Electronic Supporting Information (ESI)

Organomagnesium amide catalyzed cross-dehydrocoupling of organosilanes with amines†

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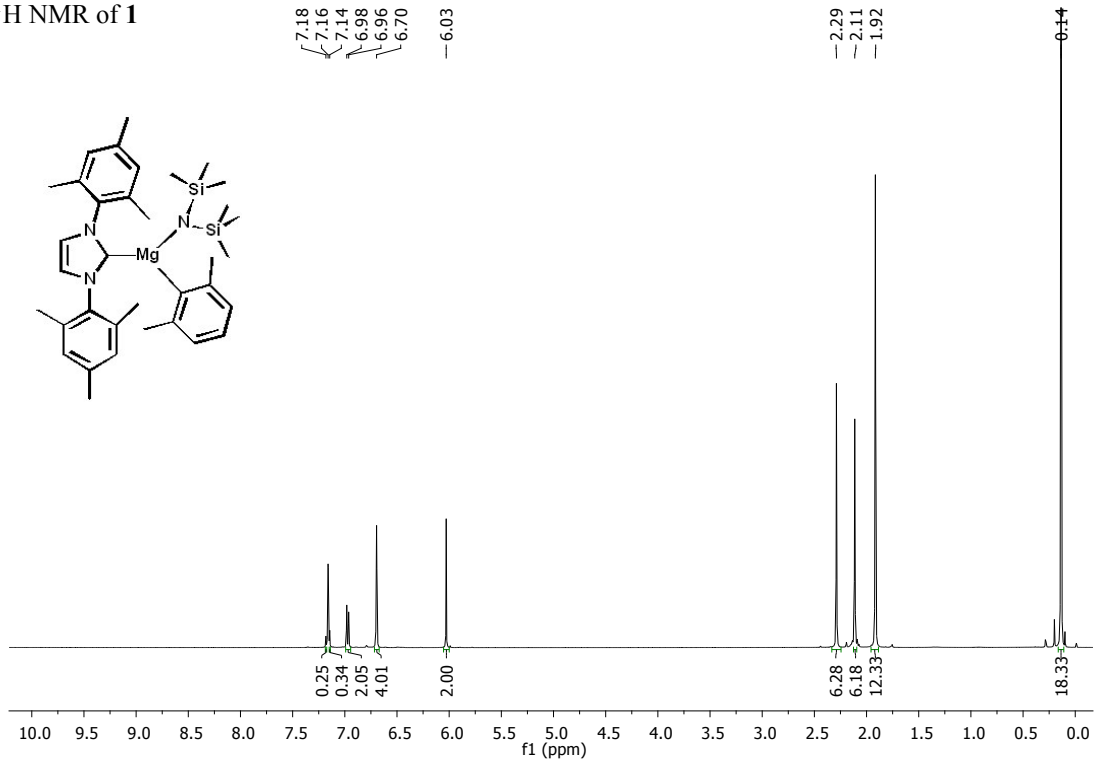
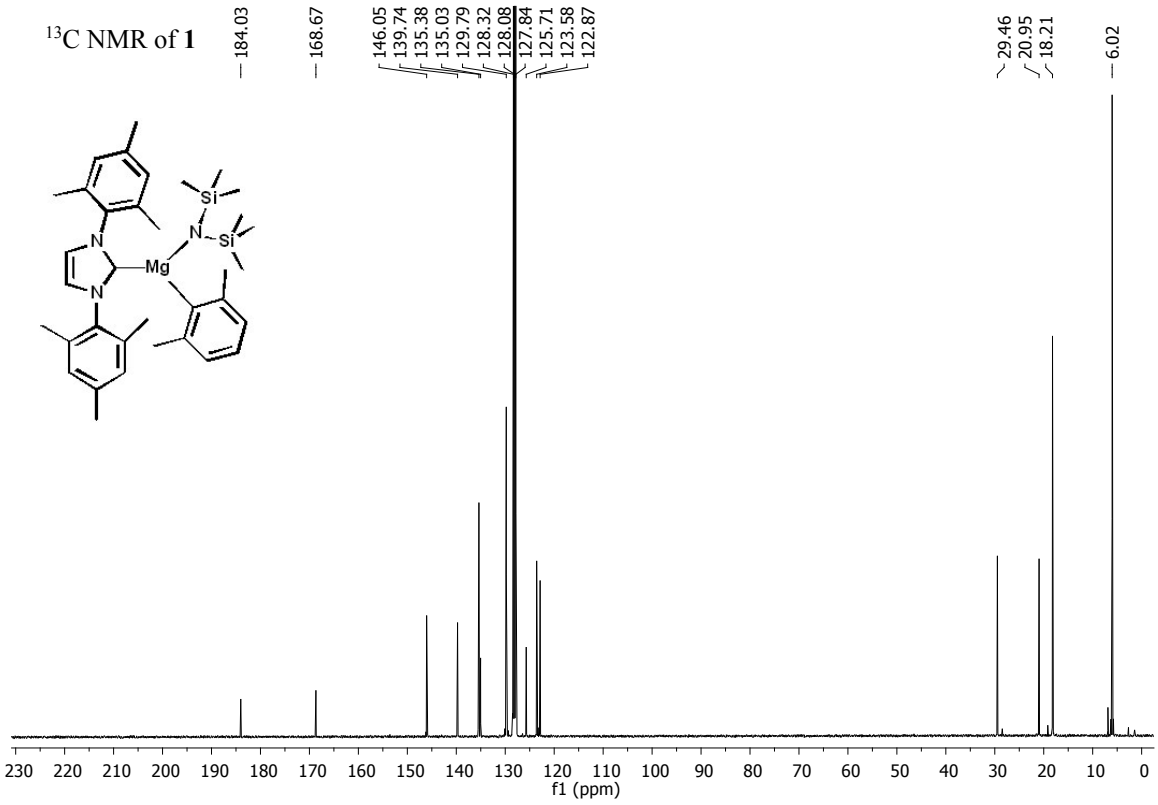
Copy of ^{1}H, ^{13}C & ^{29}Si NMR spectra of 1 & 2:

^{1}H NMR of **1**



^{13}C NMR of **1**



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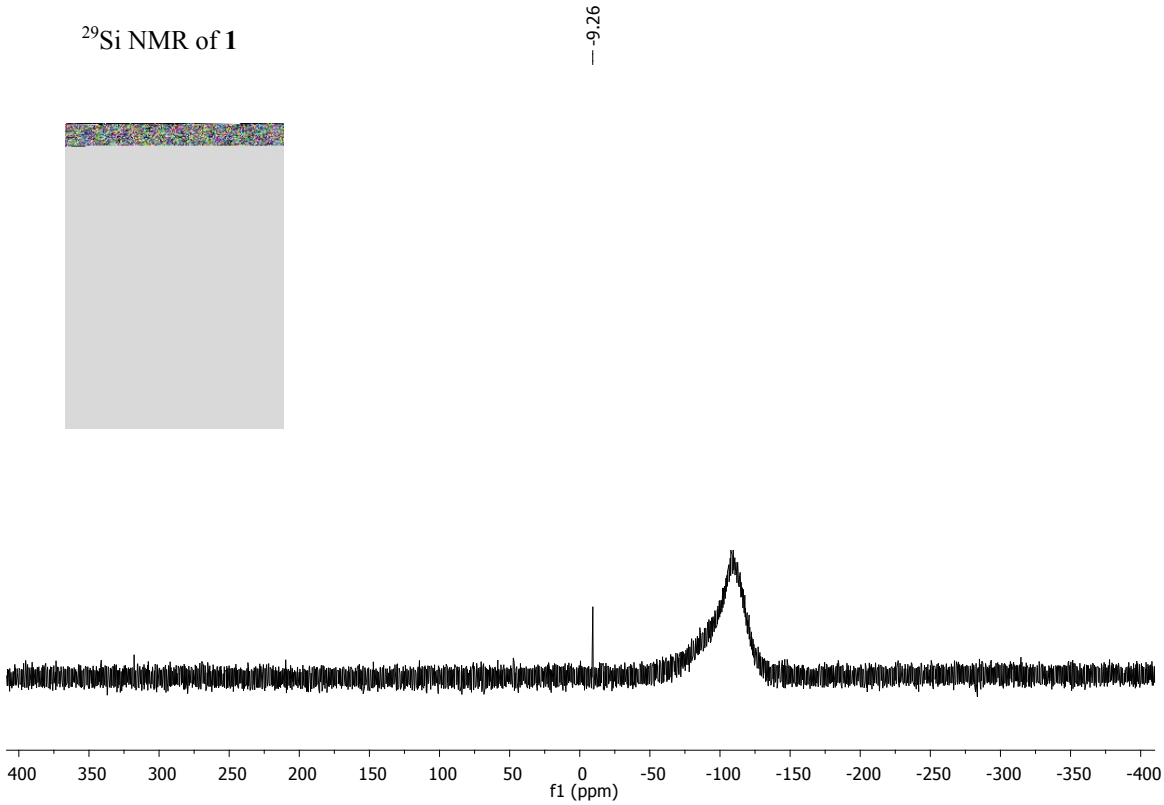

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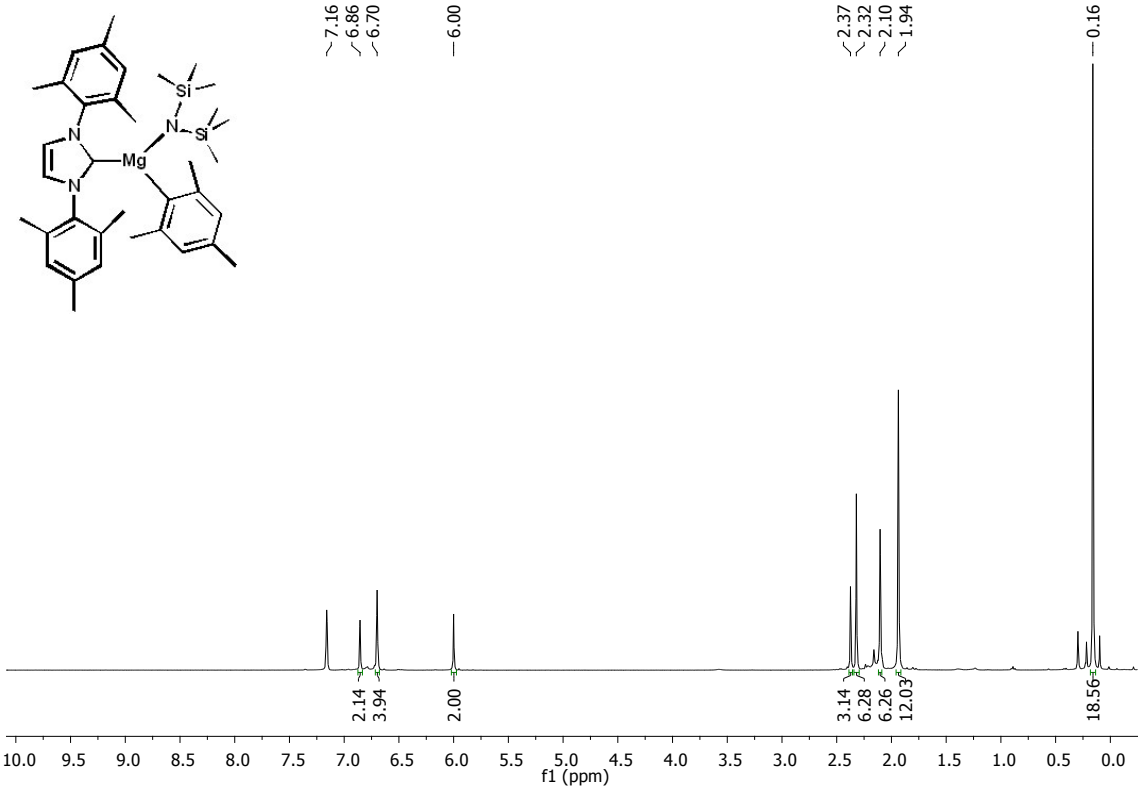

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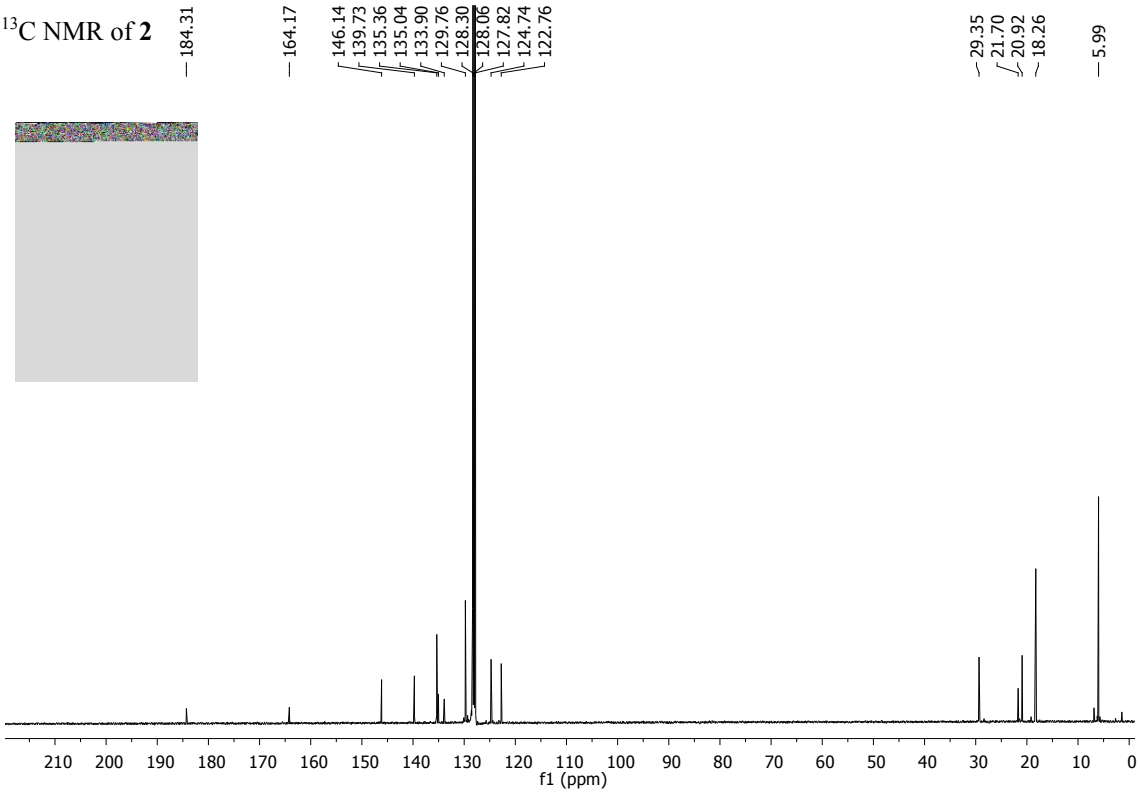

