Supporting Information

Generation of Pyridyl Coordinated Organosilicon Cation Pool by Oxidative Si-Si Bond Dissociation

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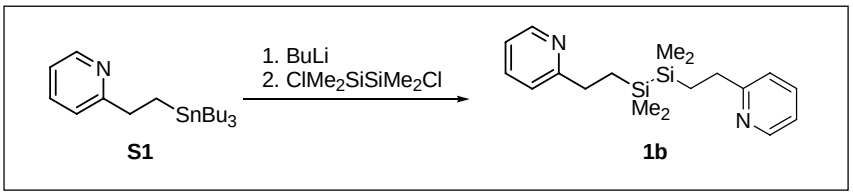
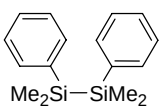
General. ^{1}H and ^{13}C NMR spectra were recorded on Varian MERCURY plus-400 (^{1}H 400 MHz, ^{13}C 100 MHz), JEOL ECA-600P (^{1}H 600 MHz, ^{13}C 150 MHz) using the residual proton ($CDCl_2$: 5.32 ppm, $CDCl_3$: 7.26 ppm) or carbon (CD_2Cl_2: 53.80 ppm, $CDCl_3$: 77.00 ppm) as an internal standard. ^{29}Si NMR spectra were recorded on Varian Gemini 2000 (60 MHz), JEOL JNM-A400 (80 MHz), JEOL JNM-A500 (100 MHz) using Me_4Si as an internal standard. EI mass spectra were recorded on JMS-SX102A spectrometer. FAB mass spectra were recorded on JMS-HX110A spectrometer. CSI mass spectra were recorded on JMS-T100CSK spectrometer. Unless otherwise noted, all materials, dried diethyl ether and tetrahydrofuran were obtained from commercial suppliers and used without further purification. Dichloromethane was washed with water, distilled from P_2O_5, redistilled from dried K_2CO_3 to remove a trace amount of acid, and stored over molecular sieves 4A. Starting materials, such as tributyl(2-pyridylethyl)stannane **S1**[1] and **1c**[2] were prepared according to the reported procedure. Rotating-disk electrode voltammetry was carried out using BAS 100B and Nikko Keisoku RRDE-1 rotating disk electrode with Nikko Keisoku SC-5 controller. Measurements were carried out in 0.1 M Bu_4NClO_4/CH_3CN using a glassy carbon disk working electrode, a platinum wire counter electrode, and an SCE reference electrode with sweep rate of 10 mV/s at 5000 r.p.m.

Preparation of 1,1,2,2-Tetramethyl-1,2-bis(2-pyridylethyl)disilane (1b).

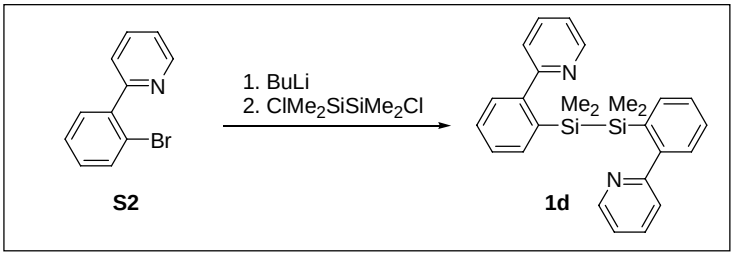


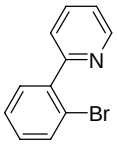
To a solution of tributyl(2-pyridylethyl)stannane **S1**[1] (15.9 g, 40.1 mmol) in THF (100 mL) was added dropwise a hexane solution of *n*-BuLi (44 mmol) at –78 °C under argon. Additional stirring (–78 °C, 30 min) of the mixture afforded a THF solution of 2-pyridylethyl lithium. To this solution, was added 1,2-dichloro-1,1,2,2-tetramethyldisilane (4.32 g, 23.1 mmol) dropwise and the mixture was stirred for 1 h at –78 °C and an additional 1 h at room temperature. The resulting mixture was treated with saturated aq $NaHCO_3$ (40 mL). After extracted with Et_2O (40 mL × 3), organic phase was dried over $MgSO_4$. The solvent was removed under reduced pressure and the crude product was purified with flash chromatography (hexane / ethyl acetate 10:1, 1:1, 2:1 and 1:2) to give the title compound in 42% yield (2.79 g). ^{1}H NMR (400 MHz, $CDCl_3$) δ 0.09 (s, 12H), 1.02-1.06 (m, 4H), 2.76-2.80 (m, 4H), 7.02 (dd, *J* = 7.6, 4.8 Hz, 2H), 7.12 (d, *J* = 7.6 Hz, 2H), 7.52 (dd, *J* = 7.6, 0.8 Hz, 2H), 8.46 (dd, *J* = 4.8, 0.8 Hz, 2H). ^{13}C NMR (100 MHz, $CDCl_3$) δ -4.0, 15.4, 33.2, 120.6, 121.7, 136.1, 148.8, 164.1. ^{29}Si NMR (100 MHz, $CDCl_3$) δ -17.1. HRMS (FAB) *m/z* calcd for $C_{18}H_{29}N_2Si_2$ (M+H): 329.1869, found 329.1868.



