Supporting Information for

Cyclopentadienyl *N*-Heterocyclic Carbene-Nickel Complexes as Efficient Pre-Catalyst for the Hydrosilylation of Imines

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I. General information

All reagents were obtained from commercial sources and used as received. All reactions were carried out under argon atmosphere. THF was distilled following conventional methods and stored under an argon atmosphere. Toluene and pentane were dried over Braun MB-SPS-800 solvent purification system. Technical grade petroleum ether (40-60°C bp) and diethylether were used for chromatography column.

Solution NMR spectra were recorded at 298 K on FT-Bruker Ultra Shield 300, FT-Bruker Spectrospin 400 (Univ. of Strasbourg), FT-Bruker AVANCE I 300 and 400 (Univ. of Rennes I) spectrometers operating at 300.13 or 400.14 MHz for ^{1}H and at 75.47 or 100.61 MHz for $^{13}C\{^{1}H\}$. The chemical shifts are referenced to residual deuterated solvent peaks (^{1}H NMR: $CDCl_3$, 7.26 ppm; THF-d_8, left peak at 3.58 ppm; ^{13}C NMR: $CDCl_3$, central peak at 77.00 ppm). Chemical shifts (δ) and coupling constants (*J*) are given in ppm and in Hz, respectively. The peak patterns are indicated as follows: (s, singlet; d, doublet; t, triplet; q, quartet; m, multiplet, and br. for broad).

HR-MS spectra and elemental analysis were carried out by the corresponding facilities at the CRMPO (Centre Régional de Mesures Physiques de l'Ouest), University of Rennes1.
FTIR spectra were recorded on an IR-ATR Affinity-1 Shimadzu apparatus.

[Ni(Mes_2NHC)HCp] (**1**),[1] [Ni(Mes_2NHC)ClCp] (**2**)[2] and [Ni(Mes_2NHC)($NCCH_3$)Cp](PF_6) (**3**)[3] were prepared according to published methods.

II. ^{1}H NMR data of [Ni(Mes$_2$NHC)HCp] (1), [Ni(Mes$_2$NHC)(NCMe)Cp](PF$_6$) (3) and Ph$_2$SiH$_2$ in THF-d_8

The ^{1}H NMR data of **1**, **3** and Ph_2SiH_2 in THF-d_8 are given for a comparison purpose with the spectrum of the reaction medium between **3** and Ph_2SiH_2 given in section III.

[Ni(Mes$_2$NHC)HCp] (1)

^{1}H NMR (300.13 MHz, 298 K, THF-d_8): δ 7.00 (s, 2H, NC*H*), 6.98 (s, 4H, *m*-H), 4.46 (s, 5H, C_5H_5), 2.34 (s, 6H, *p*-CH_3), 2.07 (s, 12H, *o*-CH_3), - 24.04 (s, 1H, Ni-*H*).

[Ni(Mes$_2$NHC)(NCMe)Cp](PF$_6$) (3)

^{1}H NMR (400.14 MHz, 298 K, THF-d_8): δ 7.57 (s, 2H, NC*H*), 7.20 (s, 4H, *m*-H), 4.81 (s, 5H, C_5H_5), 2.41 (s, 6H, *p*-CH_3), 2.17 (s, 15H, *o*-CH_3 and NCMe).

Ph$_2$SiH$_2$

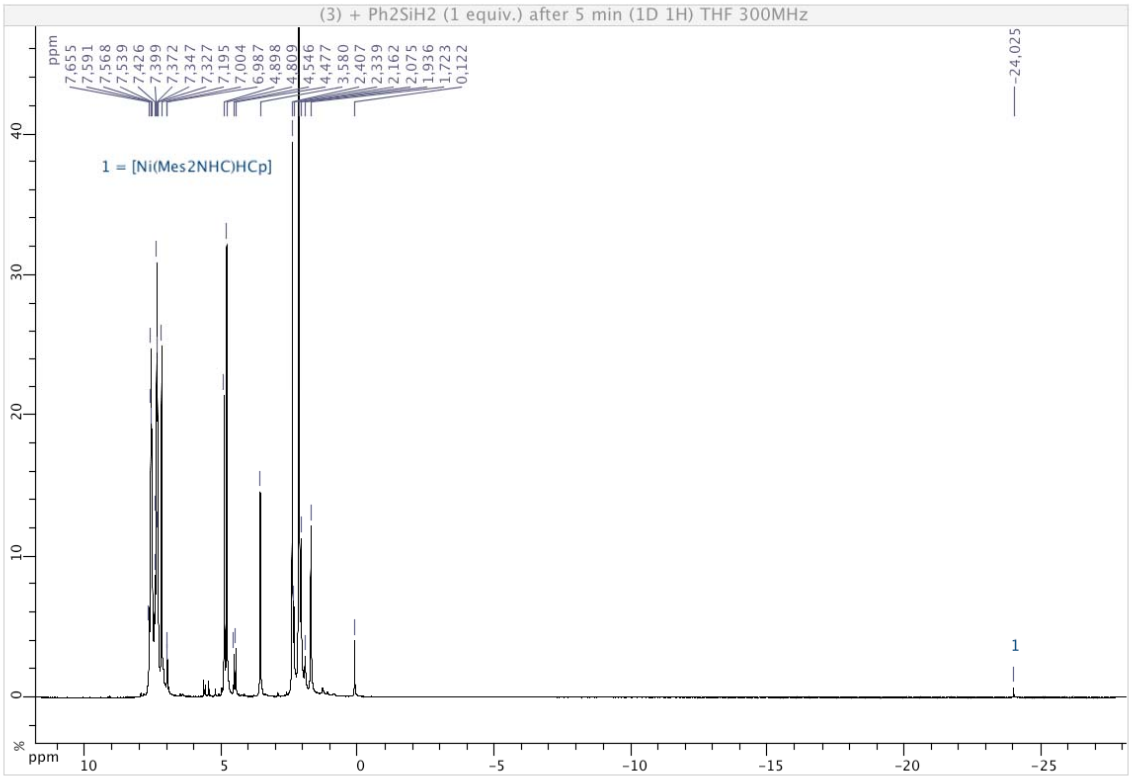
^{1}H NMR (400.14 MHz, 298 K, THF-d_8): δ 7.58 (dd, ^3J = 7.8, ^4J = 1.6, 4H, Ph), 7.41-7.32 (m, 6H, Ph), 4.90 (s, 2H, SiH_2)

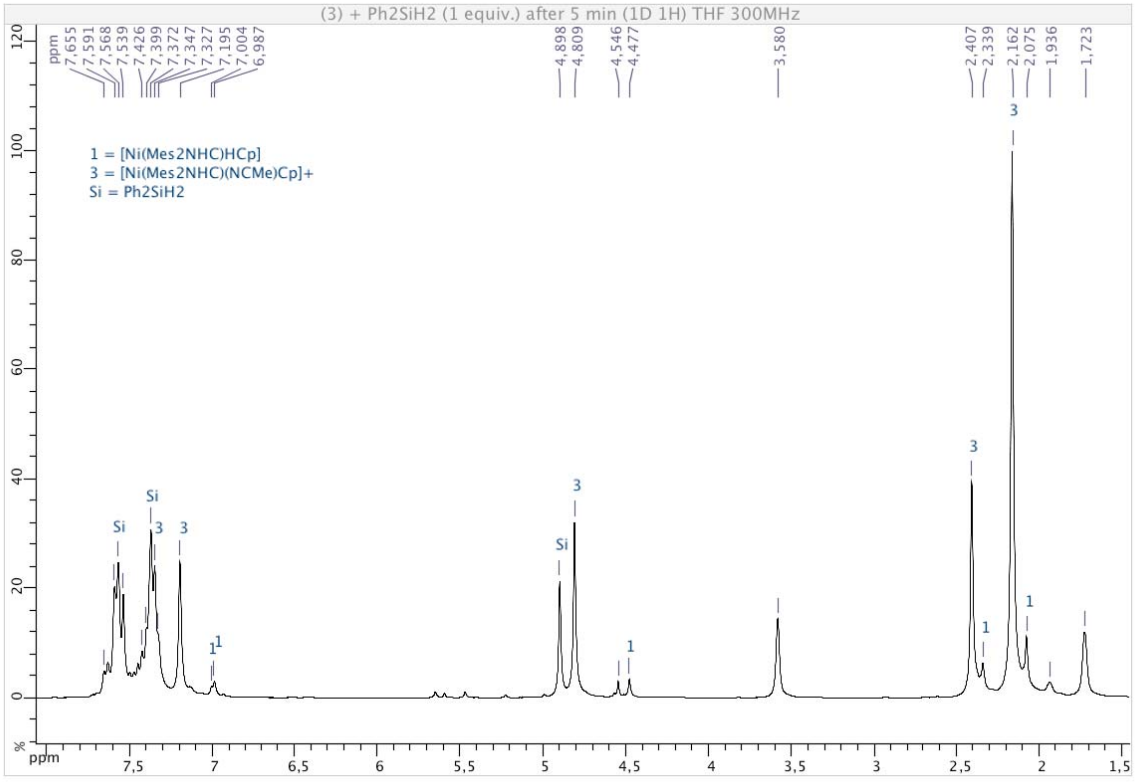
III. Reactions of [Ni(Mes$_2$NHC)(NCMe)Cp](PF$_6$) (3) and Ph$_2$SiH$_2$ in THF-d_8

To a solution of [Ni(Mes$_2$NHC)(NCMe)Cp](PF$_6$) **3** (33 mg, 54.3 x 10^{-3} mmol) in THF-d_8 (0.5 mL) placed in an NMR tube was added freeze-pump-thaw degassed Ph_2SiH_2 (5 µL, 27.1 x 10^{-3} mmol for 0.5 equiv.; 10 µL, 54.3 x 10^{-3} mmol for 1 equiv.). A slight color change from dark green to dark red immediately occurred, as well as a gas release. The reactions were then either conducted at RT or 50°C, and monitored by ^{1}H NMR spectroscopy. For the reactions run at RT, the first spectra were recorded after *ca.* 5-10 min, and then regularly until all Ph_2SiH_2 was consumed, i.e. after 6 to 22 h. For the reactions run at 50°C, the first spectra were recorded after *ca.* 5 min at RT, and then every 10 min at 50°C for 40 min. In all cases, all Ph_2SiH_2 was consumed after 20 min.

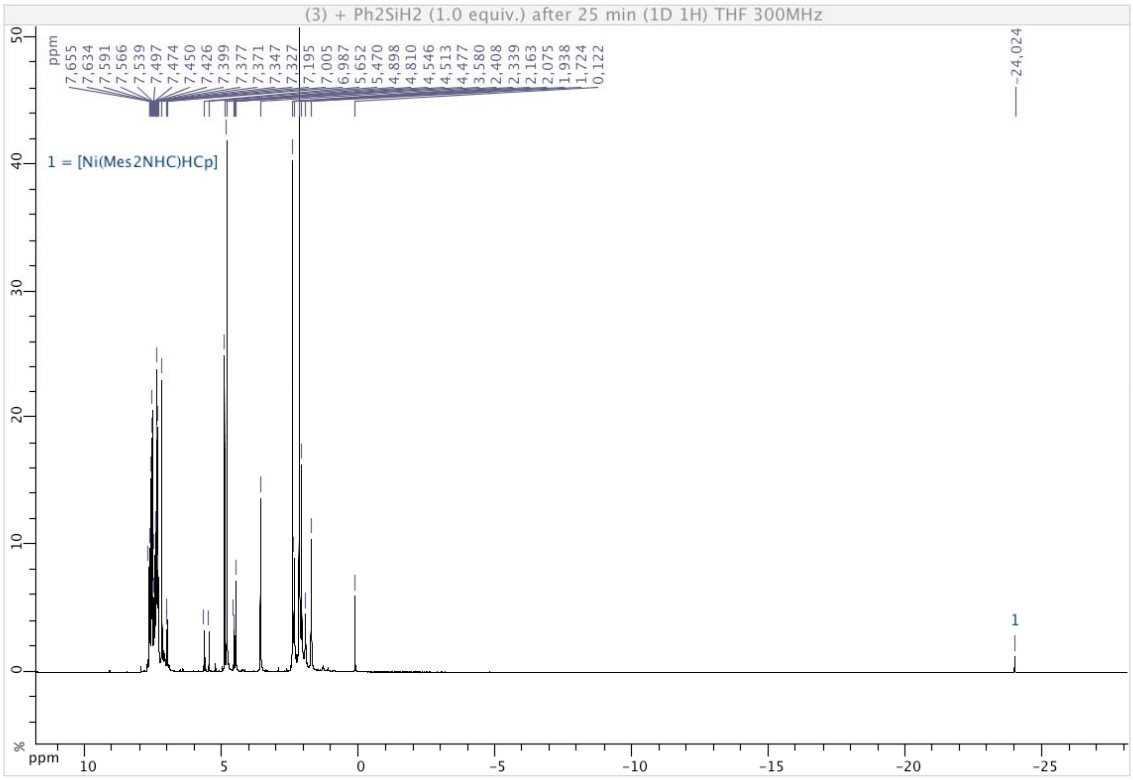
We show here three spectra of the reaction of **3** with 1.0 equiv. of Ph_2SiH_2 at RT; after 5 min, 25 min and 22 h.

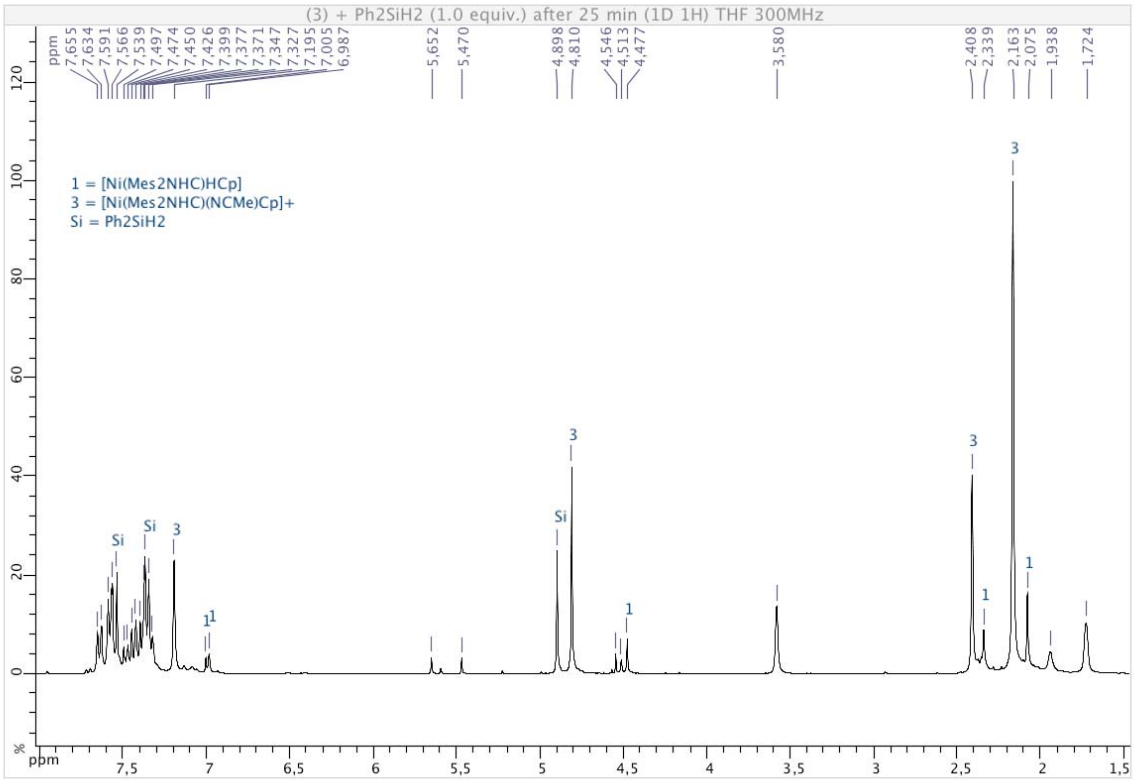
Spectrum after 5 min reaction at RT between (3) and Ph_2SiH_2 (1.0 equiv.)



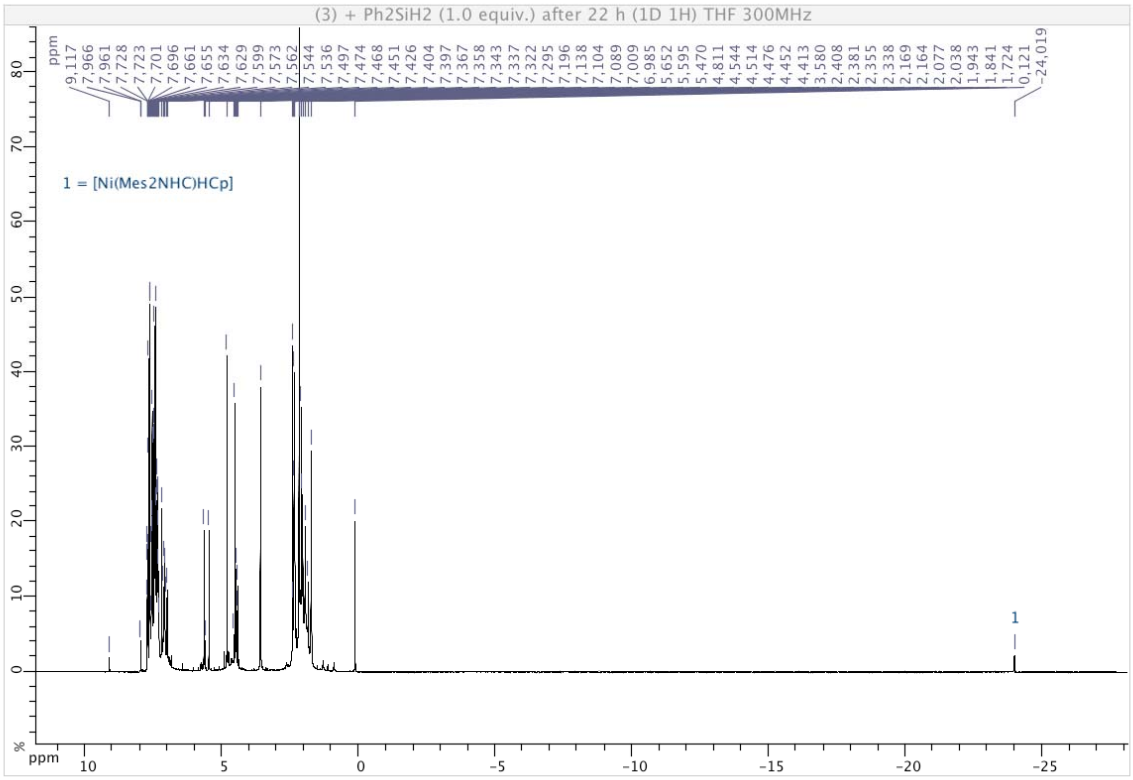


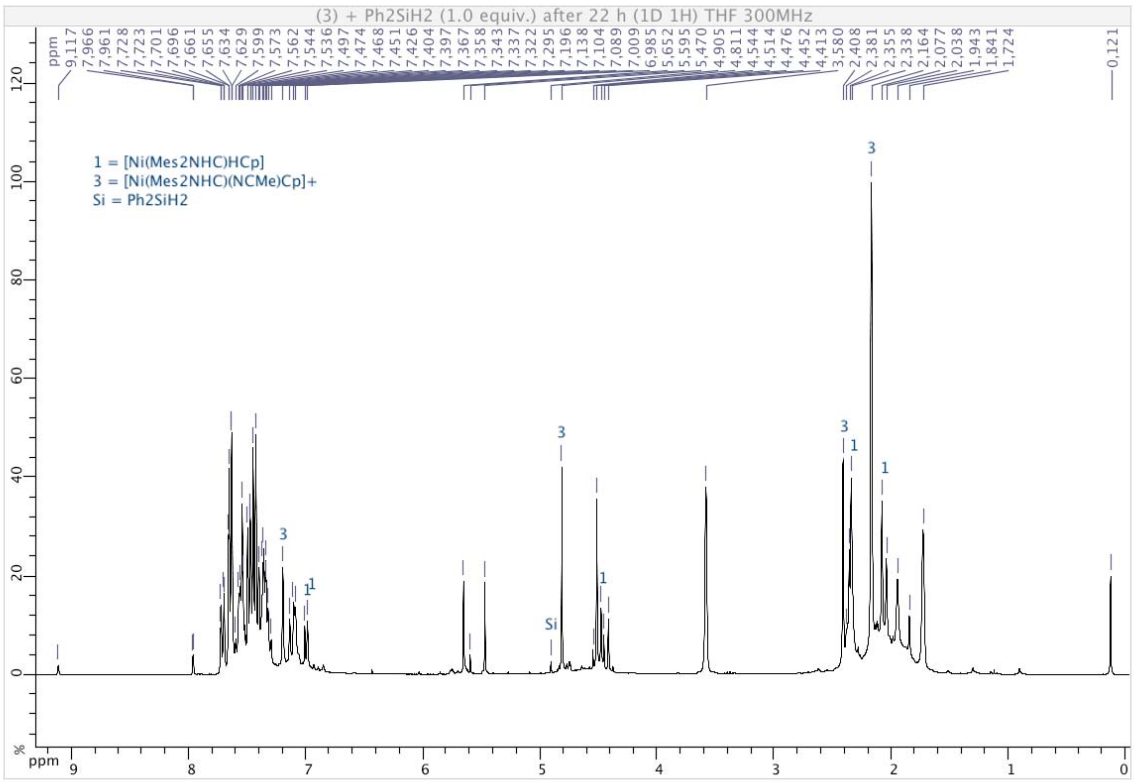
Spectrum after 25 min reaction at RT between (3) and Ph_2SiH_2 (1.0 equiv.)





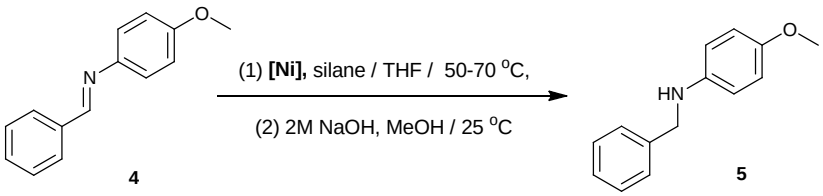
Spectrum after 22 h reaction at RT between (3) and Ph_2SiH_2 (1.0 equiv.)





IV. Optimisation of various parameters

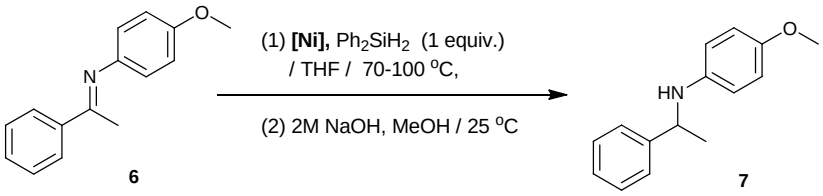
a) Influence of the silane



Entry[a]	Catalyst (mol%)	Silane (equiv.)	Solvent	Temp	Time (h)	Conversion (%)[b]
1	**3**(1)	Ph_2SiH_2 (1 equiv.)	THF	50 °C	24	> 98%
2	**3**(1)	TMDS (2 equiv.)	THF	70 °C	24	0
3	**3**(1)	PMHS (4 equiv.)	THF	70 °C	24	30%

[a] *Typical procedure:* To a solution of **3** (6.1 mg, 1 mol%) in THF (4 mL) at RT was added **4** (1 mmol) and the silane (1-4 equiv.) and the reaction mixture was stirred at 50 or 70 °C for 24 h. [b] Conversions determined by ^{1}H NMR after methanolysis: MeOH (2 mL), 2M NaOH (2 mL), RT, 2 h. and extraction with Et_2O.

b) Influence of the solvent



Entry[a]	Catalyst (mol%)	Silane (equiv.)	Solvent	Temp	Time (h)	Conversion (%)[b]
1	**3**(5)	Ph_2SiH_2 (2 equiv.)	THF	70 °C	24	> 98%
2	**3**(5)	Ph_2SiH_2 (1 equiv.)	THF	70 °C	24	85%
3	**3**(5)	Ph_2SiH_2 (1 equiv.)	2-Me-THF	80 °C	24	60%
4	**3**(5)	Ph_2SiH_2 (1 equiv.)	Toluene	100 °C	24	20%
5	**3**(1)	Ph_2SiH_2(1 equiv.)	CH_3CN	70 °C	24	0%
6	**2** (1) [c]	Ph_2SiH_2(1 equiv.)	CH_3CN	70 °C	24	0%

[a] *Typical procedure:* To a solution of **3** or **2** in the solvent (4 mL) at RT was added **6** (1 mmol) and the Ph_2SiH_2 (1 - 2 mmol) and the reaction mixture was stirred at 70, 80 or 100 °C for 24 h. [b] Conversions determined by ^{1}H NMR after methanolysis: MeOH (2 mL), 2M NaOH (2 mL), RT, 2 h. and extraction with Et_2O.[c] KPF_6 (2 mol%) was added.

