.50 (m, 3H), 7.62-7.70 (m, 4H), 8.04 (d, $J = 8.29$ Hz, 2H); ^{13}C NMR (CDCl_3) δ 26.76, 127.31, 127.37, 128.34, 129.02, 129.06, 135.94, 139.95, 145.86, 197.86.

Compound 1g:² (Table 2, entry 7) ^1H NMR (CDCl_3) δ 7.39-7.44 (m, 2H), 7.47-7.54 (m, 4H), 7.64-7.69 (m, 4H); ^{13}C NMR (CDCl_3) δ 127.18, 127.26, 128.77, 141.25.

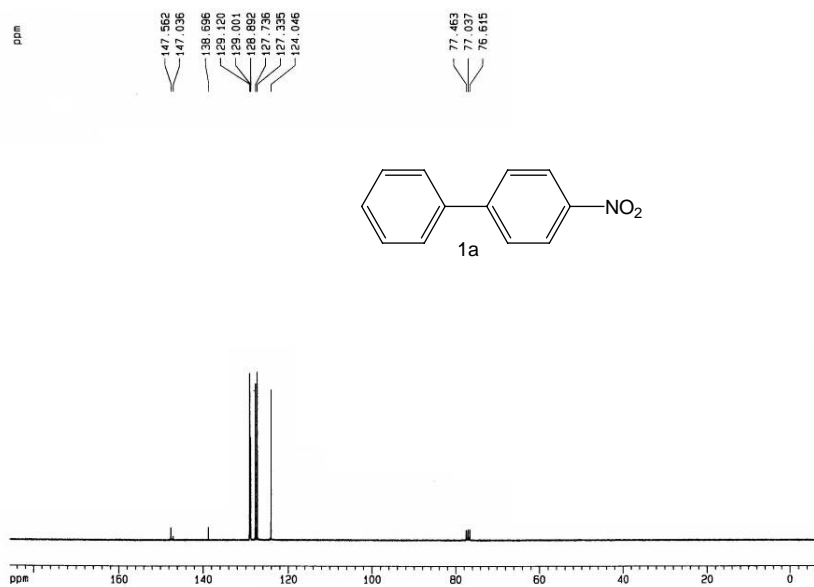
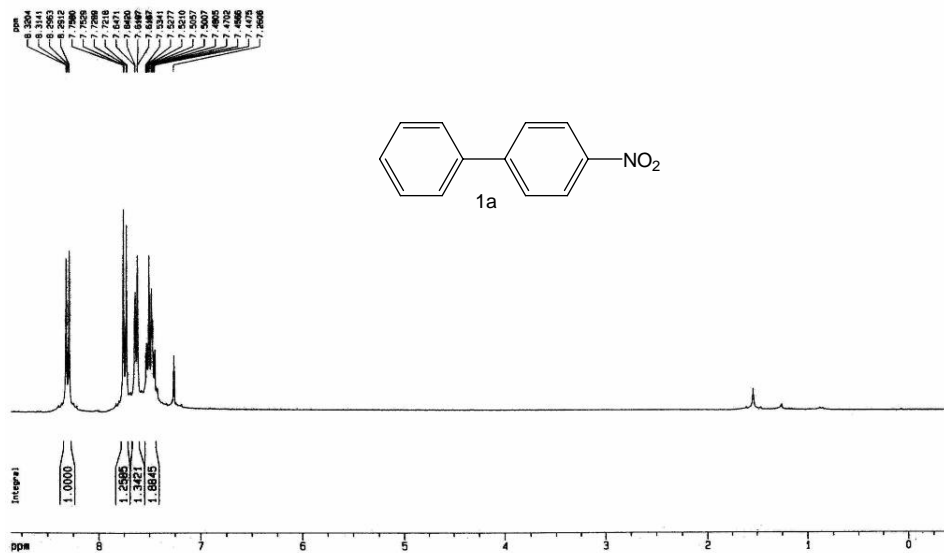
Compound 1h:³ (Table 2, entry 8) ¹H NMR (CDCl₃) δ 3.90 (s, 3H), 6.95 (dd, *J* = 8.07, 2.0 Hz, 1H), 6.97-7.25 (m, 2H), 7.38-7.42 (m, 2H), 7.49 (t, *J* = 7.6 Hz, 2H), 7.65 (d, *J* = 7.24 Hz, 2H); ¹³C NMR (CDCl₃) δ 55.37, 112.78, 113.01, 119.79, 127.30, 127.52, 128.84, 129.86, 141.21, 142.87, 160.05.

Compound 1i:¹ (Table 2, entry 9) ¹H NMR (CDCl₃) δ 3.87 (s, 3H), 7.00 (d, *J* = 8.65 Hz, 2H), 7.32 (t, *J* = 7.18 Hz, 1H), 7.43 (t, *J* = 7.28 Hz, 2H), 7.54-7.59 (m, 4H); ¹³C NMR (CDCl₃) δ 55.48, 114.35, 126.79, 126.88, 128.29, 128.86, 133.93, 140.98, 159.29.

Compound 1j:² (Table 2, entry 10) ¹H NMR (CDCl₃) δ 2.26 (s, 3H), 7.17-7.25 (m, 4H), 7.29-7.34 (m, 3H), 7.37-7.42 (m, 2H); ¹³C NMR (CDCl₃) δ 20.59, 125.88, 126.88, 127.37, 128.18, 129.31, 129.92, 130.43, 135.46, 142.06, 142.09.

Compound 1k:⁴ (Table 2, entry 11) ¹H NMR (CDCl₃) δ 2.34 (s, 3H), 7.09 (d, *J* = 7.2 Hz, 1H), 7.16-7.38 (m, 6H), 7.51 (d, *J* = 7.53 Hz, 2H); ¹³C NMR (CDCl₃) δ 21.96, 124.68, 127.57, 127.59, 128.39, 128.41, 129.07, 129.10, 138.73, 141.65, 141.77.

Compound 1l:² (Table 2, entry 12) ¹H NMR (CDCl₃) δ 2.34 (s, 3H), 7.19 (d, *J* = 7.57 Hz, 2H), 7.26-7.34 (m, 1H), 7.37 (t, *J* = 7.22 Hz, 2H), 7.44 (d, *J* = 7.59, 2H), 7.52 (d, *J* = 7.34, 2H); ¹³C NMR (CDCl₃) δ 21.24, 127.11, 127.14, 128.85, 129.62, 137.16, 138.50, 141.31.