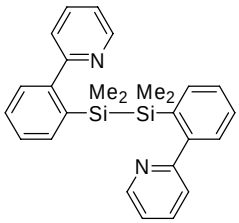
1,1,2,2-Tetramethyl-1,2-diphenyldisilane (1c).[2] 80 % yield from PhMgBr and 1,2-dichlorotetramethyldisilane. ^{1}H NMR (400 MHz, $CDCl_3$) δ 0.37 (s, 12H), 7.32-7.35 (m, 6H), 7.40-7.43 (m, 4H). ^{13}C NMR (100 MHz, $CDCl_3$) δ -3.7, 127.6, 128.3, 133.7, 138.8. ^{29}Si NMR (60 MHz, $CDCl_3$) δ -21.8.

Preparation of 1,1,2,2-Tetramethyl-1,2-bis[*o*-(2-pyridyl)phenyl]disilane (1d).



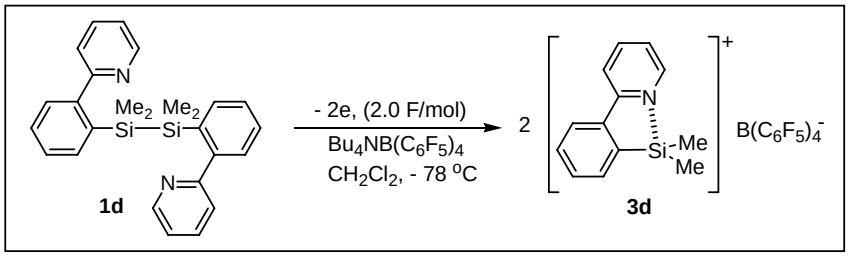


***o*-(2-Pyridyl)phenylbromide (S2).** A solution of 2-bromopyridine (2.83 g, 17.9 mmol), $Pd(PPh_3)_4$ (564 mg, 0.48 mmol), *o*-(2-bromo)phenylboronic acid (2.71 g, 12 mmol), K_2CO_3 (8.3 g, 60 mmol) and H_2O (6.5 g, 300 mmol) in DME (15 mL) was stirred at 100 °C (reflux) for 24 h under argon. Then, the mixture was cooled to room temperature and treated with saturated aq $NaHCO_3$ (10 mL). After extracted with Et_2O (15 mL × 3), organic phase was dried over $MgSO_4$. The solvent was removed under reduced pressure and the crude product was purified by distillation (0.067 mmHg, 123 °C) to give the title compound in 62% (1.95 g) yield. ^{1}H NMR (400 MHz, $CDCl_3$) δ 7.23-7.31 (m, 2H), 7.40 (td, *J* = 7.6, 1.2 Hz, 1H), 7.53 (dd, *J* = 7.6, 2.0 Hz, 1H), 7.60 (dt, *J* = 8.0, 1.2 Hz, 1H), 7.67 (dt, *J* = 8.0, 1.2 Hz, 1H), 7.76 (td, *J* = 7.6, 2.0 Hz, 1H), 8.71 (dm, *J* = 4.8 Hz, 1H). ^{13}C NMR (100 MHz, $CDCl_3$) δ 121.6, 122.2, 124.5, 127.3, 129.5, 131.2, 133.0, 135.5, 141.0, 149.1, 158.0. HRMS (EI) *m/z* calcd for $C_{11}H_8NBr$ (M+): 232.9840, found 232.9842.