V. General procedures for the nickel-catalyzed hydrosilylation reactions

*a) Typical Procedure for the Hydrosilylation of Aldimines with [Ni(Mes$_2$NHC)ClCp] (**2**) and NaHBEt$_3$*

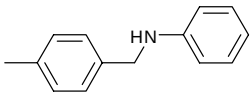
A 10 mL oven dried Schlenk tube containing a stirring bar is loaded with [Ni(Mes$_2$NHC)ClCp] **2** (4.6 mg, 1.10^{-5} mol) and THF (4 mL). To the resulting purple solution is added dropwise a solution of $NaHBEt_3$ in THF (20 µl, 1 M in THF, Acros, 2.10^{-5} mol), and the medium is stirred until the colour turns to deep red. The aldimine (1.10^{-3} mol) and Ph_2SiH_2 (186 µL, 1.10^{-3} mol) are then added in this order, and the reaction mixture is stirred in a preheated oil bath at 25 °C for 17 h. The reaction is then quenched by adding methanol (2 mL) and 2M NaOH (2 mL), and further stirring the medium for 2 h. After the addition of water (5 mL), the product is extracted with diethylether (3 x 10 mL). The combined organic layers are dried over anhydrous $MgSO_4$, filtered and concentrated under vacuum. The conversion is determined by ^{1}H NMR spectroscopy, and the product purified by silica gel column chromatography using a petroleum ether/diethylether mixture.

*b) Typical Procedure for the Hydrosilylation of Aldimines with [Ni(Mes$_2$NHC)(NCCH$_3$)Cp](PF$_6$) (**3**)*

A 10 mL oven dried Schlenk tube containing a stirring bar is loaded with [Ni(Mes$_2$NHC)(NCCH$_3$)Cp](PF$_6$) **3** (6.1 mg, 1.10^{-5} mol) and THF (4 mL) to give a yellow solution. The aldimine (1.10^{-3} mol) and Ph_2SiH_2 (186 µL, 1.10^{-3} mol) are then added in this order, and the reaction mixture is stirred in a preheated oil bath at 50 °C for 24 h. The reaction mixture is then quenched by adding methanol (2 mL) and 2M NaOH (2 mL), and further stirring the medium for 2 h. The work-up is done as described in the typical procedure for the hydrosilylation of aldimines with [Ni(Mes$_2$NHC)ClCp] **2** and $NaHBEt_3$.

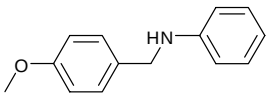
V.I. Characterization of the hydrosilylation products

***N*-(4-Methylbenzyl)-aniline** [5] (Table 2, entry 1)



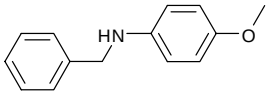
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 95/5/1), colourless oil. Obtained mass = 164 mg, 83% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.14 (d, J = 7.7, 2H), 7.08-7.03 (m, 4H), 6.60 (t, J = 6.8, 1H), 6.51 (d, J = 8.3, 2H), 4.15 (s, 2H), 3.84 (brs, 1H), 2.24 (s, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 148.1, 136.7, 136.3, 129.2, 129.1, 127.4, 117.3, 112.7, 48.0, 21.0.

***N*-(4-Methoxylbenzyl)-aniline** [7] (Table 2, entry 3)



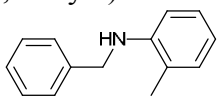
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 191 mg, 90% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.40 (d, J = 8.4, 2H), 7.30 (t, J = 7.8, 2H), 7.0 (d, J = 8.4, 2H), 6.85 (t, J = 7.4, 1H), 6.74 (d, J = 7.8, 2H), 4.35 (s, 2H), 4.07 (brs, 1H), 3.90 (s, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 158.7, 148.1, 131.3, 129.1, 128.6, 117.3, 113.9, 112.7, 55.1, 47.6.

***N*-Benzyl-4-methoxyaniline** [4] (Table 2, entry 5)



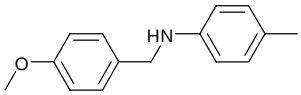
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 190 mg, 89% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.26-7.10 (m, 5H), 6.66 (d, J = 8.8, 2H), 6.48 (d, J = 8.8, 2H), 4.15 (s, 2H), 3.64 (brs, 1H), 3.61 (s, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 152.1, 142.4, 139.6, 128.5, 127.4, 127.0, 114.8, 114.0, 55.7, 49.2.

***N*-Benzyl-2-methylaniline** [6] (Table 2, entry 9)



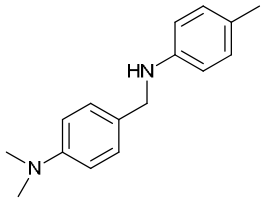
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), white solid, Obtained mass = 77 mg, 39% isolated yield. ^1H NMR (300 MHz, $CDCl_3$) δ 7.51-7.38 (m, 5H), 7.22-7.17 (m, 2H), 6.81-6.66 (m, 2H), 4.47 (s, 2H), 3.65 (brs, 1H), 2.27 (s, 3H)). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$) δ 146.0, 139.5, 130.0, 128.6, 127.5, 127.2, 127.1, 121.9, 117.1, 109.9, 48.3, 17.5.

***N*-(4-Methoxybenzyl)-4-methylaniline** [4] (Table 2, entry 10)



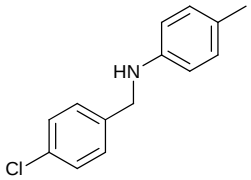
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 191 mg, 84% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.35 (d, *J* = 8.4, 2H), 7.06 (d, *J* = 8.2, 2H), 6.95 (d, *J* = 8.4, 2H) 6.63 (d, *J* = 8.2, 2H), 4.29 (s, 2H), 3.88 (brs, 1H), 3.85 (s, 3H), 2.32 (s, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 158.7, 145.9, 131.6, 129.6, 128.6, 126.5, 113.9, 112.9, 55.1, 48.0, 20.3.

***N*-(4'-(*N*',*N*'-Dimethyl)benzyl)-4-methylaniline** [4] (Table 2, entry 12)



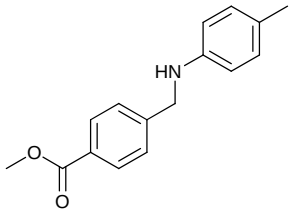
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 136 mg, 57% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.30 (d, *J* = 8.3, 2H), 7.04 (d, *J* = 8.0, 2H), 6.78 (d, *J* = 8.3, 2H) 6.62 (d, *J* = 8.0, 2H), 4.23 (s, 2H), 3.79 (brs, 1H), 2.99 (s, 6H), 2.30 (s, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 149.9, 146.2, 129.6, 128.6, 127.3, 126.3, 112.9, 112.7, 48.2, 40.6, 20.3.

_N_-(4-Chlorobenzyl)-4-methylaniline [4] (Table 2, entry 13)



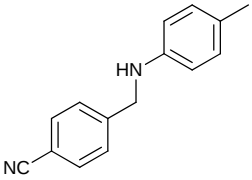
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 186 mg, 80% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.33 (m, 4H), 7.02 (d, J = 8.2, 2H), 6.56 (d, J = 8.2, 2H) 4.31 (s, 2H), 3.94 (brs, 1H), 2.28 (s, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 145.5, 138.2, 132.7, 129.7, 128.6, 128.6, 126.9, 113.0, 47.8, 20.3.

(_E_)-Methyl-4-((_p_-tolylimino)methyl)benzoate [6] (Table 2, entries 15 and 16)



The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Entry 15: Obtained mass = 193 mg, 76% isolated yield. Entry 16: Obtained mass = 210 mg, 83% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 8.00 (d, J = 8.4, 2H), 7.43 (d, J = 8.0, 2H), 6.97 (d, J = 8.0, 2H) 6.53 (d, J = 8.4, 2H), 4.38 (s, 2H), 4.01 (brs, 1H), 3.91 (s, 3H) 2.23 (s, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 167.0, 145.5, 145.2, 129.9, 129.8, 129.0, 127.1, 127.0, 113.0, 52.0, 48.3, 20.4.

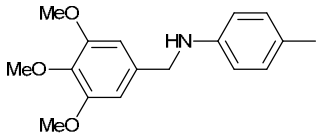
4-((_p_-tolylamino)methyl)benzonitrile [6] (Table 2, entry 17)



The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 165 mg, 74% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.61 (d, J = 7.9, 2H), 7.48 (d, J = 7.9, 2H), 6.99 (d, J = 8.0, 2H) 6.51 (d, J = 8.0, 2H), 4.40 (s, 2H), 4.11 (brs, 1H), 2.24 (s,

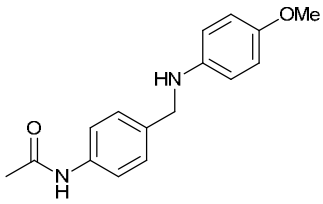
3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 145.5, 145.0, 132.3, 129.7, 127.6, 127.2, 118.8, 112.9, 110.7, 48.0, 20.3.

4-Methyl-*N*-(3,4,5-trimethoxybenzyl)aniline [4] (Table 2, entry 18)



The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 245 mg, 81% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.00 (d, *J* = 8.2, 2H), 6.62 (s, 2H), 6.58 (d, *J* = 8.2, 2H), 4.24 (s, 2H), 3.93 (brs, 1H), 3.84 (s, 9H), 2.26 (s, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 153.2, 145.8, 136.8, 135.3, 129.5, 126.6, 112.9, 104.2, 60.6, 55.9, 48.9, 20.2.

***N*-(4-(((4-methoxyphenyl)amino)methyl)phenyl)acetamide** (Table 2, entry 20)

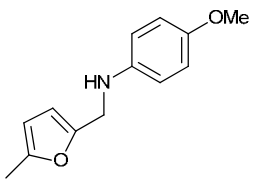


The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 194 mg, 72% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.45 (d, *J* = 8.1, 2H), 7.31 (d, *J* = 8.1, 2H), 6.76 (d, *J* = 8.7, 2H) 6.58 (d, *J* = 8.7, 2H), 4.23 (s, 2H), 3.73 (s, 3H), 2.16 (s, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 168.2, 152.2, 142.3, 136.8, 135.6, 128.1, 120.1, 114.9, 114.1, 55.8, 48.7, 24.5.

ESI-HR-MS: $[M+Na]^+$ ($C_{16}H_{18}N_2O_2Na$): calcd m/z: 293.1266, found m/z: 293.1262 (1 ppm).

IR (ν, cm^{-1}): 3361, 3248, 1656, 1598, 1539, 1508.

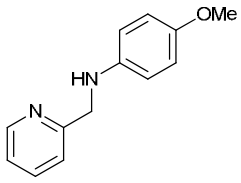
4-Methoxy-*N*-[(5-methyl-2-furyl)methyl]aniline [4] (Table 2, entry 24)



The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 124 mg, 57% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 6.81-6.77 (m, 2H), 6.67-6.63

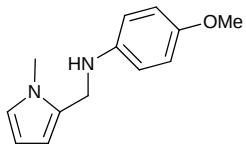
(m, 2H), 6.10 (s, 1H) 5.89 (s, 1H), 4.21 (s, 2H), 3.75 (s, 3H), 3.74 (brs, 1H), 2.28 (s, 3H). $^{13}C\{^{1}H\}$ NMR (75 MHz, $CDCl_3$): δ 152.4, 151.4, 151.0, 141.9, 114.7, 114.5, 107.7, 106.0, 55.7, 42.4, 13.5.

4-Methoxy-*N*-(pyridin-2-ylmethyl)aniline [4] (Table 2, entry 26)



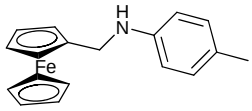
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 132 mg, 61% isolated yield. ^{1}H NMR (400 MHz, $CDCl_3$): δ 8.58 (d, *J* =4.4, 1H), 7.63 (t, *J* = 7.6, 1H), 7.33 (d, *J* = 7.8, 1H), 7.18-7.15 (m, 1H), 6.77 (d, *J* = 8.8, 2H), 6.63 (d, *J* = 8.8, 2H), 4,41 (s, 2H), 3.73 (s, 3H). $^{13}C\{^{1}H\}$ NMR (75 MHz, $CDCl_3$): δ 158.8, 152.2, 149.1, 142.1, 136.5, 122.0, 121.6, 114.8, 114.2, 55.7, 50.2.

4-Methoxy-*N*-[(1-methyl-1H-pyrrol-2yl)methyl]aniline (Table 2, entry 29)



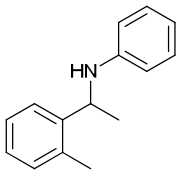
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 151 mg, 70% isolated yield. ^{1}H NMR (300 MHz, $CDCl_3$): δ 6.82 (d, *J* = 8.9, 2H), 6.65 (d, *J* = 8.9, 2H) 6.11-6.08 (m, 2H), 4.17 (s, 2H), 3.76 (s, 3H), 3.64 (s, 3H). $^{13}C\{^{1}H\}$ NMR (75 MHz, $CDCl_3$): δ 152.3, 142.4, 129.9, 122.7, 114.9, 114.2, 108.3, 106.7, 55.8, 41.3, 33.7.
ESI-HR-MS: $[M+Na]^+$ ($C_{13}H_{16}N_2ONa$): calcd m/z: 239.1160, found m/z: 239.1159 (0 ppm).
IR (ν, cm^{-1}): 3373, 1625, 1512

***N*-(Ferrocenylmethyl)-4-methylaniline** [4] (Table 2, entry 30)



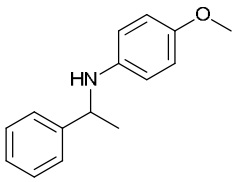
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 260 mg, 85% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.04 (d, *J* = 8.1, 2H), 6.62 (d, *J* = 8.1, 2H), 4.26 (s, 2H), 4.20 (s, 5H), 4.16 (s, 2H), 3.96 (s, 2H), 3.77 (brs, 1H), 2.28 (s, 3H).$^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 146.1, 129.7, 126.7, 113.0, 86.6, 68.4, 68.0, 67.8, 43.7, 20.4.

***N*-[1-(2-methylphenyl)ethyl]aniline** [4] (Table 4, entry 1)



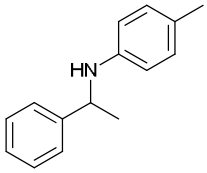
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 162 mg, 77% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.45-7.43 (m, 1H), 7.19-7.09 (m, 5H), 6.68-6.64 (m, 1H) 6.47 (d, *J* = 7.7, 2H) 4.71 (q, *J* = 6.6, 1H), 4.0 (brs, 1H), 2.46 (s, 3H), 1.50 (d, *J* = 6.6, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 147.2, 142.7, 134.5, 130.5, 129.1, 126.6, 126.5, 124.6, 117.1, 112.9, 49.7, 22.9, 18.9.

4-Methoxy-*N*-(1-phenylethyl)aniline [4] (Table 4, entry 2)



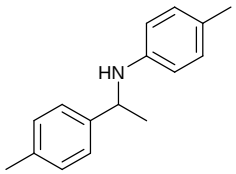
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil, Obtained mass = 177 mg, 78% isolated yield. ^1H NMR (300 MHz, $CDCl_3$): δ 7.41-7.25 (m, 5H), 6.72 (d, *J* = 8.9, 2H) 6.51 (d, *J* = 8.9, 2H), 4.45 (q, *J* = 6.6, 1H), 3.81 (brs, 1H), 3.72 (s, 3H), 1.53 (d, *J* = 6.6, 3H). $^{13}C\{^1H\}$ NMR (100 MHz, $CDCl_3$): δ 151.8, 145.4, 141.5, 128.5, 126.7, 125.8, 114.7, 114.5, 55.7, 54.2, 25.1.

4-Methyl-*N*-(1-phenylethyl)aniline [4] (Table 4, entry 4)



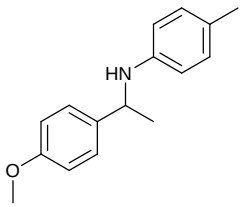
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 134 mg, 63% isolated yield. ^1H NMR (300 MHz, $CDCl_3$): δ 7.32-7.28 (m, 5H), 6.91 (d, *J* = 8.2, 2H), 6.40 (d, *J* = 8.2, 2H) 4.42 (q, *J* = 6.7, 1H), 3.90 (brs, 1H), 2.20 (s, 3H), 1.48 (d, *J* = 6.7, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 144.6, 143.9, 132.2, 129.5, 128.6, 127.1, 126.5, 113.4, 53.1, 25.0, 20.3.

4-Methyl-*N*-[1-(4-methylphenyl)-ethyl]aniline [4] (Table 4, entry 5)



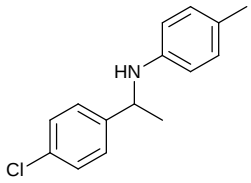
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 165 mg, 73% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.27 (d, *J* = 7.8, 2H), 7.14 (d, *J* = 7.8, 2H) 6.92 (d, *J* = 8.1, 2H), 6.46 (d, *J* = 8.1, 2H), 4.45 (q, *J* = 6.6, 1H), 3.89 (brs, 1H), 2.34 (s, 3H), 2.21 (s, 3H) 1.51 (d, *J* = 6.6, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 145.0, 142.3, 136.2, 129.5, 129.2, 126.2, 125.7, 113.3, 53.3, 25.0, 21.0, 20.3.

***N*-[1-(4-Methoxyphenyl)ethyl]-4-methylaniline** [4] (Table 4, entry 6)



The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 203 mg, 84% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.28 (d, *J* = 8.8, 2H), 6.91 (d, *J* = 8.4, 2H) 6.85 (d, *J* = 8.8, 2H), 6.45 (d, *J* = 8.4, 2H) 4.42 (q, *J* = 6.7, 1H), 3.83 (brs, 1H), 3.75 (s, 3H), 2.20 (s, 3H) 1.47 (d, *J* = 6.7, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 158.3, 145.0, 137.4, 129.5, 126.8, 126.1, 113.9, 113.3, 55.1, 52.9, 24.9, 20.2.

***N*-[1-(4-Chlorophenyl)ethyl]-4-methylaniline** (Table 4, entry 8)



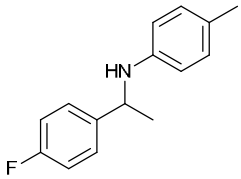
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 188 mg, 77% isolated yield. ^1H NMR (300 MHz, $CDCl_3$): δ 7.45-7.28 (m, 5H), 6.97 (d, J = 8.1, 2H), 6.51 (d, J = 8.1, 2H), 4.52 (q, J = 6.7, 1H), 3.96 (brs. 1H), 2.26 (s, 3H), 1.57 (d, J = 6.7, 2H).$^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 145.3, 144.9, 129.5, 128.5, 126.7, 126.2, 125.8, 113.3, 53.6, 25.0, 20.3.

ESI-HR-MS: $[M+H]^+$ ($C_{15}H_{17}N^{35}Cl$): calcd m/z: 246.1049, found m/z: 246.1048 (1 ppm).

$[M+Na]^+$ ($C_{15}H_{17}N^{35}ClNa$): clacd m/z: 268.0869, found m/z: 268.0873 (2 ppm).

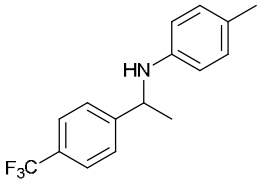
IR (ν, cm^{-1}): 3404, 1681, 1616, 1587, 1517.

***N*-[1-(4-Fluorophenyl)ethyl]-4-methylaniline** [6] (Table 4, entries 9 and 10)



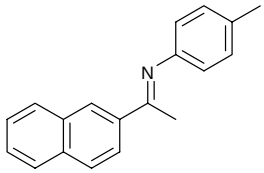
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Entry 9: obtained mass = 171mg, 75% isolated yield. Entry 10: obtained mass = 182mg, 80% isolated yield. ^1H NMR (300 MHz, $CDCl_3$): δ 7.35-7.30 (m, 2H), 7.03-6.97 (m, 2H), 6.92 (d, J = 8.1, 2H), 6.42 (d, J = 8.1, 2H), 4.44 (q, J = 6.6, 1H), 3.88 (brs. 1H), 2.20 (s, 3H), 1.49 (d, J = 6.7, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 161.6 (d, $J_{C\text{-}F}$ = 253), 144.8, 141.0 (d, $J_{C\text{-}F}$ = 3.0), 129.5, 127.2 (d, $J_{C\text{-}F}$ = 7.9), 126.5, 115.3 (d, $J_{C\text{-}F}$ = 21.3), 113.4, 53.1, 25.1, 20.3.

***N*-[1-(4-(Trifluoromethyl)phenyl)ethyl]aniline** [6] (Table 4, entry 13)



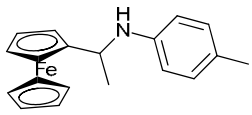
The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 193 mg, 69% isolated yield. ^1H NMR (300 MHz, $CDCl_3$): δ 7.57 (d, *J* = 8.1, 2H), 7.48 (d, *J* = 8.1, 2H) 6.91 (d, *J* = 8.2, 2H), 6.39 (d, *J* = 8.2, 2H) 4.50 (q, *J* = 6.7, 1H), 3.93 (brs, 1H), 2.19 (s, 3H), 1.51 (d, *J* = 6.7, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 149.6, 144.5, 129.6, 129.3 (q, J_{C-F} = 32.0), 127.0, 126.1, 125.6 (q, J_{C-F} = 3.8), 122.4 (q, J_{C-F} = 270.0), 113.3, 53.4, 25.0, 20.3.

4-Methyl-*N*-[1-(2-naphthyl)ethyl]aniline [4] (Table 4, entry 14)



The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 154 mg, 59% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.83-7.80 (m, 4H), 7.52-7.43 (m, 3H), 6.89 (d, *J* = 8.3, 2H), 6.49 (d, *J* = 8.3, 2H), 4.62 (q, *J* = 6.7, 1H), 3.99 (brs. 1H), 2.18 (s, 3H), 1.59 (d, *J* = 6.7, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 145.0, 142.9, 133.5, 132.7, 129.5, 128.4, 127.8, 127.6, 126.4, 125.9, 125.4, 124.4, 124.2, 113.4, 53.9, 25.0, 20.3.

***N*-[1-(Ferrocenyl)ethyl]-4-methylaniline** [4] (Table 4, entry 17)



The compound was prepared as described in the general procedure. Purification by flash chromatography (petroleum ether/diethyl ether/Et_3N: 90/10/1), colourless oil. Obtained mass = 212 mg, 66% isolated yield. ^1H NMR (400 MHz, $CDCl_3$): δ 7.02 (d, *J* = 8.1, 2H), 6.59 (d, *J* = 8.1, 2H) 4.30 (q, *J* = 6.4, 1H), 4.22-4.13 (m, 9H) 3.78 (brs, 1H), 2.26 (s, 3H), 1.50 (d, *J* = 6.4, 3H). $^{13}C\{^1H\}$ NMR (75 MHz, $CDCl_3$): δ 145.2, 129.8, 126.3, 113.4, 93.7, 68.3, 67.6, 67.4, 66.9, 66.1, 47.4, 20.9, 20.3.

VII. References

[1] L. P. Beether, M. Henrion, L. Brelot, C. Darcel, M. J. Chetcuti, J.-B. Sortais, V. Ritleng, *Adv. Synth. Catal.* **2012**, *354*, 2619.