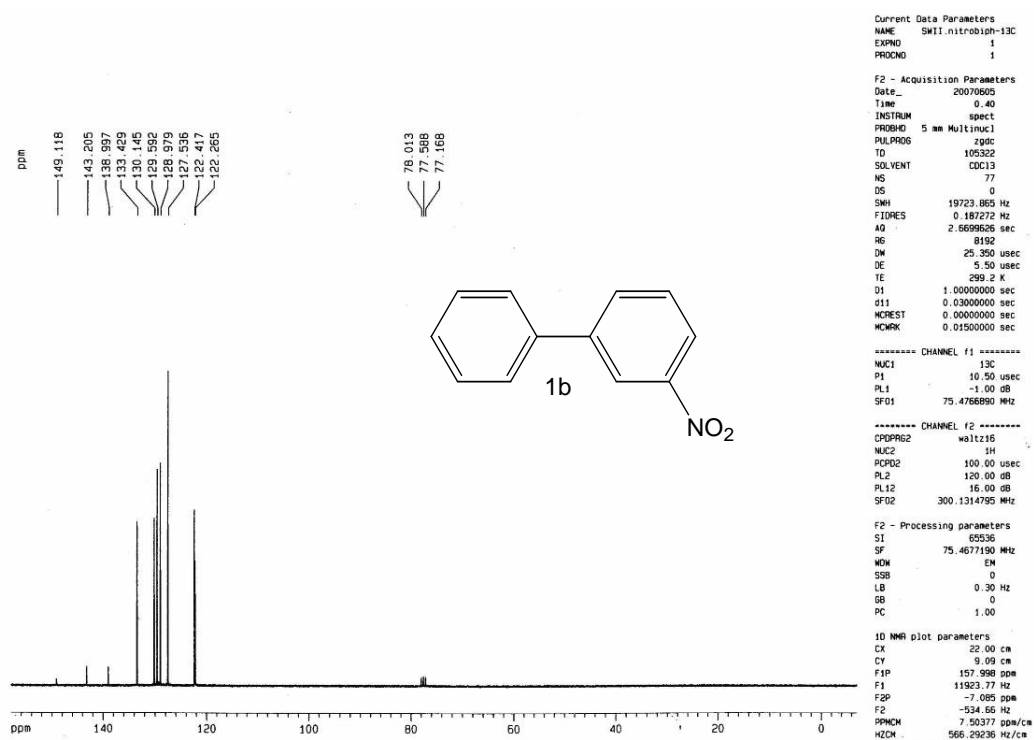
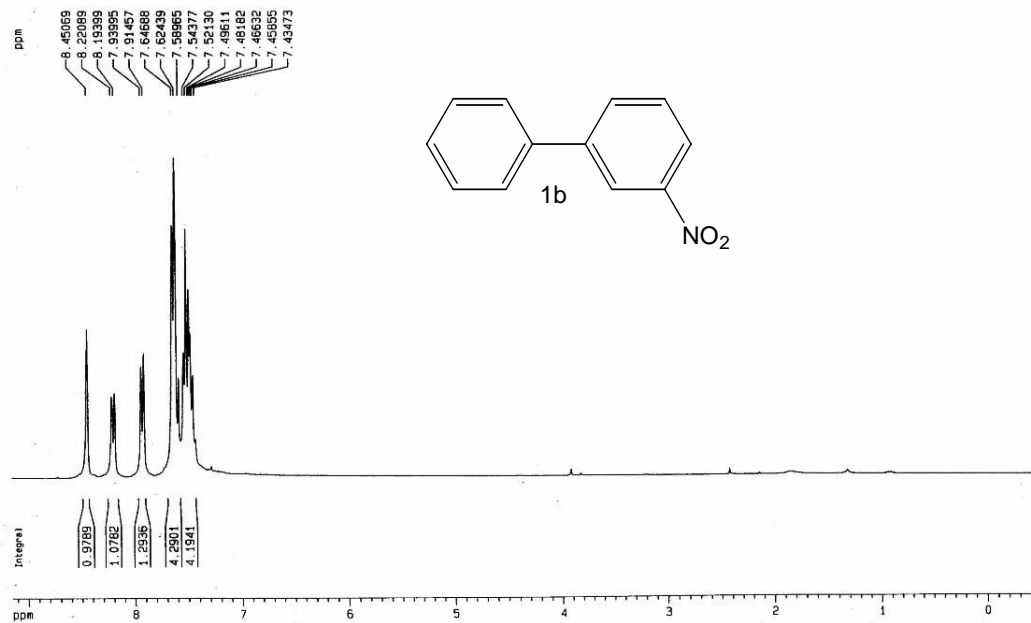


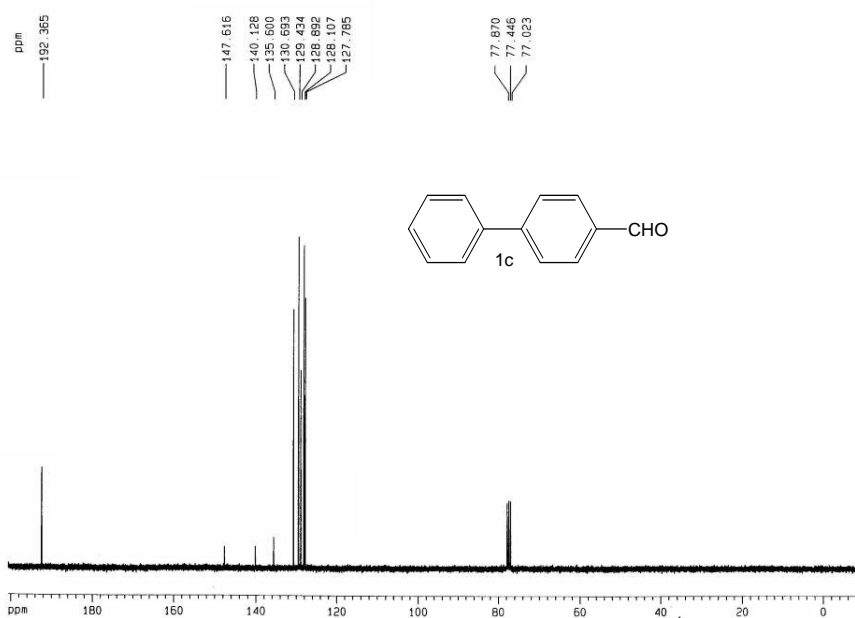
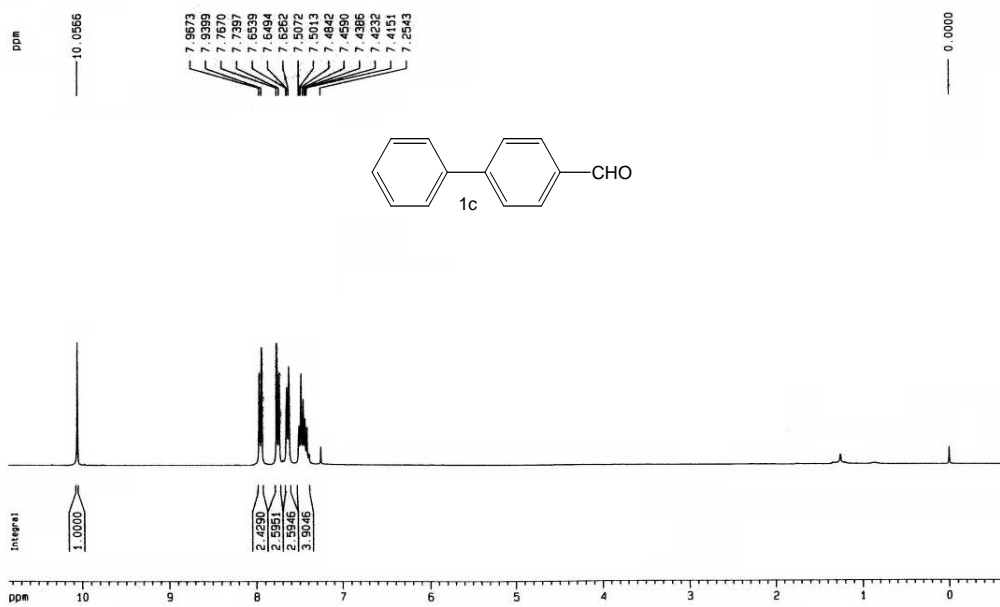
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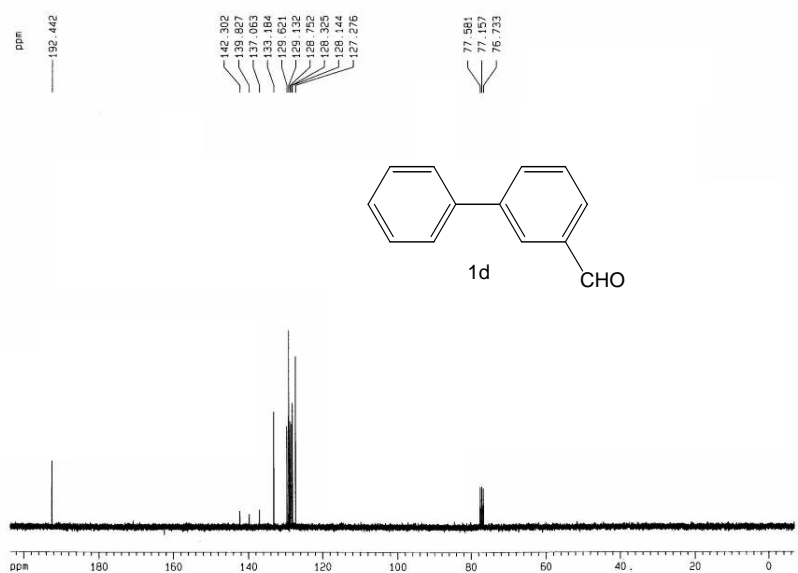