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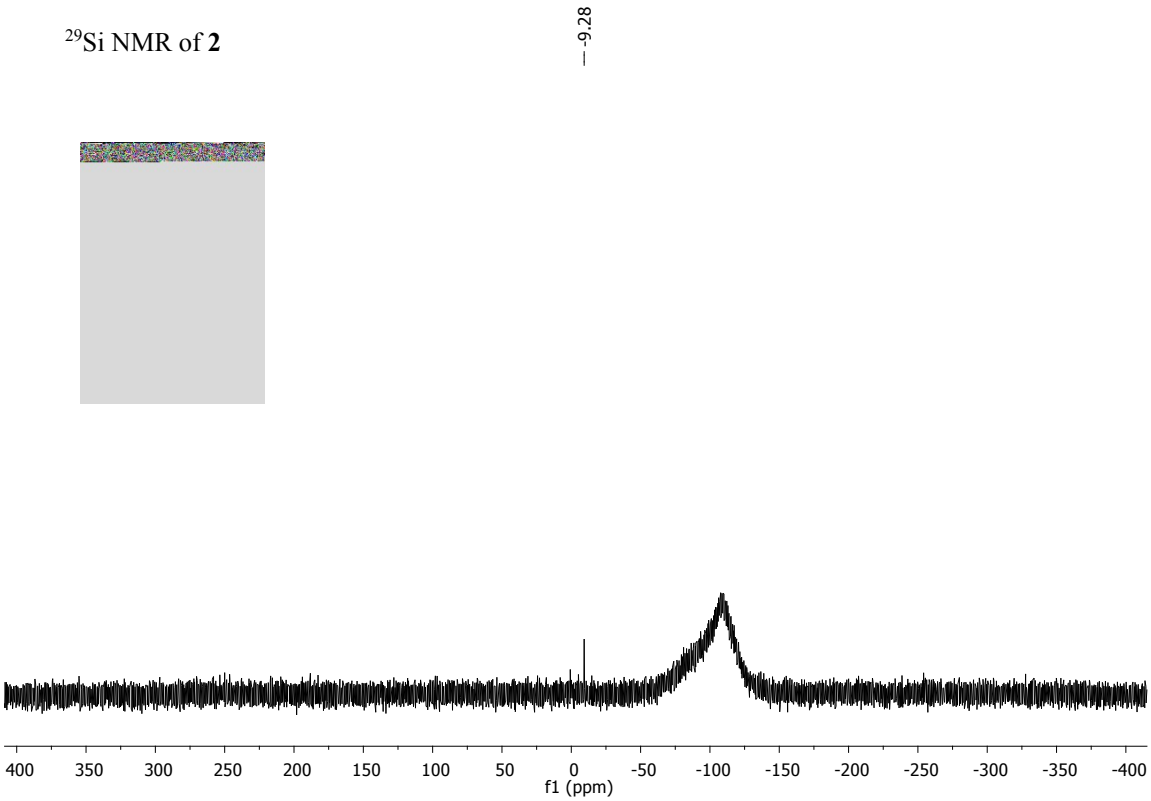
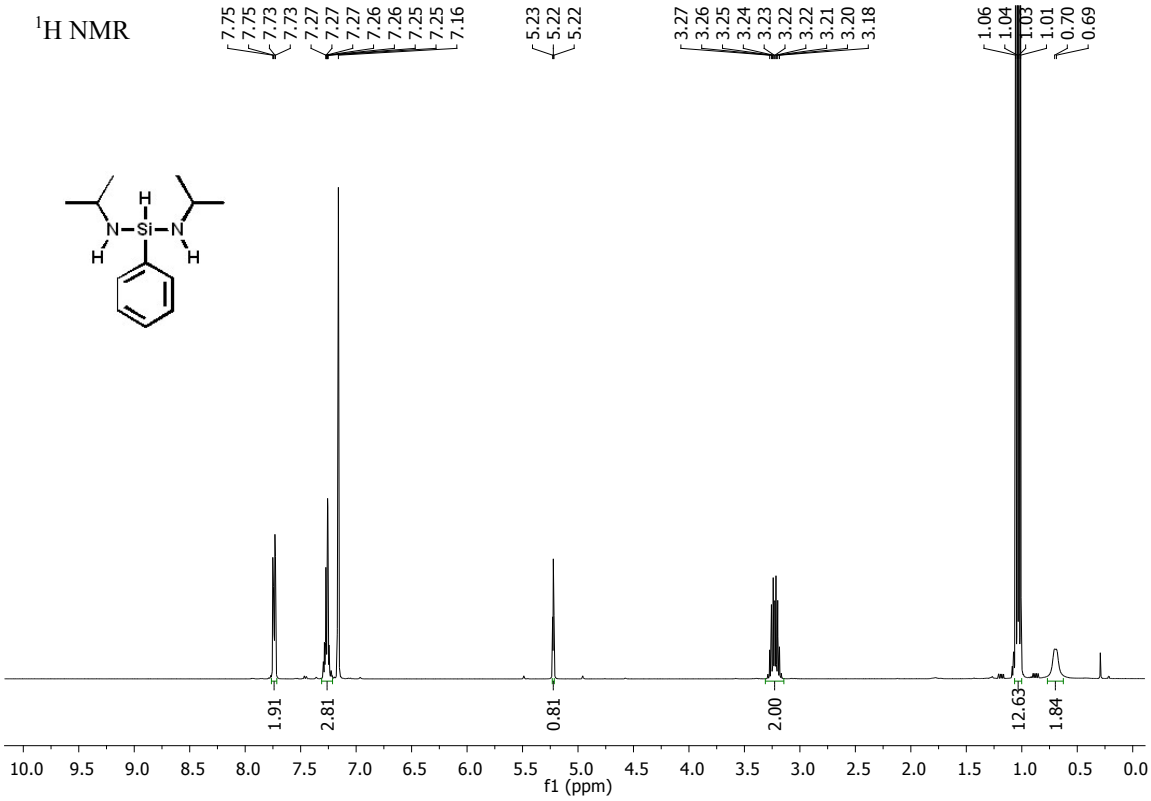
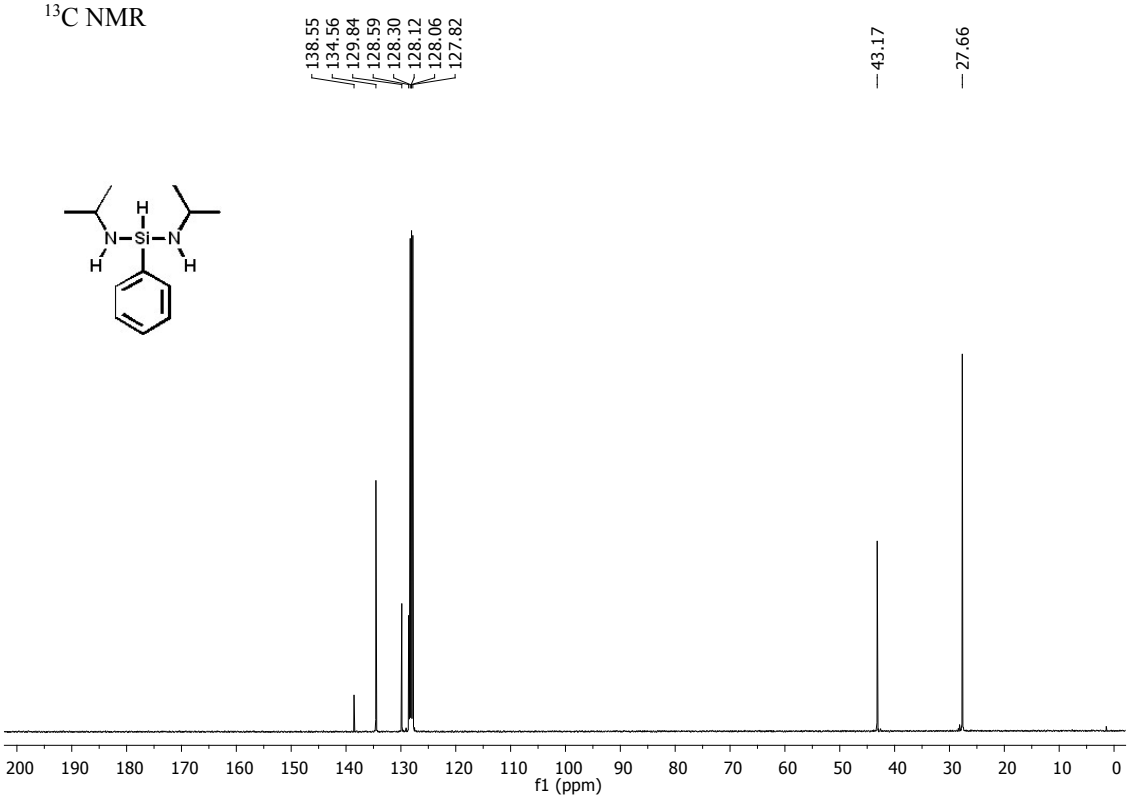


Copy of ^{1}H, ^{13}C & ^{29}Si NMR spectra of aminosilanes:

^{1}H NMR



^{13}C NMR



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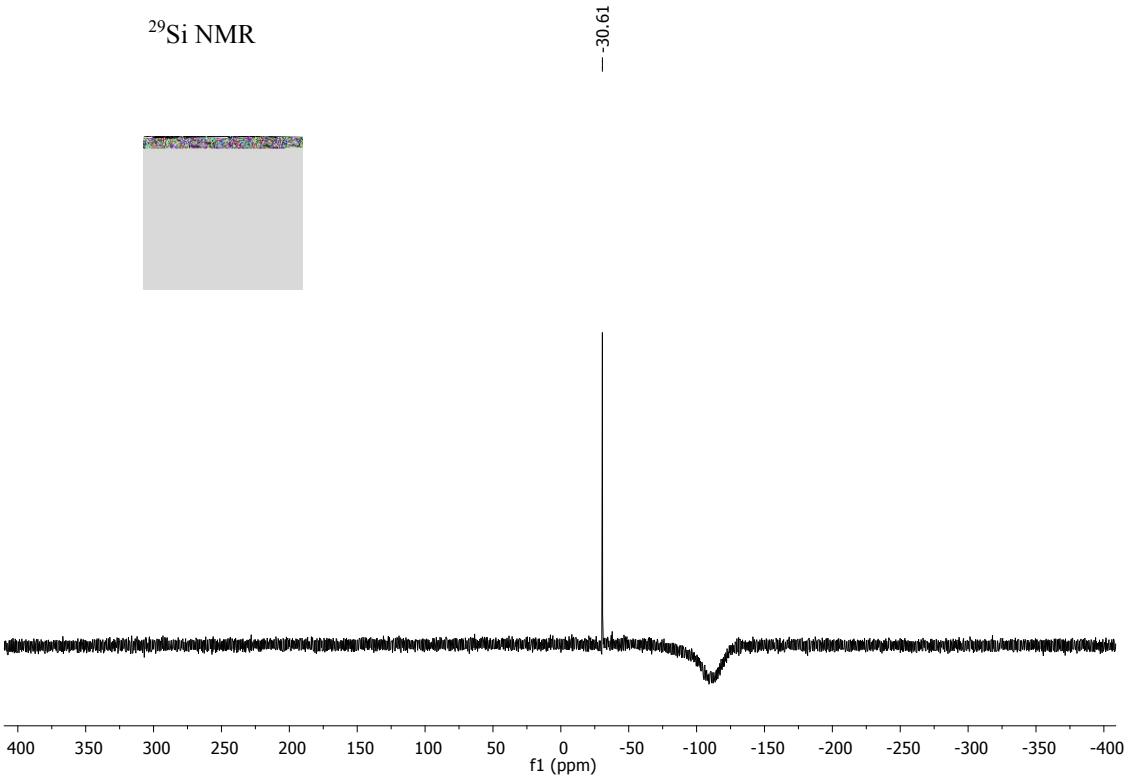

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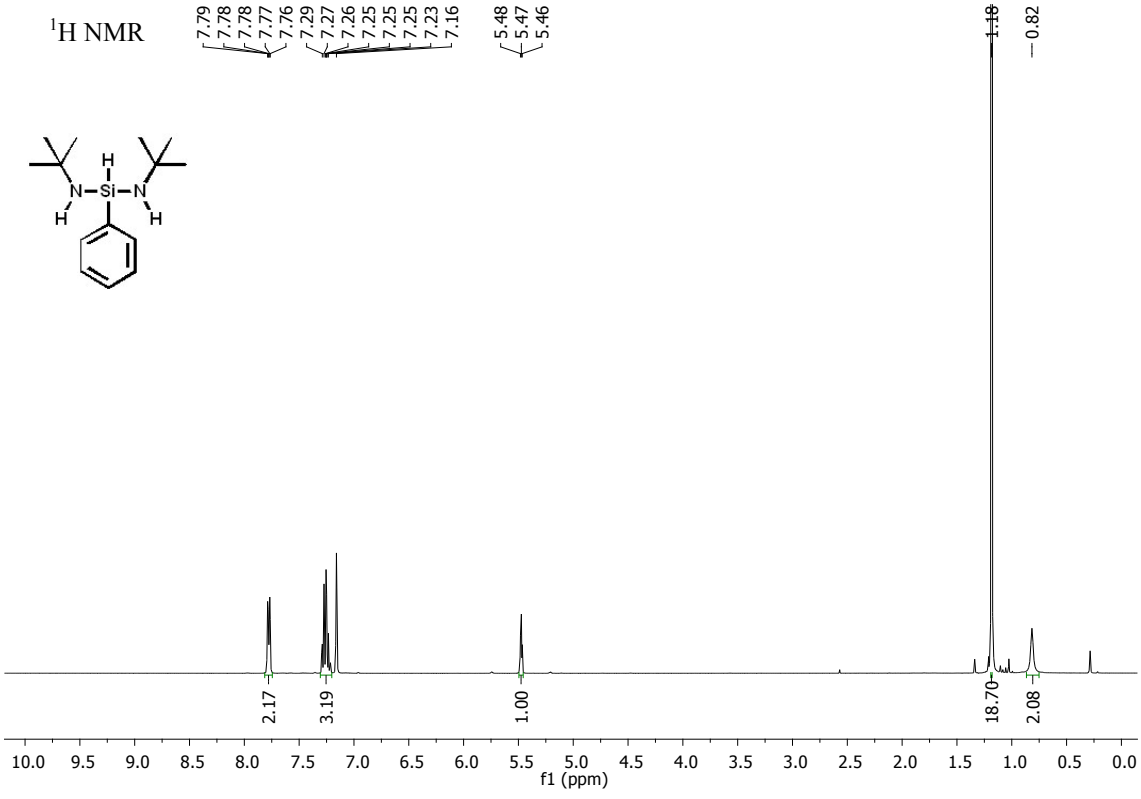

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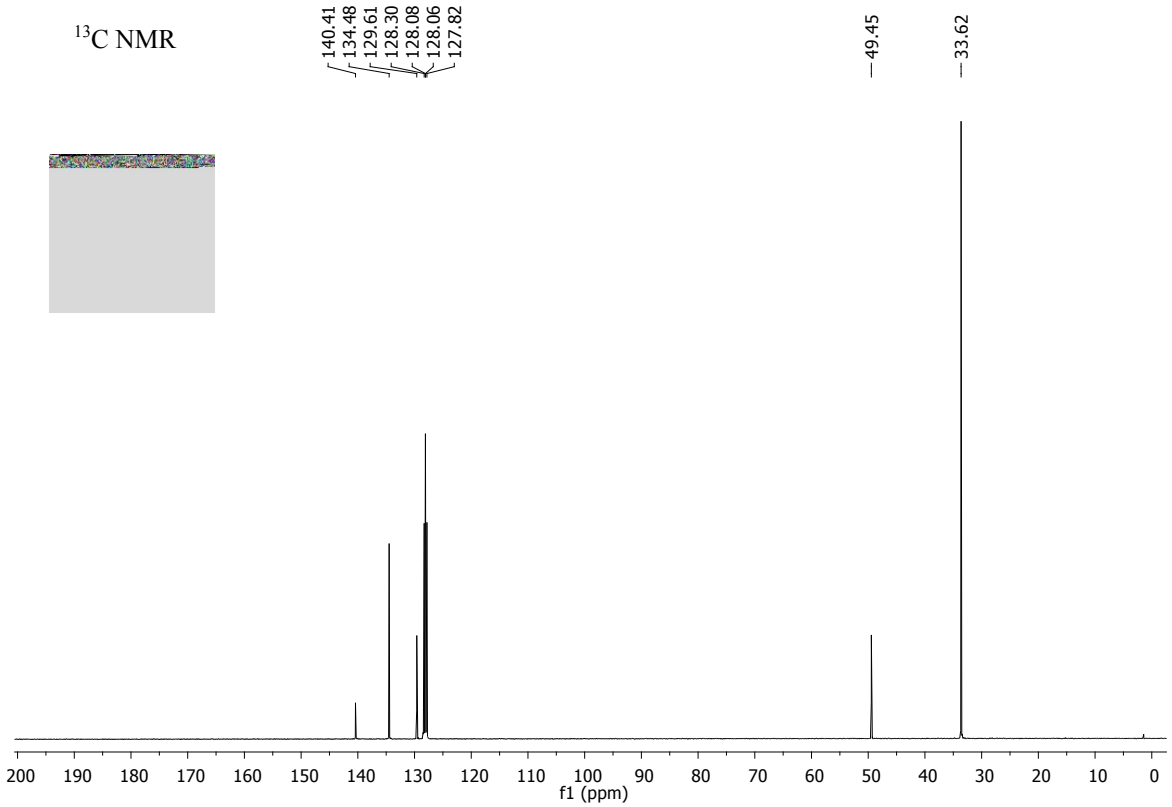

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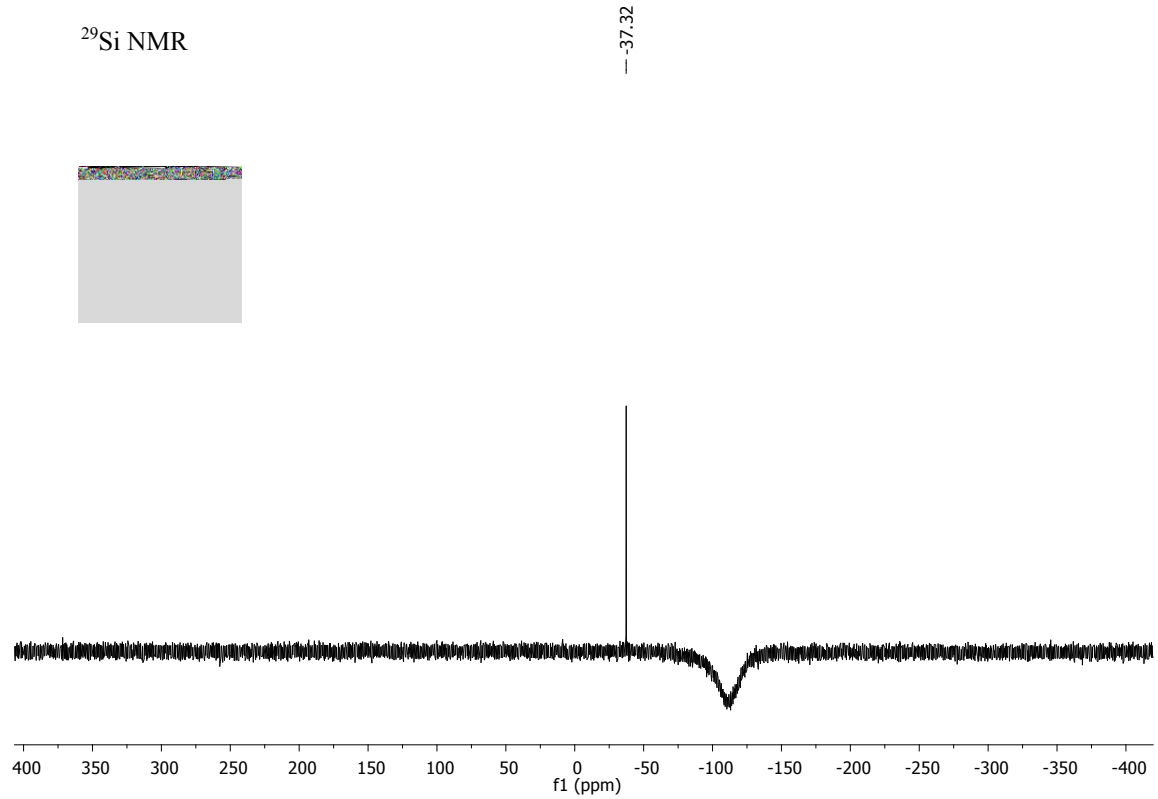

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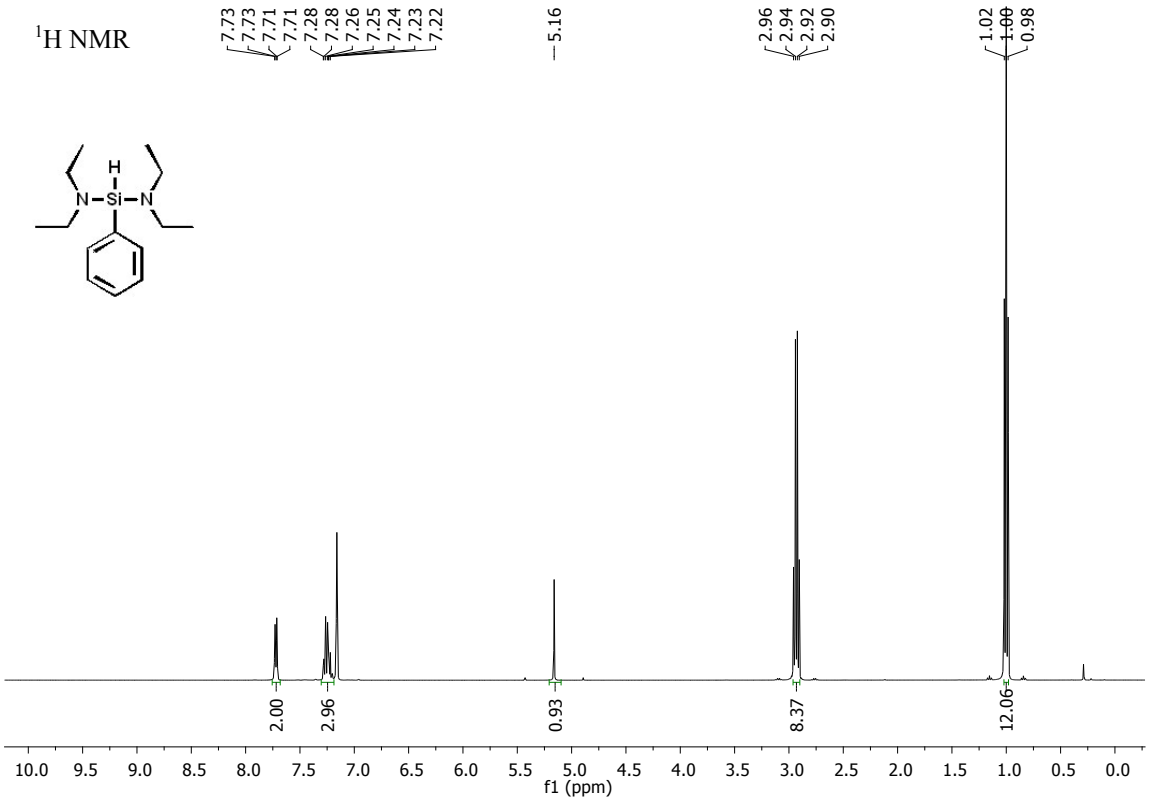