[2] (a) V. Ritleng, E. Brenner, M. J. Chetcuti, *J. Chem. Educ.* **2008**, *85*, 1646; (b) C. D. Abernethy, A. H. Cowley, R. A. Jones, *J. Organomet. Chem.* **2000**, *596*, 3.

[3] V. Ritleng, A. M. Oertel, M. J. Chetcuti, *Dalton Trans*. **2010**, *39*, 8153.

[4] L. C. Misal Castro, J.-B. Sortais, C. Darcel, *Chem. Commun.* **2012**, *48*, 151.

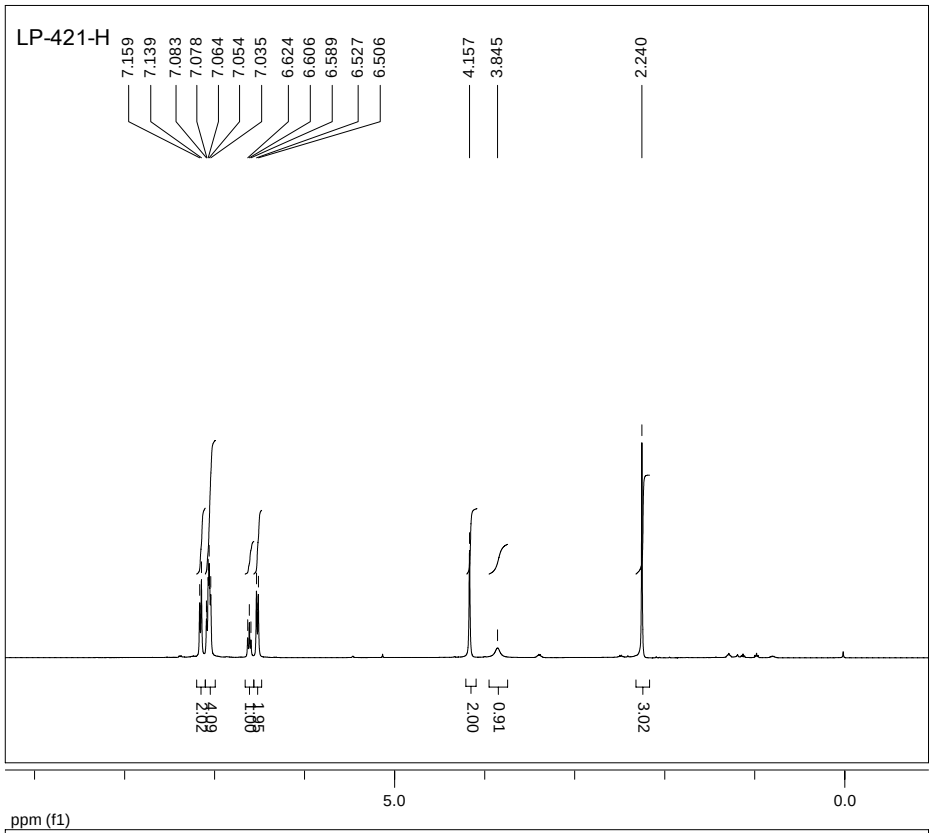
[5] S. Manzini, C. A. U. Blanco, S. P. Nolan, *Adv. Synth. Catal.* **2012**, *354*, 3036.

[6] B. Li, J.-B. Sortais, C. Darcel, P. H. Dixneuf, *ChemSusChem.* **2012**, 5, 396.

[7] A. Wetzel, S. Weocket, M. Schelwies, M. K. Brinks, F. Rominger, P. Hofmann, M. Limbach, *Org. Lett.* **2013**, 15, 266.

^{1}H NMR and ^{13}C NMR spectra of the hydrosilylation products.

N-(4-Methylbenzyl)-aniline (Table 2, entry 1)



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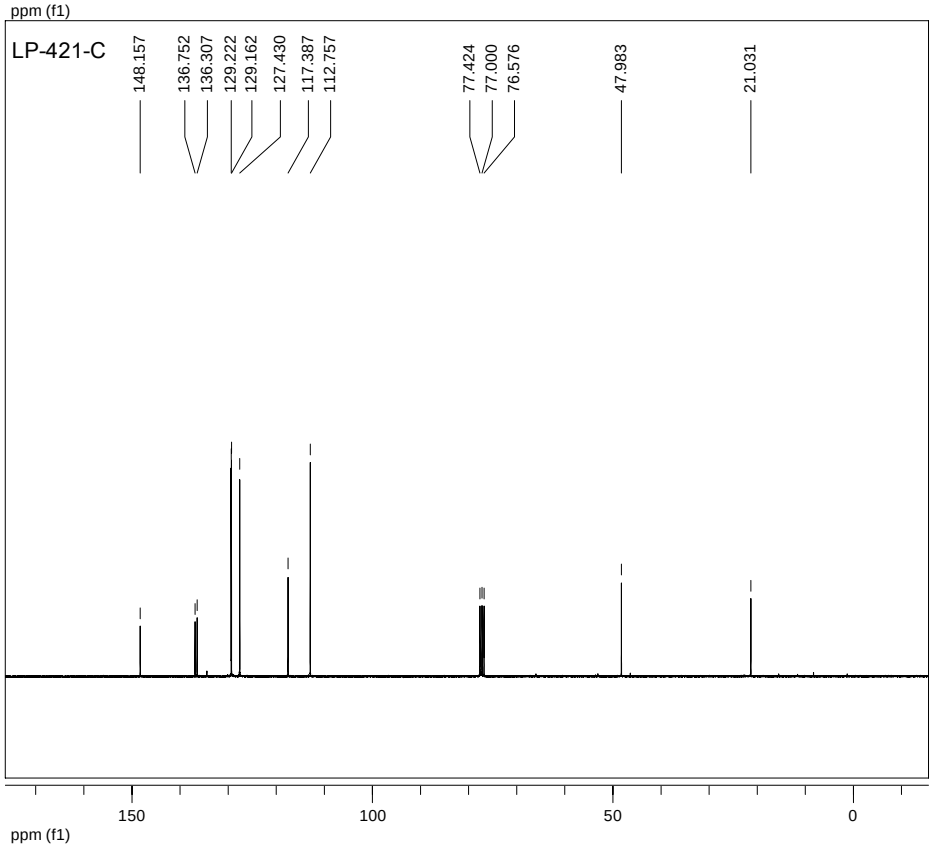

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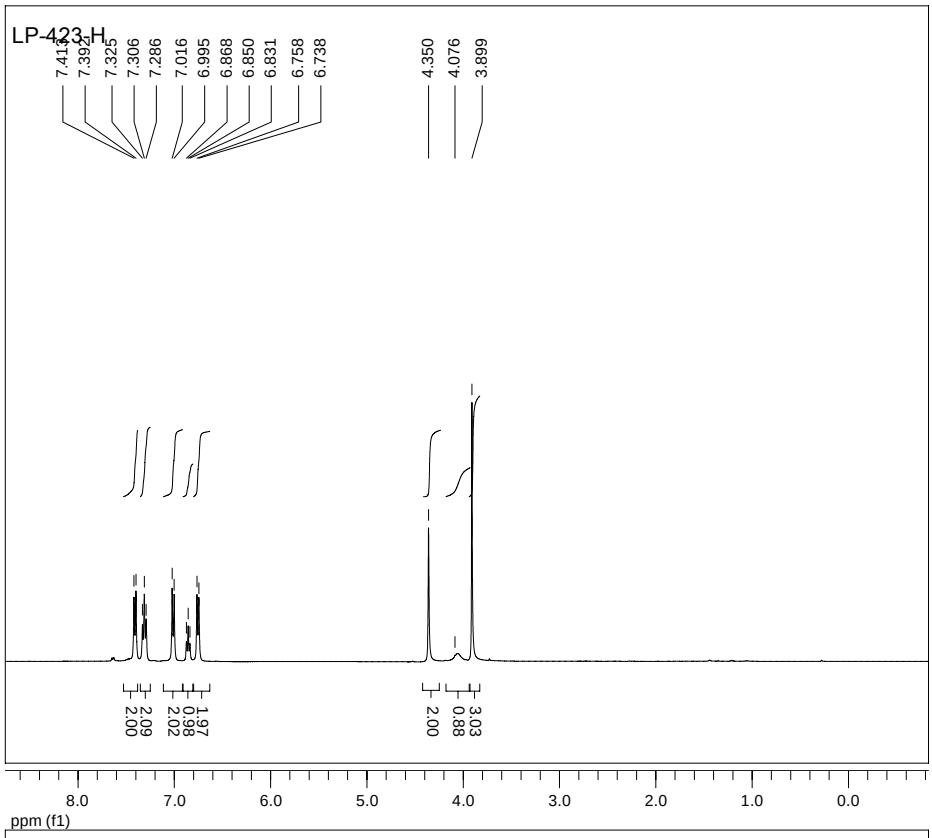
***N*-(4-Methoxylbenzyl)-aniline** (Table 2, entry 3)



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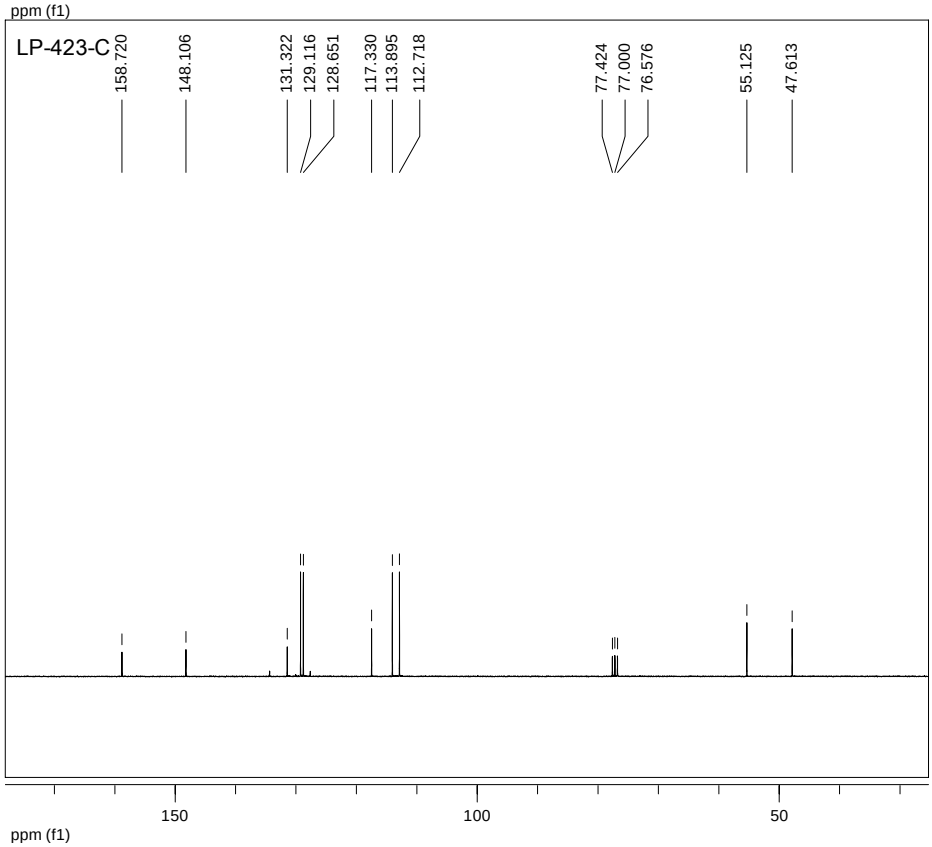

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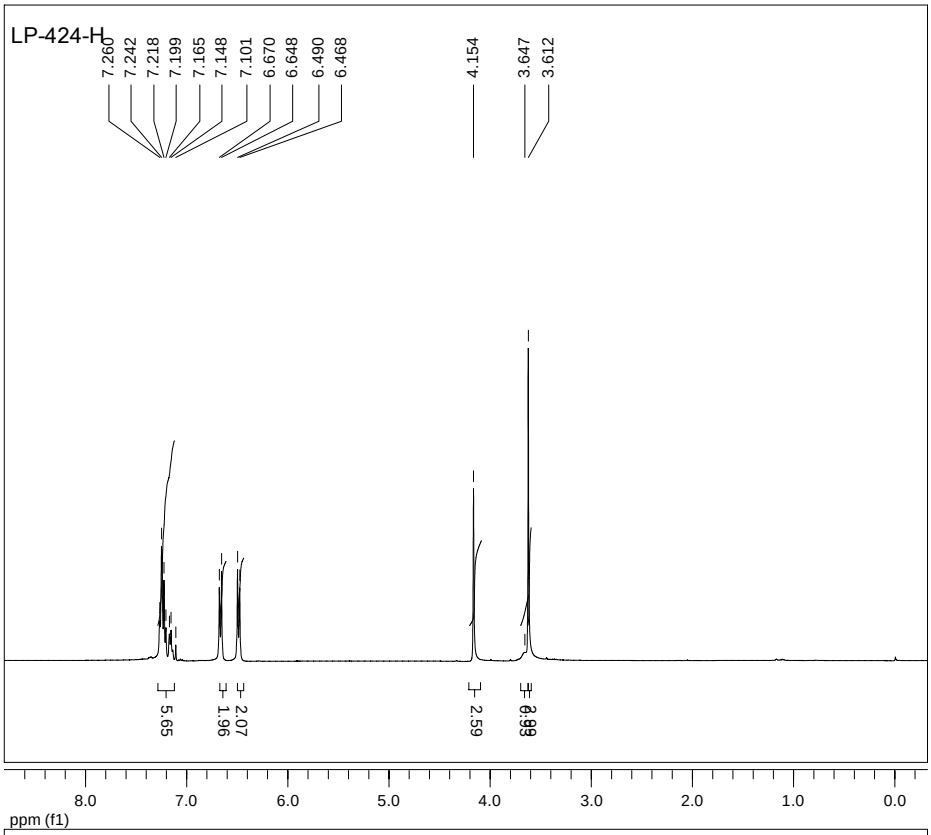
Number of Scans:
700
Acq. Date:
Sat Oct 27 02:09:58 PM

***N*-Benzyl-4-Methoxyaniline** (Table 2, entry 5)



Date:
13 Nov 2012
Document's Title:
1

Spectrum Title:

Frequency (MHz):
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Original Points Count:
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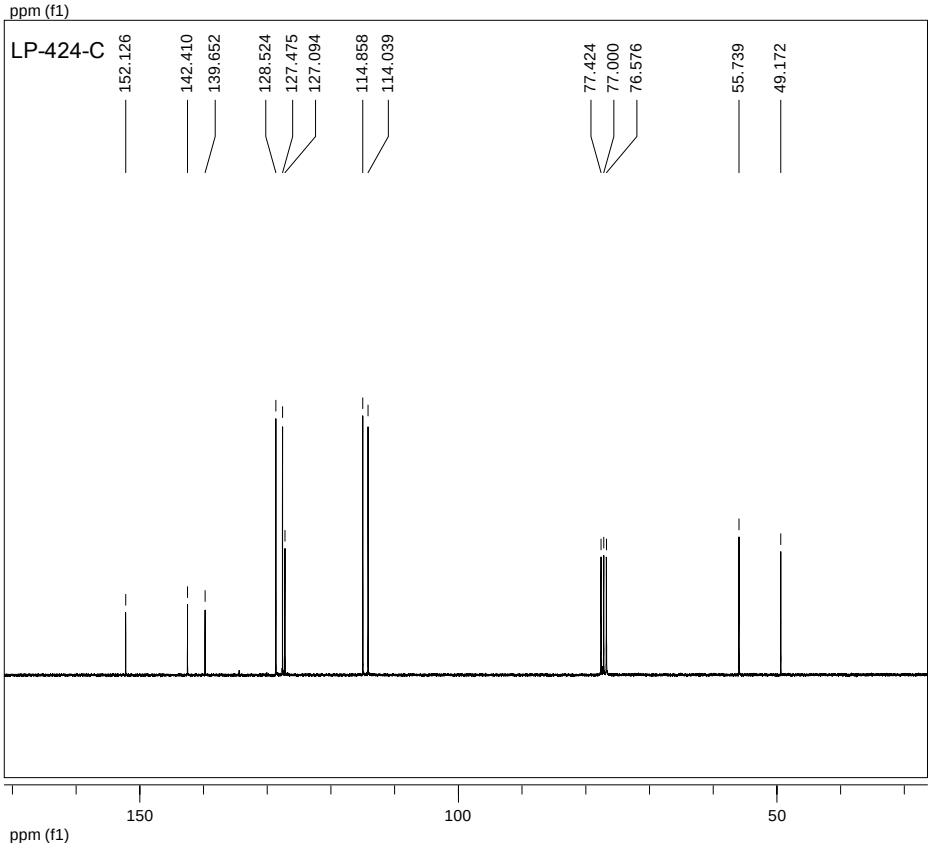
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 3.9846
Spectral Width (ppm):
(f1) 20.551
Pulse Program:
ZG30
Temperature:
299.0795
Number of Scans:
16
Acq. Date:
Mon Oct 29 12:08:57 AM



Date:
13 Nov 2012
Document's Title:
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Spectrum Title:
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Frequency (MHz):
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Original Points Count:
(f1) 32768
Actual Points Count:
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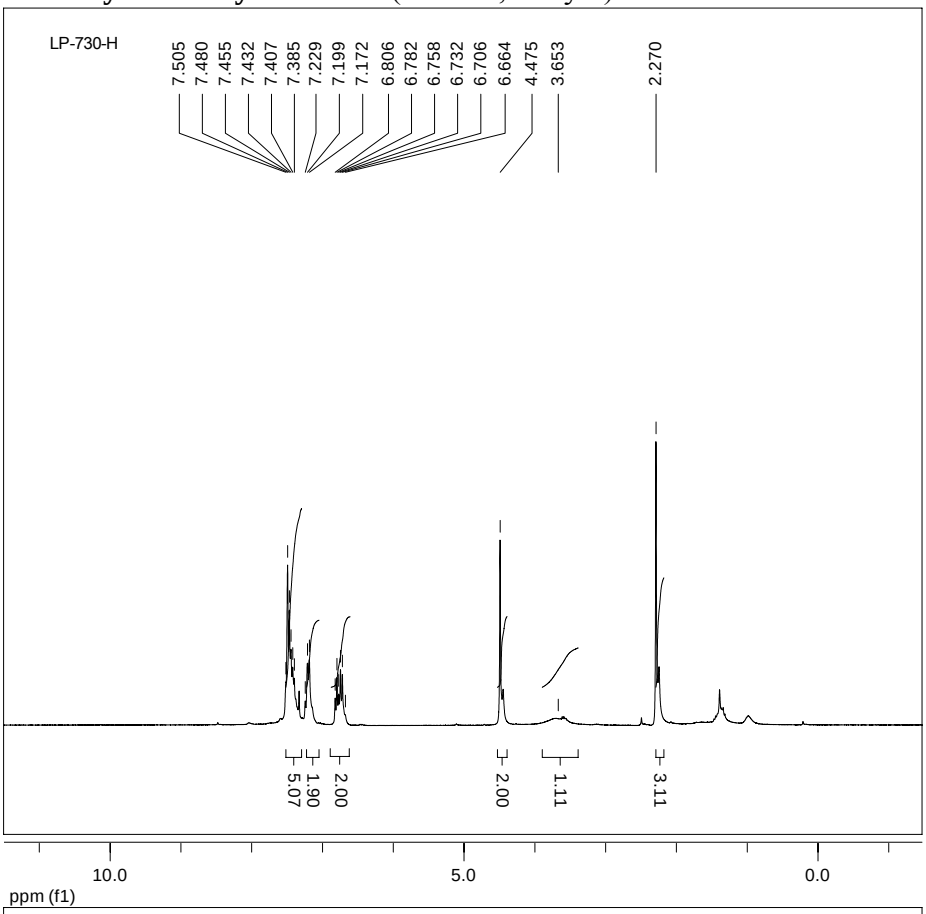
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
297.7322
Number of Scans:
700
Acq. Date:
Sat Oct 27 01:16:00 PM

N-Benzyl-2-methylaniline [6] (Table 2, entry 9)



Date:
5 Sep 2013
Document's Title:
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Spectrum Title:
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Original Points Count:
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Actual Points Count:
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Acquisition Time (sec):
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Spectral Width (ppm):
(f1) 20.567
Pulse Program:
ZG30
Temperature:
295.2782
Number of Scans:
8
Acq. Date:
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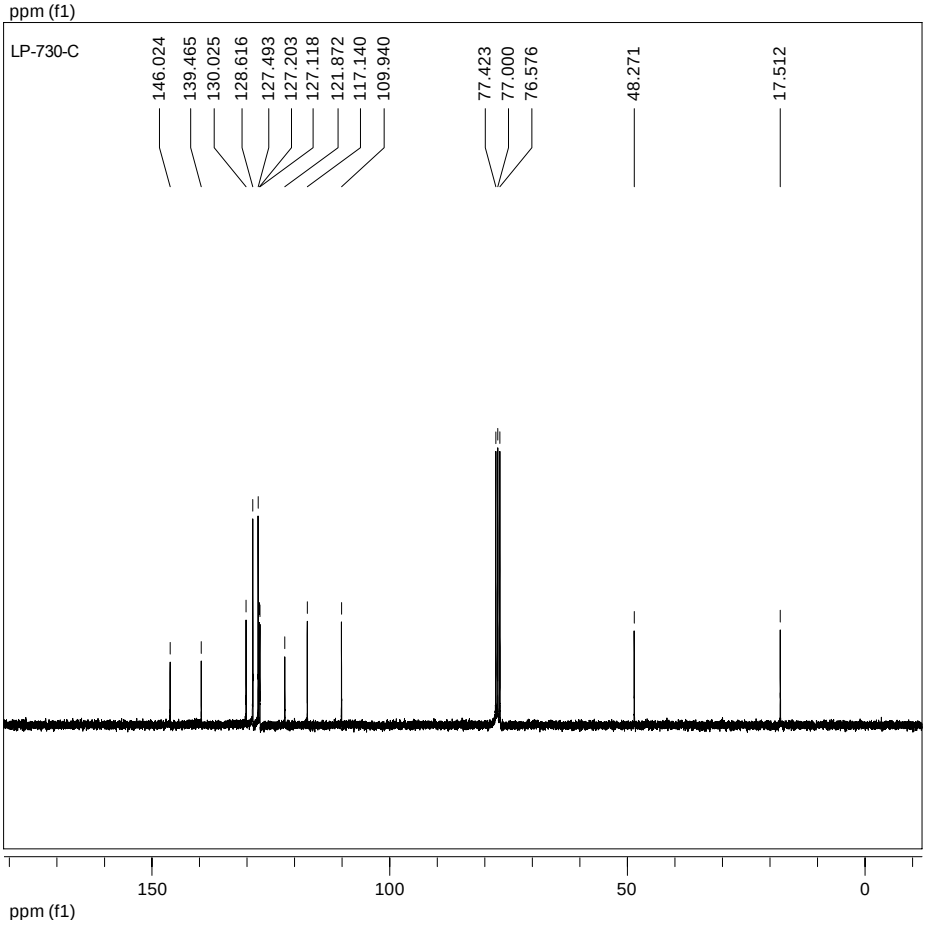