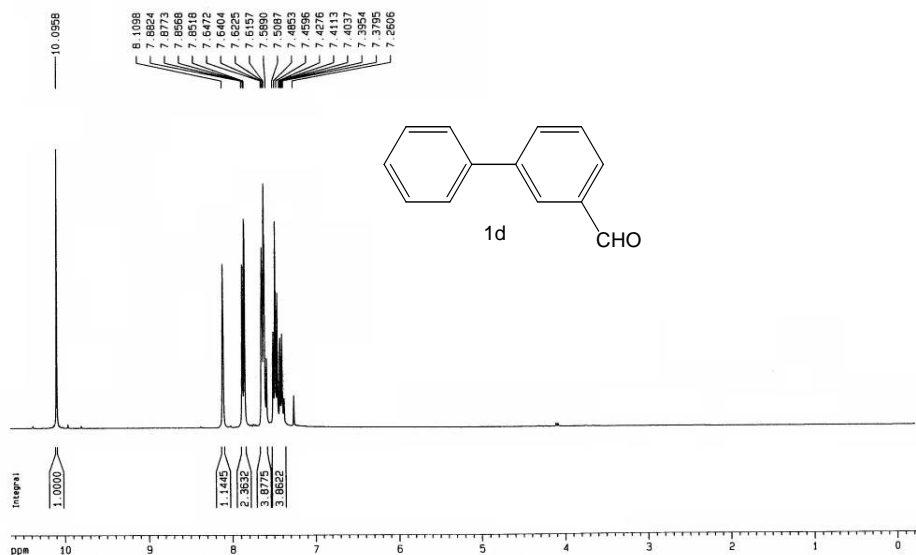
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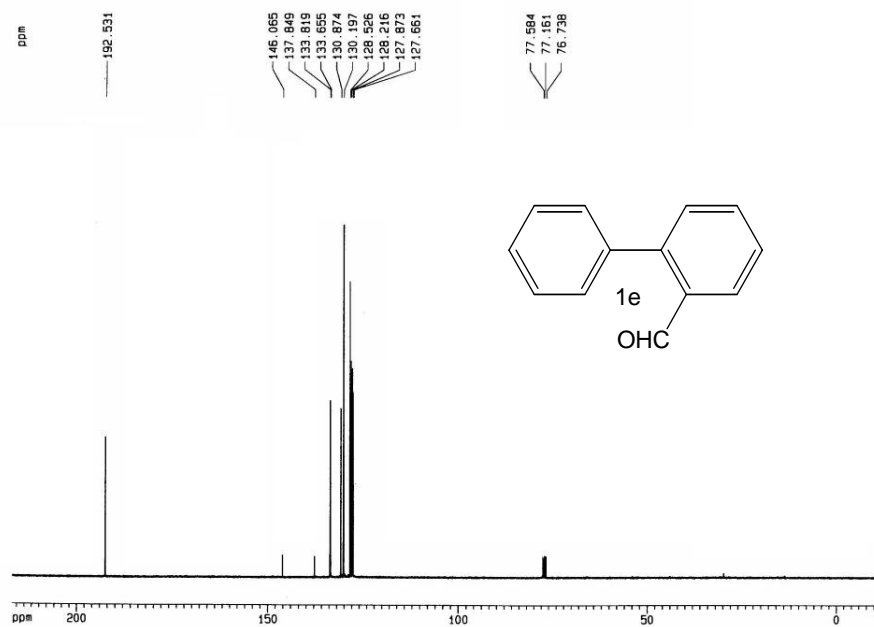
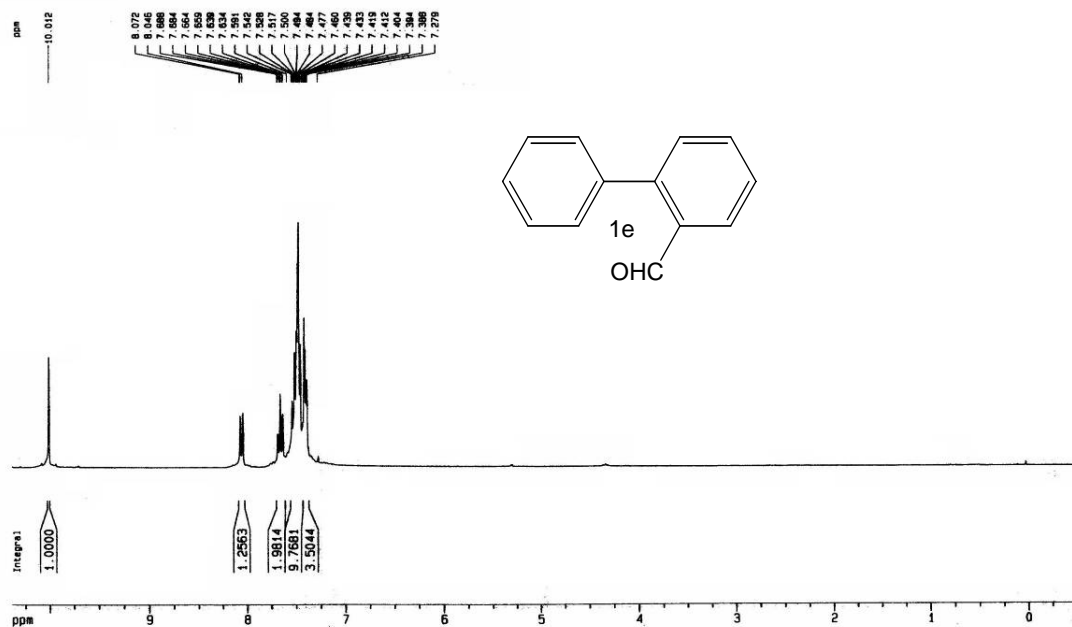
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