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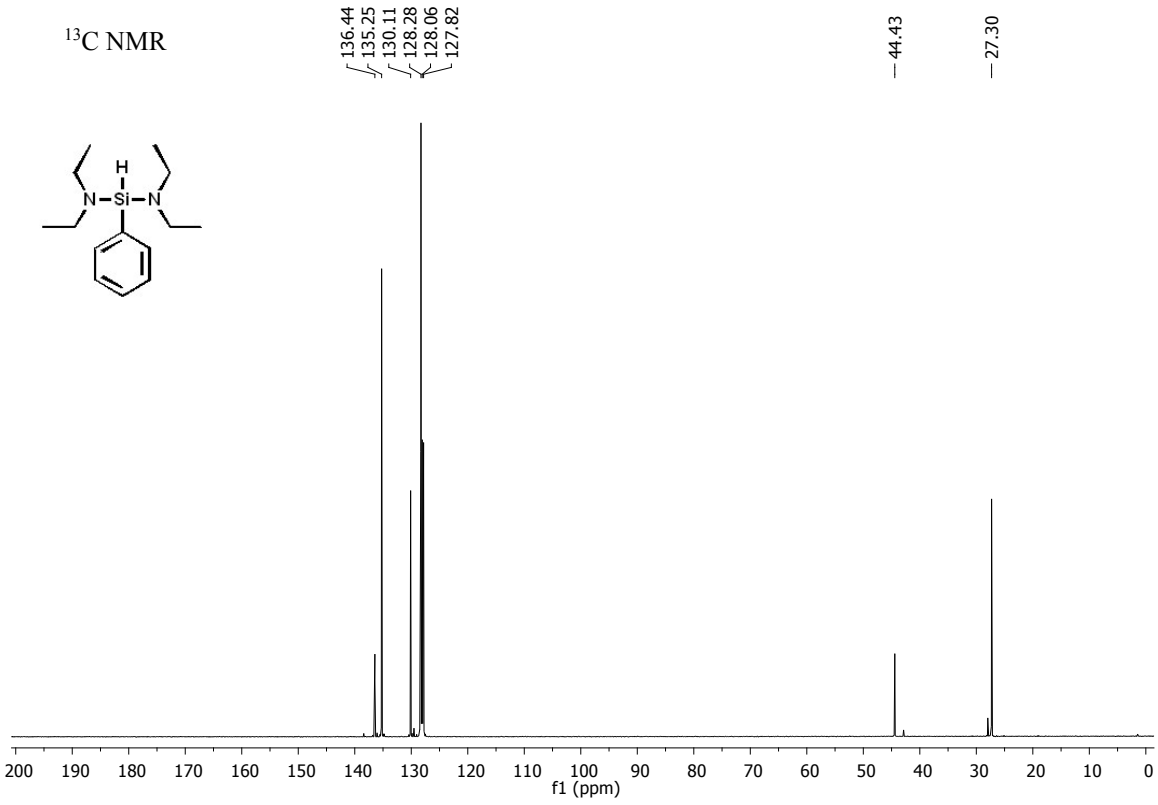

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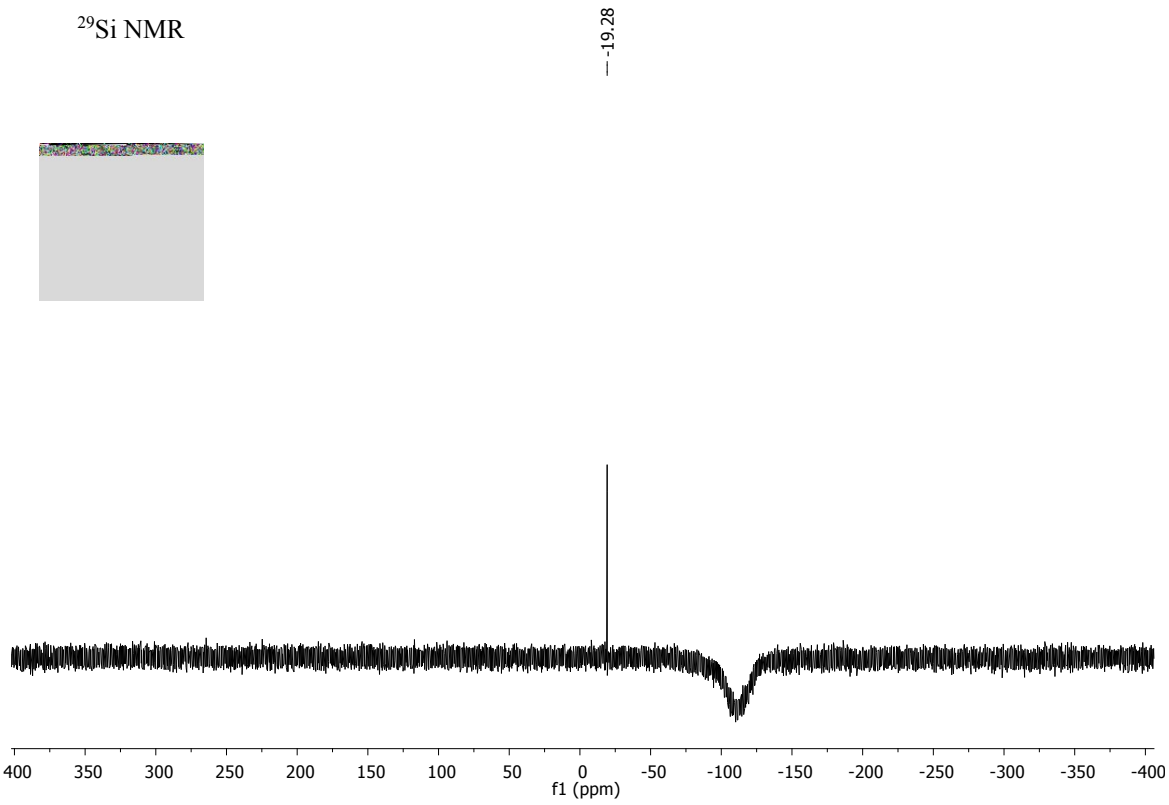

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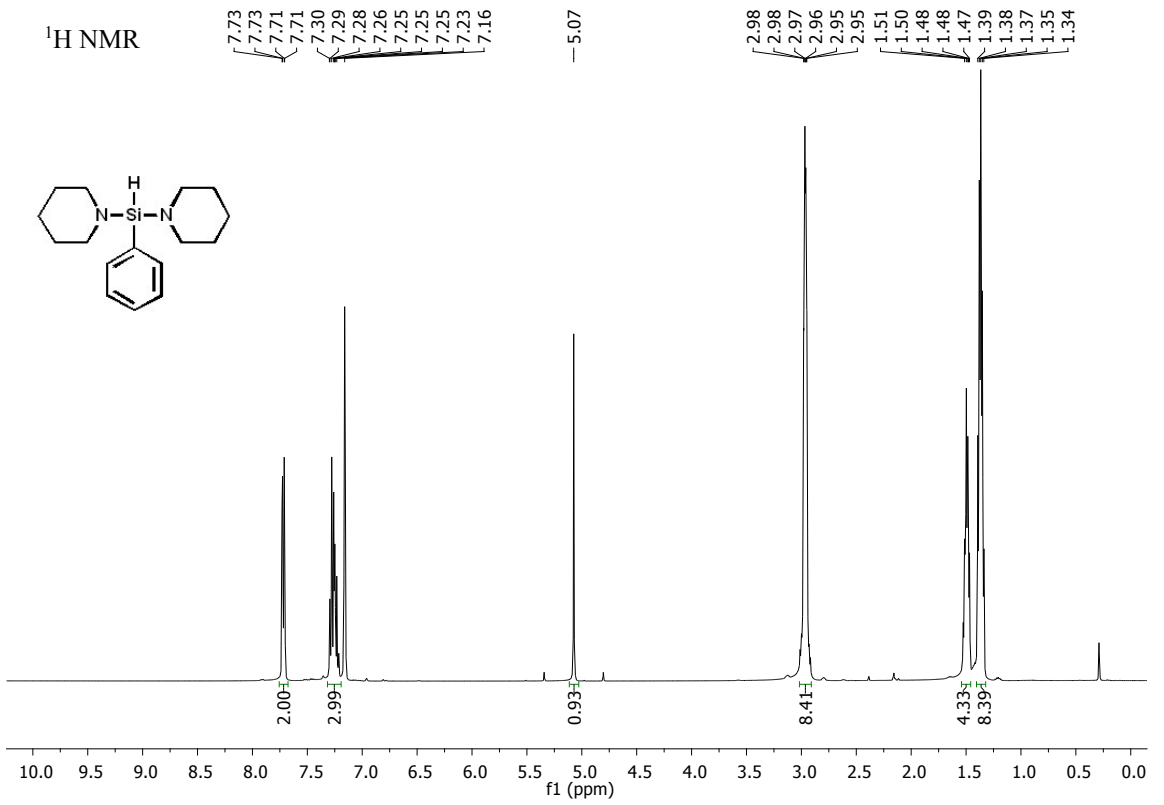

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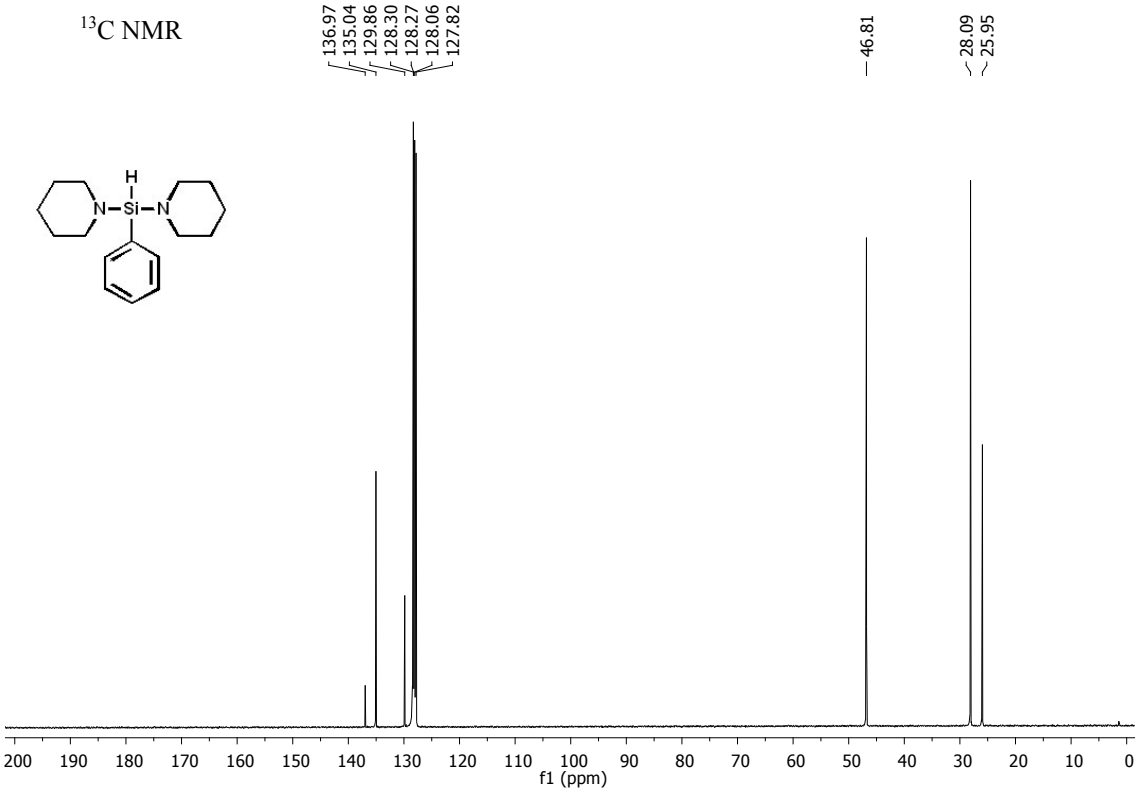

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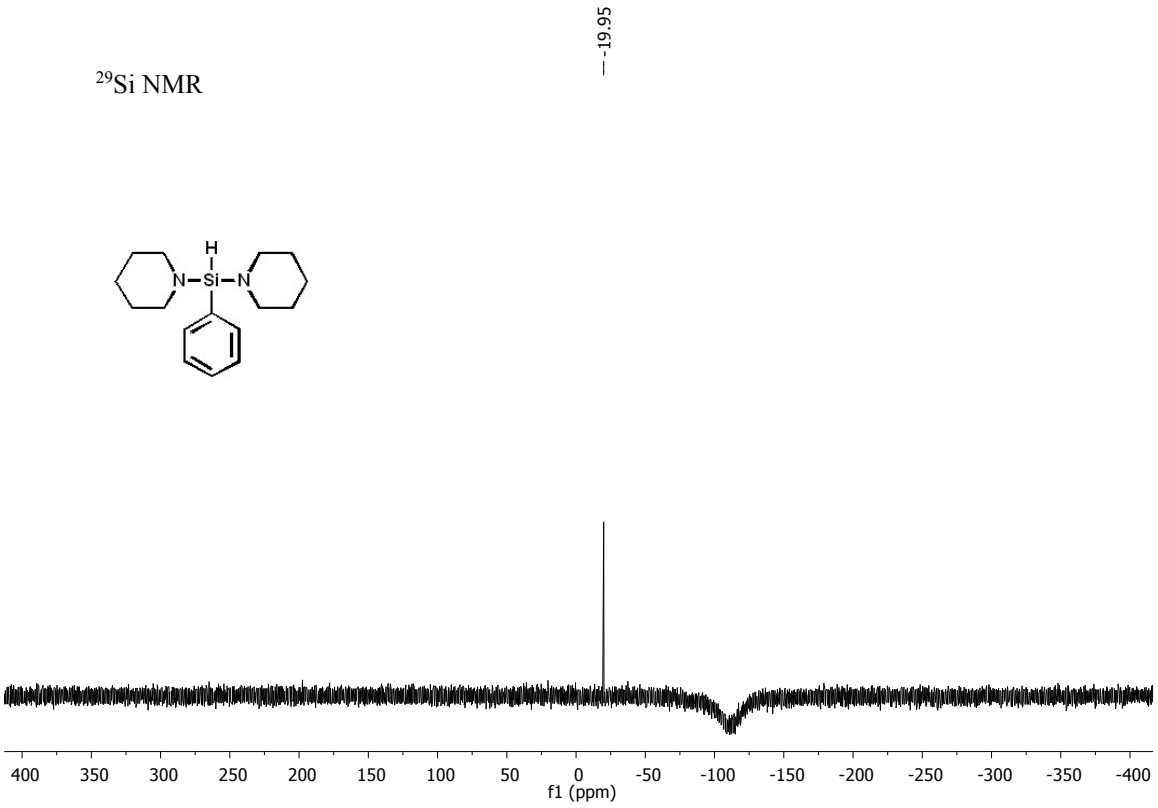

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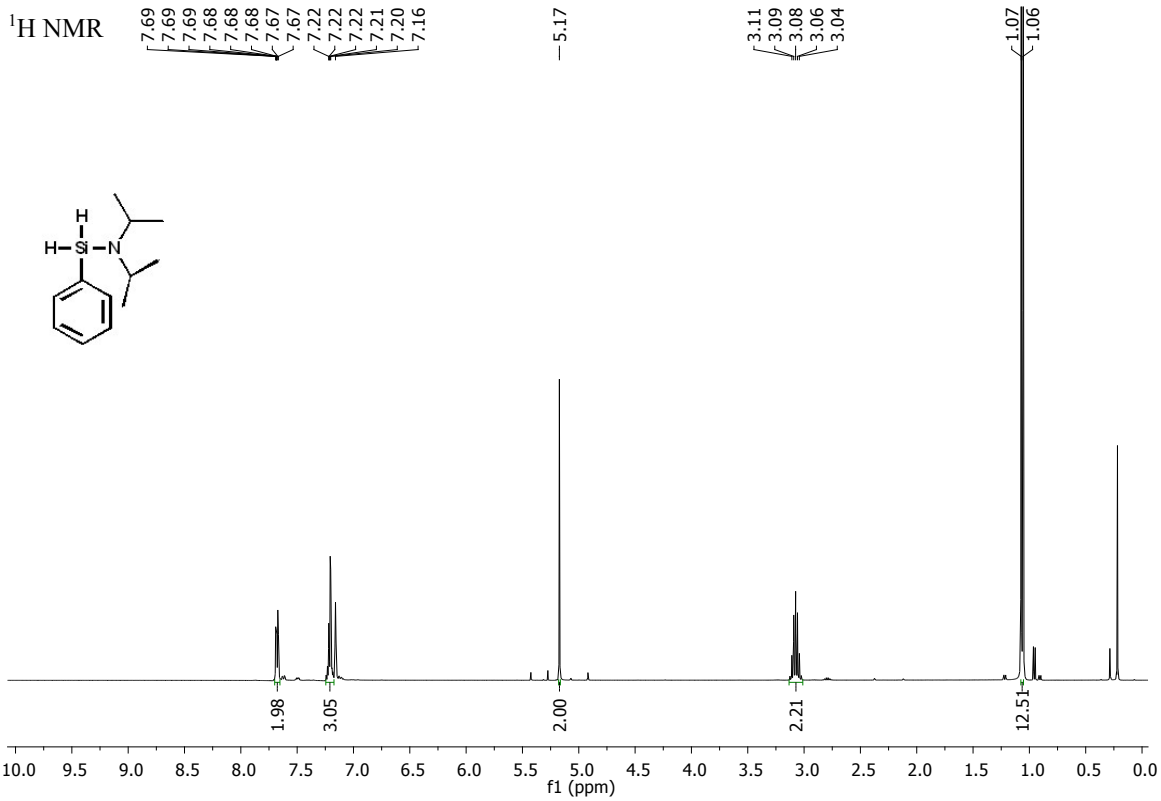