Date:
3 Sep 2013
Document's Title:
1

Spectrum Title:
CDLP-730-C

Frequency (MHz):
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Original Points Count:
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Actual Points Count:
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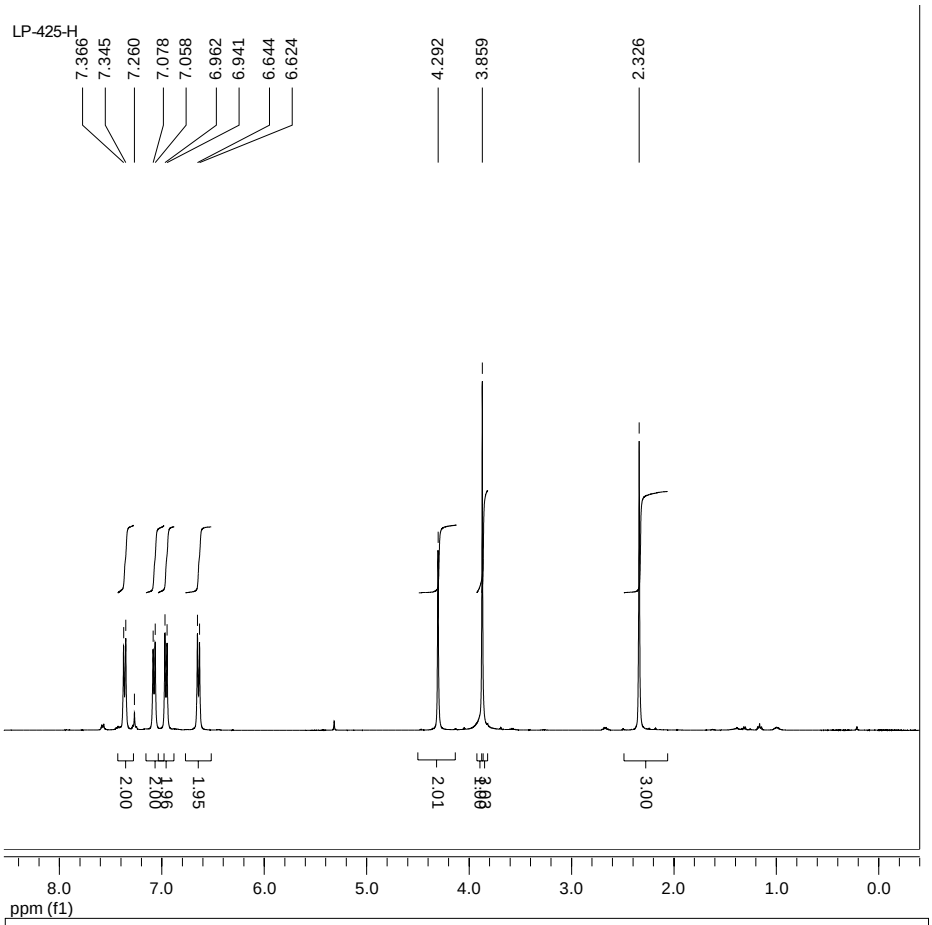
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
296.1371
Number of Scans:
800
Acq. Date:
Mon Sep 02 03:46:14 PM

N-(4-Methoxybenzyl)-4-methylaniline (Table 2, entry 10)



Date:
28 Jun 2013
Document's Title:
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Spectrum Title:

Frequency (MHz):
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Original Points Count:
(f1) 32768
Actual Points Count:
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Acquisition Time (sec):
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Spectral Width (ppm):
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Pulse Program:
ZG30
Temperature:
299.1239
Number of Scans:
16
Acq. Date:
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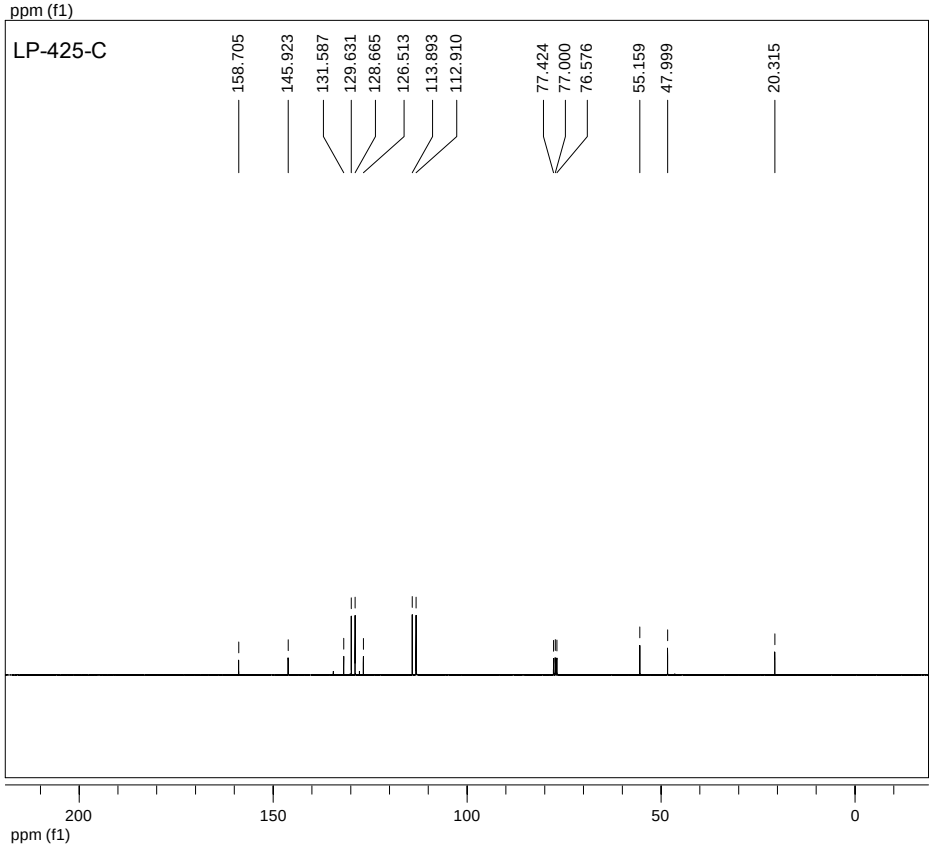

Date:
13 Nov 2012
Document's Title:
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Actual Points Count:
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Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
297.6095
Number of Scans:
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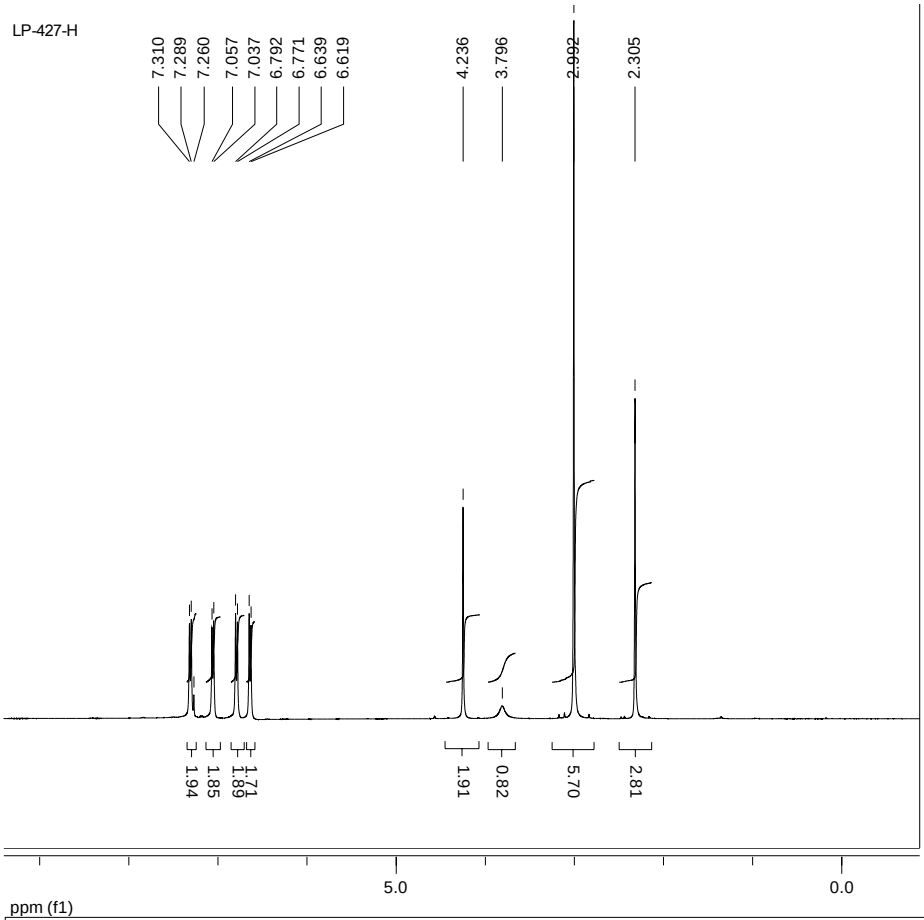
Acq. Date:
Sat Oct 27 08:47:01 AM

N-(4'-(*N*',*N*'-Dimethyl)benzyl)-4-methylaniline (Table 2, entry 12)



Date:
28 Jun 2013
Document's Title:
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Spectrum Title:

Frequency (MHz):
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Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 3.9846
Spectral Width (ppm):
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Pulse Program:
ZG30
Temperature:
299.1255
Number of Scans:
16
Acq. Date:
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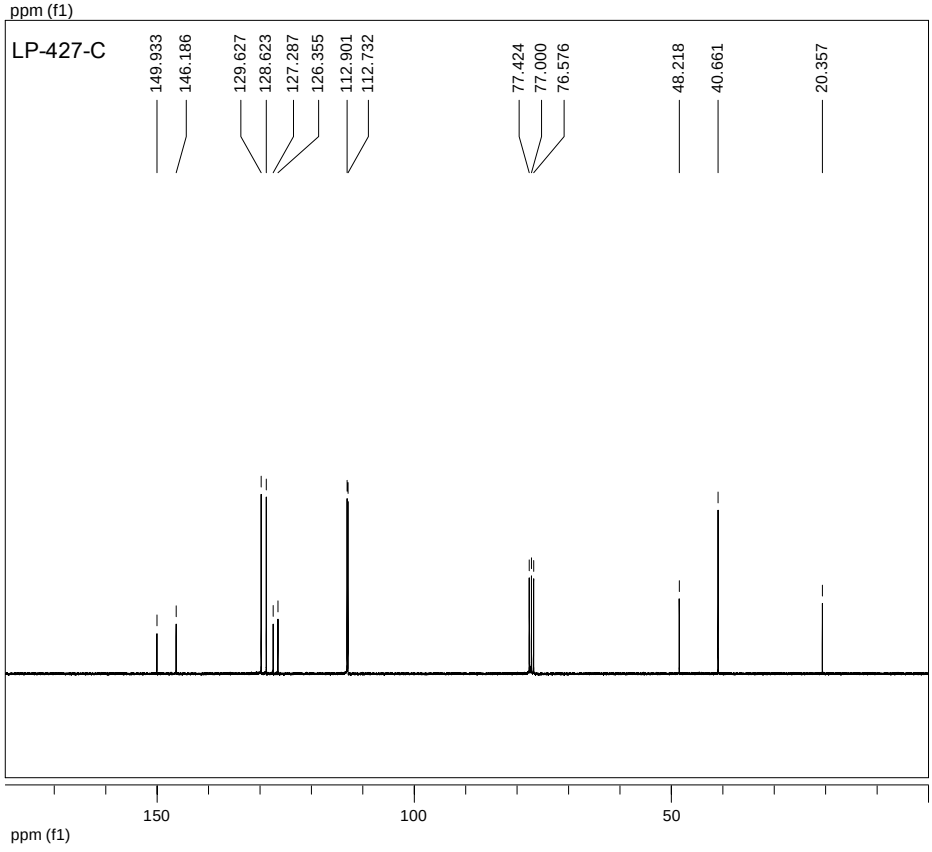

Date:
13 Nov 2012
Document's Title:
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Spectrum Title:
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Frequency (MHz):
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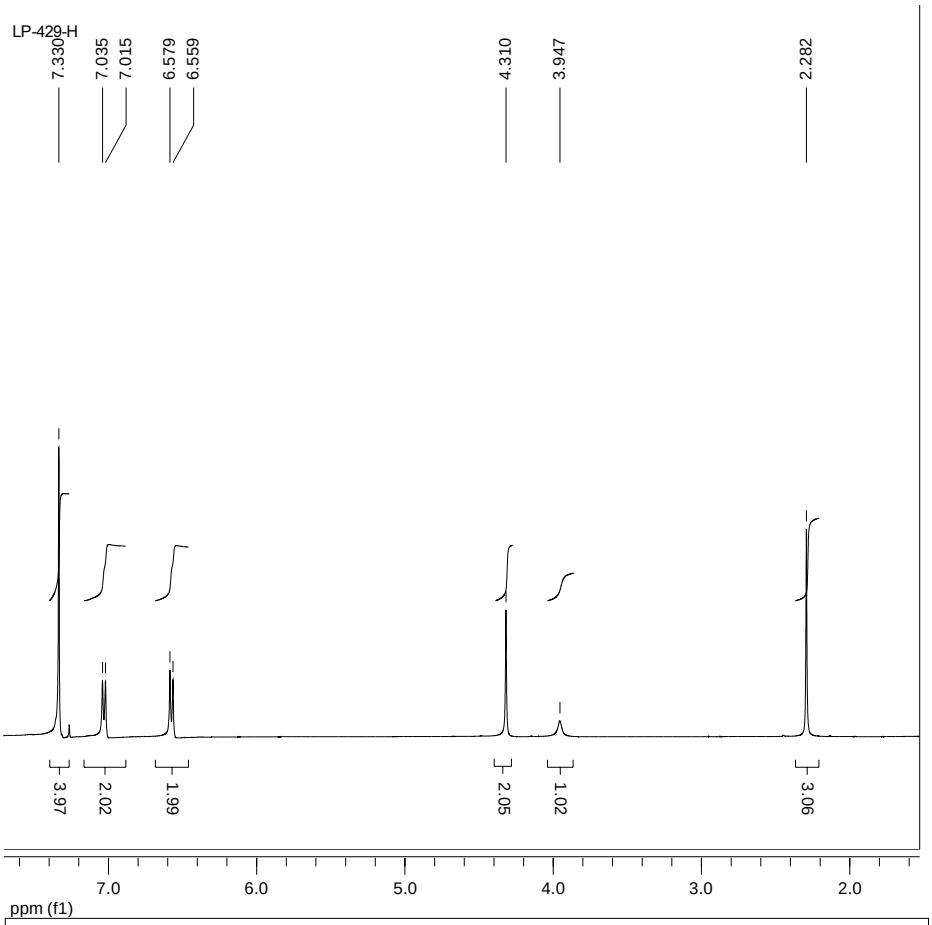
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
297.4868
Number of Scans:
600
Acq. Date:
Sun Nov 04 07:12:15 PM

***N*-(4-Chlorobenzyl)-4-methylaniline** (Table 2, entry 13)



Date:
28 Jun 2013
Document's Title:
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Spectrum Title:

Frequency (MHz):
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Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 3.9846
Spectral Width (ppm):
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Pulse Program:
ZG30
Temperature:
299.1204
Number of Scans:
16
Acq. Date:
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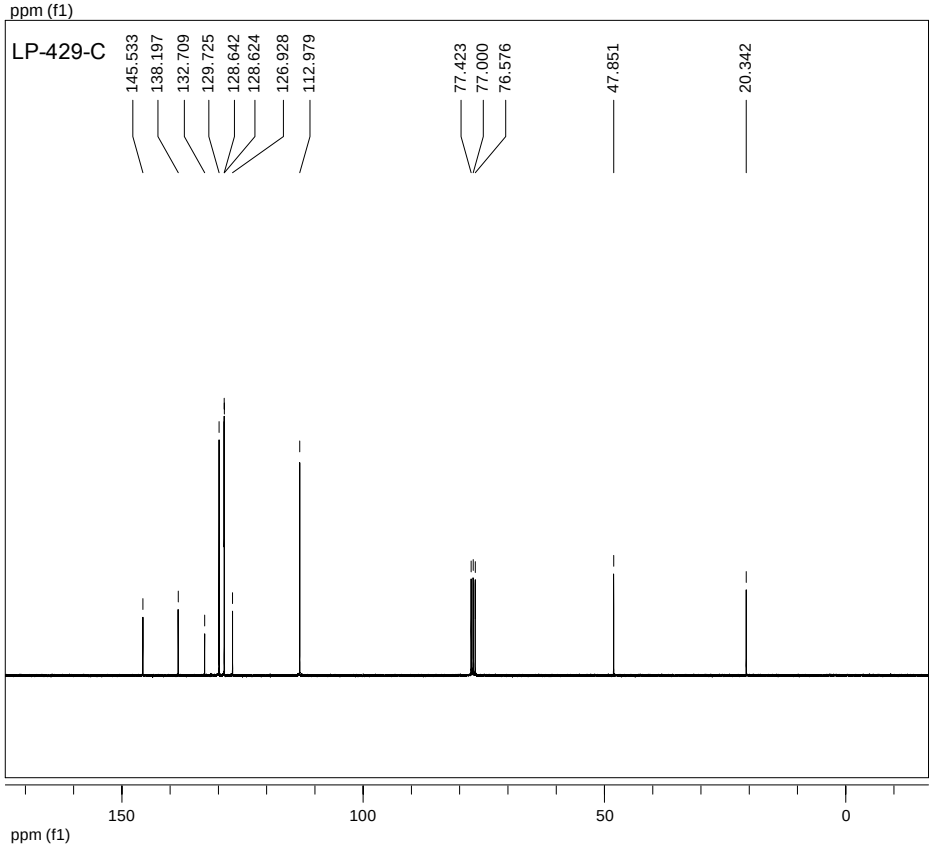

Date:
13 Nov 2012
Document's Title:
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Spectrum Title:
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Frequency (MHz):
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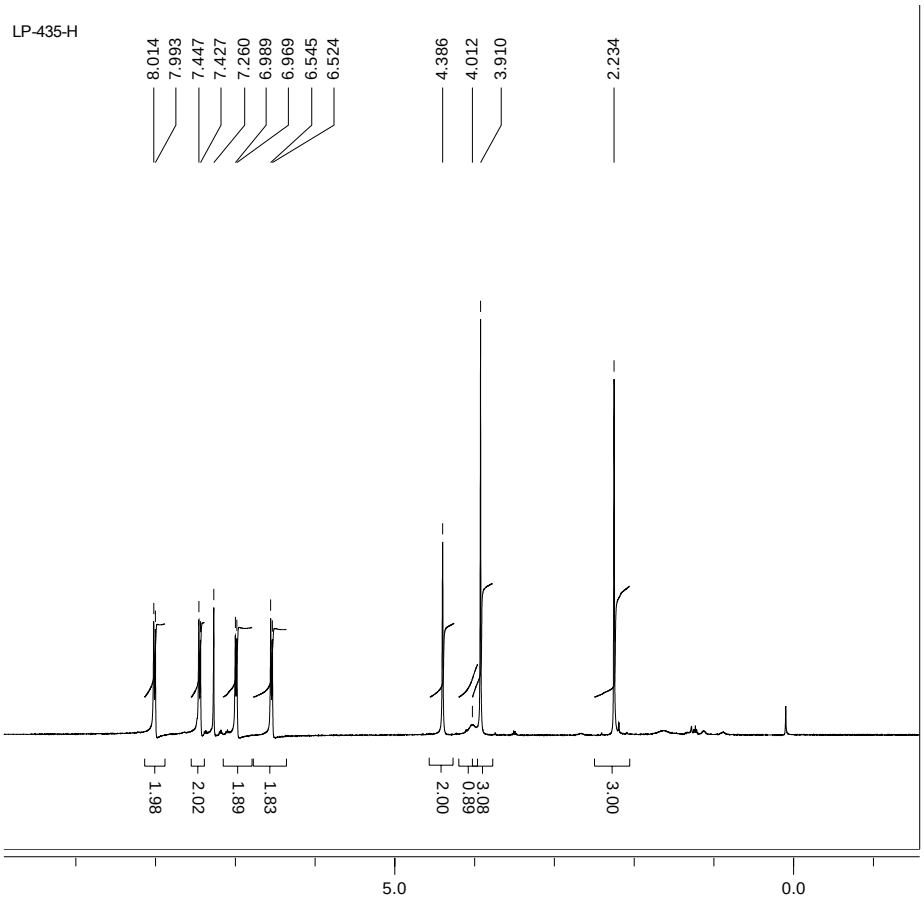
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
297.4868
Number of Scans:
600
Acq. Date:
Sun Nov 04 07:58:53 PM

(*E*)-Methyl-4-((*p*-tolylimino)methyl)benzoate (Table 2, entry 15)



Date:
28 Jun 2013
Document's Title:
1

Spectrum Title:

Frequency (MHz):
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Original Points Count:
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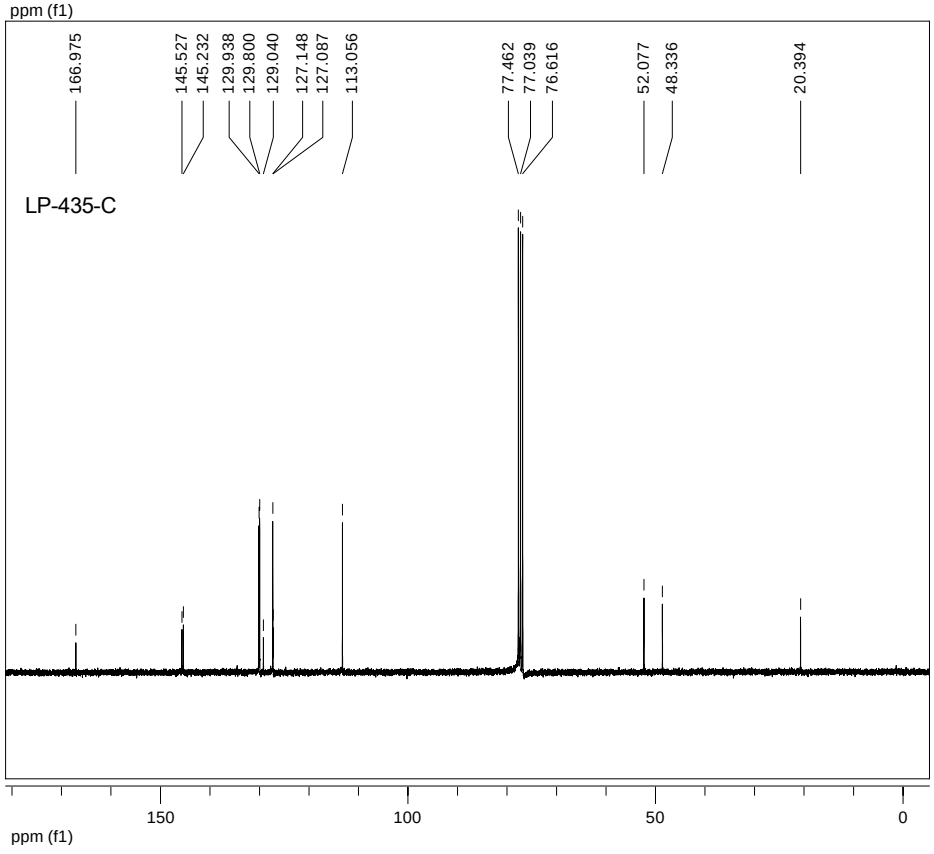
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 3.9846
Spectral Width (ppm):
(f1) 20.551
Pulse Program:
ZG30
Temperature:
299.1161
Number of Scans:
16
Acq. Date:
Wed Nov 14 10:39:57 AM



Date:
28 Nov 2012
Document's Title:
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Original Points Count:
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Actual Points Count:
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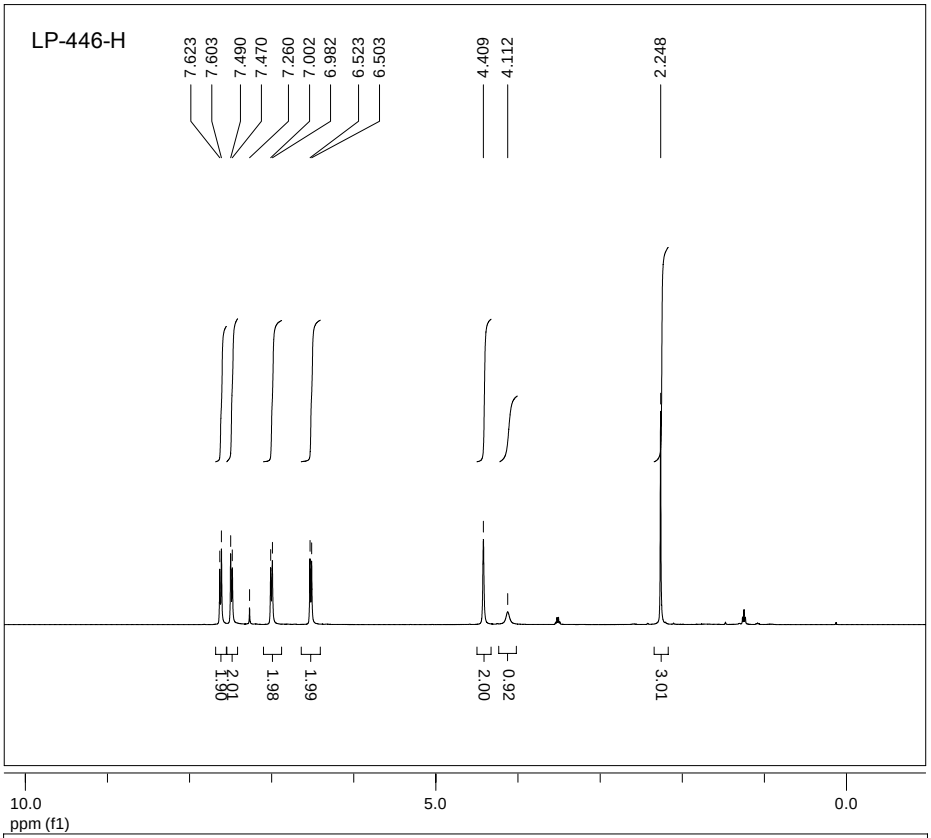
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
296.996
Number of Scans:
2000
Acq. Date:
Fri Nov 09 09:29:38 PM