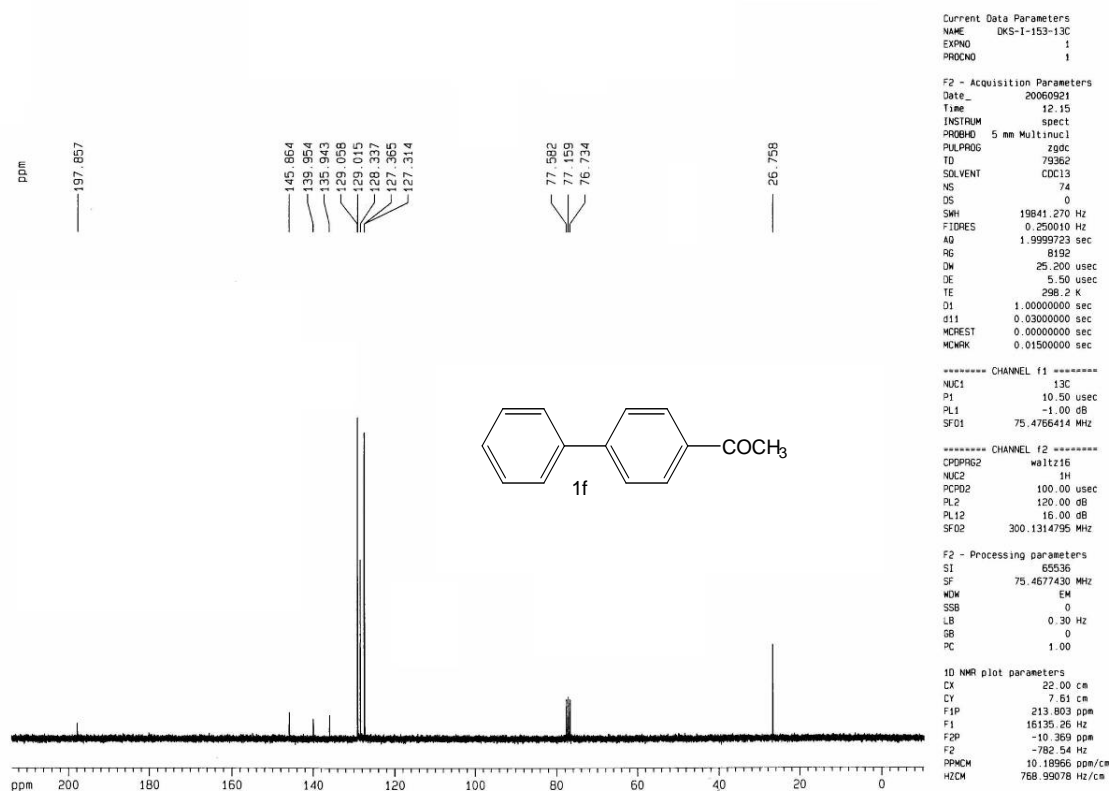
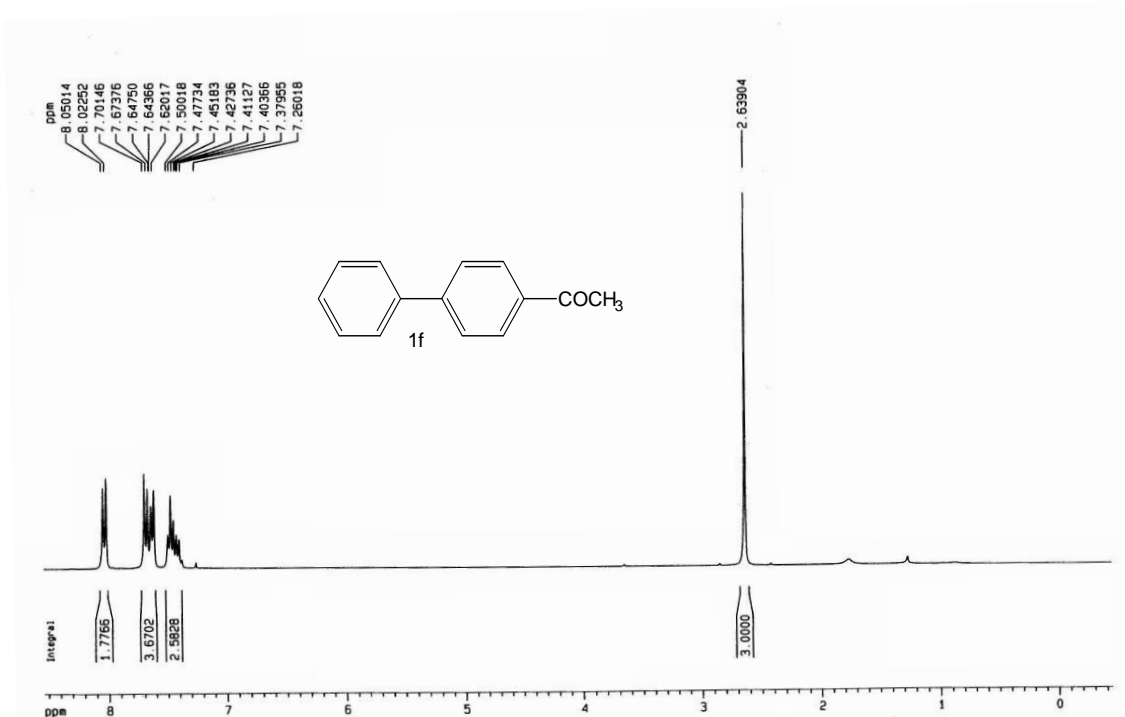


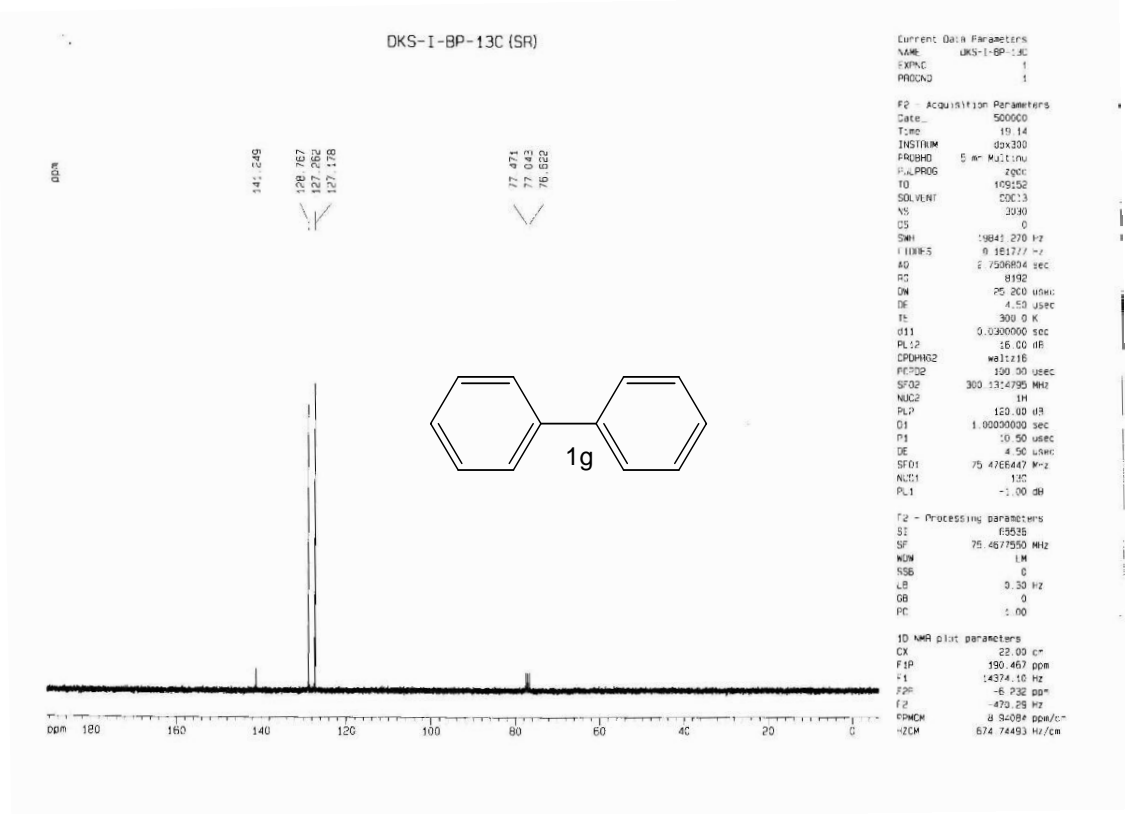
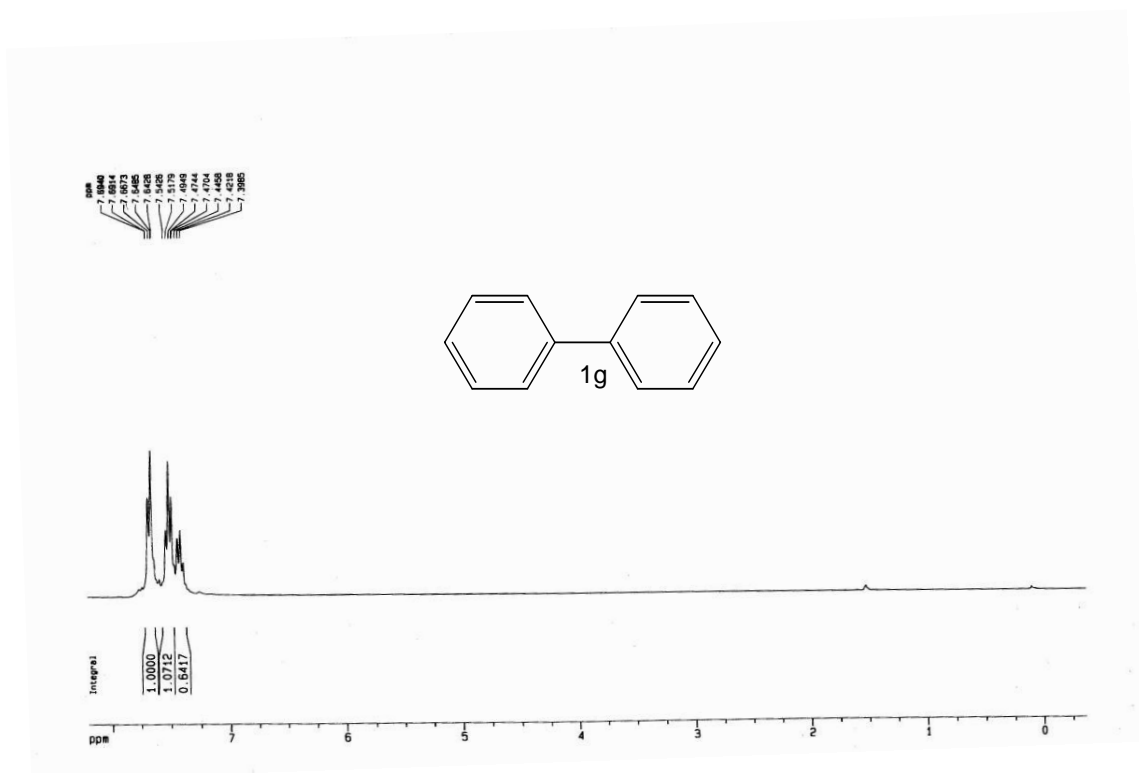
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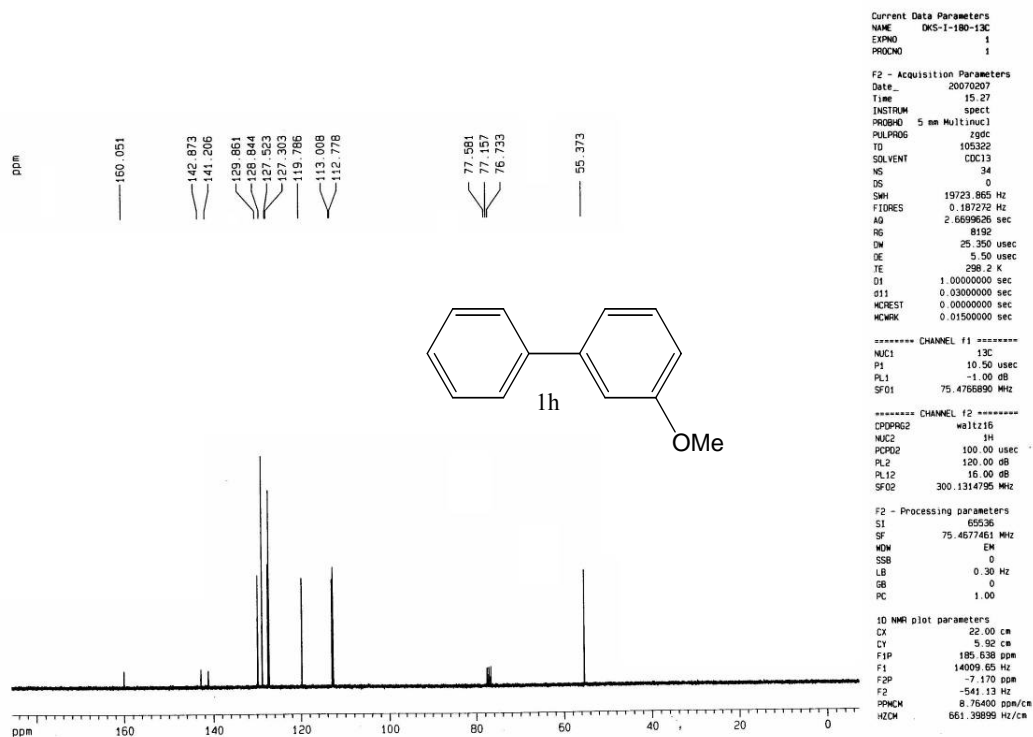