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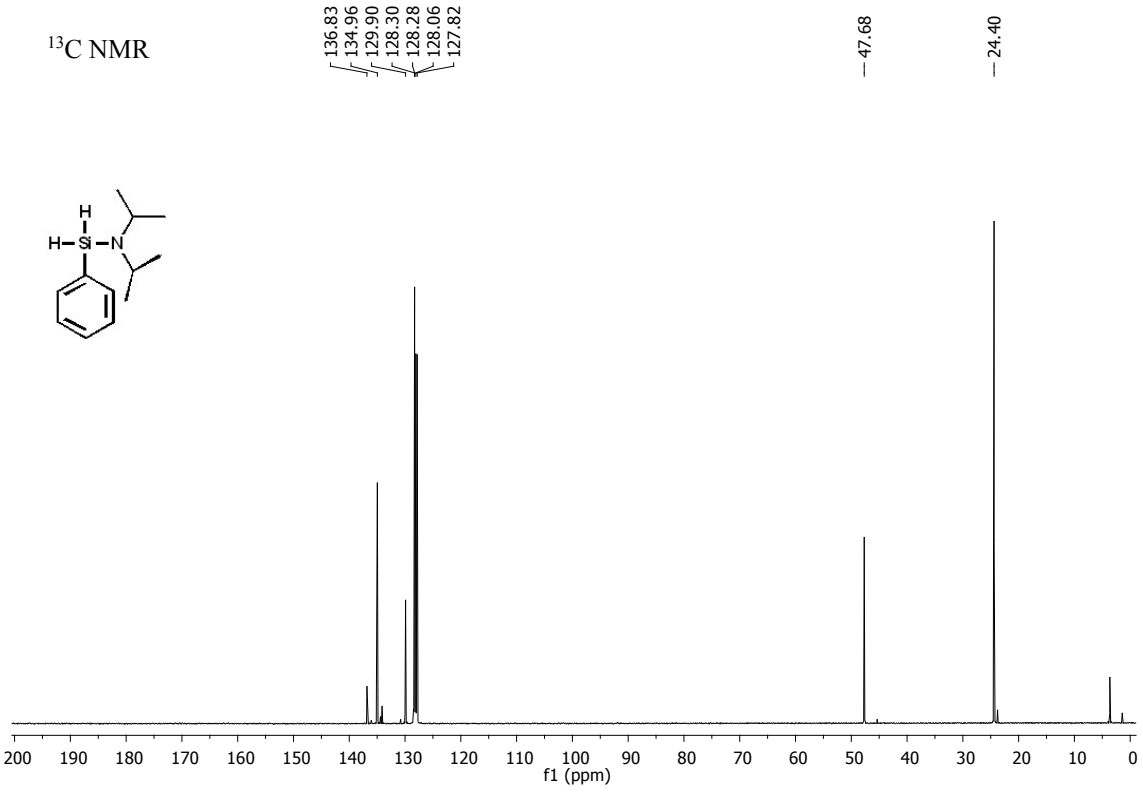

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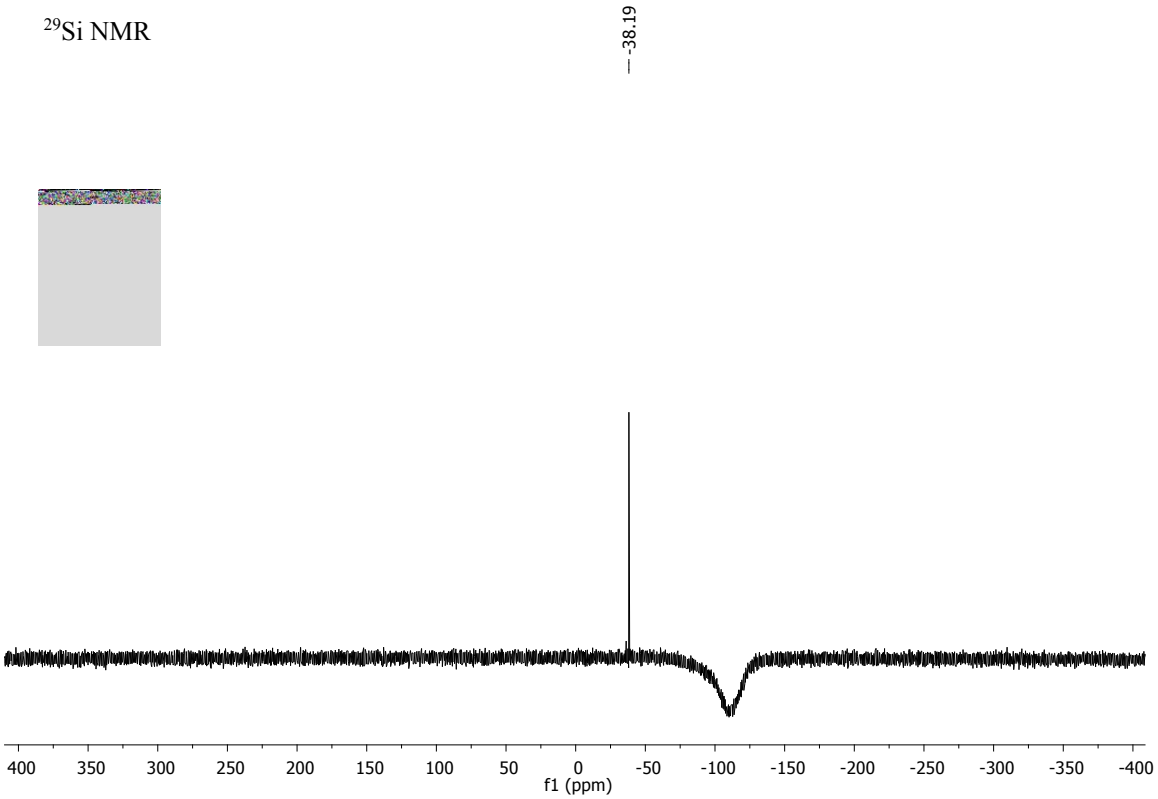

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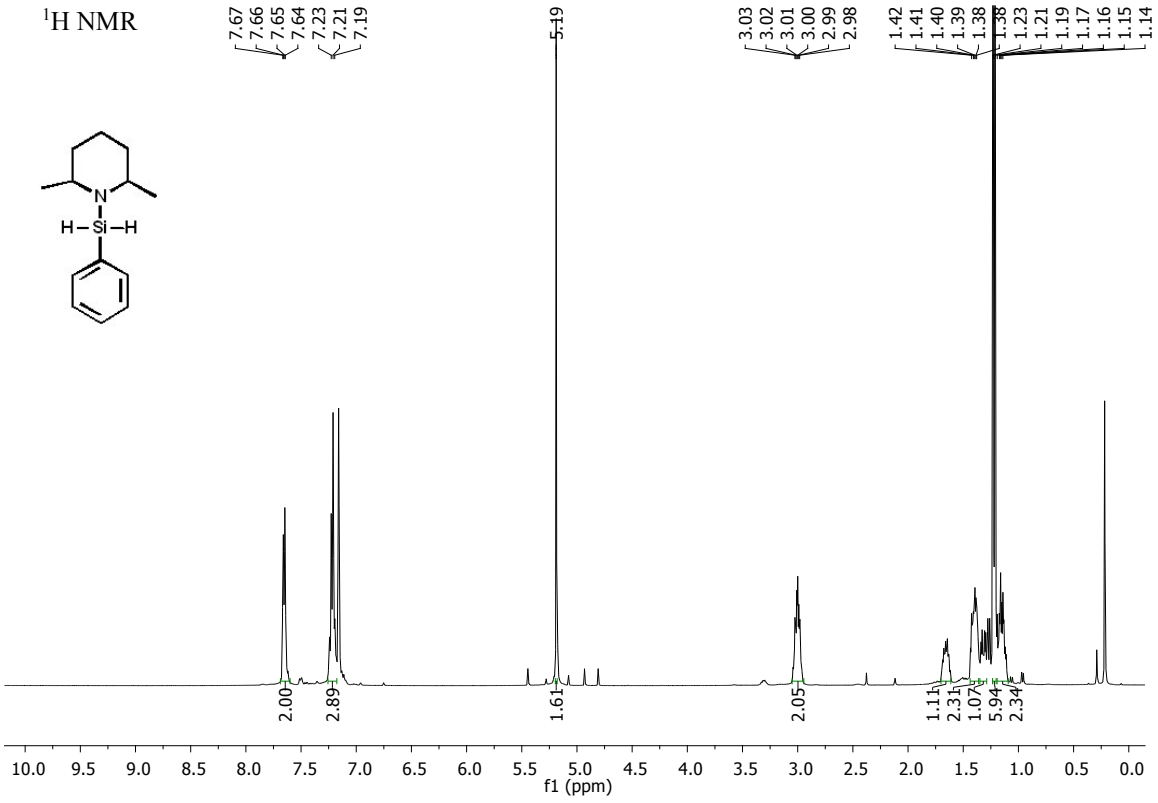

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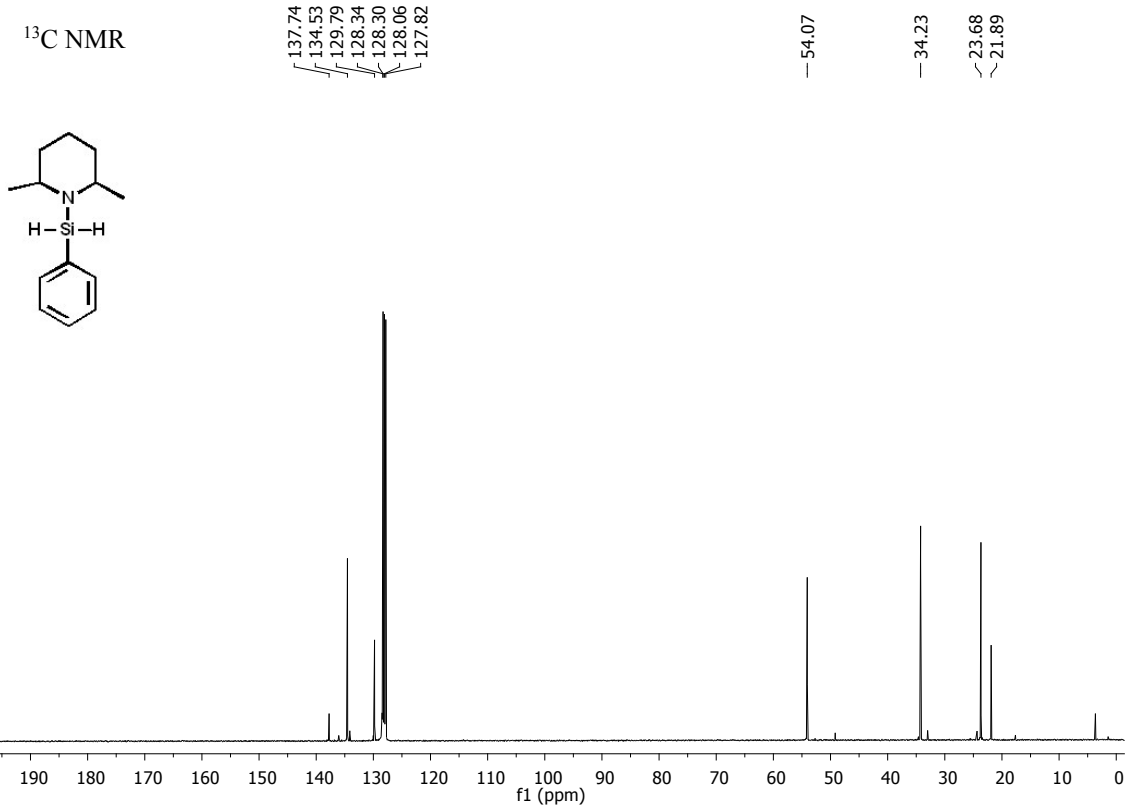

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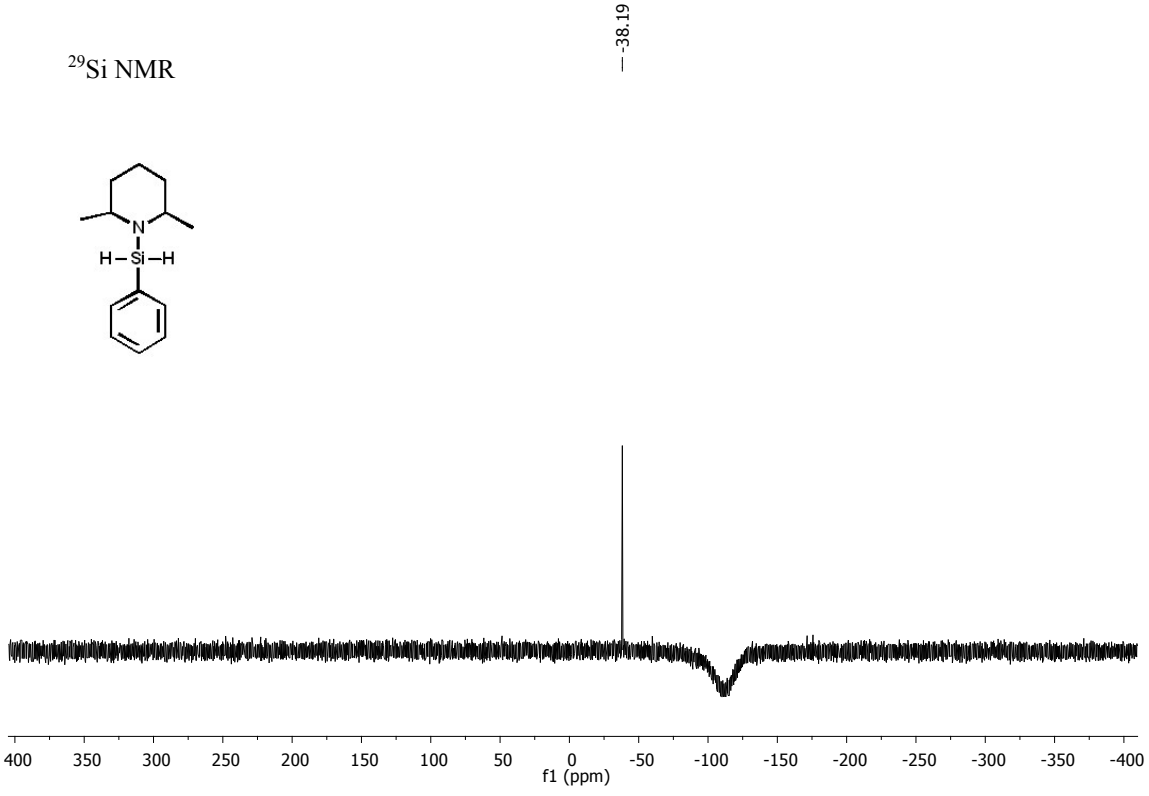

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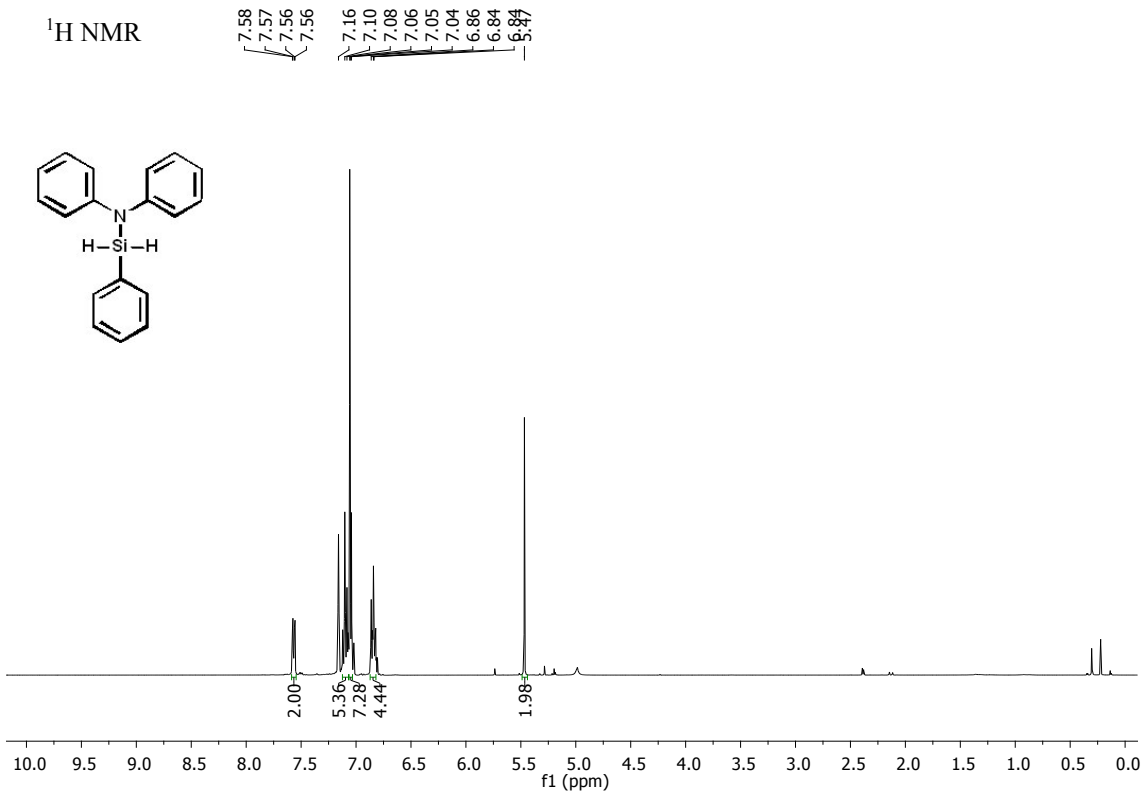

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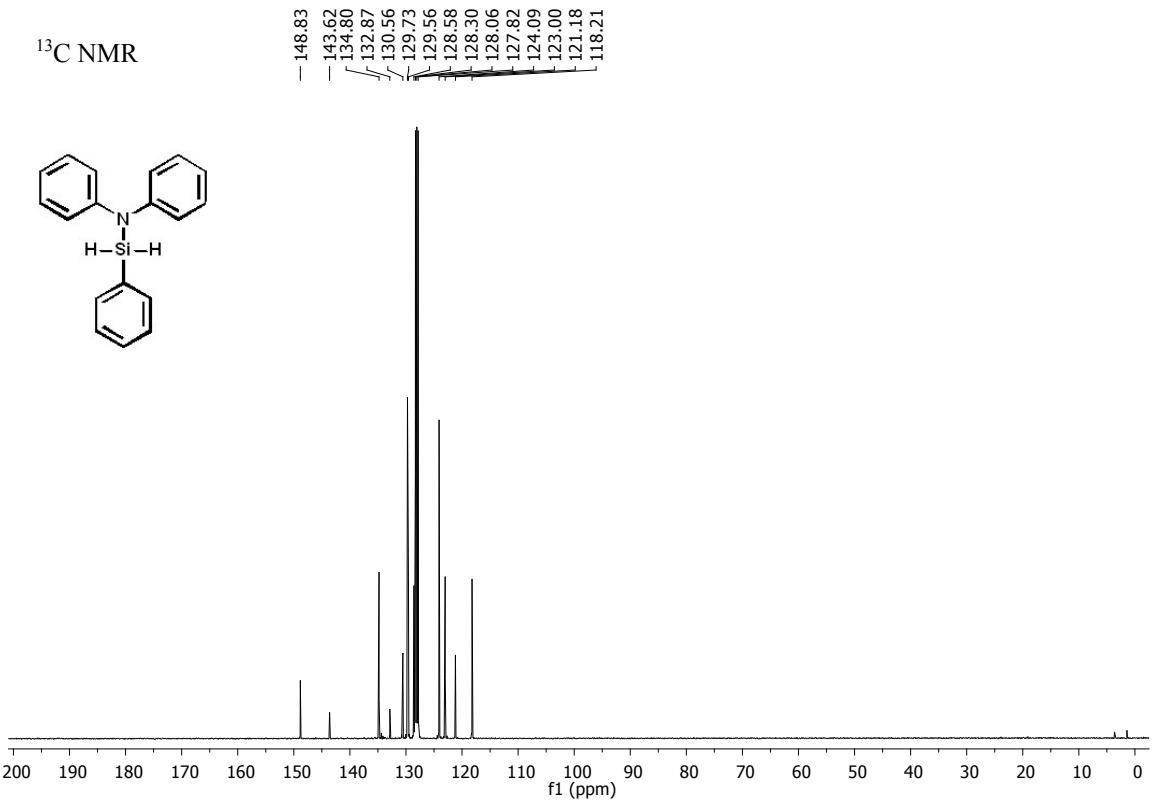