4-((*p*-tolylamino)methyl)benzonitrile (Table 2, entry 17)



Date:
18 Feb 2013
Document's Title:
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Spectrum Title:

Frequency (MHz):
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Actual Points Count:
(f1) 65536
Acquisition Time (sec):
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Spectral Width (ppm):
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Pulse Program:
ZG30
Temperature:
299.1061
Number of Scans:
16
Acq. Date:
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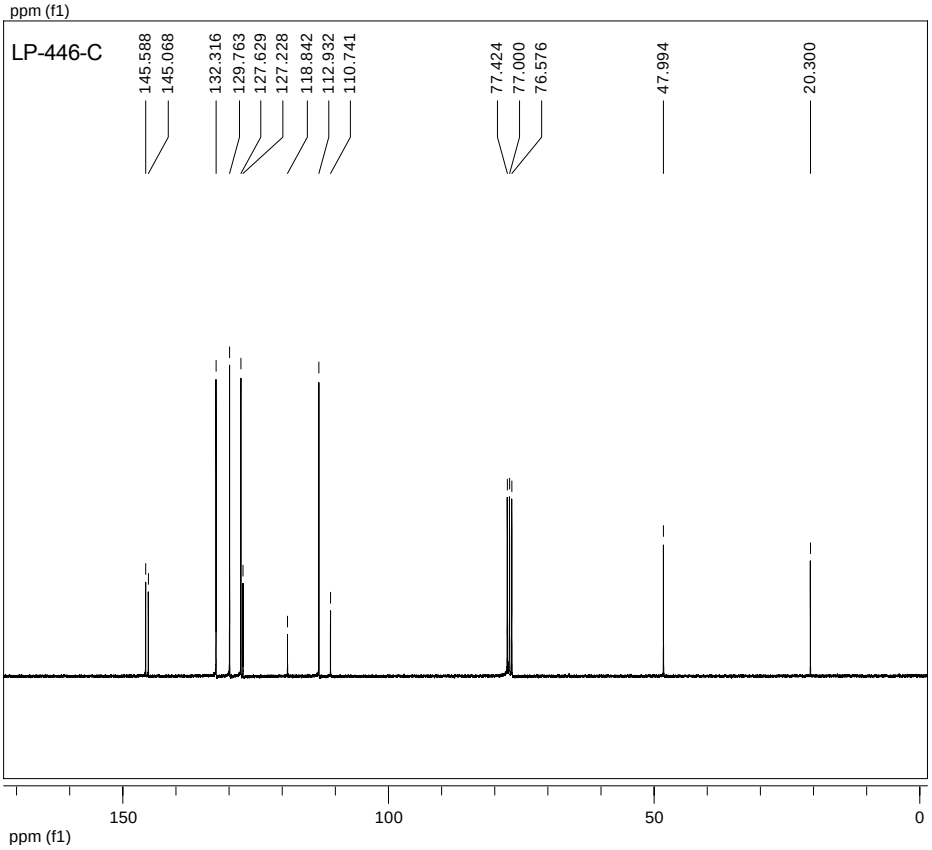

Date:
28 Nov 2012
Document's Title:
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Original Points Count:
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Actual Points Count:
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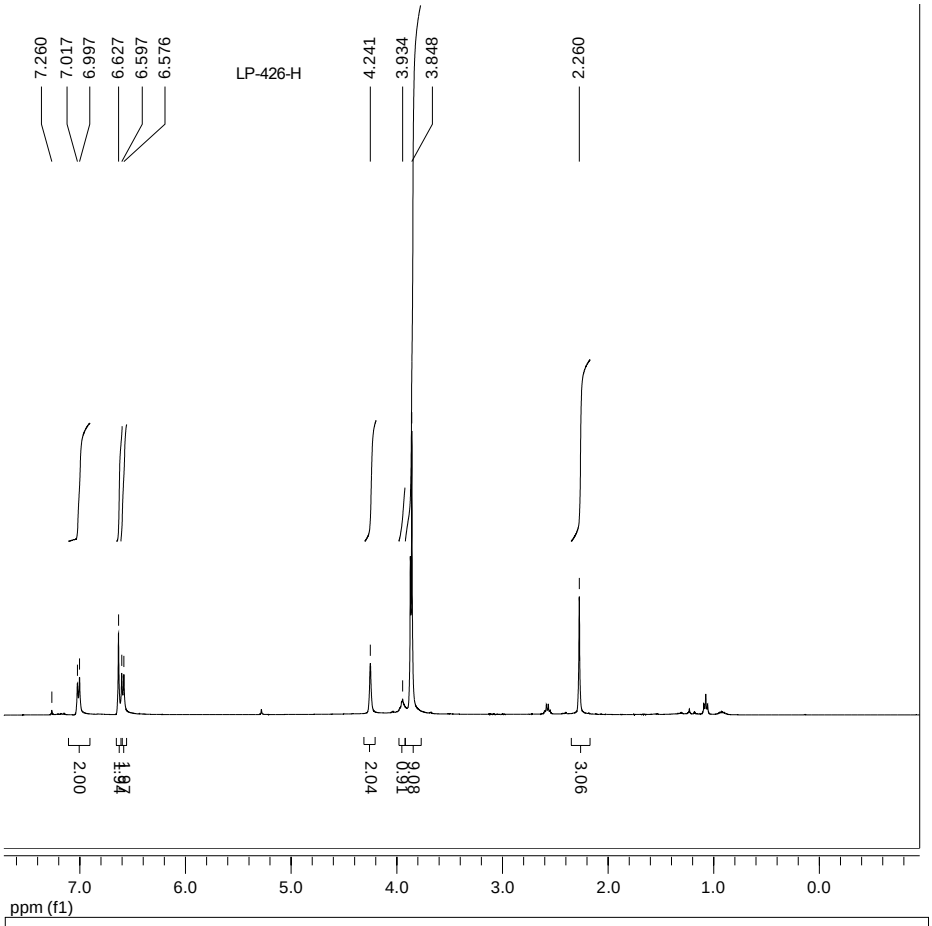
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
297.1187
Number of Scans:
2000
Acq. Date:
Fri Nov 09 11:48:35 PM

4-Methyl-*N*-(3,4,5-trimethoxybenzyl)aniline (Table 2, entry 18)



Date:
28 Jun 2013
Document's Title:
1

Spectrum Title:

Frequency (MHz):
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Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
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Spectral Width (ppm):
(f1) 20.551
Pulse Program:
ZG30
Temperature:
299.1069
Number of Scans:
16
Acq. Date:
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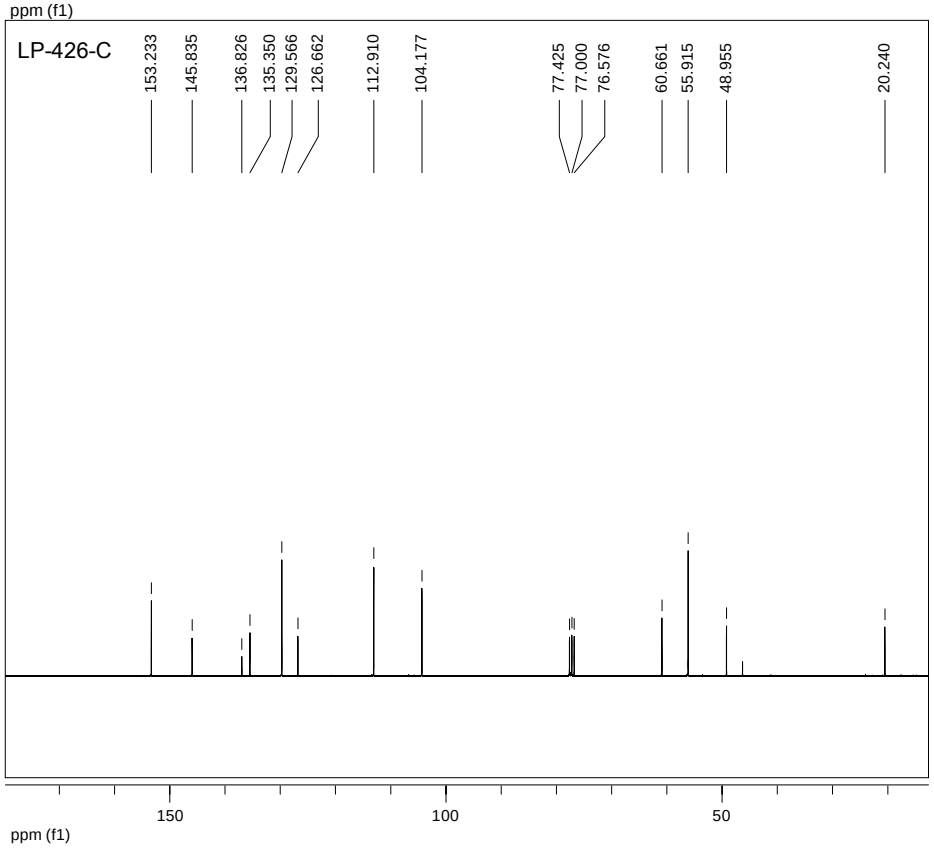

Date:
13 Nov 2012
Document's Title:
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Spectrum Title:
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Frequency (MHz):
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Original Points Count:
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Actual Points Count:
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Acquisition Time (sec):
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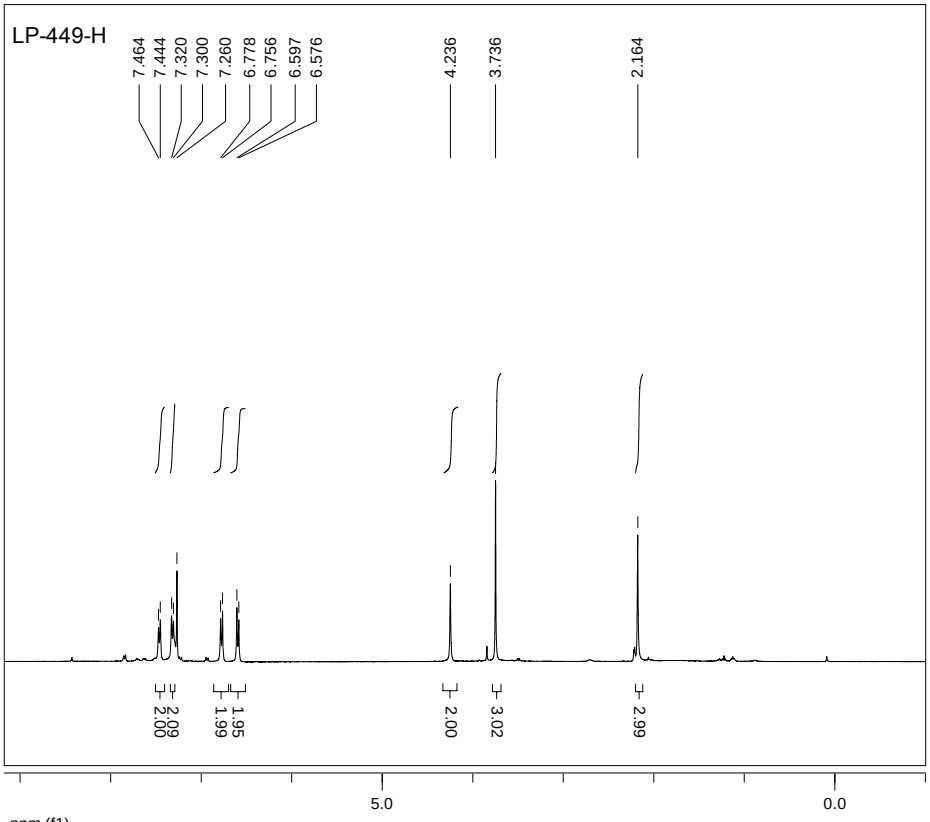
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
297.4868
Number of Scans:
700
Acq. Date:
Sat Oct 27 09:41:27 AM

***N*-(4-(((4-methoxyphenyl)amino)methyl)phenyl)acetamide** (Table 2, entry 20)



Date:
18 Feb 2013
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Spectrum Title:

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Actual Points Count:
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Spectral Width (ppm):
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Pulse Program:
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Temperature:
299.1039
Number of Scans:
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Acq. Date:
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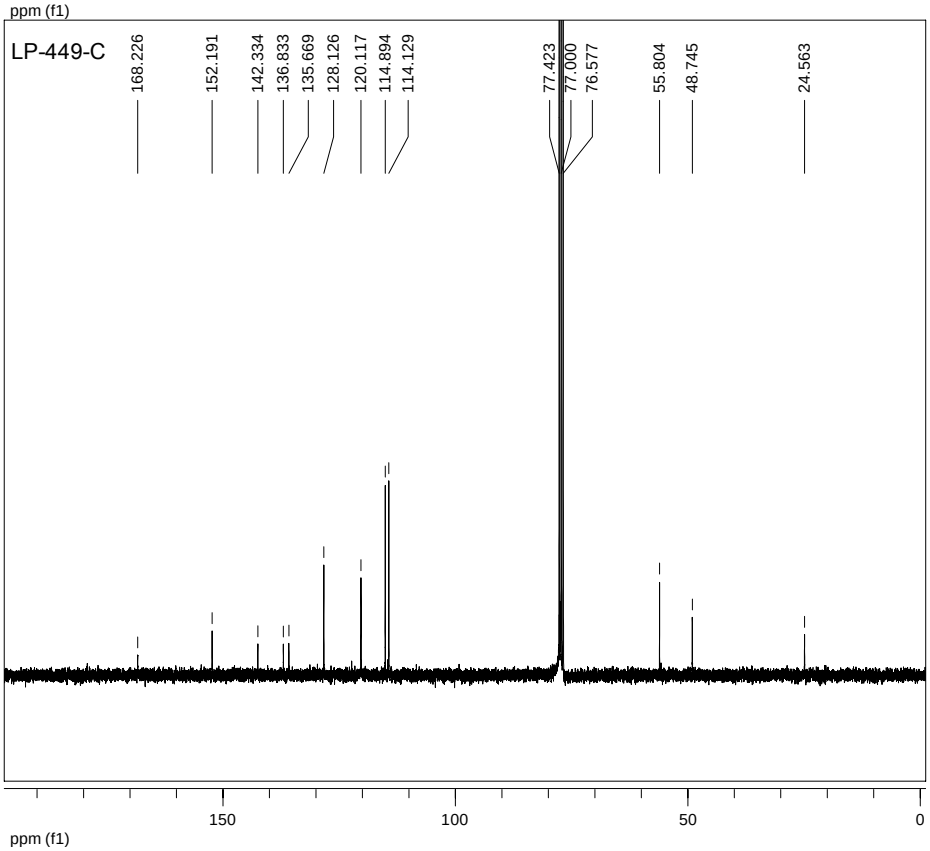

Date:
18 Feb 2013
Document's Title:
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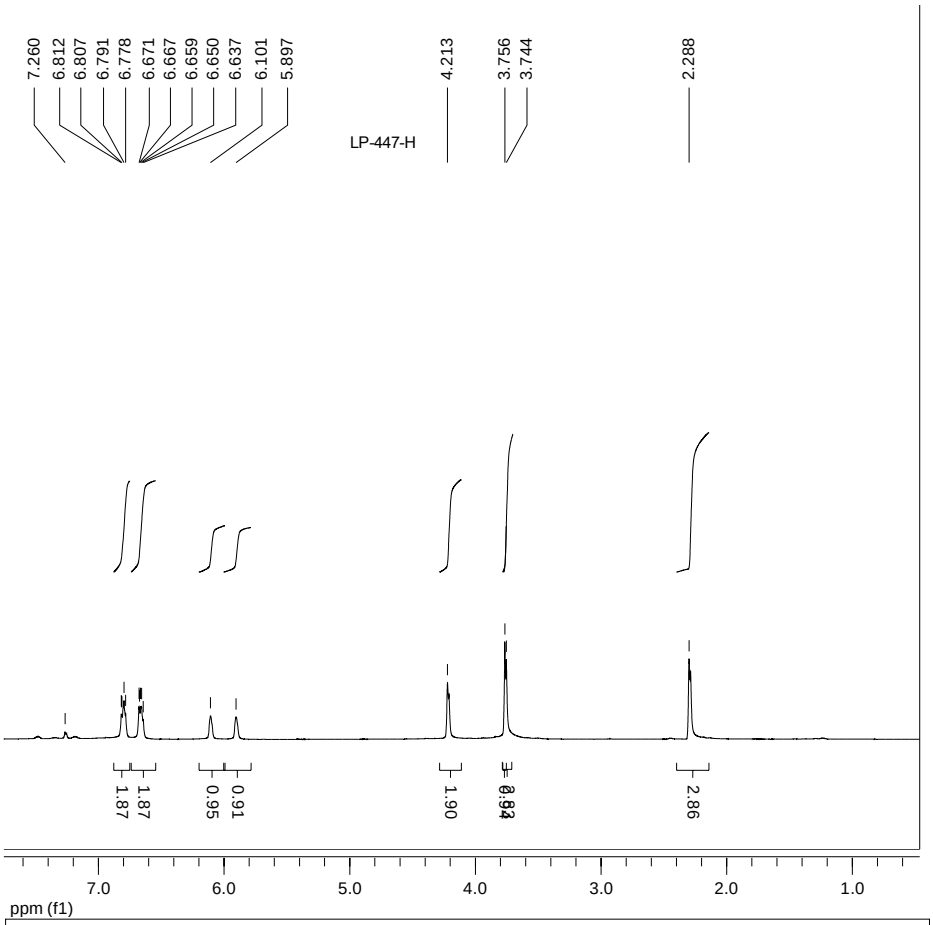
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
296.996
Number of Scans:
2000
Acq. Date:
Sat Nov 10 04:25:11 AM

4-Methoxy-*N*-[(5-methyl-2-furyl)methyl]aniline (Table 2, entry 24)



Date:
28 Jun 2013
Document's Title:
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Spectrum Title:

Frequency (MHz):
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Original Points Count:
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Actual Points Count:
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Acquisition Time (sec):
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Spectral Width (ppm):
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Pulse Program:
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Temperature:
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Acq. Date:
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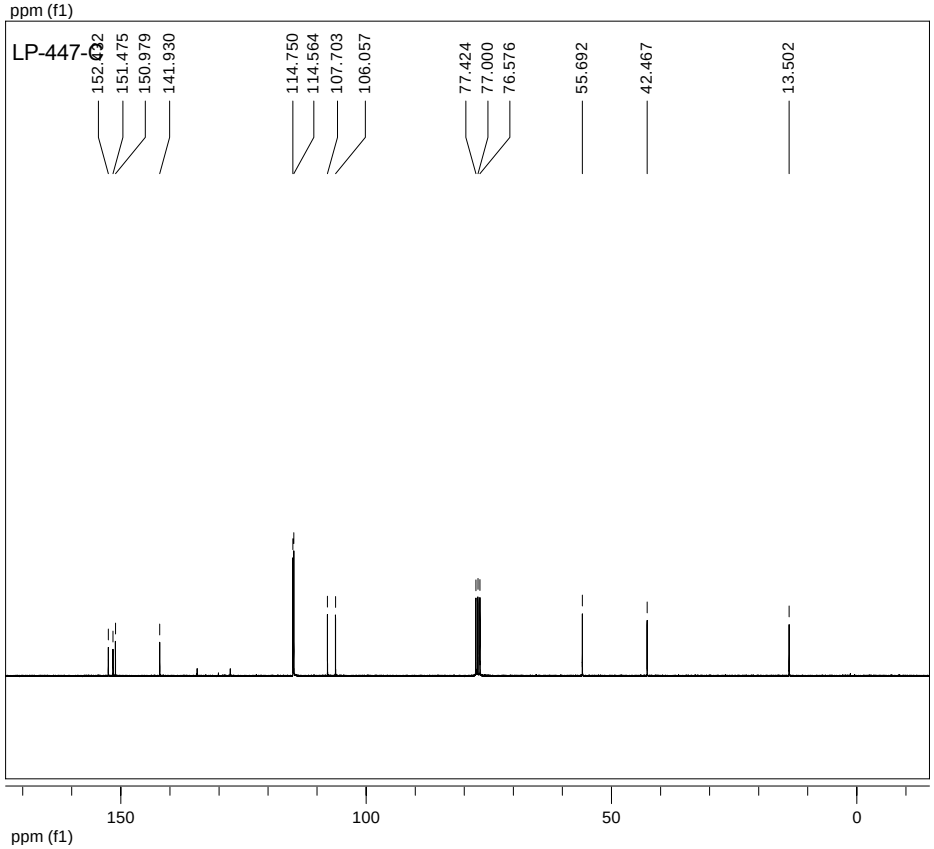

Date:
28 Nov 2012
Document's Title:
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Spectrum Title:
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Frequency (MHz):
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Original Points Count:
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Actual Points Count:
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Acquisition Time (sec):
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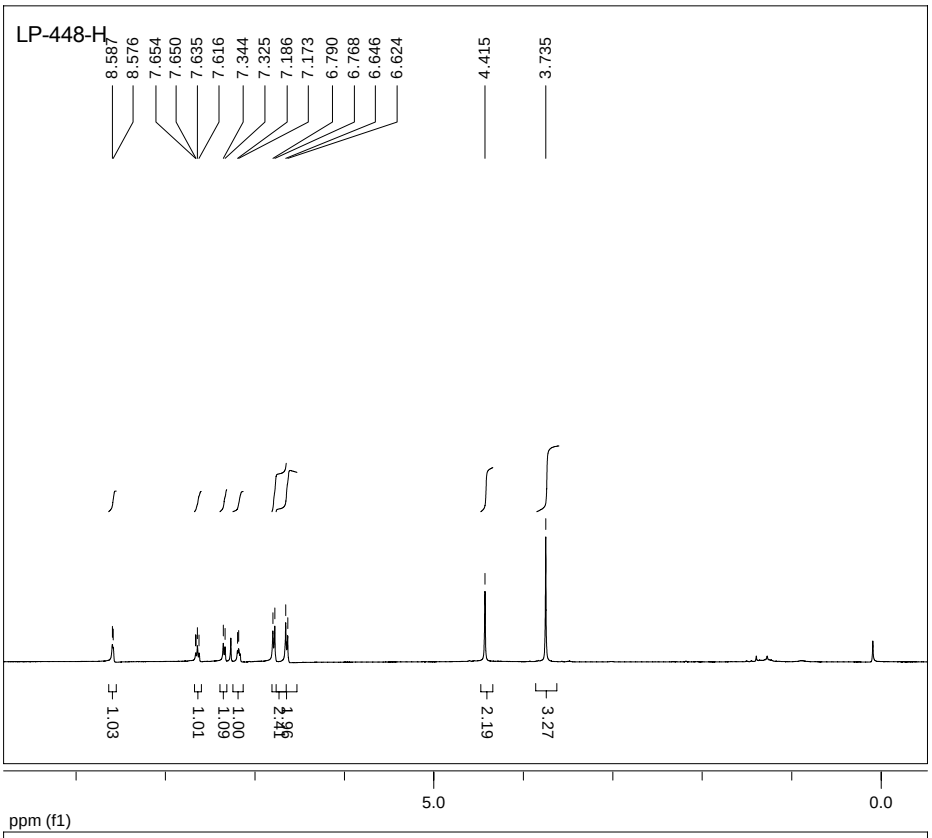
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
296.996
Number of Scans:
2000
Acq. Date:
Sat Nov 10 02:07:18 AM