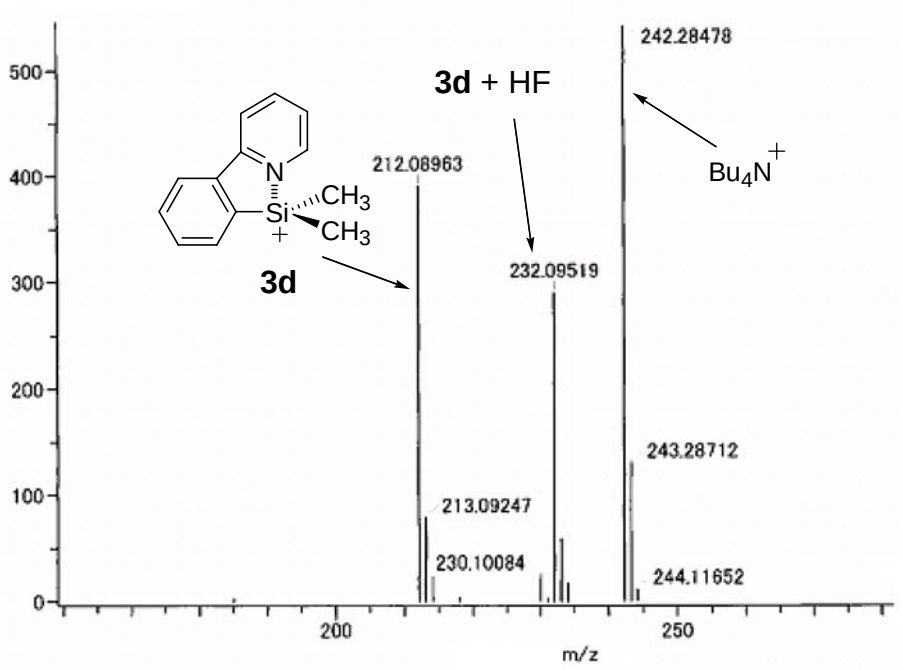


1,1,2,2-Tetramethyl-1,2-bis[*o*-(2-pyridyl)phenyl]disilane (1d). To a solution of *o*-(2-pyridyl)phenylbromide **S2** (1.32 g, 5.6 mmol) in Et_2O (10 mL) was added dropwise a *n*-hexane solution of *n*-BuLi (5.7 mmol) at –78 °C under argon. Additional stirring (–78 °C, 90 min) of the mixture afforded a Et_2O solution of *o*-(2-pyridyl)phenyl lithium. To this solution, was added 1,2-dichloro-1,1,2,2-tetramethyldisilane (505.5 mg, 2.7 mmol) dropwise and stirred at –78 °C to room temperature for 20 h. The resulting mixture was treated with saturated aq $NaHCO_3$ (10 mL). After extracted with Et_2O (10 mL × 3), organic phase was dried over $MgSO_4$. The solvent was removed under reduced pressure and the crude product was purified with flash chromatography (hexane / ethyl acetate 5:1) to give the title compound in 85% yield (974.1 mg). ^{1}H NMR (400 MHz, $CDCl_3$) δ 0.07 (s, 12H), 7.08 (ddd, *J* = 6.4, 4.8, 1.6 Hz, 2H), 7.39 (td, *J* = 7.2, 1.6 Hz, 2H), 7.46 (td, *J* = 7.2, 1.6 Hz, 2H), 7.60-7.66 (m, 6H), 7.71 (dd, *J* = 7.8, 1.6 Hz, 2H), 8.18 (dt, *J* = 4.8, 0.8 Hz, 2H). ^{1}H NMR (600 MHz, CH_2Cl_2 containing 10% CD_2Cl_2, 0 °C) δ -0.05 (s, 12H), 7.06 (ddd, *J* = 7.5, 6.3, 1.2 Hz, 2H), 7.34 (td, *J* = 7.5, 1.2 Hz, 2H), 7.42 (td, *J* = 7.5, 1.7 Hz, 2H), 7.57 (d, *J* = 8.0 Hz, 2H), 7.61-7.64 (m, 6H), 8.08 (d, *J* = 5.2 Hz, 2H). ^{13}C NMR (100 MHz, $CDCl_3$) δ 0.2, 121.3, 122.0, 127.3, 127.8, 128.0, 135.9, 136.2, 141.1, 145.2, 148.0, 160.1. ^{29}Si NMR (80 MHz, $CDCl_3$) δ -21.0. HRMS (FAB) *m/z* calcd for $C_{26}H_{29}N_2Si_2$ (M+H): 425.1869, found 425.1874.

Preparation of Dimethyl[*o*-(2-pyridyl)phenyl]silylium ion (3d).