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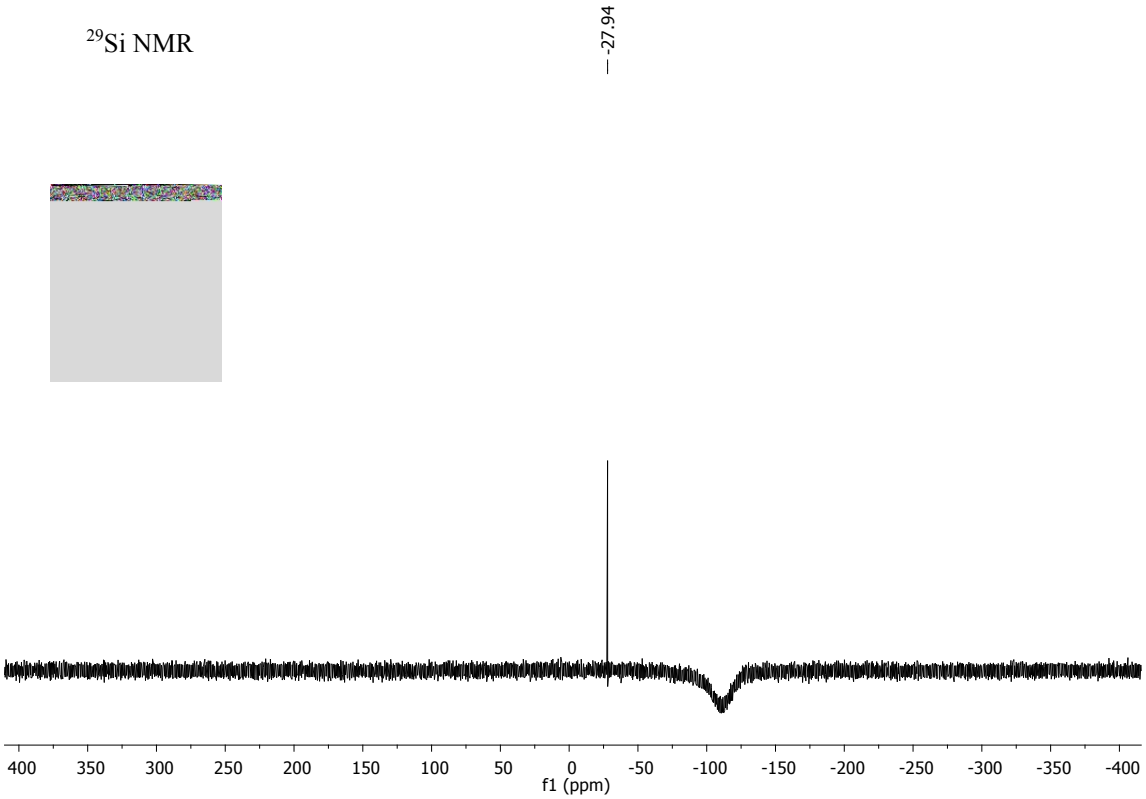

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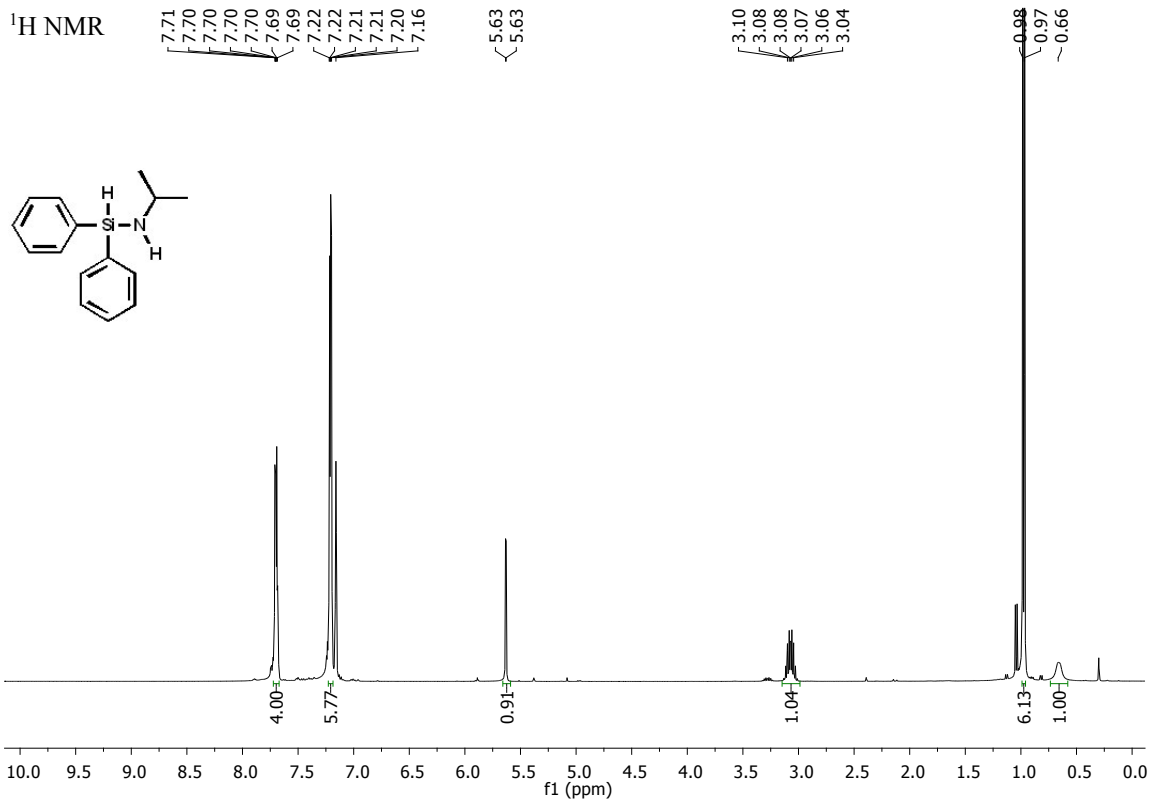

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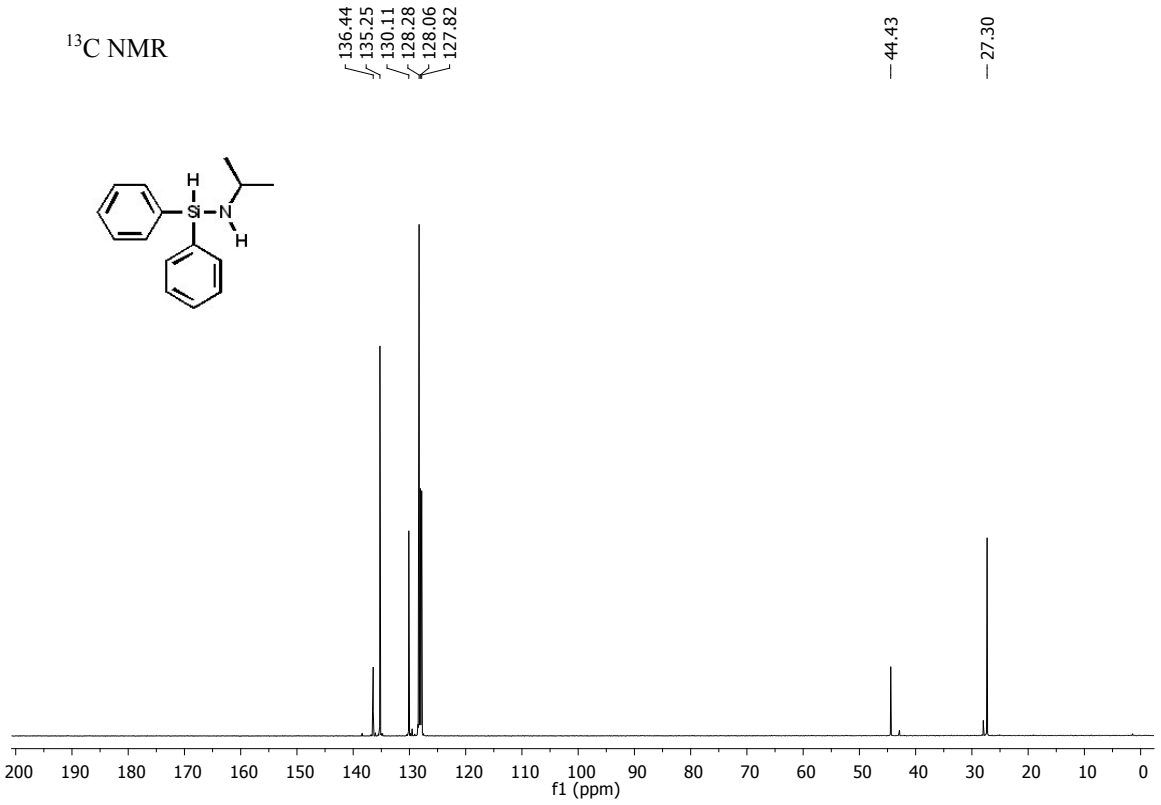

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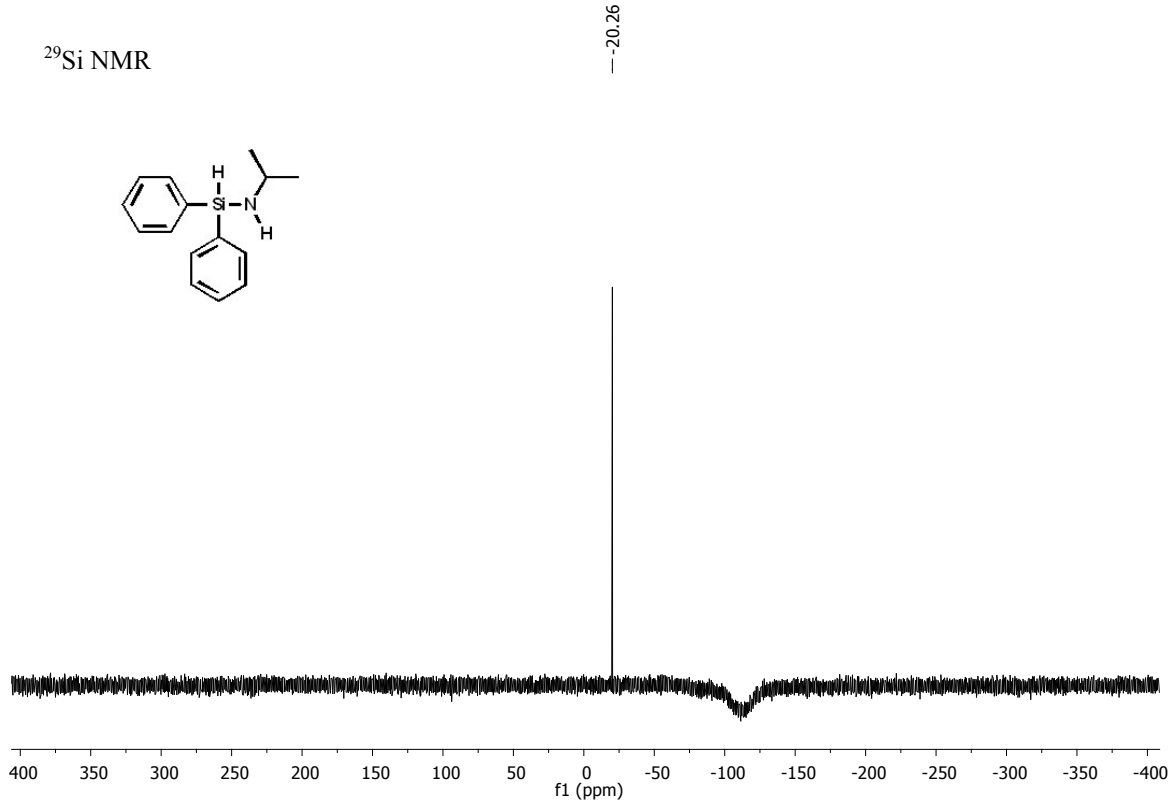

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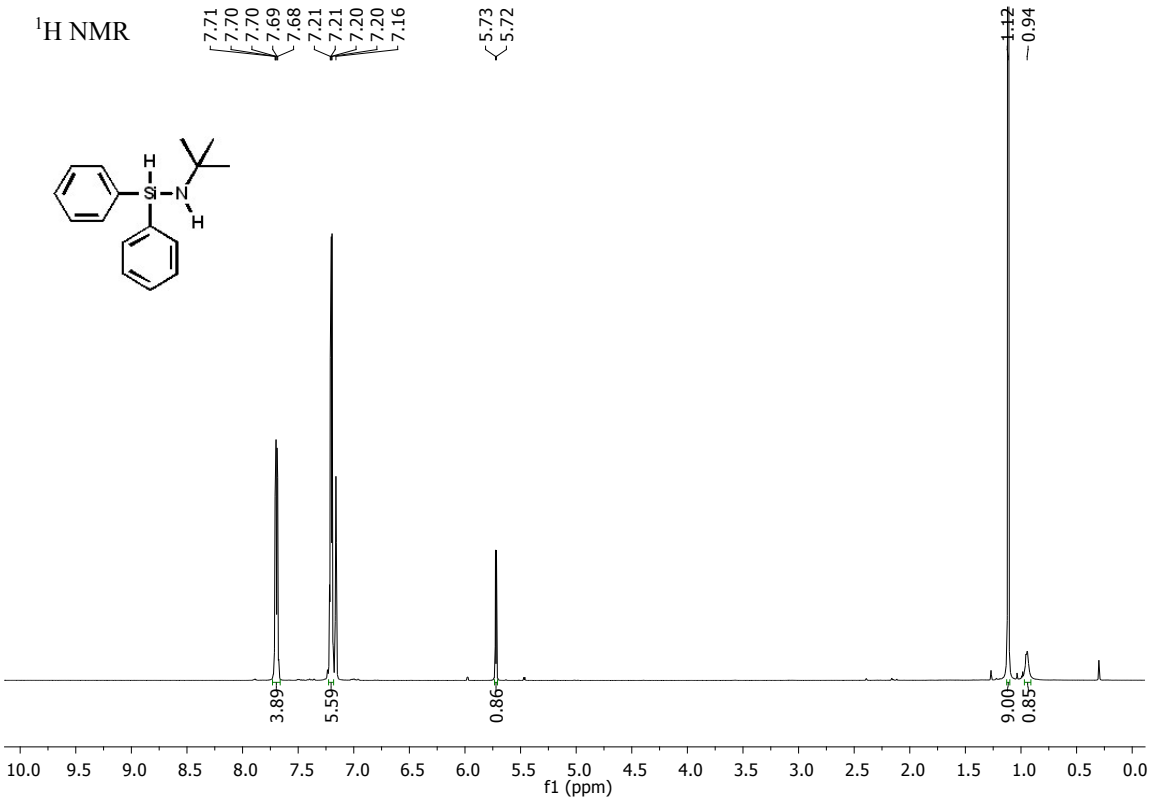

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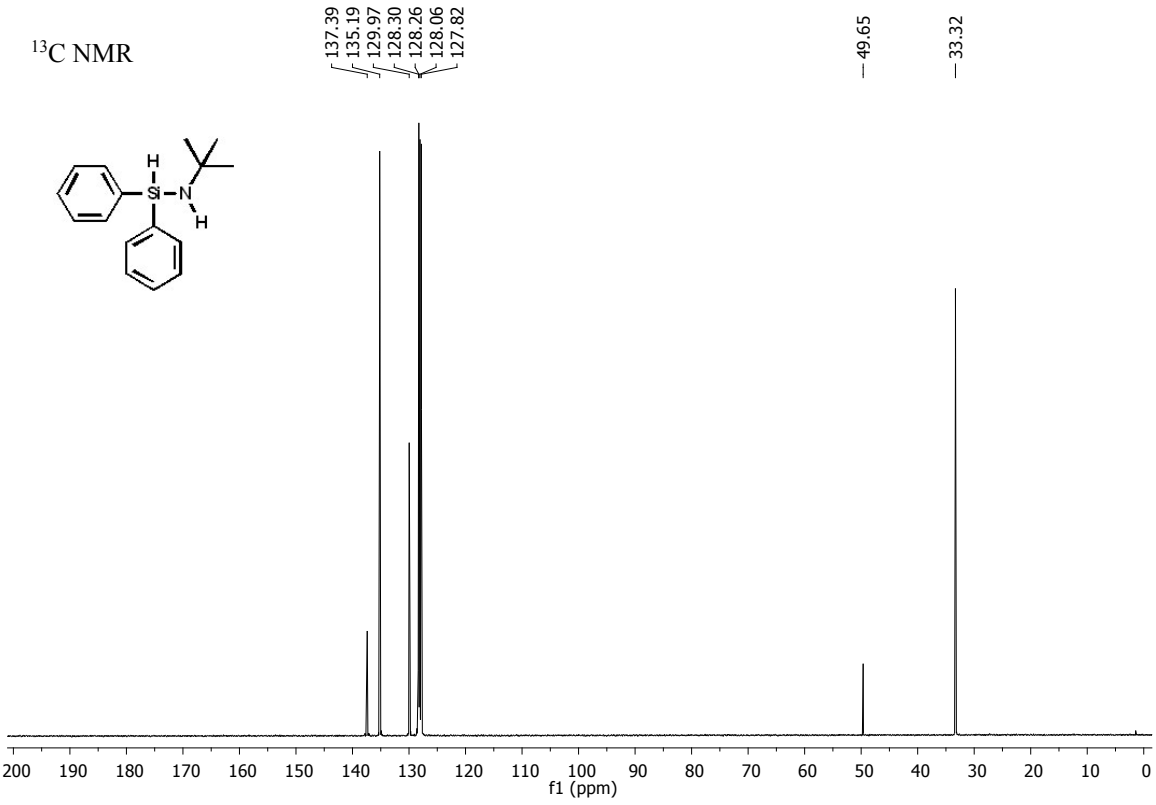