4-Methoxy-*N*-(pyridin-2-ylmethyl)aniline (Table 2, entry 26)



Date:
28 Nov 2012
Document's Title:
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Spectrum Title:

Frequency (MHz):
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Original Points Count:
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Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 3.9846
Spectral Width (ppm):
(f1) 20.551
Pulse Program:
ZG30
Temperature:
299.0775
Number of Scans:
8
Acq. Date:
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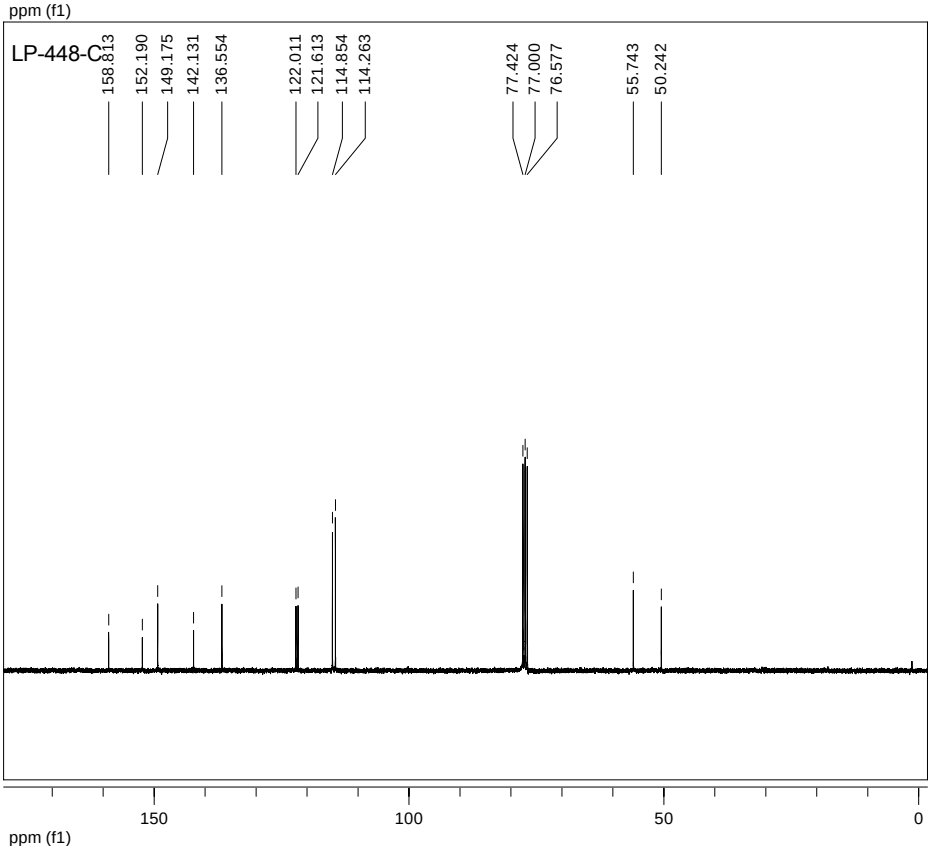

Date:
28 Nov 2012
Document's Title:
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Spectrum Title:
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Original Points Count:
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Actual Points Count:
(f1) 65536
Acquisition Time (sec):
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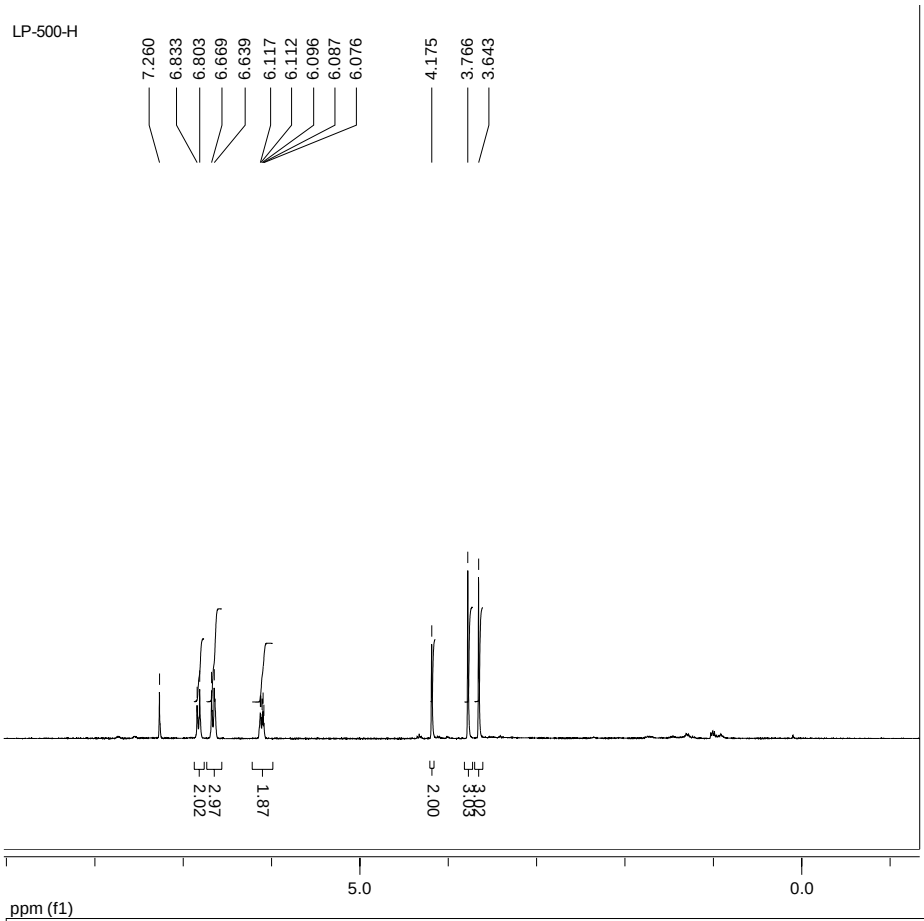
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
296.996
Number of Scans:
700
Acq. Date:
Mon Nov 19 01:22:31 AM

4-Methoxy-*N*-[(1-methyl-1H-pyrrol-2yl)methyl]aniline (Table 2, entry 29)



Date:
28 Jun 2013
Document's Title:
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Spectrum Title:
CDLP-500-H

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Original Points Count:
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Actual Points Count:
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Acquisition Time (sec):
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Spectral Width (ppm):
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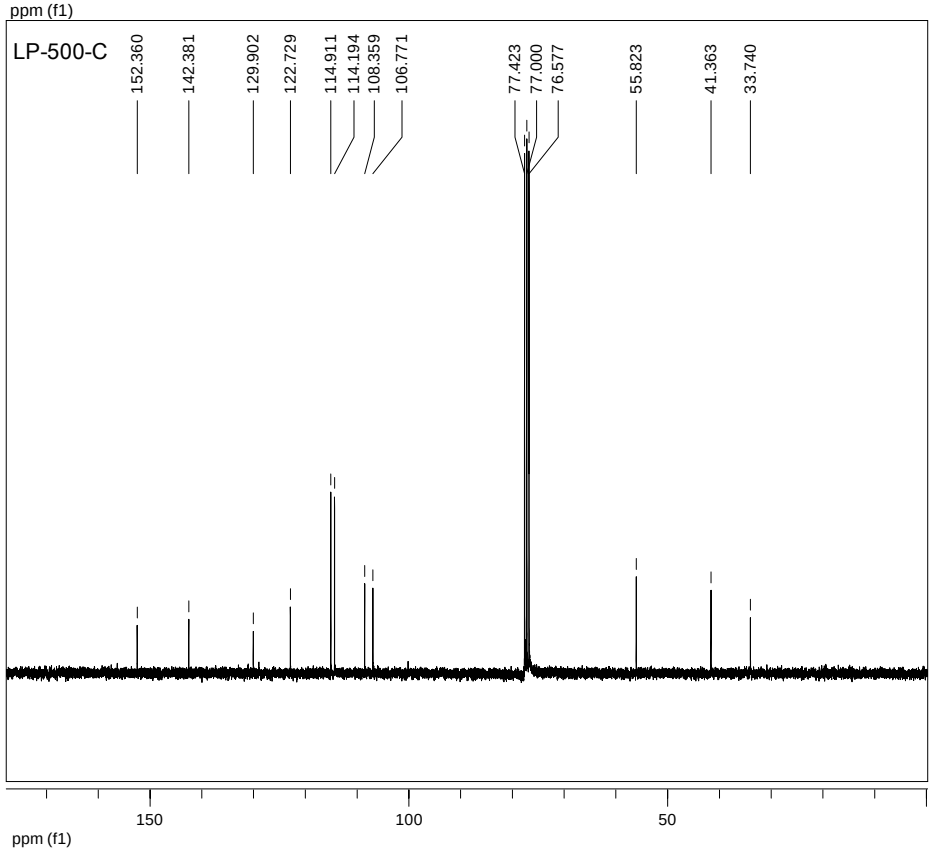
Pulse Program:
ZG30
Temperature:
294.542
Number of Scans:
8
Acq. Date:
Fri Jan 25 11:11:13 AM



Date:
18 Feb 2013
Document's Title:
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Spectrum Title:
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Frequency (MHz):
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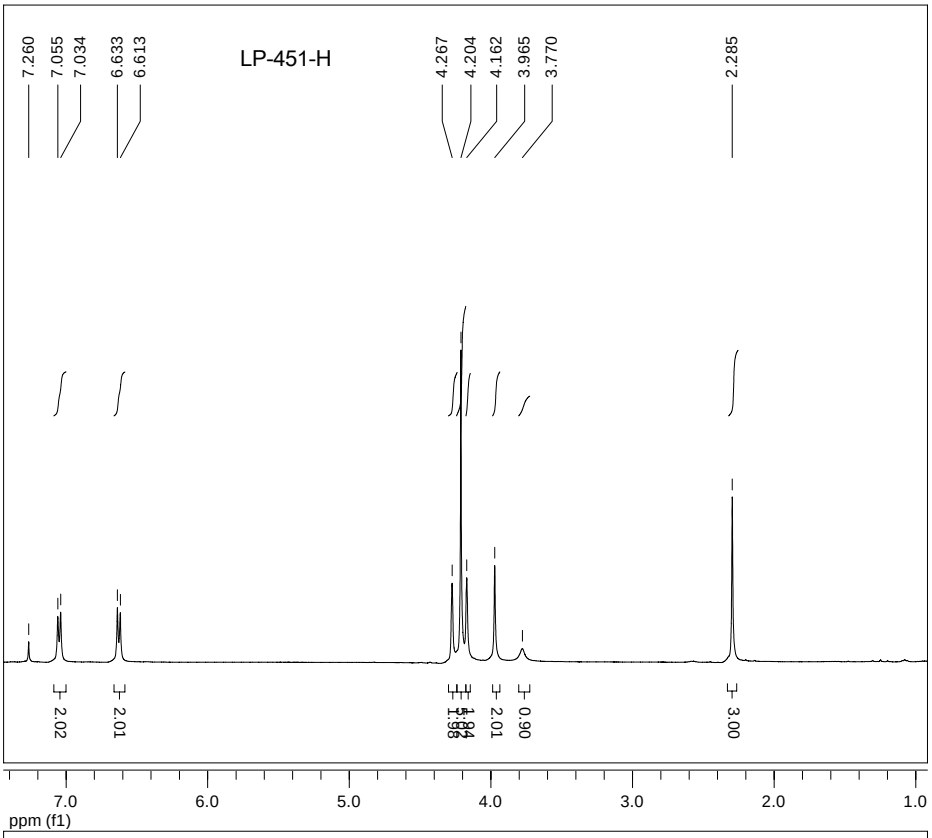
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
295.769
Number of Scans:
600
Acq. Date:
Sun Jan 20 09:24:14 PM

***N*-(Ferrocenylmethyl)-4-methylaniline** (Table 2, entry 30)



Date:
28 Nov 2012
Document's Title:
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Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
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Spectral Width (ppm):
(f1) 20.551
Pulse Program:
ZG30
Temperature:
299.1233
Number of Scans:
8
Acq. Date:
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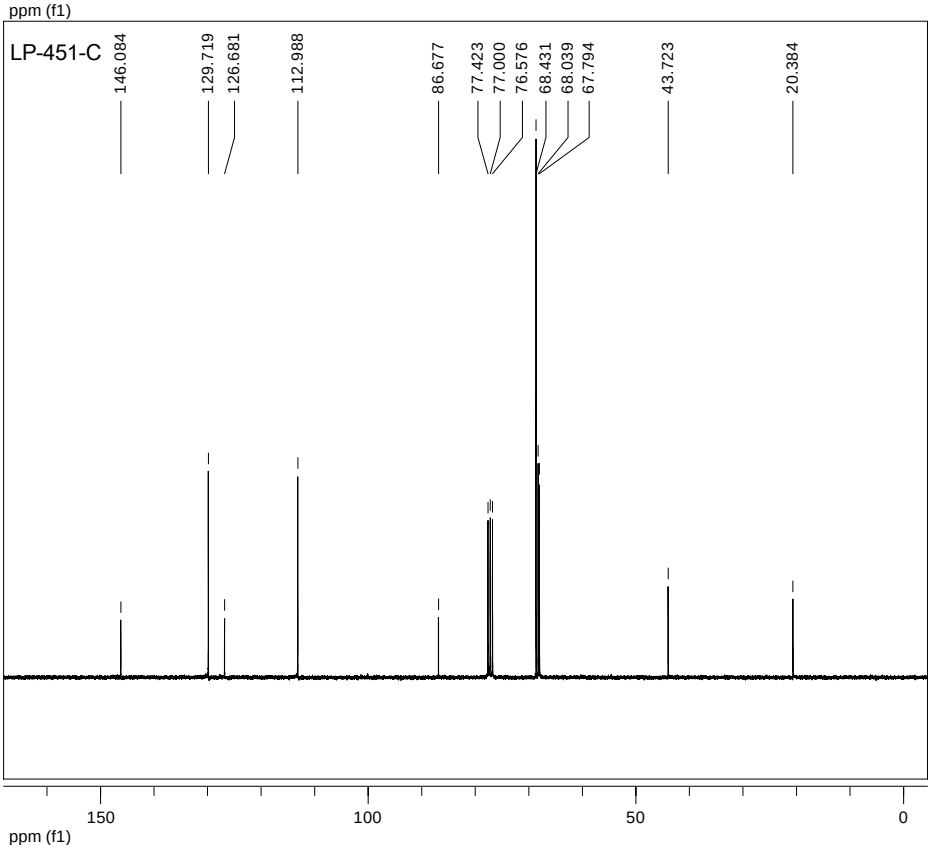

Date:
28 Nov 2012
Document's Title:
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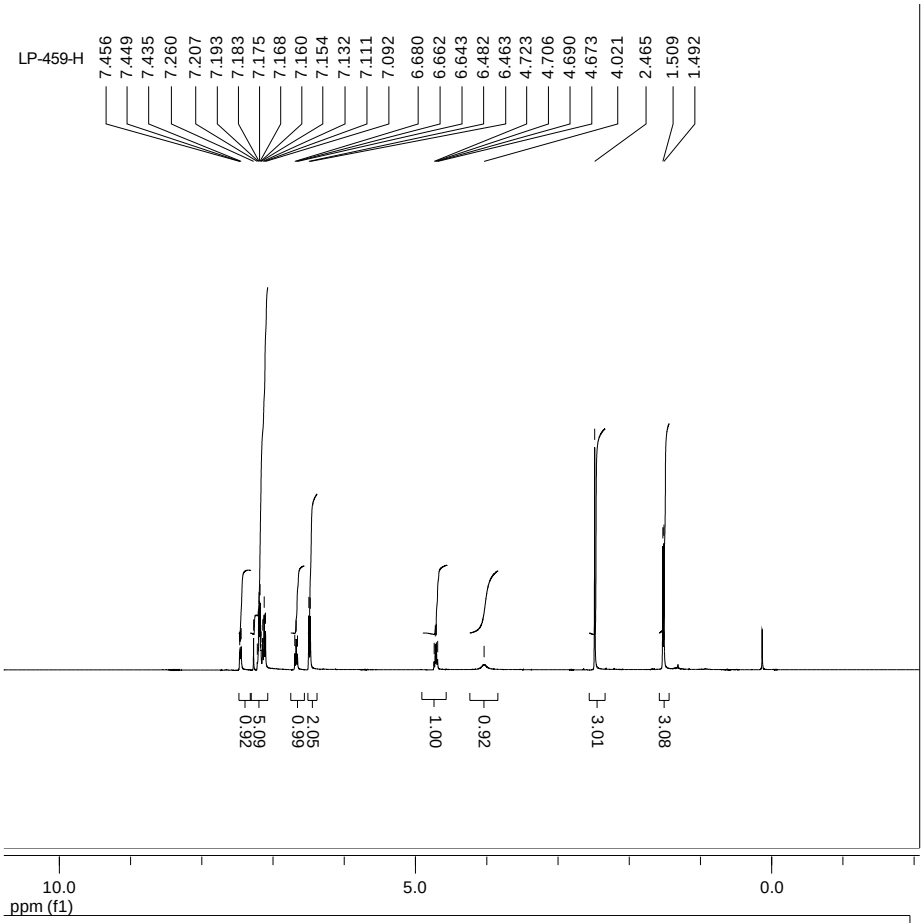
Frequency (MHz):
(f1) 75.475
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
297.1187
Number of Scans:
700
Acq. Date:
Mon Nov 19 02:17:44 AM

N-[1-(2-methylphenyl)ethyl]aniline (Table 4, entry 1)



Date:
28 Jun 2013
Document's Title:
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Frequency (MHz):
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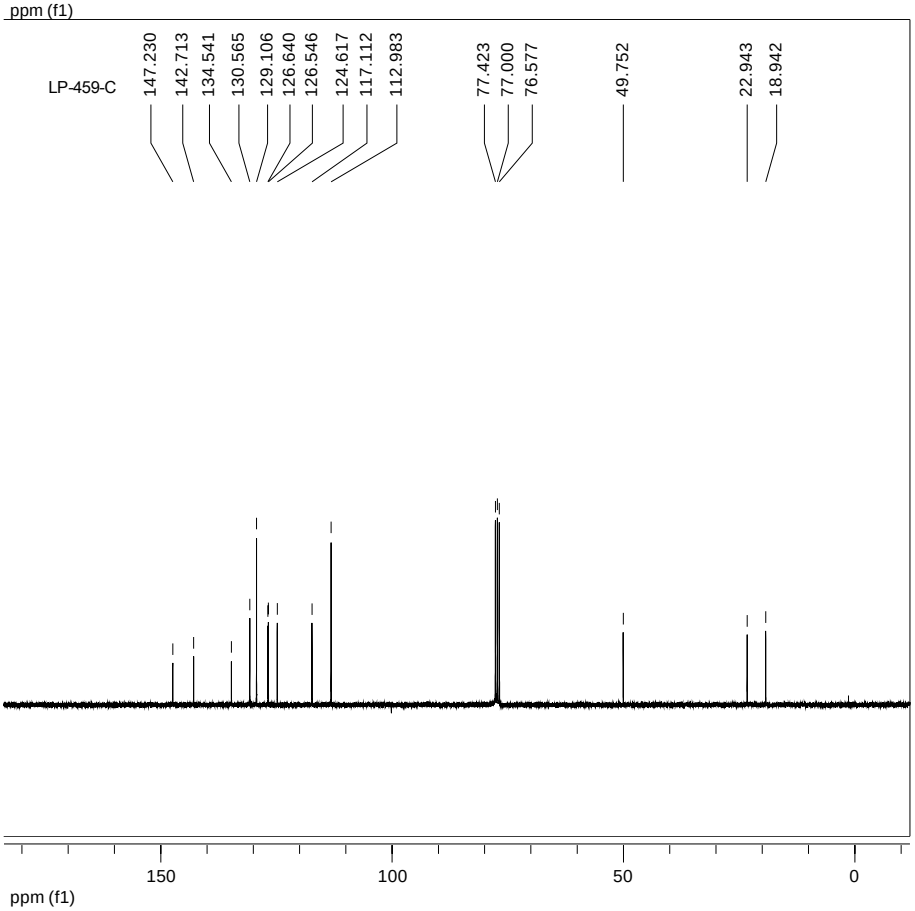
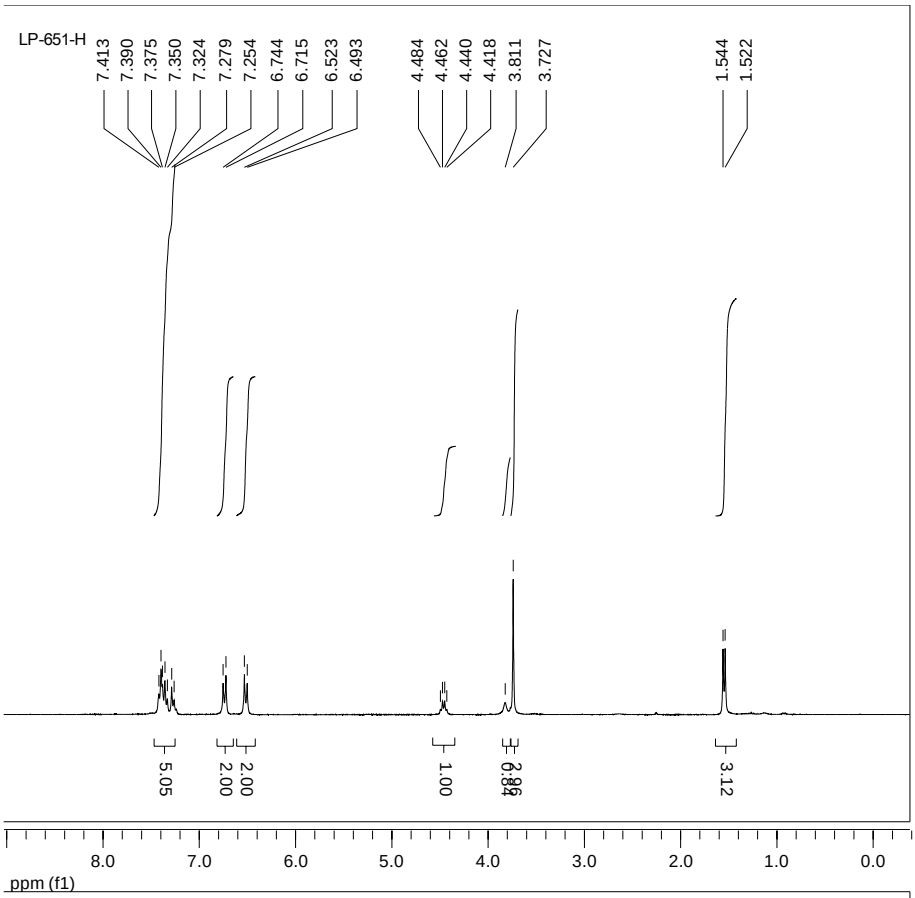
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 3.9846
Spectral Width (ppm):
(f1) 20.551
Pulse Program:
ZG30
Temperature:
299.1045
Number of Scans:
16
Acq. Date:
Mon Nov 26 12:21:48 AM



Date:
27 Jun 2013
Document's Title:
10

Spectrum Title:
None
Frequency (MHz):
(f1) 75.475
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
297.7322
Number of Scans:
600
Acq. Date:
Fri Nov 23 11:40:03 PM