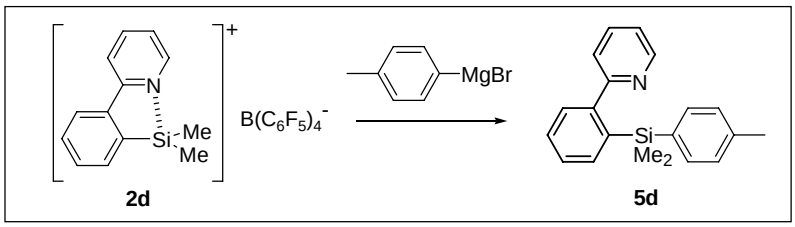


The anodic oxidation was carried out in an H-type divided cell equipped with a 4G glass filter (separator), a carbon felt anode (Nippon Carbon JF-20-P7, ca. 160 mg, dried at 250 °C/1 mmHg for 2.5 h before use) and a platinum plate cathode (10 mm x 10 mm). In the anodic chamber was placed a solution of **1d** (84.9 mg, 0.2 mmol) in 0.1 M $Bu_4NB(C_6F_5)_4/CH_2Cl_2$ (10% CD_2Cl_2) (4 mL). In the cathodic chamber was placed 0.1 M $Bu_4NB(C_6F_5)_4/CH_2Cl_2$ (10% CD_2Cl_2) (4 mL). The constant current electrolysis (5 mA) was carried out at 0 °C with magnetic stirring until 2 F/mol of electricity was consumed. The resulting solution in the anodic chamber was analyzed by NMR. ^{1}H NMR (600 MHz, CH_2Cl_2 containing 10% CD_2Cl_2, 0 °C) δ 0.87 (s, 6H), 7.73 (ddd, *J* = 7.5, 6.6, 0.6 Hz, 1H), 7.78 (ddd, *J* = 7.8, 7.5, 0.6 Hz, 1H), 7.83 (ddd, *J* = 6.6, 6.0, 0.6 Hz, 1H), 7.92 (d, *J* = 6.6 Hz, 1H), 8.11 (d, *J* = 7.8 Hz, 1H), 8.36 (d, *J* = 7.8 Hz, 1H), 8.50 (ddd, *J* = 7.8, 6.0, 0.6 Hz, 1H), 8.52 (d, *J* = 6.0 Hz, 1H). ^{13}C NMR (150 MHz, CD_2Cl_2, 0 °C) δ -2.3, 121.8, 125.1, 126.4, 132.1, 133.6, 133.9, 134.1, 137.1, 143.6, 148.1, 157.3. ^{29}Si NMR (80 MHz, CD_2Cl_2) δ 37.7. HRMS (CSI) *m/z* calcd for $C_{13}H_{14}NSi$ (M^+): 212.08955, found 212.08963.



CSI-MS of **3d** at 0 °C.

Preparation of Dimethyl[*o*-(2-pyridyl)phenyl]-*p*-tolylsilane (5d).

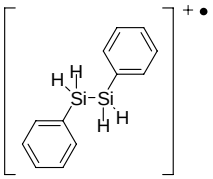


The electrochemical oxidation of **1d** (61.1 mg, 0.14 mmol) was carried out in 0.1 M $Bu_4NB(C_6F_5)_4/CH_2Cl_2$ as described above. A Et_2O solution of *p*-tolylmagnesium bromide (0.375 mmol) was added to the anodic chamber and the mixture was stirred at 0 °C for 1 h. The solution in the anodic chamber was treated with saturated aq

$NaHCO_3$ (4 mL). After extracted with $CHCl_3$ (4 mL × 3), organic phase was dried over $MgSO_4$. Removal of the solvent under reduced pressure and the residue was quickly filtered through a short column (2 x 3 cm) of silica gel to remove $Bu_4NB(C_6F_5)_4$. The silica gel was washed with diethyl ether (50 mL). The solvent was removed from the combined filtrate under reduced pressure. ^{1}H NMR analysis of the crude product using 1,1,2,2-tetrachloroethane as internal standard indicated that the title compound was formed in 90% yield. The product was purified with flash chromatography (hexane / ethyl acetate 10:1) to give the title compound in 68% (58.7 mg) yield. ^{1}H NMR (400 MHz, $CDCl_3$) δ 0.32 (s, 6H), 2.33 (s, 3H), 7.09 (d, *J* = 7.6 Hz, 2H), 7.16 (ddd, *J* = 7.6, 4.8, 1.2 Hz, 1H), 7.32-7.38 (m, 4H), 7.44 (td, *J* = 7.6, 1.6 Hz, 1H), 7.50 (dd, *J* = 7.6, 1.6 Hz, 1H), 7.59 (td, *J* = 7.6, 1.6 Hz, 1H), 7.62 (dd, *J* = 7.6, 1.6 Hz, 1H), 8.51 (dd, *J* = 4.8, 1.2 Hz, 1H). ^{13}C NMR (150 MHz, $CDCl_3$) δ -0.4, 21.4, 121.9, 122.9, 127.4, 128.3, 128.6, 129.0, 133.8, 136.2, 136.7, 137.0, 137.5, 138.0, 147.0, 148.2, 160.6. HRMS (FAB) *m/z* calcd for $C_{20}H_{25}N_2Si_1$ (M+H): 304.1522, found 304.1524.

DFT Calculations.

The DFT calculations were carried out at B3LYP/LANL2DZ level using the Gaussian 2003W, Revision-B.05.[7] Geometries were fully optimized. The local minima were verified to have no negative eigenvalue by the vibration analysis. Cartesian coordinates and energies of computationally characterized species are as follows:



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4	6	0	1.886531	1.337262	-0.941782
5	6	0	-1.692778	-1.864633	2.273778
6	6	0	-2.313688	-3.058227	2.656262
7	6	0	-3.113040	-3.768108	1.726085
8	6	0	-3.292910	-3.272614	0.410696
9	6	0	-2.673616	-2.079375	0.024521
10	6	0	2.680729	2.081401	-0.010519
11	6	0	3.299812	3.274707	-0.396819
12	6	0	3.120042	3.769929	-1.712328
13	6	0	2.321003	3.059701	-2.642511
14	6	0	1.700301	1.866047	-2.259898
15	1	0	-1.819359	0.956370	-0.647582
16	1	0	-0.831280	1.172546	1.617980
17	1	0	0.839148	-1.171145	-1.603631
18	1	0	1.826989	-0.954356	0.661994
19	1	0	-1.082498	-1.327845	2.996394
20	1	0	-2.185911	-3.441015	3.664436
21	1	0	-3.585681	-4.701349	2.021297
22	1	0	-3.912239	-3.818965	-0.294428
23	1	0	-2.819637	-1.708164	-0.987230
24	1	0	2.826677	1.710399	1.001319
25	1	0	3.918909	3.821329	0.308300
26	1	0	3.592527	4.703224	-2.007620
27	1	0	2.193309	3.442274	-3.650777
28	1	0	1.090257	1.328991	-2.982516