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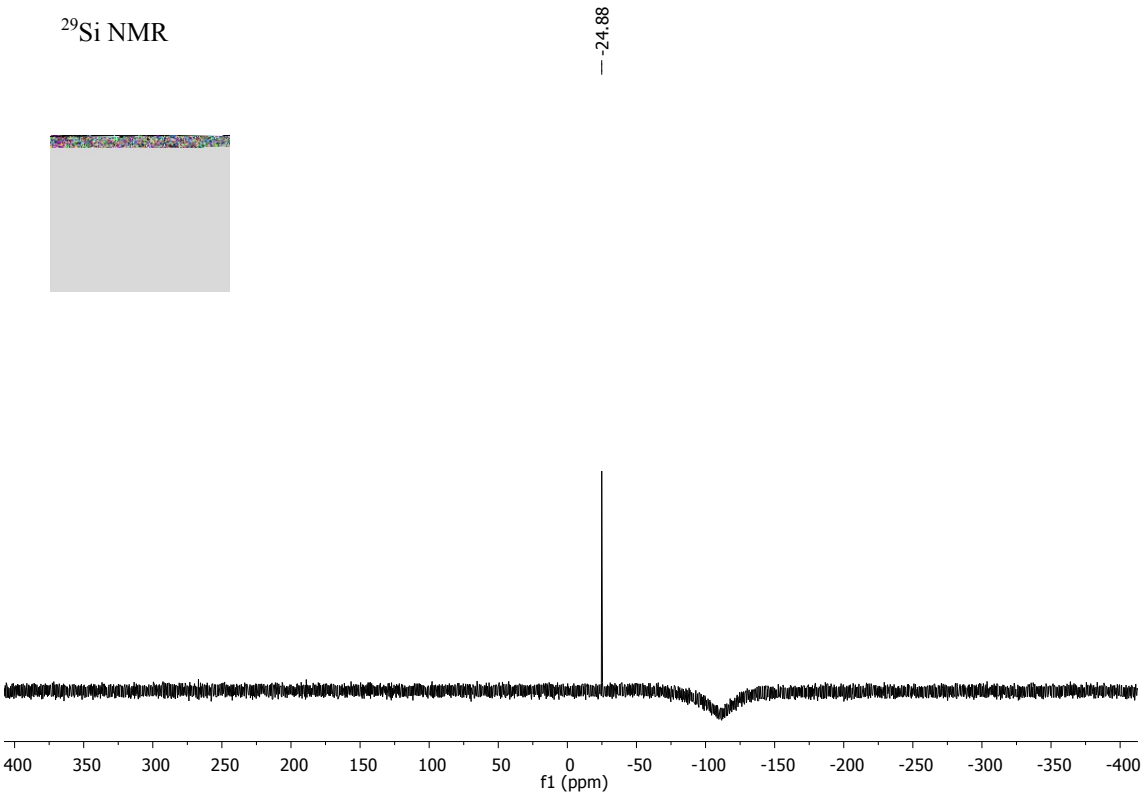

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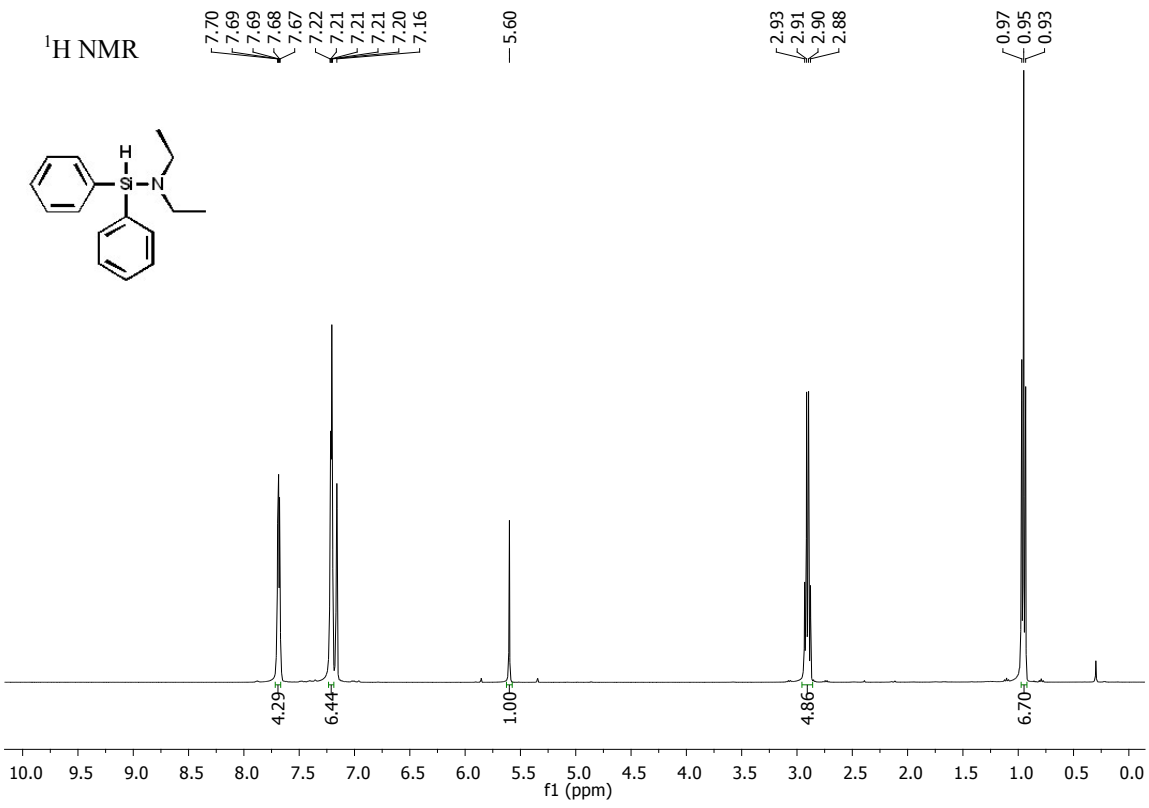

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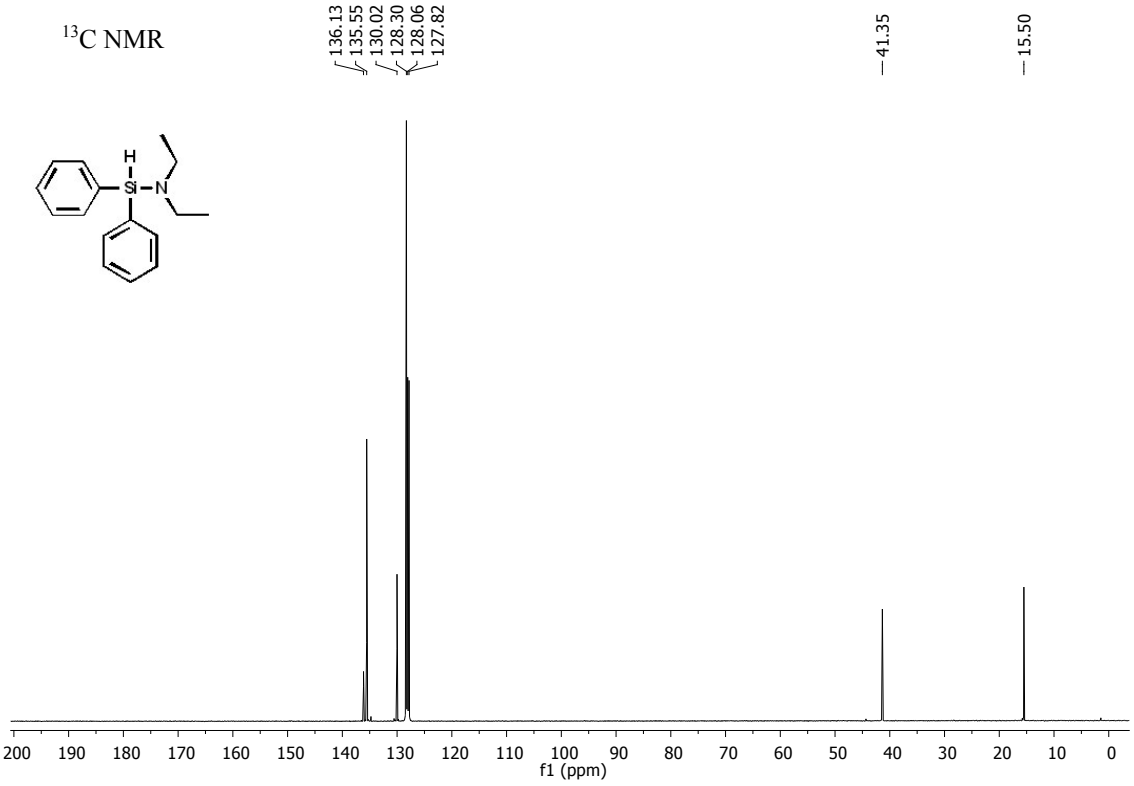

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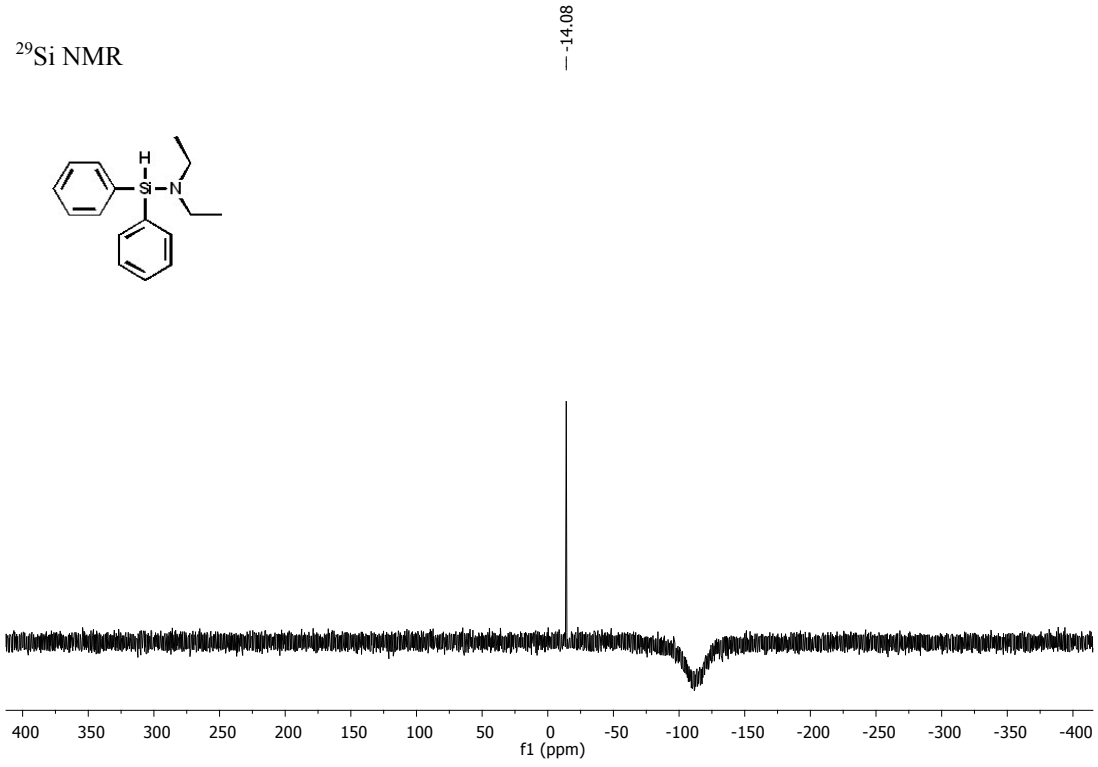

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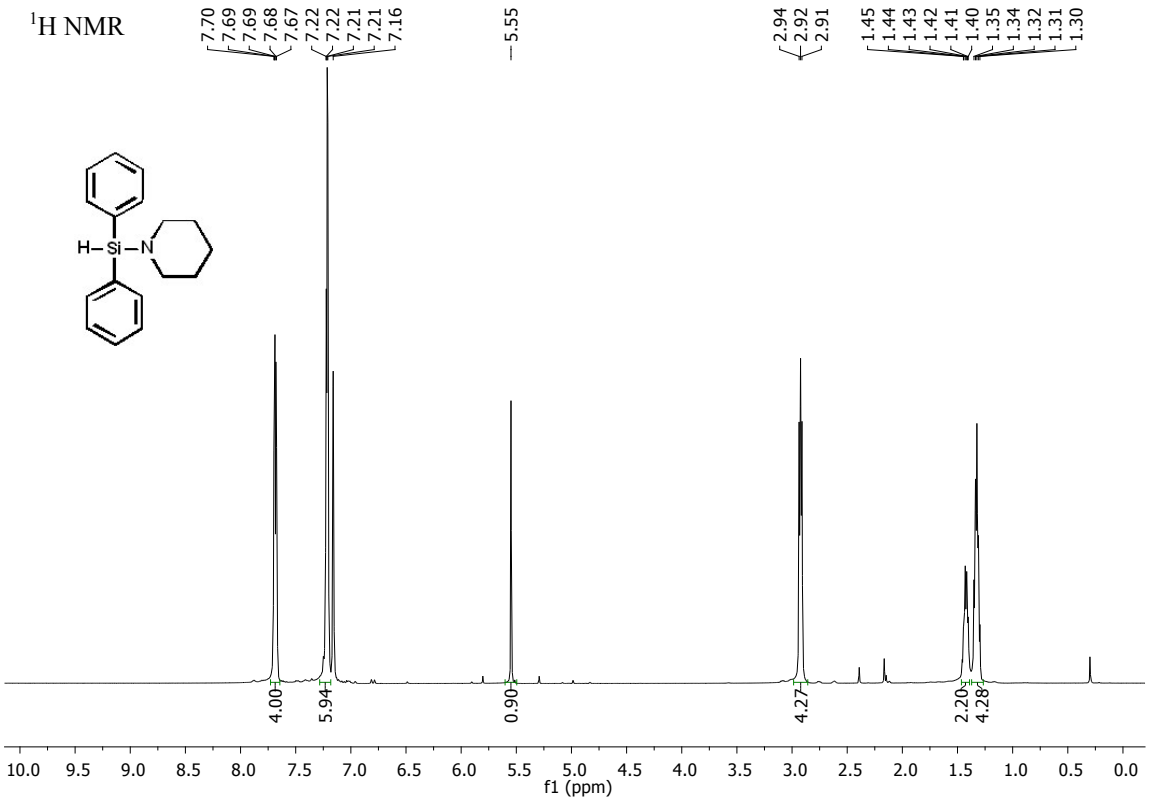

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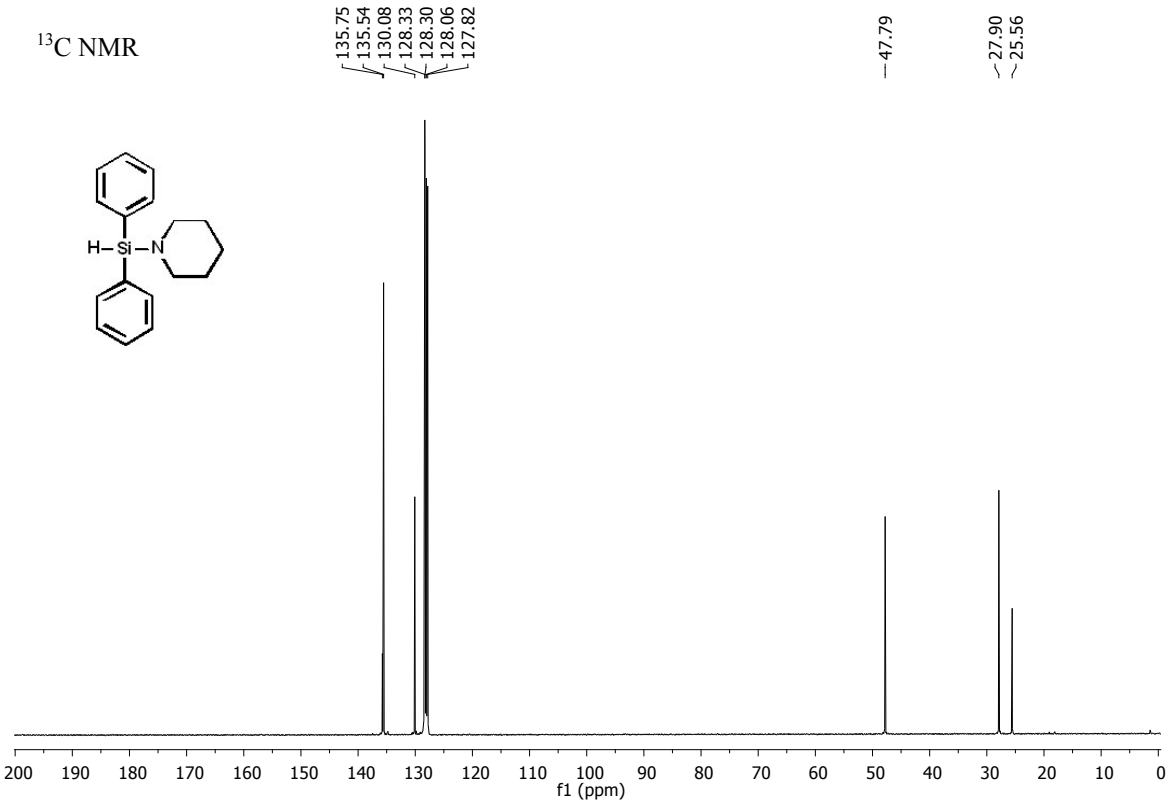

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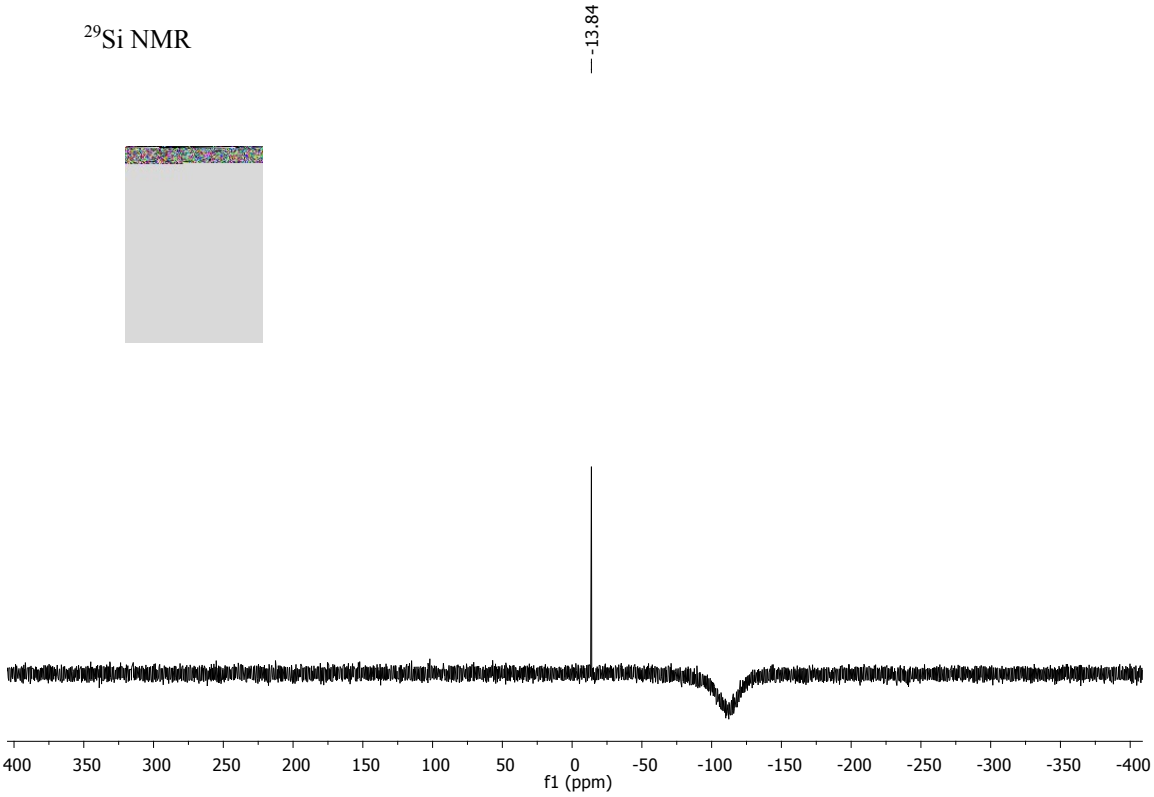