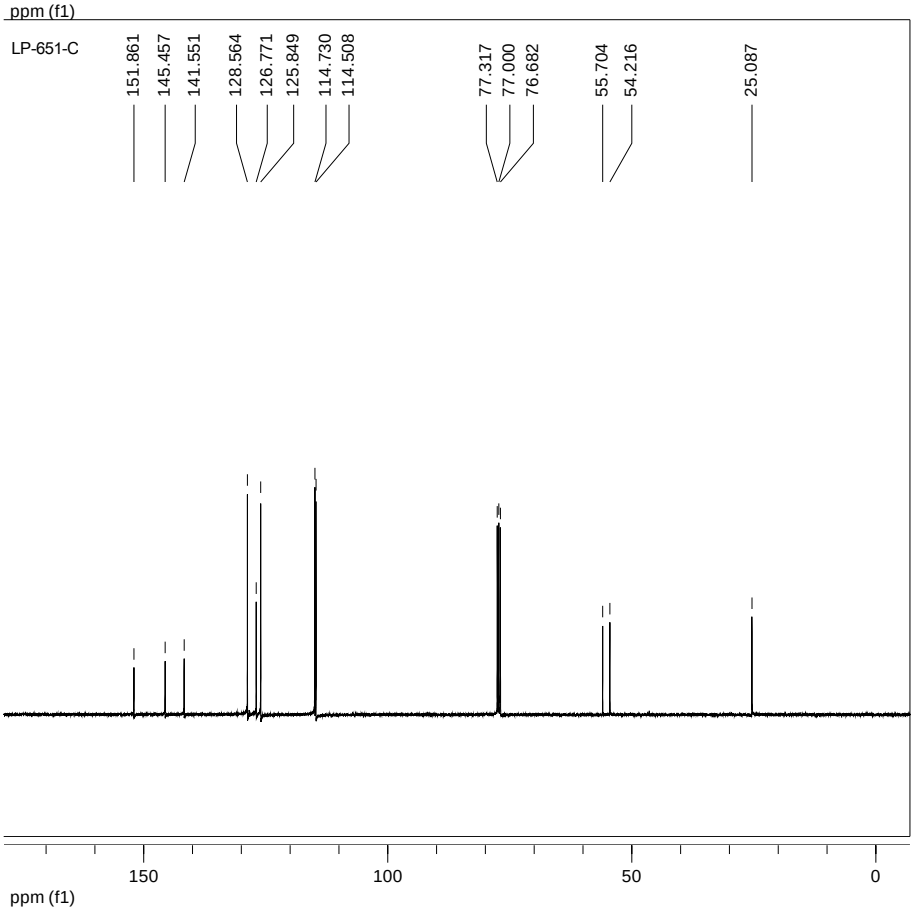
4-Methoxy-*N*-(1-phenylethyl)aniline (Table 4, entry 2)



Date:
11 Jun 2013
Document's Title:
1

Spectrum Title:
CDLP-561-H

Frequency (MHz):
(f1) 300.132
Original Points Count:
(f1) 16384
Actual Points Count:
(f1) 32768
Acquisition Time (sec):
(f1) 2.6542
Spectral Width (ppm):
(f1) 20.567
Pulse Program:
ZG30
Temperature:
298.8365
Number of Scans:
8
Acq. Date:
Fri Jun 07 01:33:39 PM

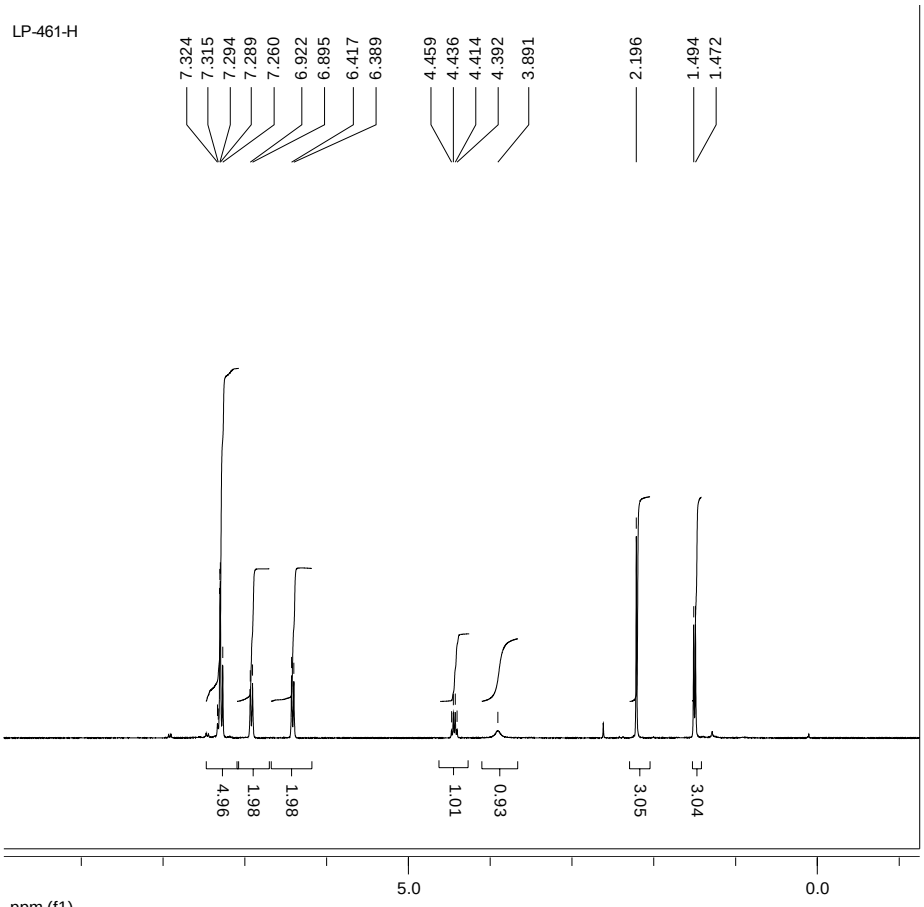


Date:
11 Jun 2013
Document's Title:
10

Spectrum Title:

Frequency (MHz):
(f1) 100.631
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.2583
Spectral Width (ppm):
(f1) 258.783
Pulse Program:
ZGPG30
Temperature:
299.1277
Number of Scans:
700
Acq. Date:
Sat Jun 08 06:08:12 PM

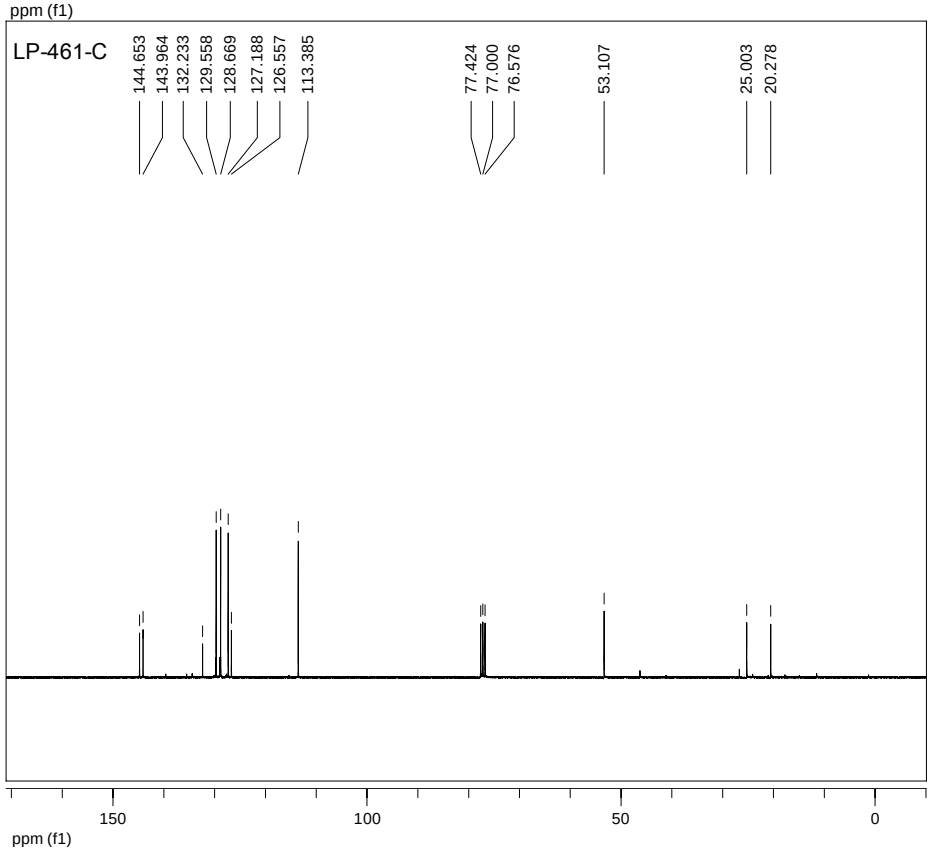
4-Methyl-*N*-(1-phenylethyl)aniline (Table 4, entry 4)



Date:
28 Jun 2013
Document's Title:
1

Spectrum Title:
CDLP-461-H

Frequency (MHz):
(f1) 300.132
Original Points Count:
(f1) 16384
Actual Points Count:
(f1) 32768
Acquisition Time (sec):
(f1) 2.6542
Spectral Width (ppm):
(f1) 20.567
Pulse Program:
ZG30
Temperature:
294.542
Number of Scans:
8
Acq. Date:
Fri Jan 25 11:28:18 AM



Date:
20 Feb 2013
Document's Title:
10

Spectrum Title:
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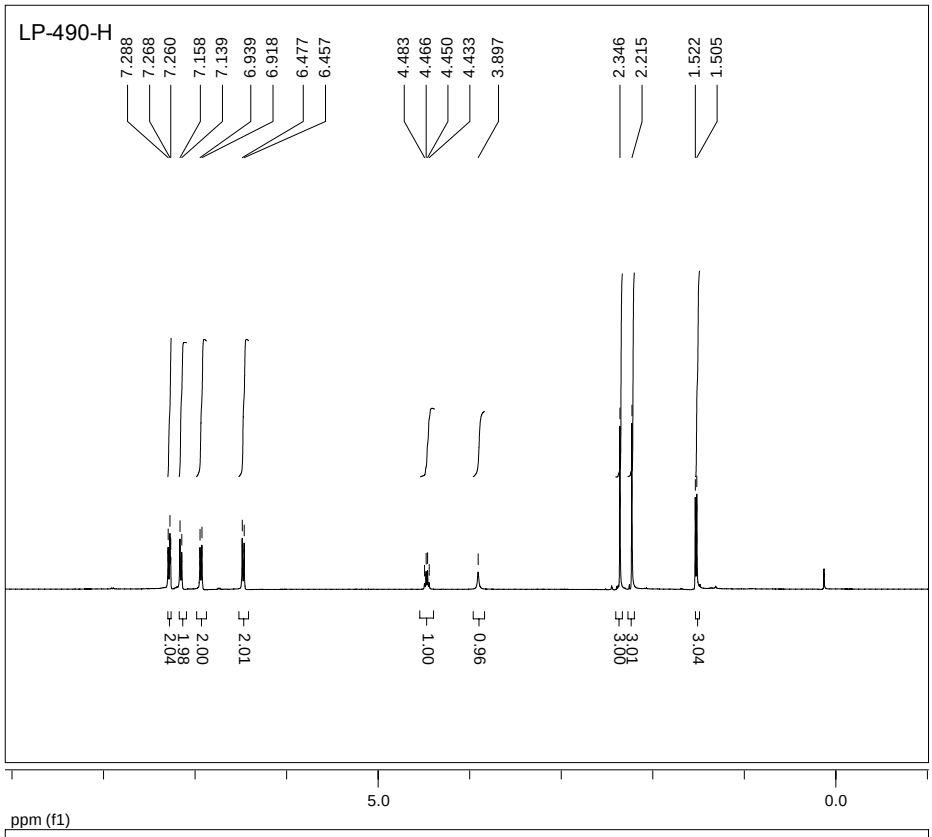
Frequency (MHz):
(f1) 75.475
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
297.6095
Number of Scans:
600
Acq. Date:
Sat Nov 24 01:19:27 AM

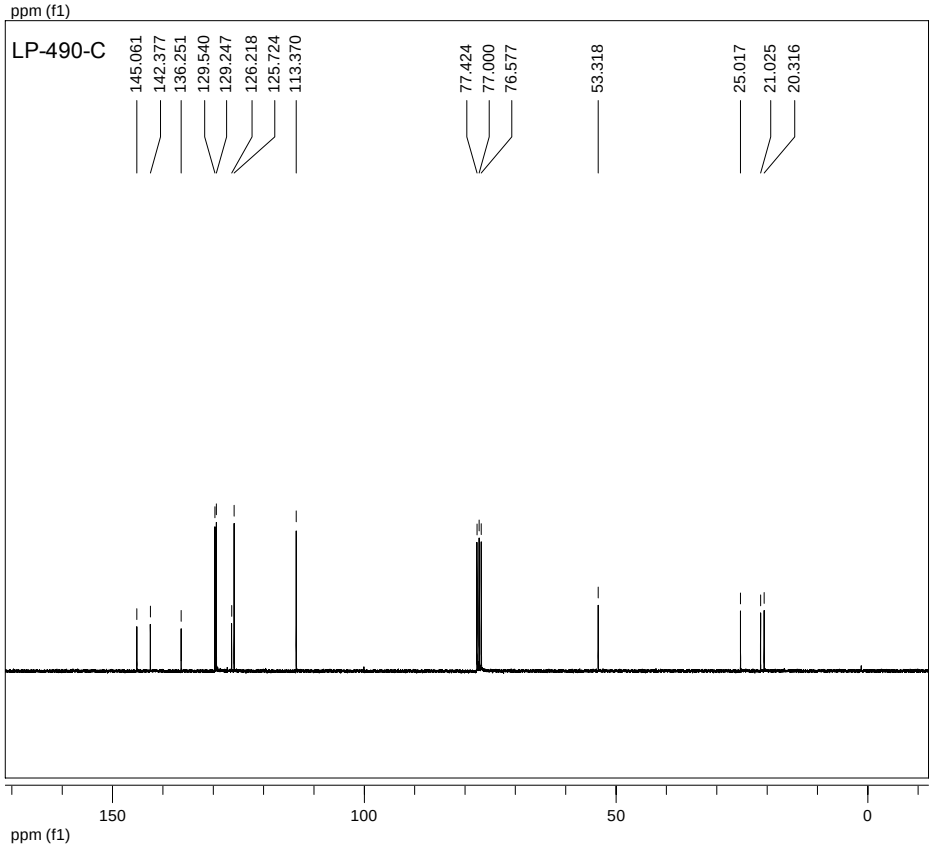
4-Methyl-*N*-[1-(4-methylphenyl)-ethyl]aniline (Table 4, entry 5)



Date:
14 Jan 2013
Document's Title:
1

Spectrum Title:

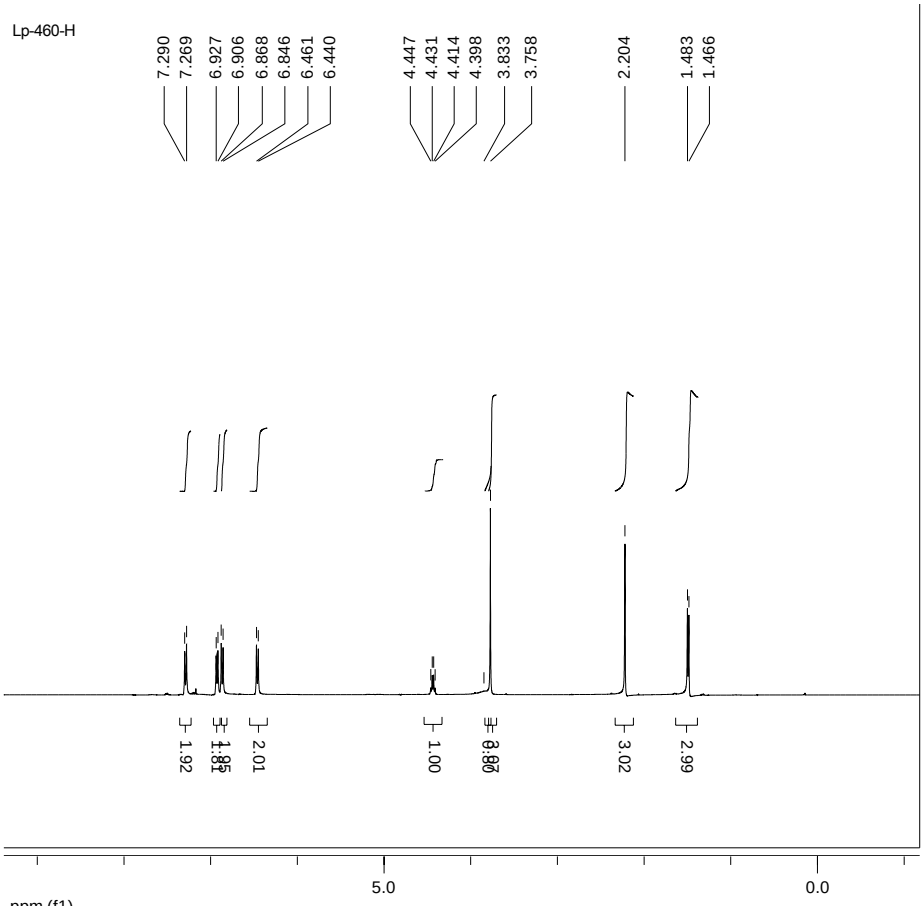
Frequency (MHz):
(f1) 400.162
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 3.9846
Spectral Width (ppm):
(f1) 20.551
Pulse Program:
ZG30
Temperature:
299.0729
Number of Scans:
16
Acq. Date:
Mon Jan 14 11:17:28 AM



Date:
21 Jan 2013
Document's Title:
20

Spectrum Title:
None
Frequency (MHz):
(f1) 75.475
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
295.4009
Number of Scans:
600
Acq. Date:
Mon Jan 21 08:32:44 AM

N-[1-(4-Methoxyphenyl)ethyl]-4-methylaniline (Table 4, entry 6)



Date:
28 Jun 2013
Document's Title:
1

Spectrum Title:

Frequency (MHz):
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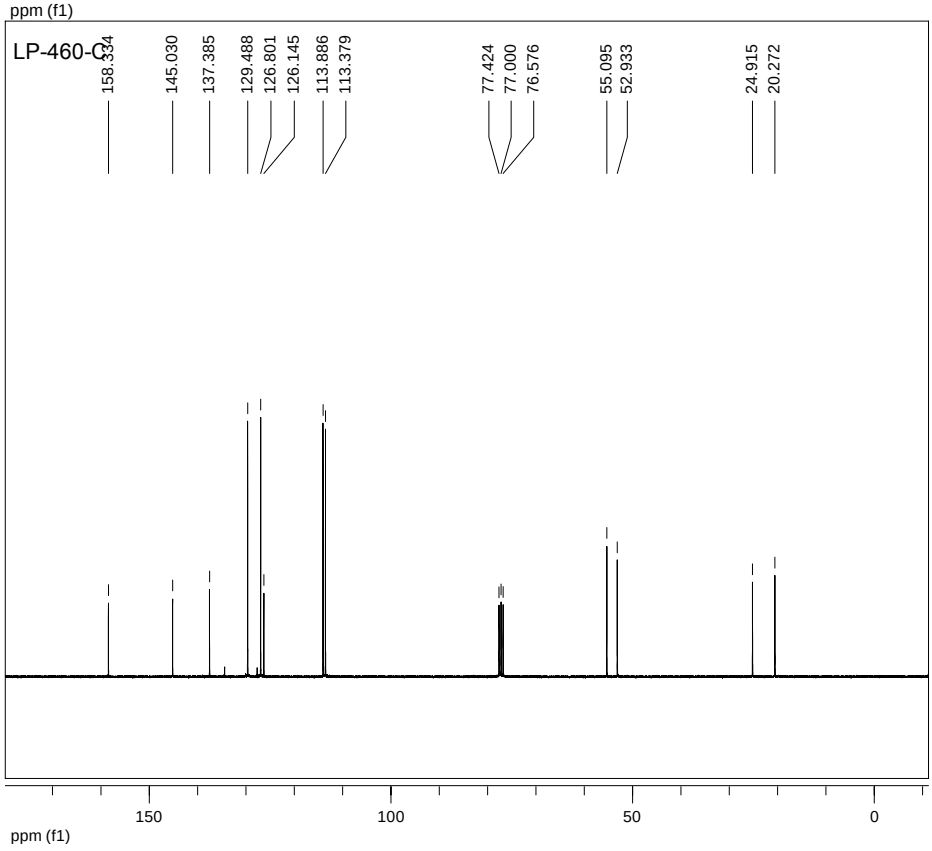
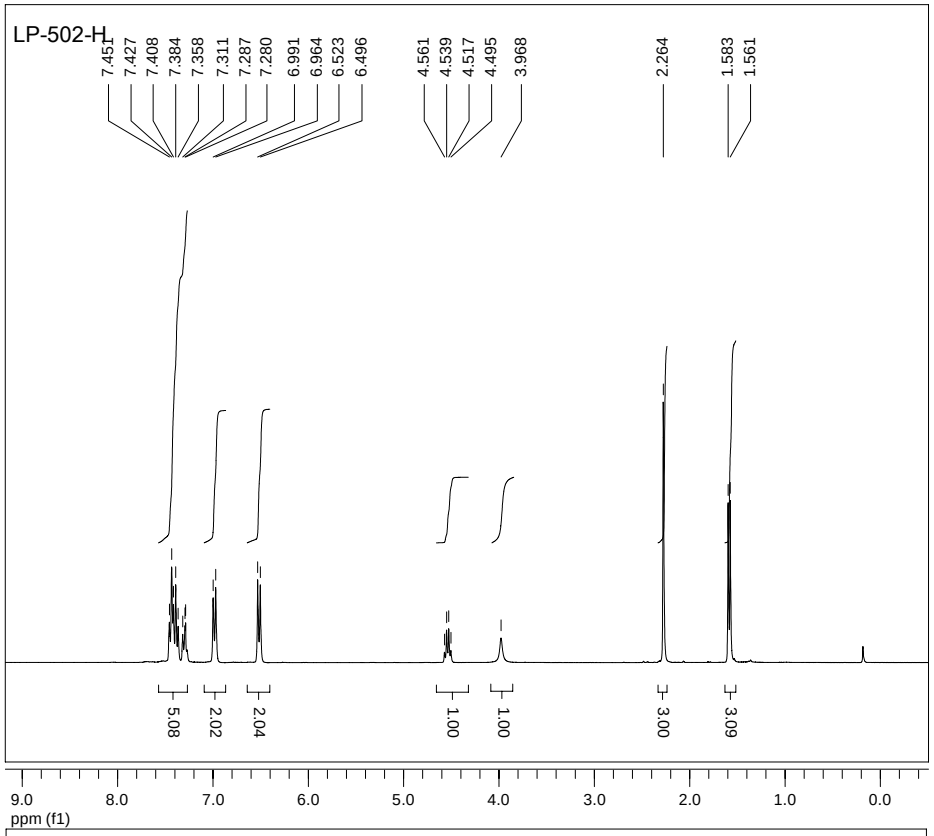
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 3.9846
Spectral Width (ppm):
(f1) 20.551
Pulse Program:
ZG30
Temperature:
299.1223
Number of Scans:
16
Acq. Date:
Mon Nov 26 12:27:19 AM



Date:
21 Jan 2013
Document's Title:
10

Spectrum Title:
None
Frequency (MHz):
(f1) 75.475
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
297.6095
Number of Scans:
600
Acq. Date:
Sat Nov 24 12:29:11 AM