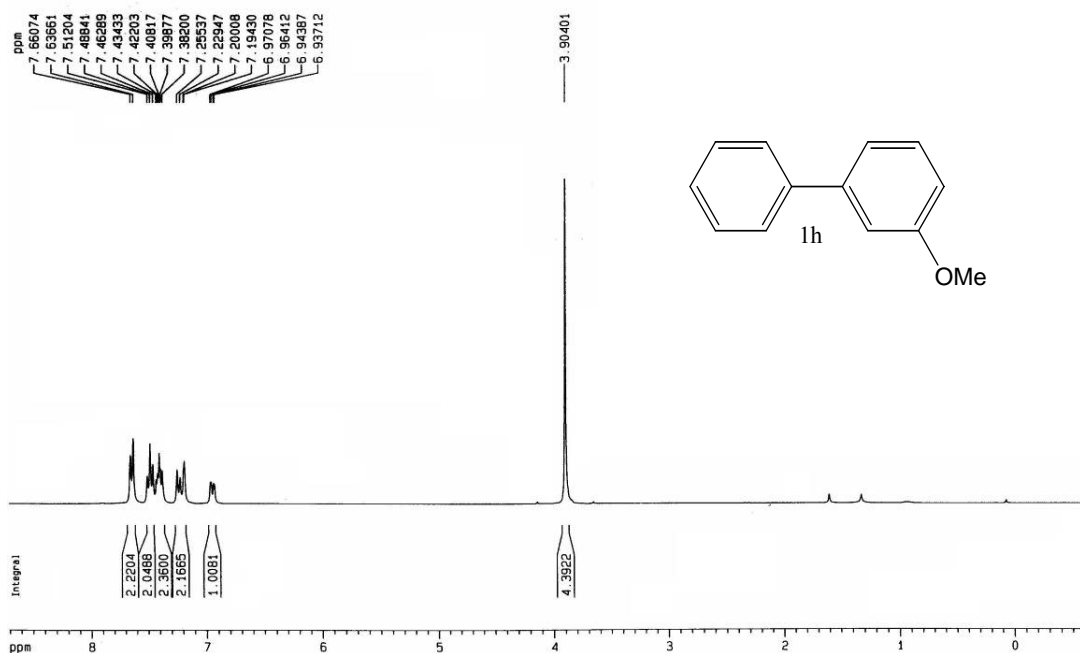
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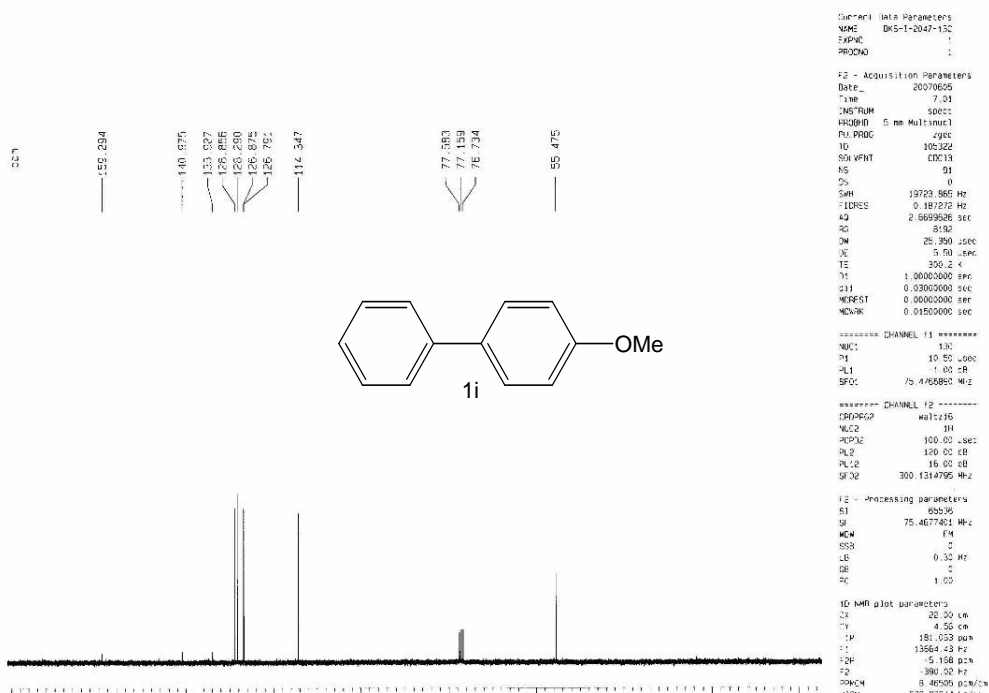
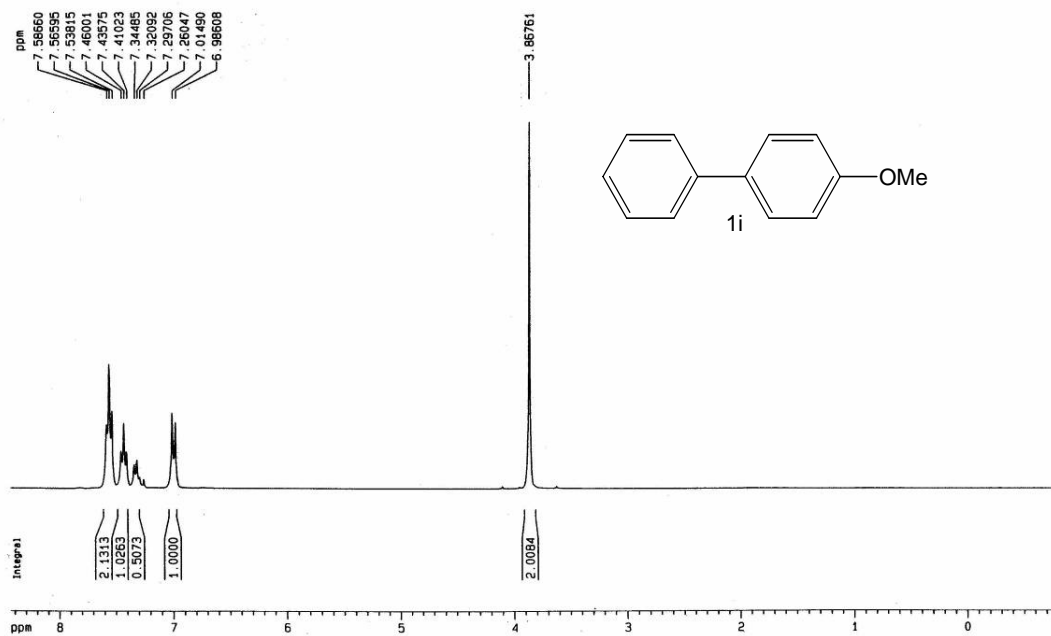
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