Zero-point correction= 0.216454 (Hartree/Particle)
Thermal correction to Energy= 0.230809
Thermal correction to Enthalpy= 0.231753
Thermal correction to Gibbs Free Energy= 0.171505
Sum of electronic and zero-point Energies= -472.886084
Sum of electronic and thermal Energies= -472.871728
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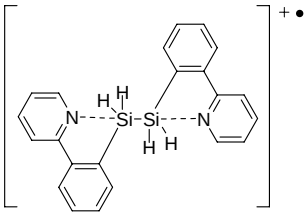

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4	6	0	-1.270497	-2.107509	0.586037
5	6	0	0.198774	3.028793	-0.485673
6	6	0	0.244325	4.409975	-0.764854
7	6	0	1.482306	5.059717	-0.927531
8	6	0	2.677295	4.331285	-0.811687
9	6	0	2.629093	2.950143	-0.532443
10	6	0	3.831088	2.104672	-0.393174
11	6	0	5.174385	2.515320	-0.510430
12	6	0	6.198855	1.571635	-0.346801
13	6	0	5.876094	0.226158	-0.067598
14	6	0	4.527336	-0.126844	0.038197
15	7	0	3.543536	0.793047	-0.121697
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17	6	0	-2.565489	-4.159638	1.032515
18	6	0	-1.370495	-4.888019	1.148643
19	6	0	-0.132510	-4.238258	0.986085
20	6	0	-0.086961	-2.857110	0.706732
21	6	0	-3.719284	-1.933103	0.613591
22	6	0	-5.062590	-2.343787	0.730645
23	6	0	-6.087058	-1.400133	0.566831
24	6	0	-5.764291	-0.054656	0.287637
25	6	0	-4.415525	0.298379	0.182037
26	7	0	-3.431726	-0.621483	0.342103
27	1	0	1.612165	-0.595367	-1.081475
28	1	0	1.675727	-0.096813	1.394517
29	1	0	-1.563894	0.268409	-1.173920
30	1	0	-1.500414	0.766957	1.302077
31	1	0	-0.768119	2.552506	-0.364890
32	1	0	-0.679296	4.975427	-0.854869
33	1	0	1.514498	6.124127	-1.142608
34	1	0	3.627823	4.841930	-0.938944
35	1	0	5.411910	3.550744	-0.725022
36	1	0	7.237696	1.875787	-0.434782
37	1	0	6.647163	-0.524659	0.063718
38	1	0	4.217030	-1.145129	0.251184
39	1	0	-3.516020	-4.670293	1.159709
40	1	0	-1.402691	-5.952399	1.363859
41	1	0	0.791118	-4.803663	1.076335
42	1	0	0.879939	-2.380807	0.586066
43	1	0	-5.300120	-3.379213	0.945217
44	1	0	-7.125906	-1.704312	0.654653
45	1	0	-6.535359	0.696138	0.156181
46	1	0	-4.105214	1.316660	-0.030960

Zero-point correction= 0.358910 (Hartree/Particle)
Thermal correction to Energy= 0.381025
Thermal correction to Enthalpy= 0.381969
Thermal correction to Gibbs Free Energy= 0.304229
Sum of electronic and zero-point Energies= -966.915950
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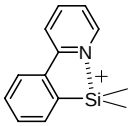
Sum of electronic and thermal Enthalpies= -966.892892
Sum of electronic and thermal Free Energies= -966.970631



3d

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms) X	Y	Z
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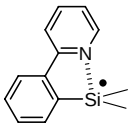
4	6	0	0.217309	2.145601	-1.580555
5	6	0	0.104064	0.991354	-0.779149
6	6	0	0.090418	-0.308140	-1.368130
7	6	0	-0.007472	1.005604	0.691084
8	14	0	-0.069911	-1.631294	-0.046051
9	6	0	-0.021040	2.133923	1.532824
10	6	0	-0.134440	1.967063	2.920003
11	6	0	-0.234741	0.668852	3.469991
12	6	0	-0.218038	-0.425427	2.607247
13	7	0	-0.107313	-0.256338	1.256309
14	6	0	1.442324	-2.694580	0.283541
15	6	0	-1.703478	-2.552940	0.044016
16	1	0	0.183828	-1.406324	-3.240528
17	1	0	0.382798	0.629458	-4.644766
18	1	0	0.405114	2.888937	-3.601363
19	1	0	0.228583	3.138941	-1.140659
20	1	0	0.056268	3.126043	1.103978
21	1	0	-0.145238	2.835337	3.572012
22	1	0	-0.323358	0.512750	4.538774
23	1	0	-0.291760	-1.443485	2.974430
24	1	0	2.356712	-2.093306	0.337400
25	1	0	1.573060	-3.424744	-0.526376
26	1	0	1.344065	-3.264344	1.216265
27	1	0	-1.798443	-3.123119	0.976826
28	1	0	-1.775139	-3.273775	-0.781499
29	1	0	-2.558105	-1.872020	-0.036529