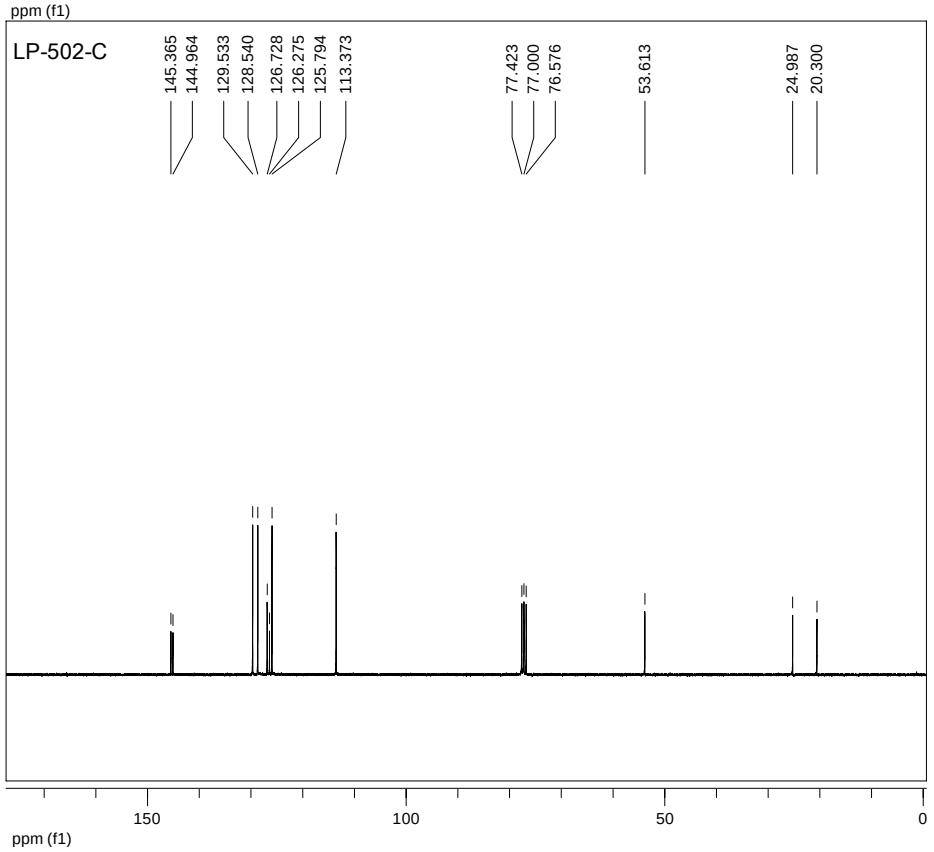
***N*-[1-(4-Chlorophenyl)ethyl]-4-methylaniline** (Table 4, entry 8)



Date:
25 Jan 2013
Document's Title:
1

Spectrum Title:
CDLP-502-H

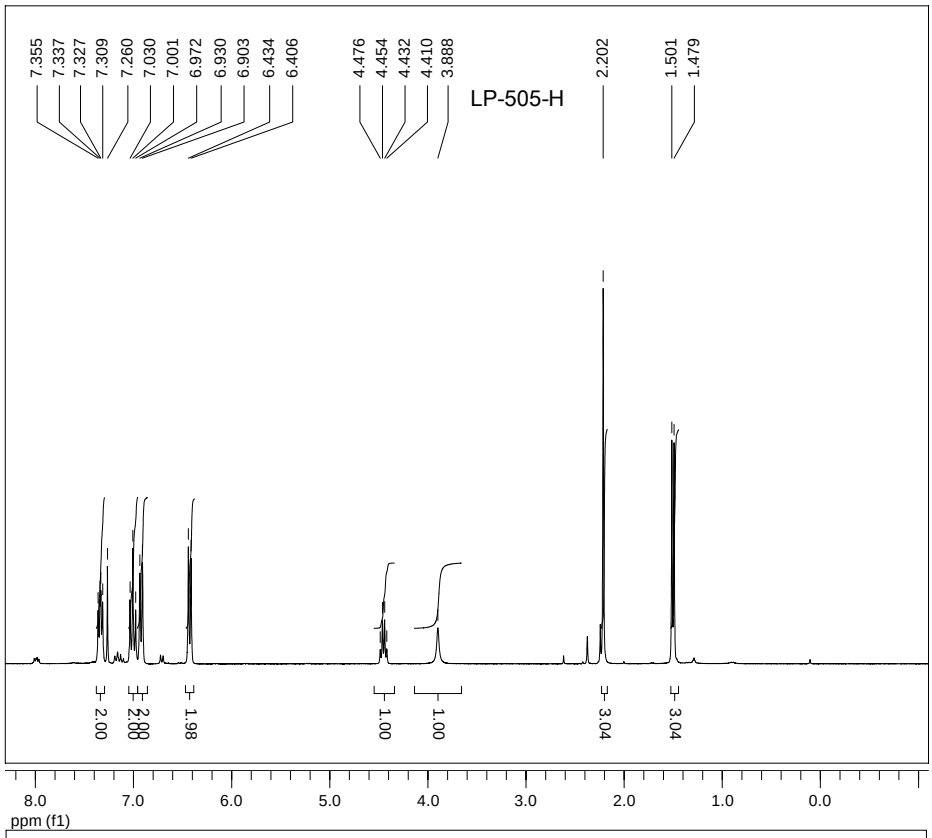
Frequency (MHz):
(f1) 300.132
Original Points Count:
(f1) 16384
Actual Points Count:
(f1) 32768
Acquisition Time (sec):
(f1) 2.6542
Spectral Width (ppm):
(f1) 20.567
Pulse Program:
ZG30
Temperature:
294.542
Number of Scans:
8
Acq. Date:
Fri Jan 25 11:16:10 AM



Date:
20 Feb 2013
Document's Title:
10

Spectrum Title:
None
Frequency (MHz):
(f1) 75.475
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
296.2598
Number of Scans:
600
Acq. Date:
Sun Feb 03 08:57:53 PM

***N*-[1-(4-Fluorophenyl)ethyl]-4-methylaniline** (Table 4, entry 9)



Date:
25 Jan 2013
Document's Title:
1

Spectrum Title:
CDLP-505-H

Frequency (MHz):
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Original Points Count:
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Actual Points Count:
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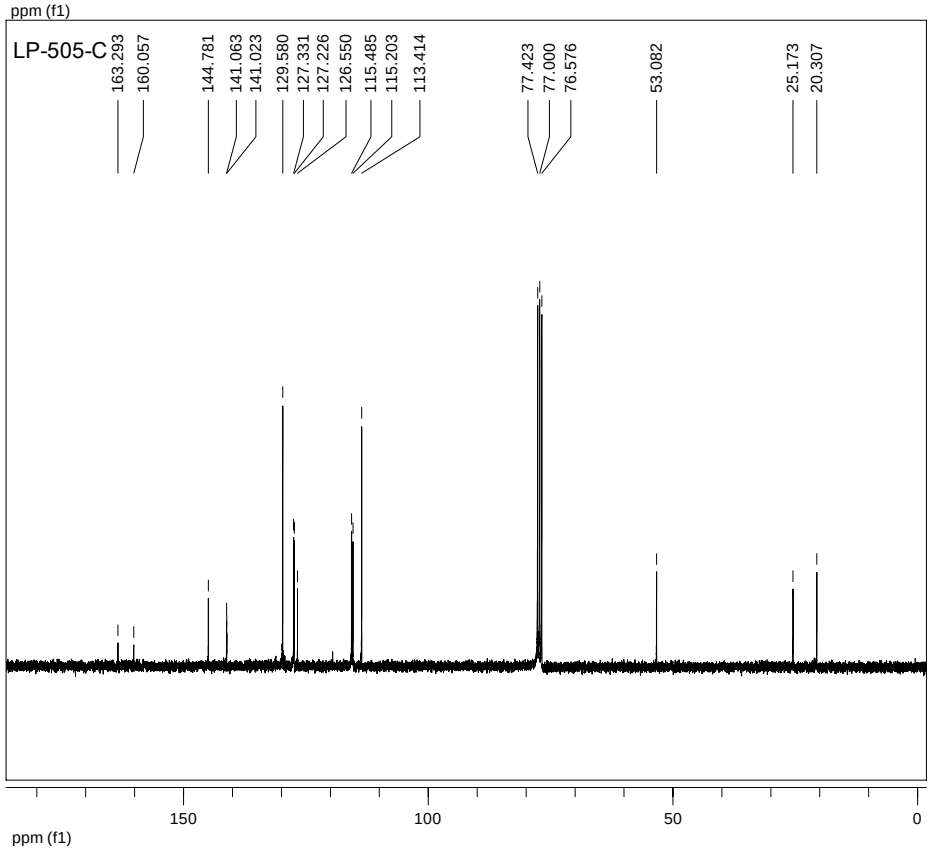
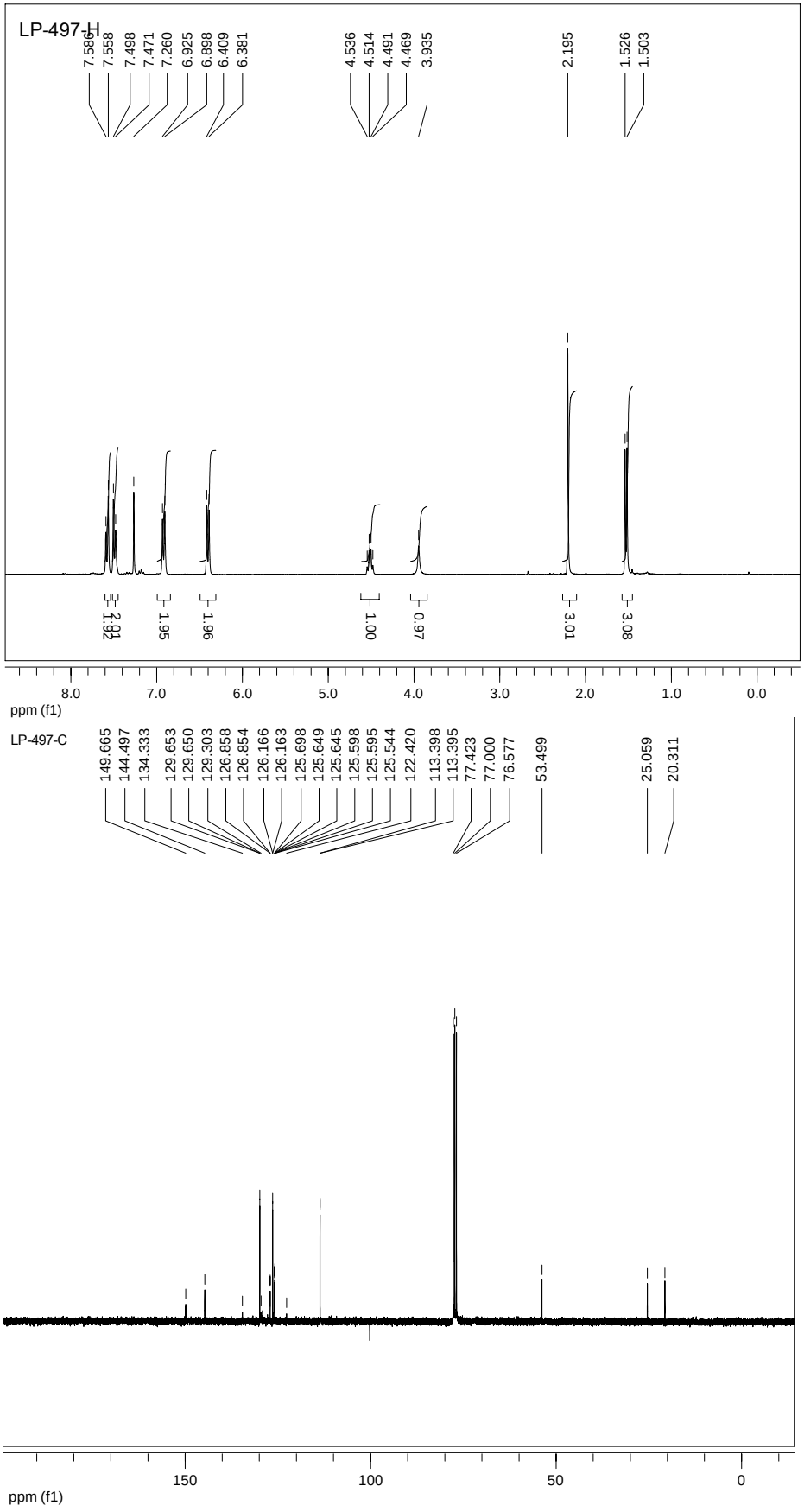
Acquisition Time (sec):
(f1) 2.6542
Spectral Width (ppm):
(f1) 20.567
Pulse Program:
ZG30
Temperature:
294.542
Number of Scans:
8
Acq. Date:
Fri Jan 25 11:25:27 AM



Date:
20 Feb 2013
Document's Title:
10

Spectrum Title:
None
Frequency (MHz):
(f1) 75.475
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
296.2598
Number of Scans:
600
Acq. Date:
Sun Feb 03 09:46:18 PM

***N*-[1-(4-(Trifluoromethyl)phenyl)ethyl]aniline** (Table 4, entry 13)



Date:
7 Mar 2013
Document's Title:
1

Spectrum Title:
CDLP-497-H

Frequency (MHz):
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Original Points Count:
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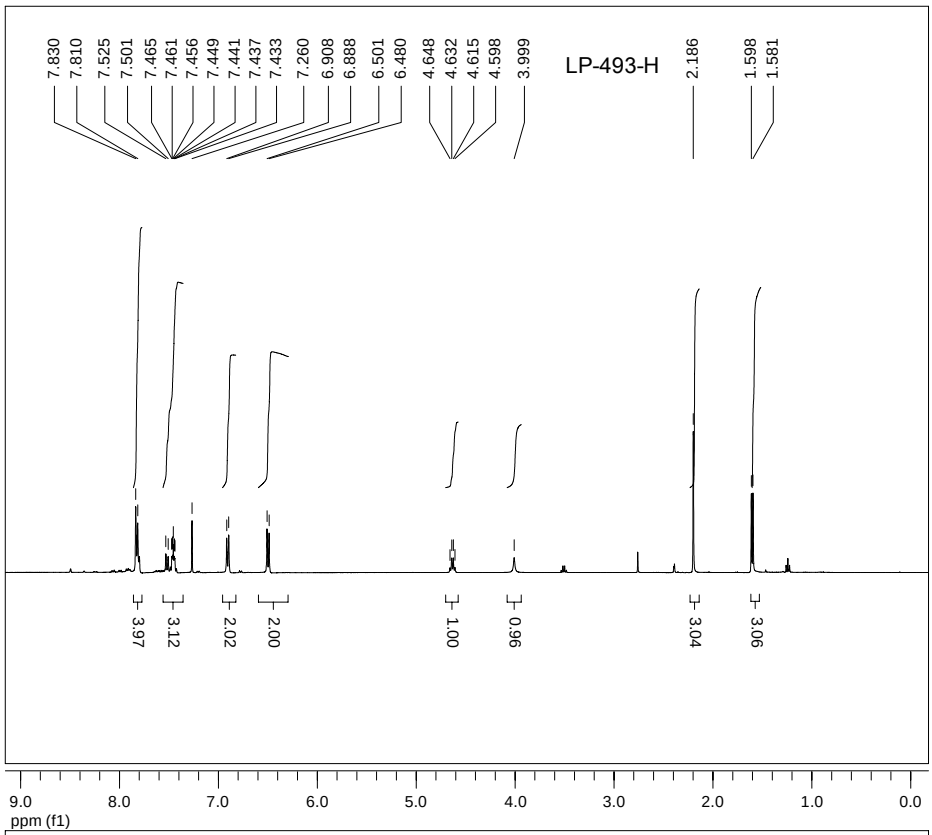
Actual Points Count:
(f1) 32768
Acquisition Time (sec):
(f1) 2.6542
Spectral Width (ppm):
(f1) 20.567
Pulse Program:
ZG30
Temperature:
294.542
Number of Scans:
8
Acq. Date:
Fri Jan 25 11:07:23 AM

Date:
28 Jun 2013
Document's Title:
10

Spectrum Title:
None
Frequency (MHz):
(f1) 75.475
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
296.3825
Number of Scans:
600
Acq. Date:
Sun Feb 03 11:19:42 PM

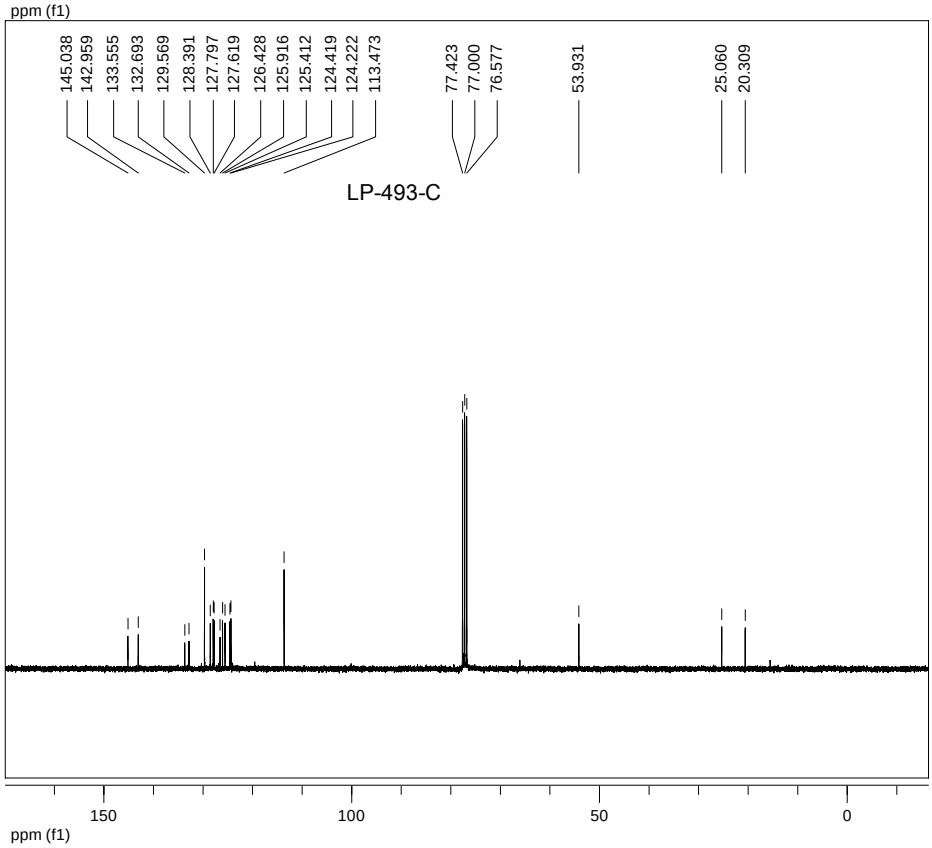
4-Methyl-*N*-[1-(2-naphthyl)ethyl]aniline (Table 4, entry 14)



Date:
21 Jan 2013
Document's Title:
1

Spectrum Title:

Frequency (MHz):
(f1) 400.162
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 3.9846
Spectral Width (ppm):
(f1) 20.551
Pulse Program:
ZG30
Temperature:
299.0514
Number of Scans:
16
Acq. Date:
Fri Jan 18 01:23:26 PM



Date:
21 Jan 2013
Document's Title:
10

Spectrum Title:
None
Frequency (MHz):
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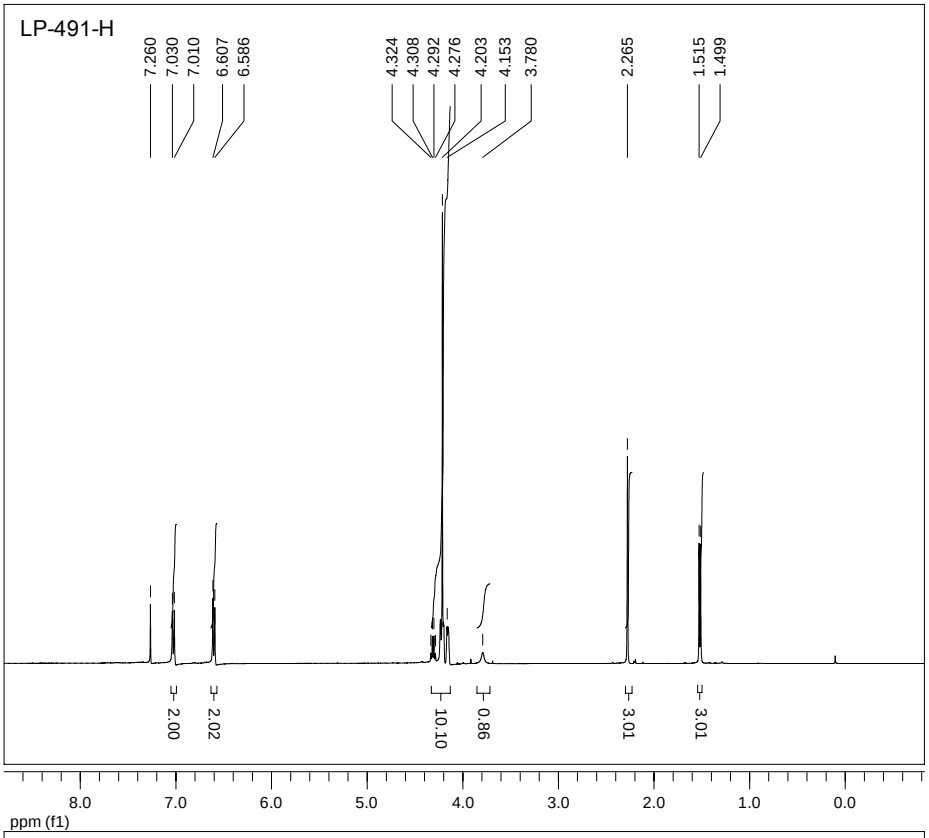
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
295.5236
Number of Scans:
600
Acq. Date:
Sun Jan 20 08:36:09 PM

***N*-[1-(Ferrocenyl)ethyl]-4-methylaniline** (Table 4, entry 17)



Date:
7 Mar 2013
Document's Title:
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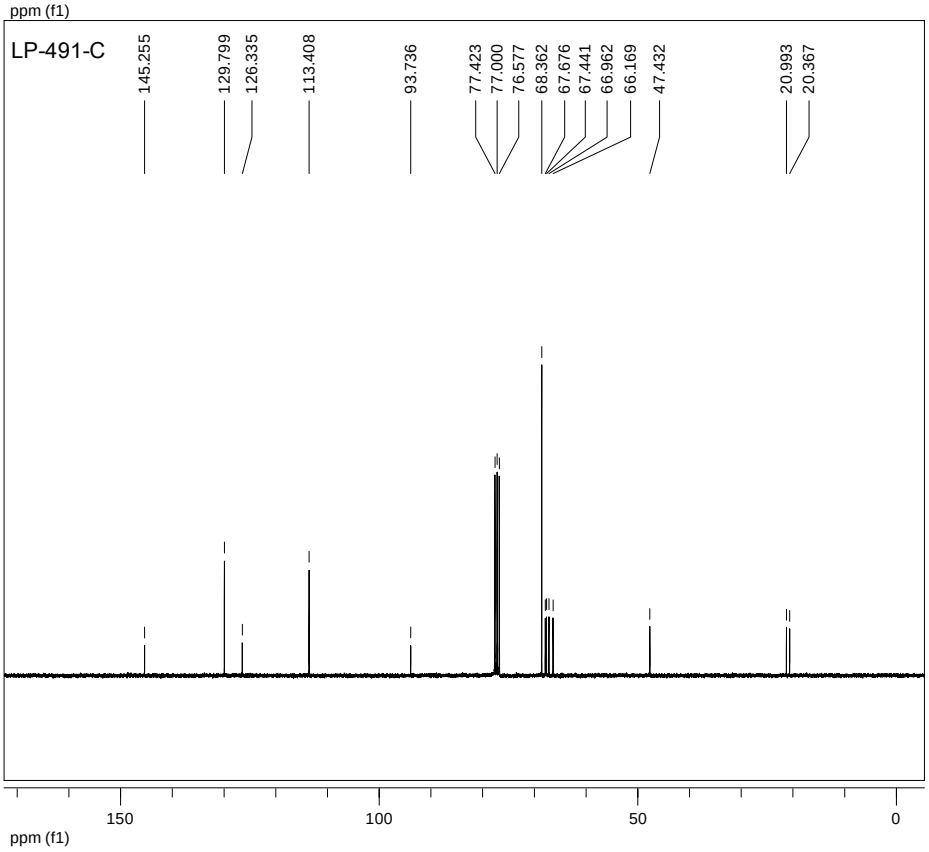
Spectrum Title:

Frequency (MHz):
(f1) 400.162
Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 3.9846
Spectral Width (ppm):
(f1) 20.551
Pulse Program:
ZG30
Temperature:
299.1325
Number of Scans:
16
Acq. Date:
Mon Jan 14 11:22:50 AM



Date:
7 Mar 2013
Document's Title:
20

Spectrum Title:
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Frequency (MHz):
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Original Points Count:
(f1) 32768
Actual Points Count:
(f1) 65536
Acquisition Time (sec):
(f1) 1.8219
Spectral Width (ppm):
(f1) 238.298
Pulse Program:
ZGPG30
Temperature:
295.4009
Number of Scans:
600
Acq. Date:
Mon Jan 21 09:20:22 AM