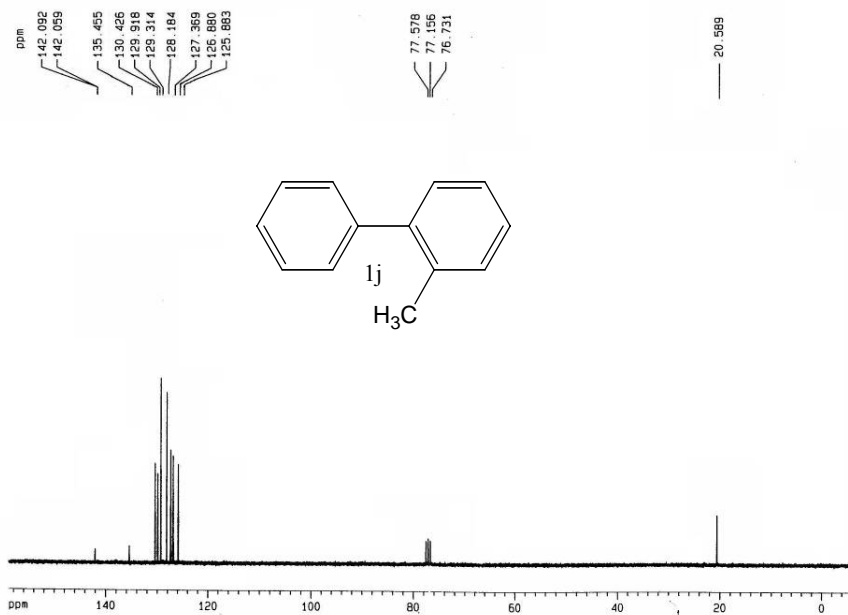
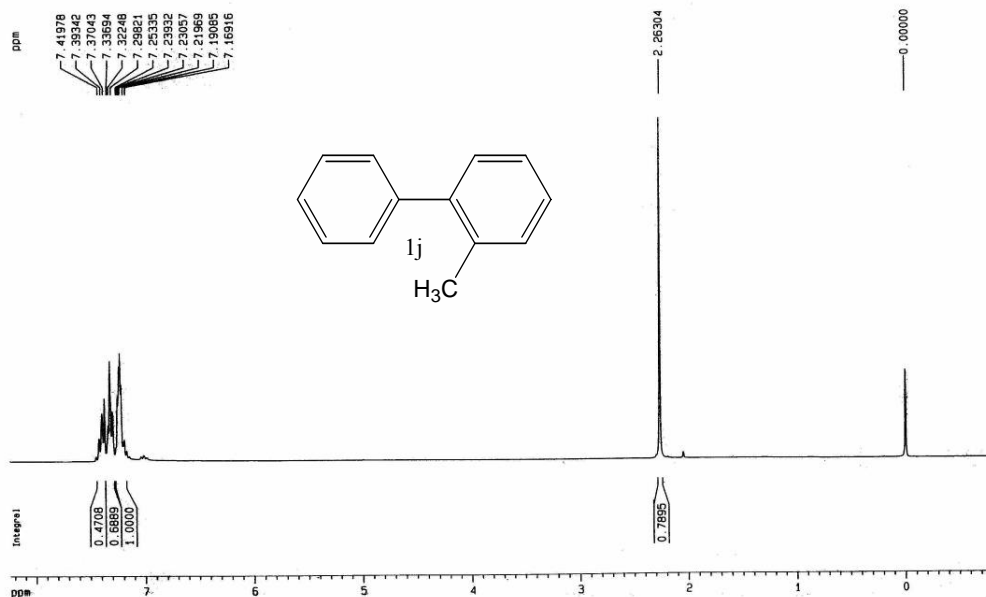
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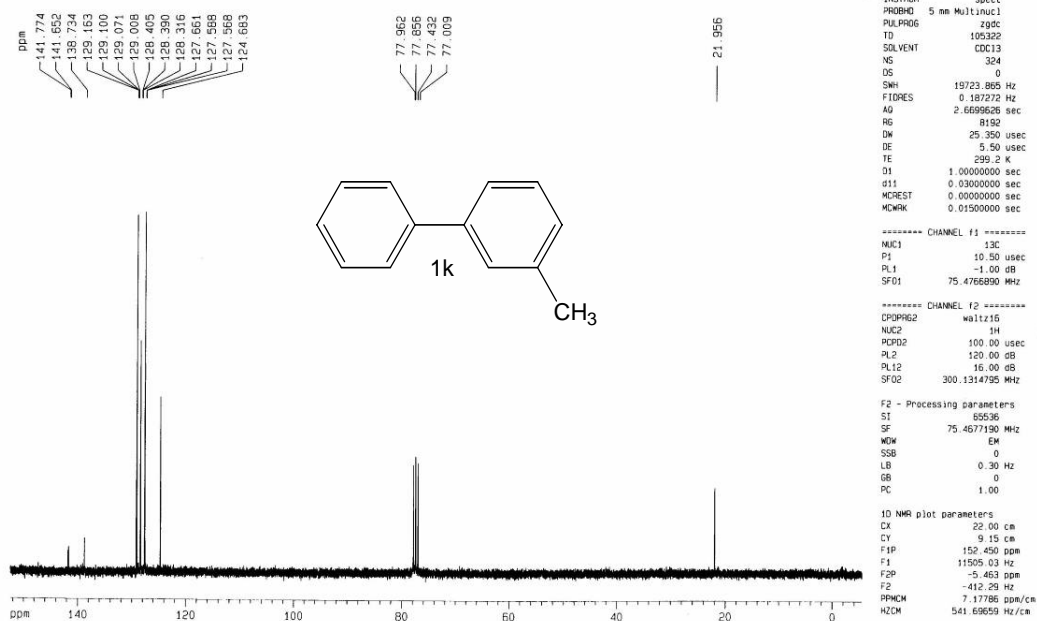
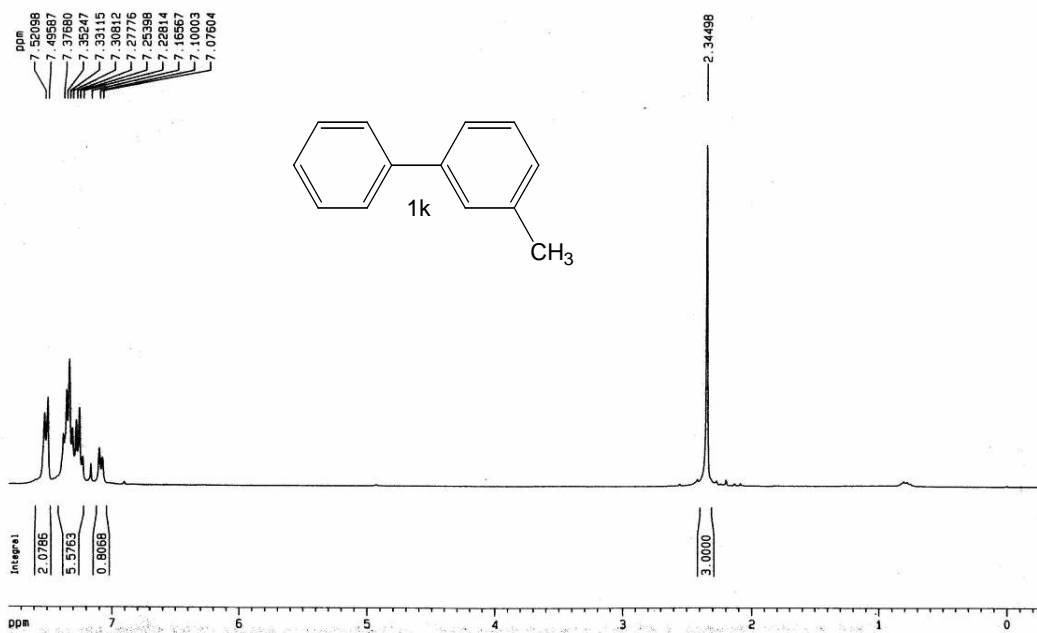