Zero-point correction= 0.239061 (Hartree/Particle)
Thermal correction to Energy= 0.252719
Thermal correction to Enthalpy= 0.253663
Thermal correction to Gibbs Free Energy= 0.199003
Sum of electronic and zero-point Energies= -561.976619
Sum of electronic and thermal Energies= -561.962961
Sum of electronic and thermal Enthalpies= -561.962017
Sum of electronic and thermal Free Energies= -562.016678



4d

Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms) X	Y	Z
1	6	0	0.190580	-0.432942	-2.753313
2	6	0	0.304643	0.703271	-3.578021
3	6	0	0.318117	1.993586	-2.993413
4	6	0	0.219501	2.153943	-1.606264
5	6	0	0.104092	1.014230	-0.765986
6	6	0	0.090047	-0.298339	-1.356233
7	6	0	-0.005430	1.036997	0.682933
8	14	0	-0.070808	-1.589228	-0.009463
9	6	0	-0.020859	2.147594	1.540335

10	6	0	-0.133708	1.998418	2.931417
11	6	0	-0.235194	0.668850	3.477221
12	6	0	-0.220176	-0.421209	2.637314
13	7	0	-0.108114	-0.282790	1.250203
14	6	0	1.409691	-2.740062	0.248736
15	6	0	-1.670138	-2.601438	0.013750
16	1	0	0.181081	-1.421027	-3.211720
17	1	0	0.381995	0.593087	-4.656853
18	1	0	0.406248	2.871070	-3.630867
19	1	0	0.231761	3.153320	-1.177396
20	1	0	0.057006	3.140550	1.105551
21	1	0	-0.144559	2.864985	3.584862
22	1	0	-0.323911	0.513048	4.548095
23	1	0	-0.294799	-1.436478	3.016431
24	1	0	2.343449	-2.167975	0.299204
25	1	0	1.493562	-3.453883	-0.582608
26	1	0	1.311396	-3.322695	1.174838
27	1	0	-1.765544	-3.184351	0.939978
28	1	0	-1.690676	-3.310424	-0.825670
29	1	0	-2.545903	-1.947886	-0.073653

Zero-point correction=	0.235103 (Hartree/Particle)
Thermal correction to Energy=	0.249091
Thermal correction to Enthalpy=	0.250035
Thermal correction to Gibbs Free Energy=	0.194115
Sum of electronic and zero-point Energies=	-562.152616
Sum of electronic and thermal Energies=	-562.138629
Sum of electronic and thermal Enthalpies=	-562.137684
Sum of electronic and thermal Free Energies=	-562.193604

References

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(2) Kunai, A.; Kawakami, T.; Toyoda, E.; Ishikawa, M. *Organometallics* **1991**, *10*, 893.

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(4) Chen, S-L.; Ji, S-J.; Loh, T-P. *Tetrahedron Lett.* **2004**, *45*, 375.