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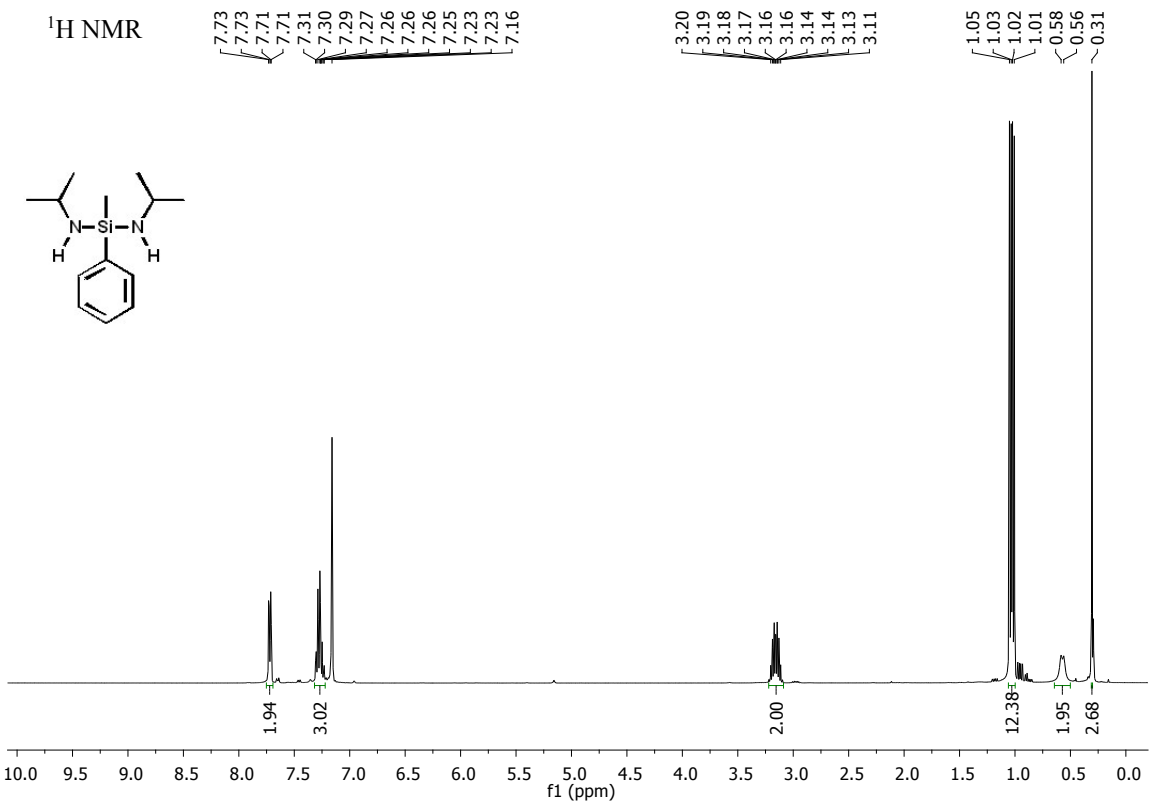

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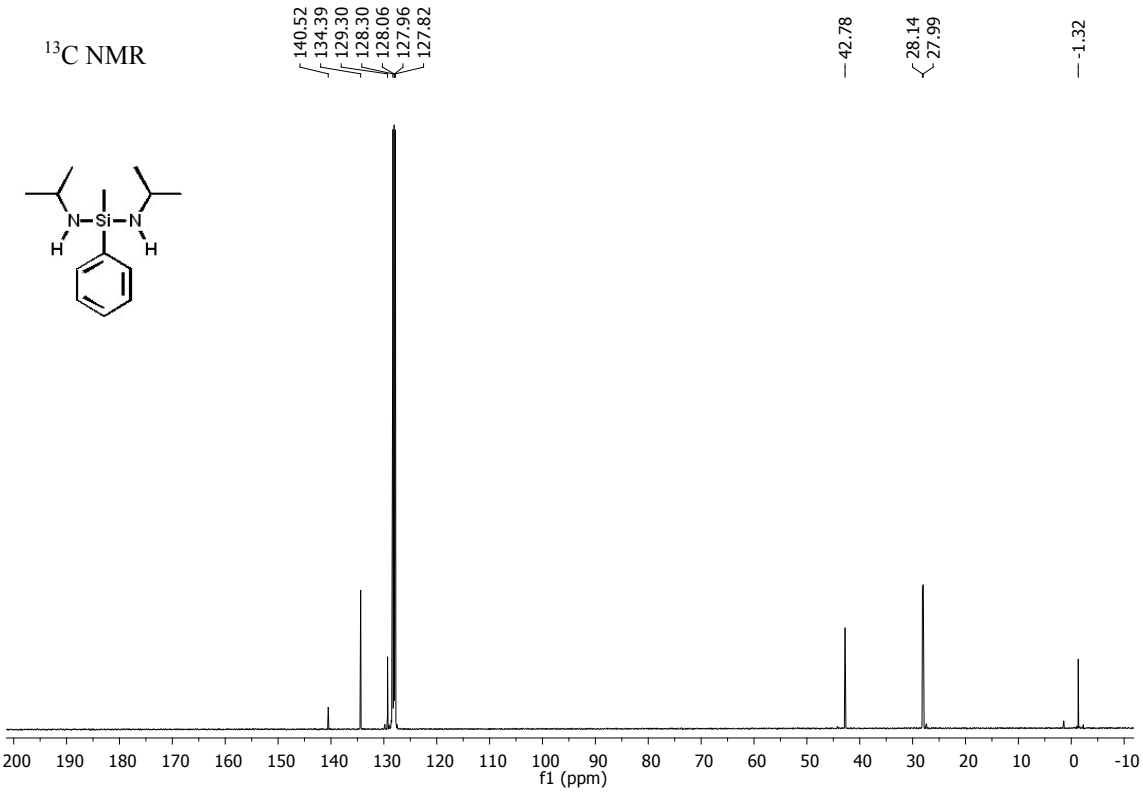

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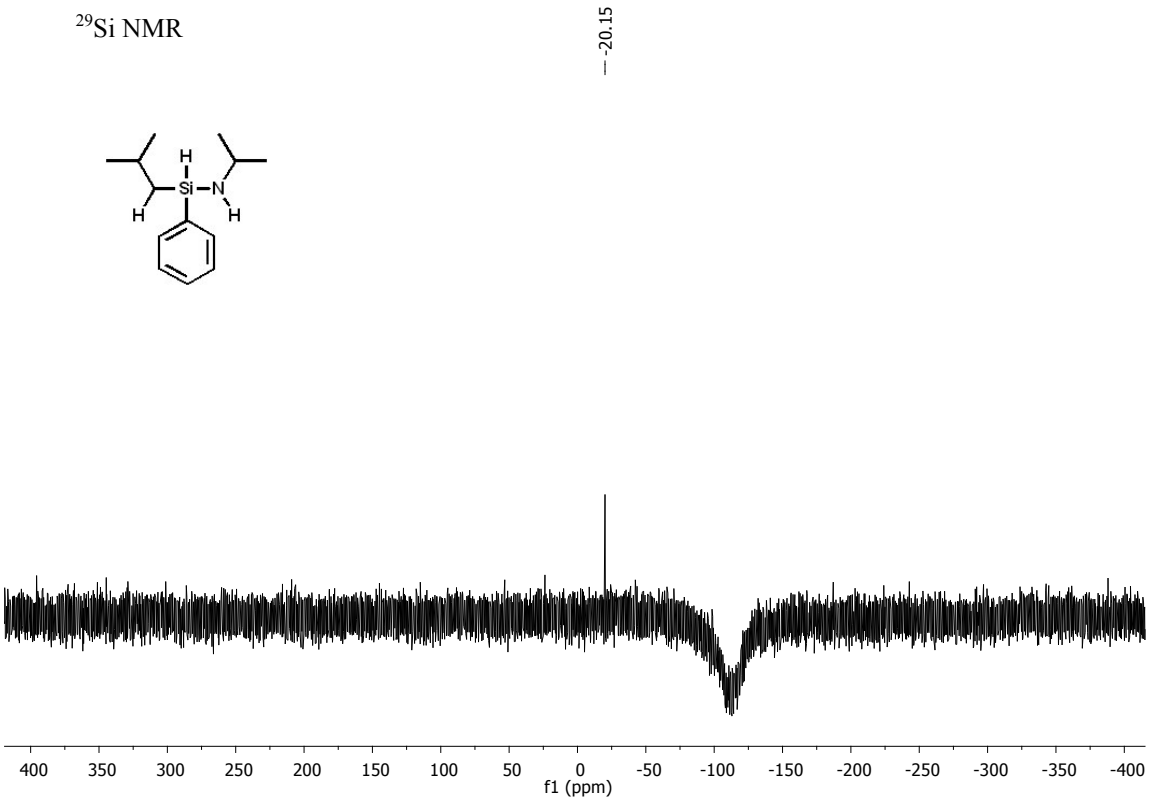

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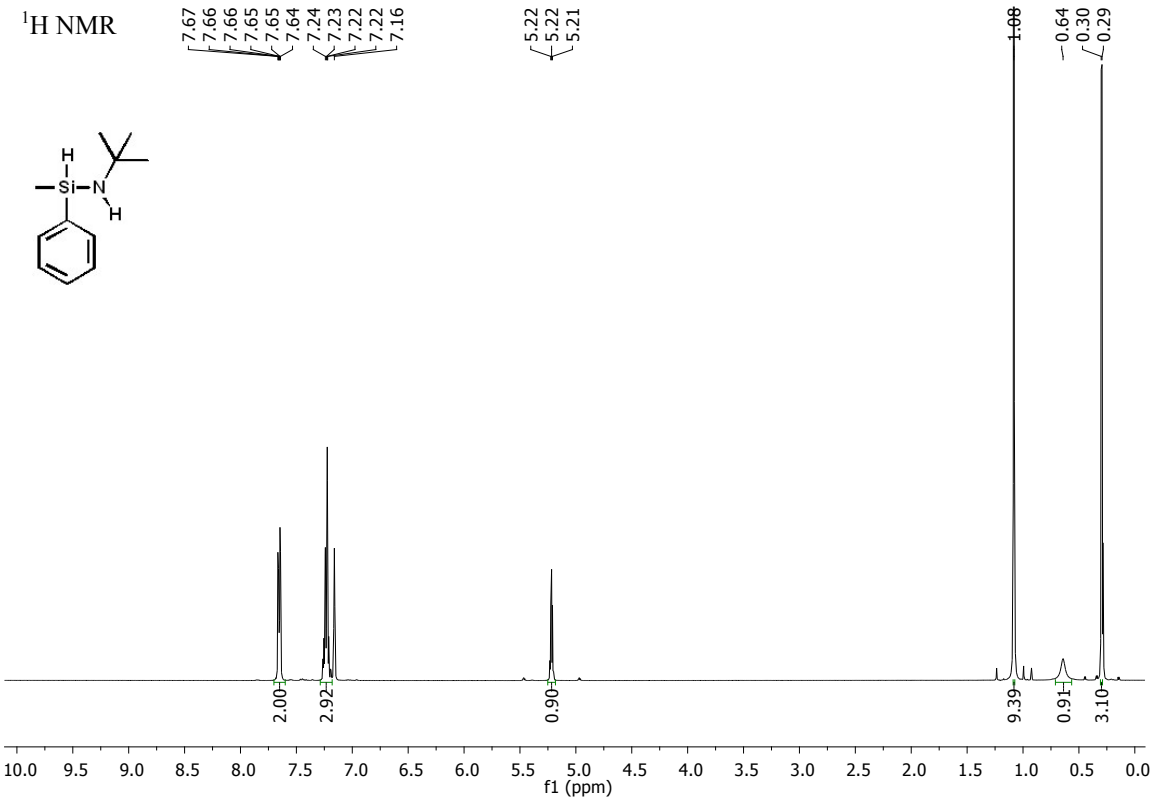

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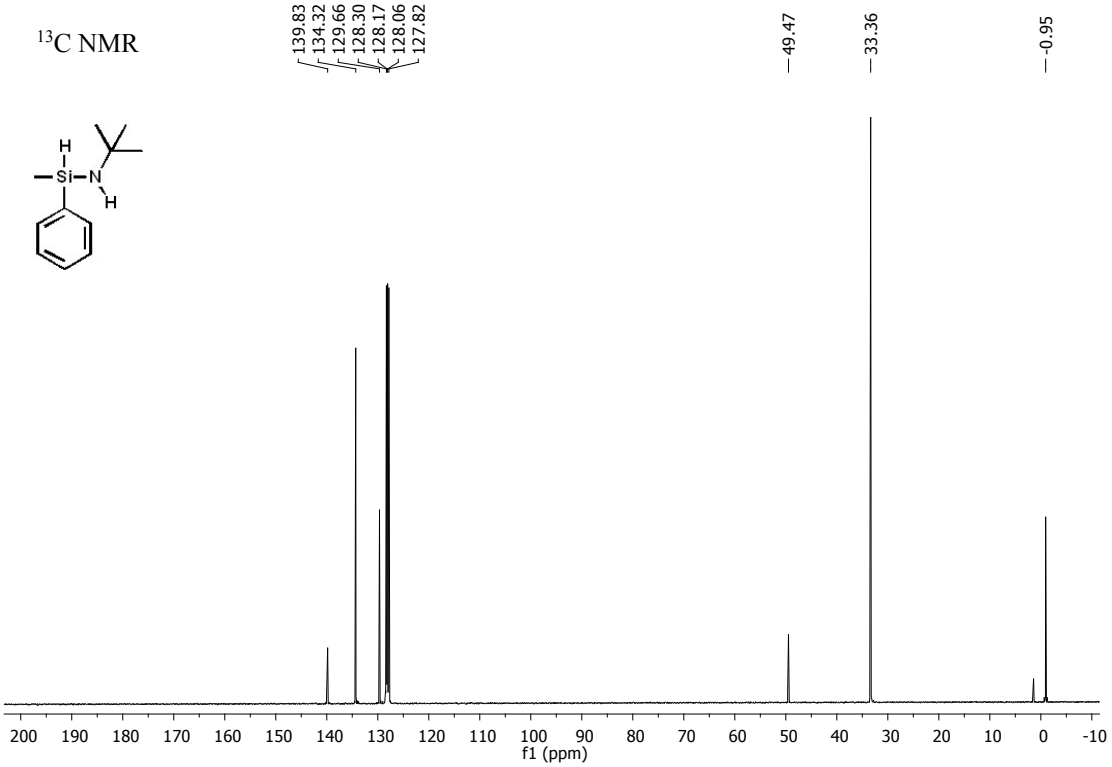

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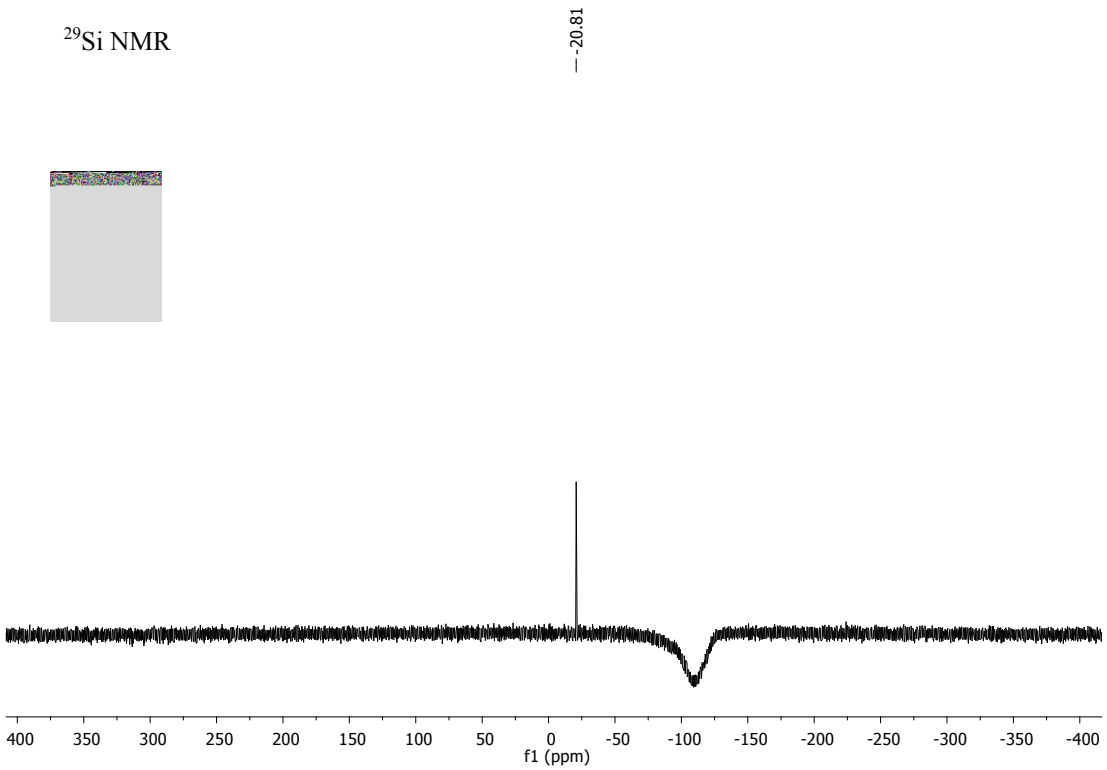