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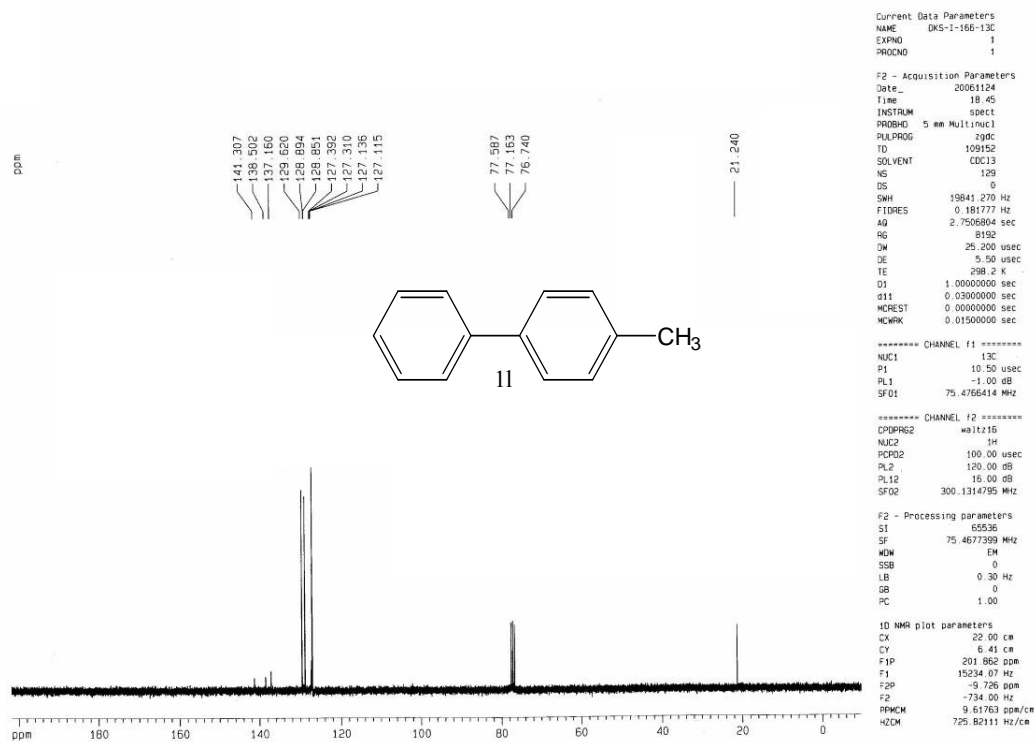
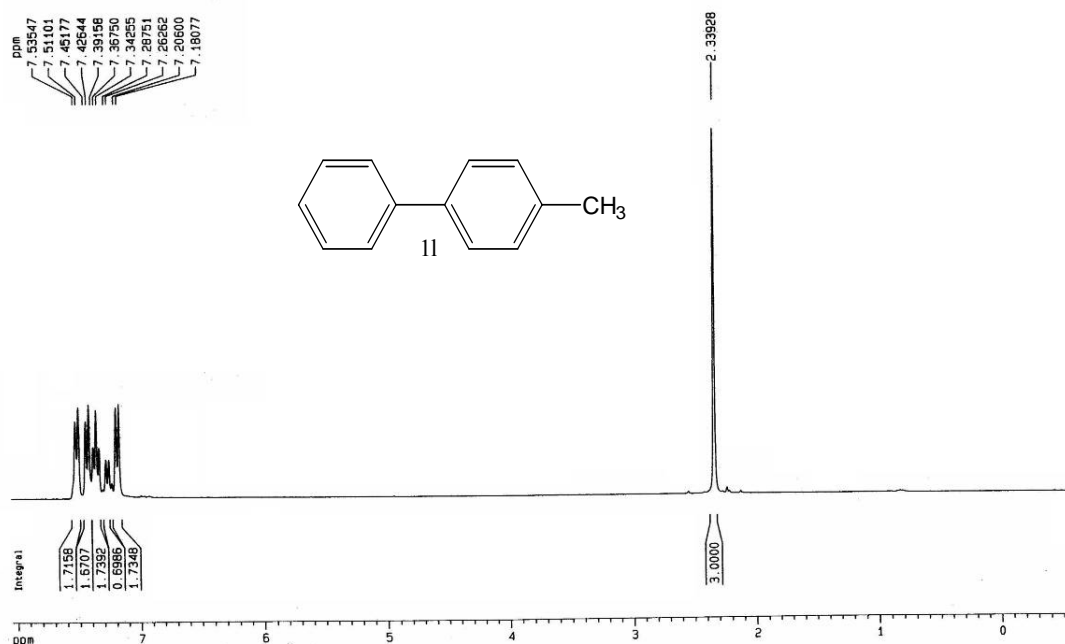
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References:

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- 2 L. Wu, B.-L. Li, Y.-Y. Huang, H.-F. Zhou, Y.-M. He and Q.-H. Fan, *Org. Lett.*, 2006, **8**, 3605-3608.
- 3 T. Mino, Y. Shirae, M. Sakamoto and T. Fujita, *J. Org. Chem.*, 2005, **70**, 2191-2194.
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