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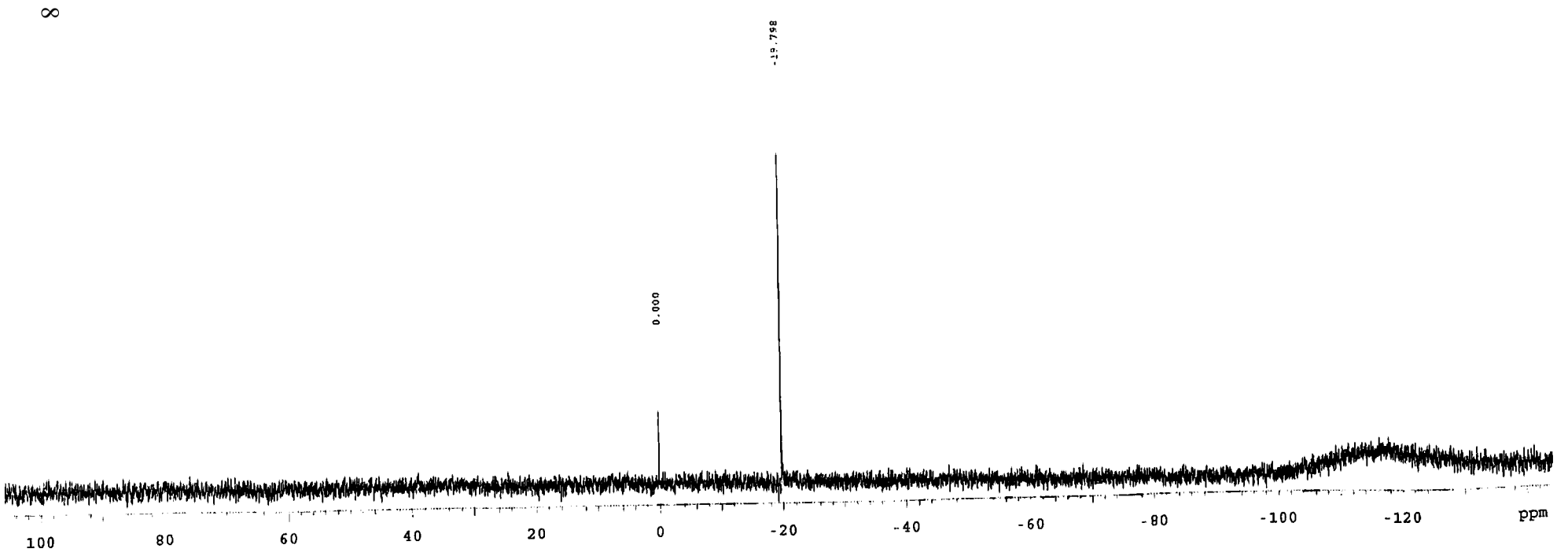
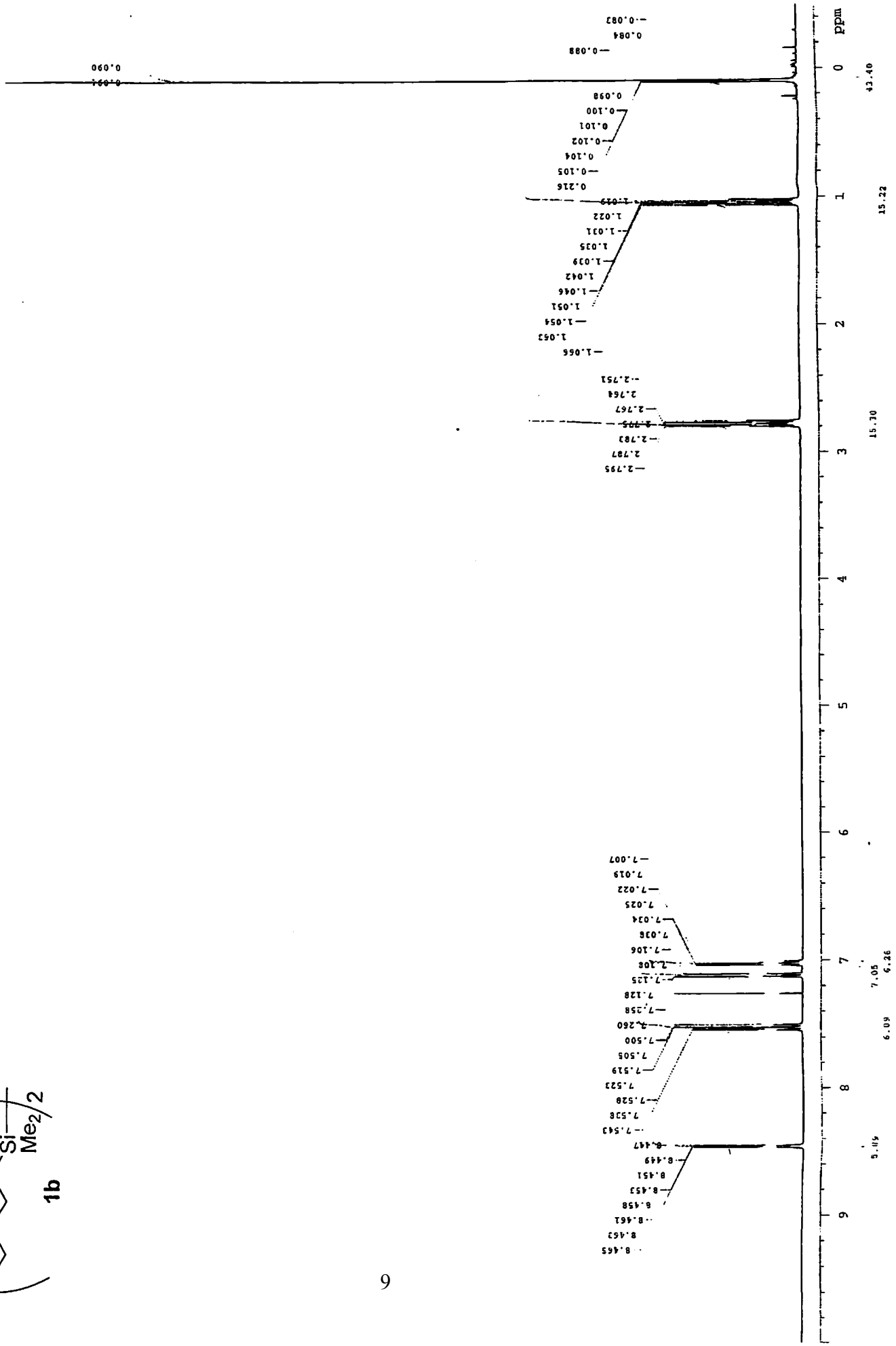
$Me_3Si—SiMe_3$