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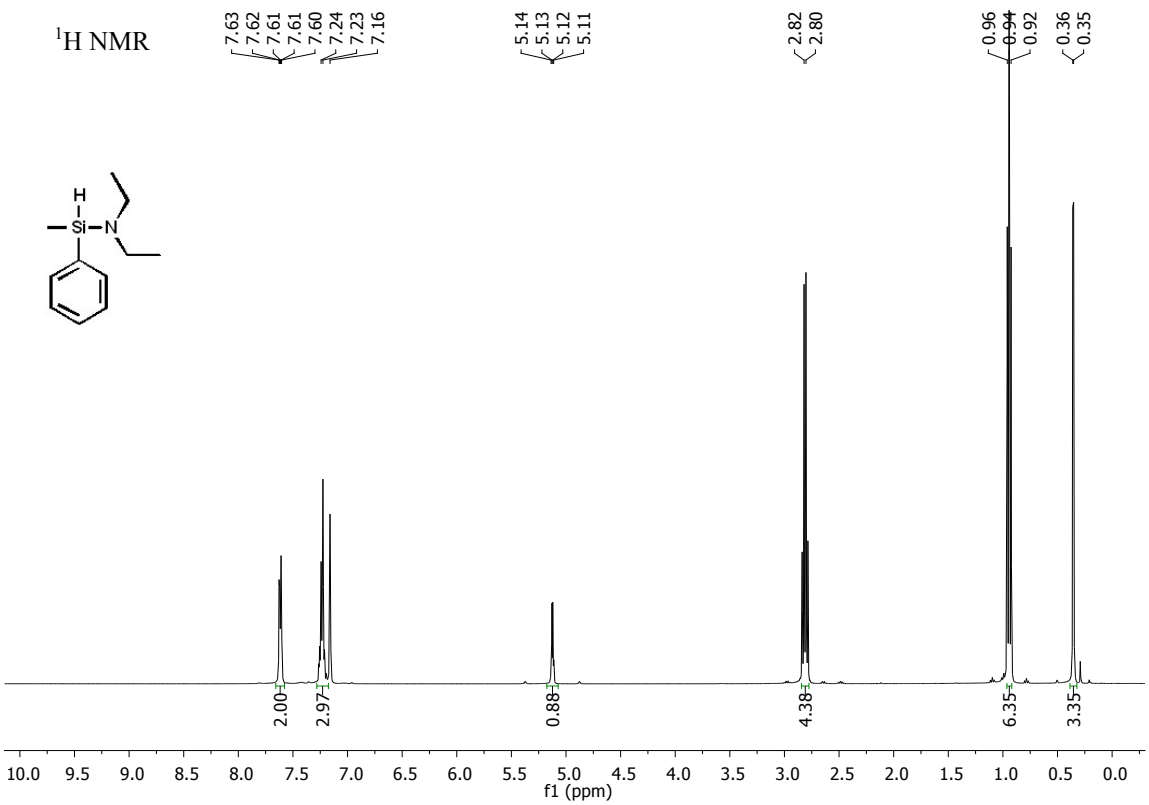

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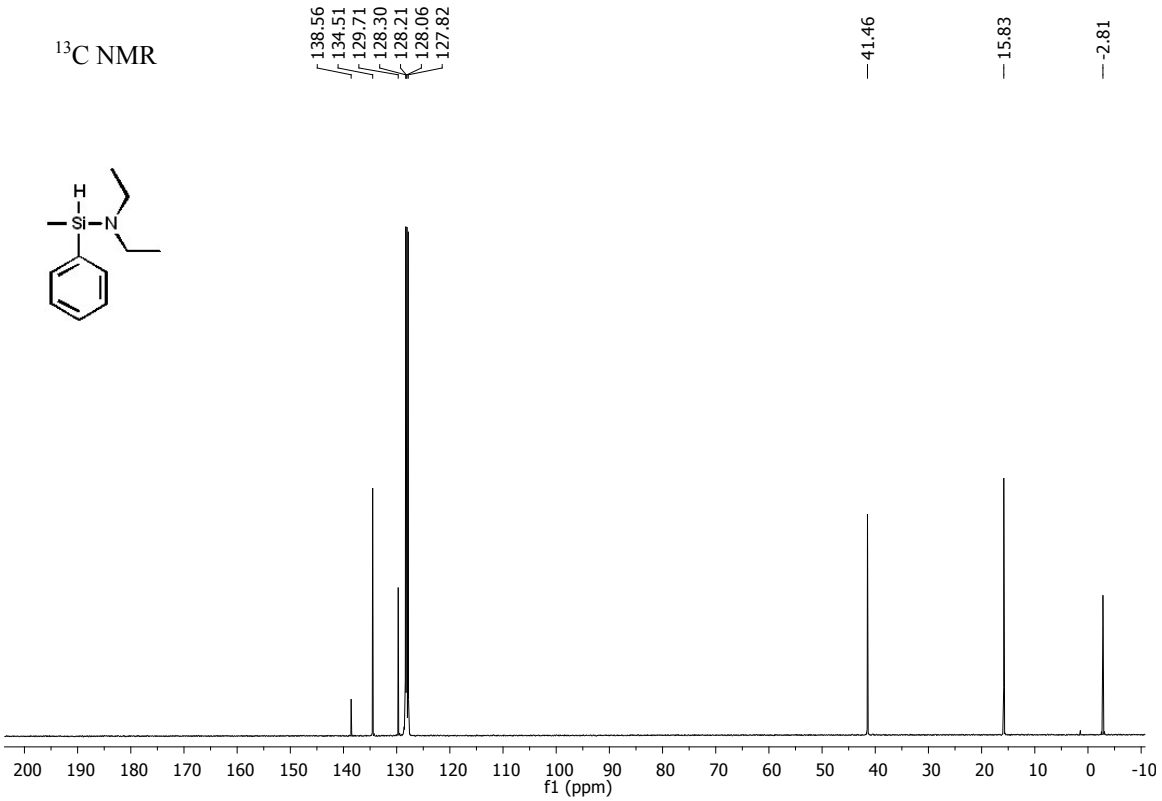

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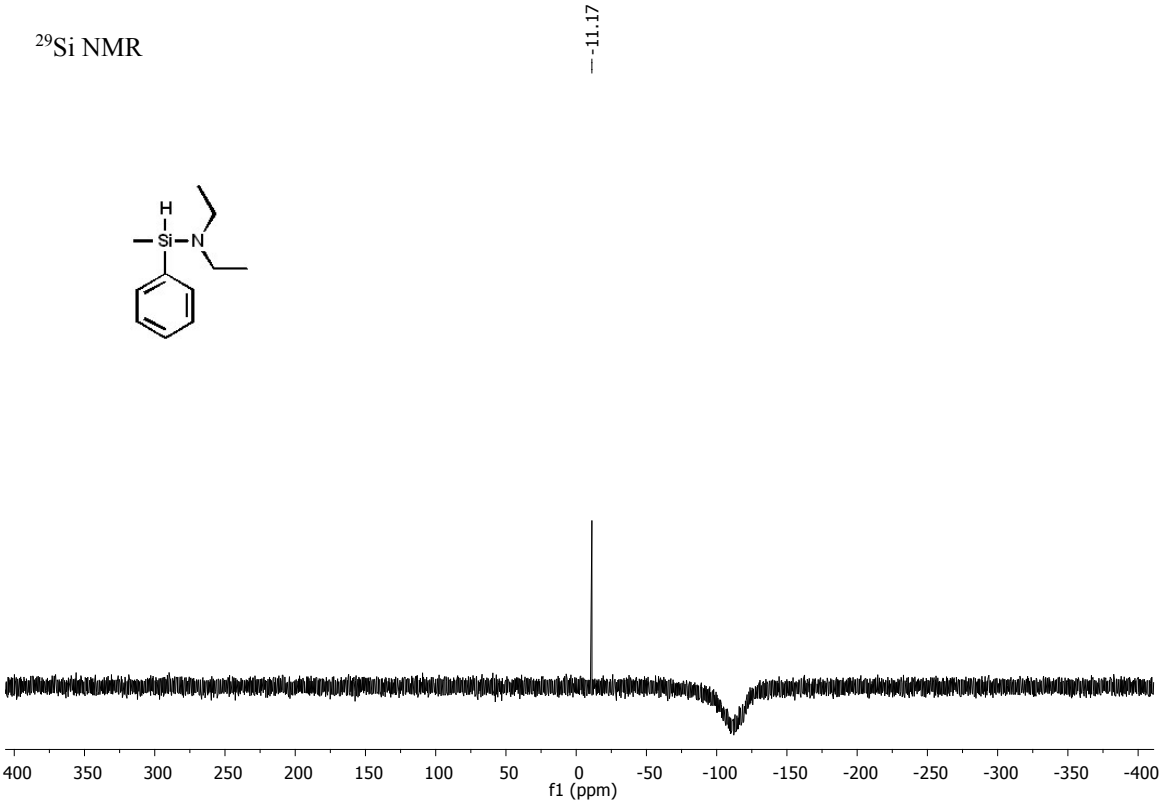

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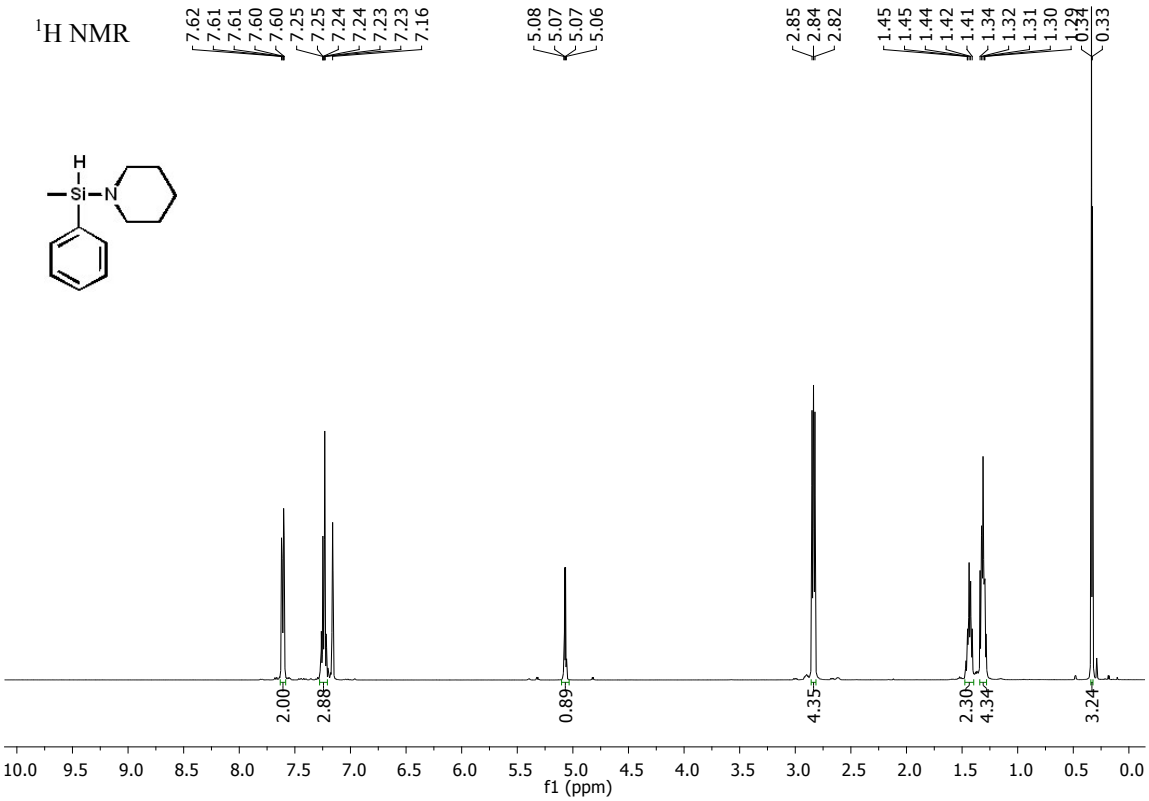

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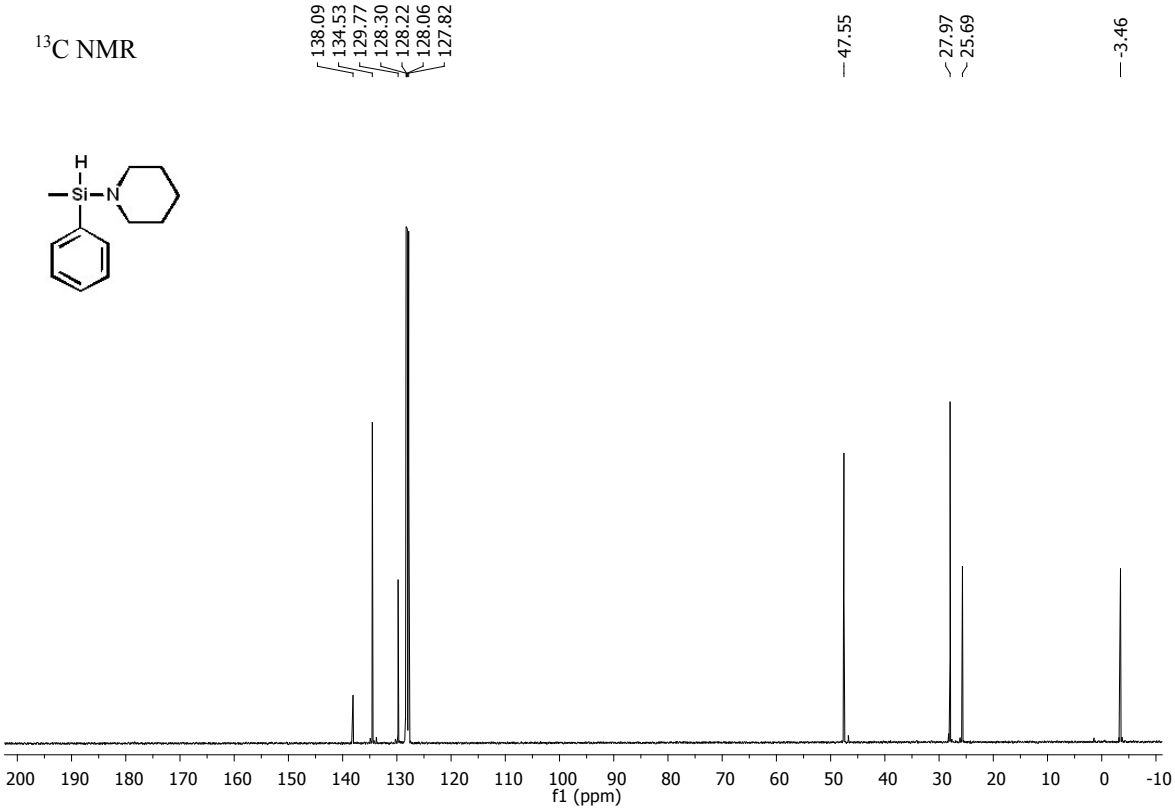

^{29}Si NMR

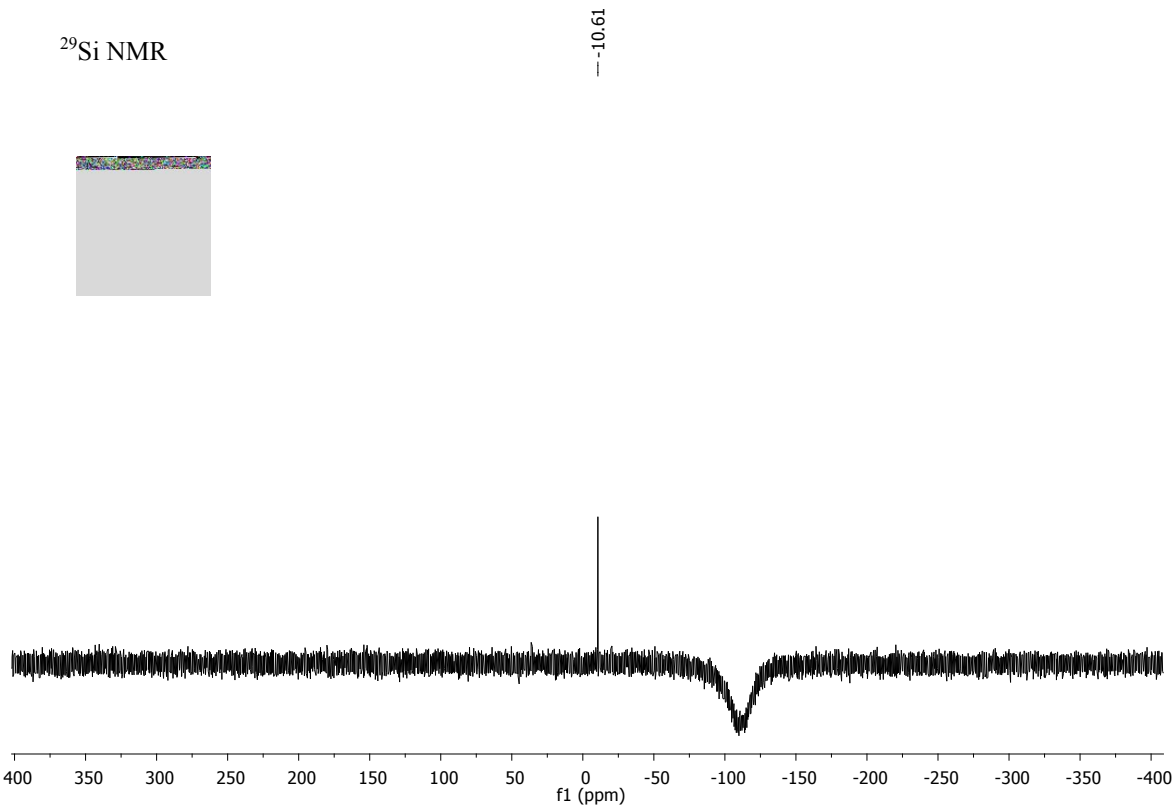
-10.61
400
350
300
250
200
150
100
50
0
-50
-100
-150
-200
-250
-300
-350
-400
f1 (ppm)

Table S1. Crystal data and structure refinement details of compounds **1** and **2**

	1	**2**
CCDC	1517518	1517519
Empirical formula	$C_{42}H_{59}MgN_3Si_2$	$C_{36}H_{53}N_3MgSi_2$
Formula weight	686.41	608.30
Crystal system	Triclinic	Triclinic
Space group	$P\bar{1}$	$P\bar{1}$
a/Å	9.4770(4)	9.1877(3)
b/Å	12.9087(6)	11.2375(3)
c/Å	18.2858(8)	18.5799(5)
α/°	72.347(3)	85.9850(10)
β/°	76.154(3)	77.6490(10)
γ/°	89.454(3)	1830.86(9)
Volume/Å^3	2064.92(16)	1830.86(9)
Z	2	2
ρ_{calc}g/cm^3	1.104	1.103
μ/mm^{-1}	0.132	0.141
F(000)	744.0	660.0
Crystal size /mm^3	0.16 × 0.14 × 0.1	0.19 × 0.14 × 0.1
2Θ range for data collection/°	7.738 to 60.226	4.49 to 61.14
Index ranges	-13 ≤ h ≤ 12, -18 ≤ k ≤ 17, -25 ≤ l ≤ 25	-12 ≤ h ≤ 13, -15 ≤ k ≤ 16, -24 ≤ l ≤ 26
Reflections collected	31544	29800
Independent reflections	11856 [R_{int} = 0.0443, R_{sigma} = 0.0567]	10999 [R_{int} = 0.0416, R_{sigma} = 0.0518]
Data/restraints/parameters	11856/369/576	10999/0/394
Goodness-of-fit on F^2	1.032	1.040
R1, wR2 [I>=2σ (I)]	R_1 = 0.0500,	R_1 = 0.0505, wR_2 = 0.1344

	$wR_2 = 0.1242$	
R1, wR2 [all data]	$R_1 = 0.0836$, $wR_2 = 0.1436$	$R_1 = 0.0736$, $wR_2 = 0.1521$
Largest diff. peak/hole/eÅ^{-3}	0.39/-0.51	0.73/-0.38