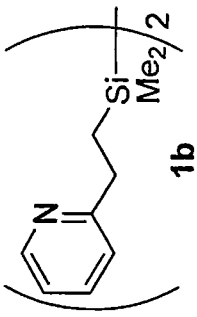
1a

^{29}Si NMR

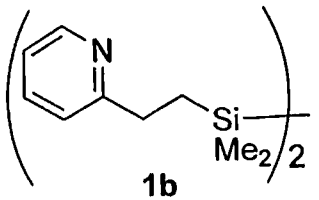


^{1}H NMR



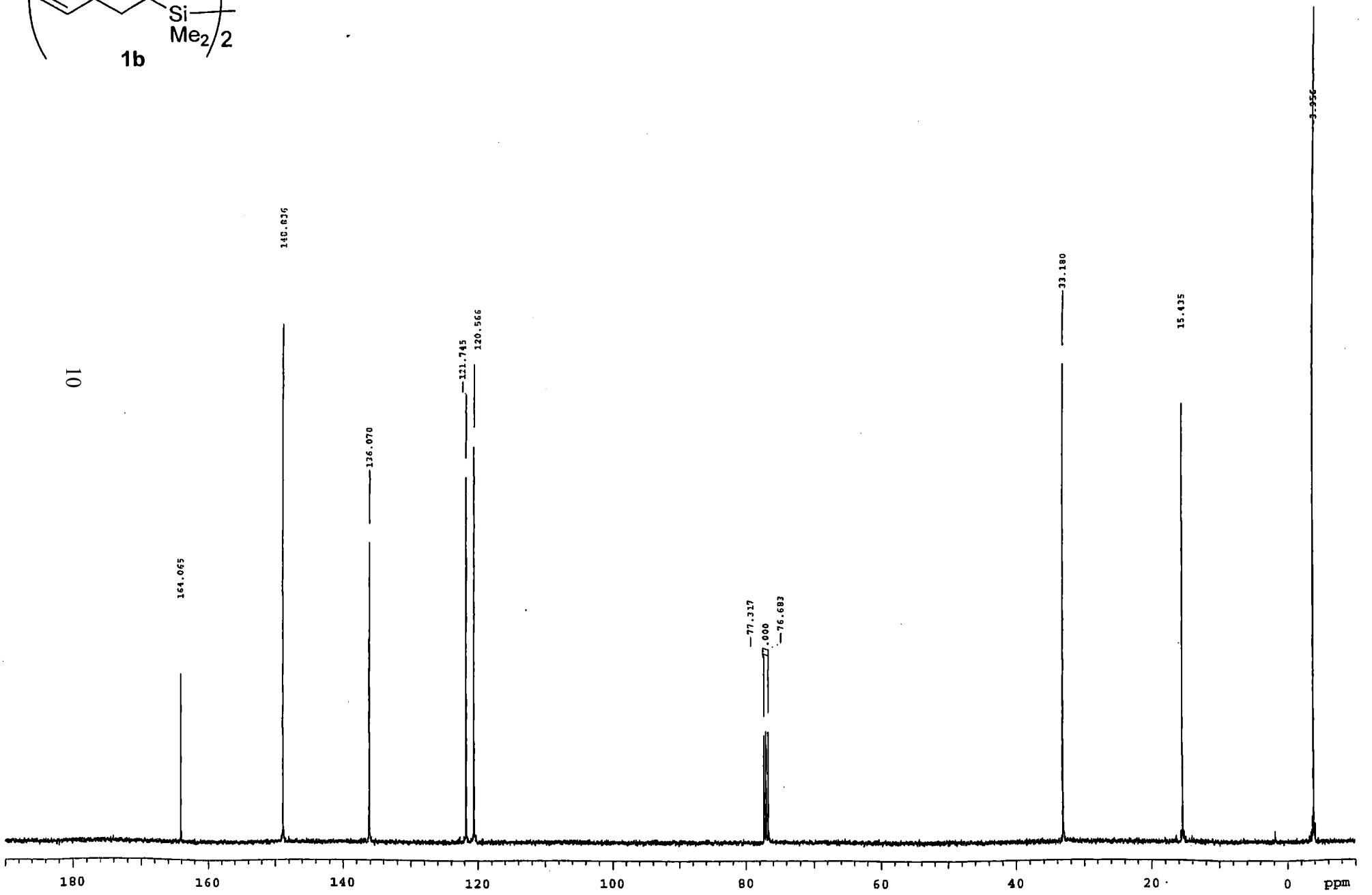


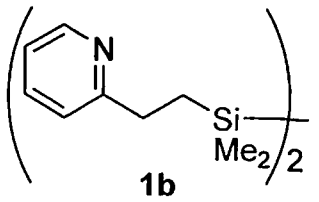
1b


N
Si
Me2
2

1b

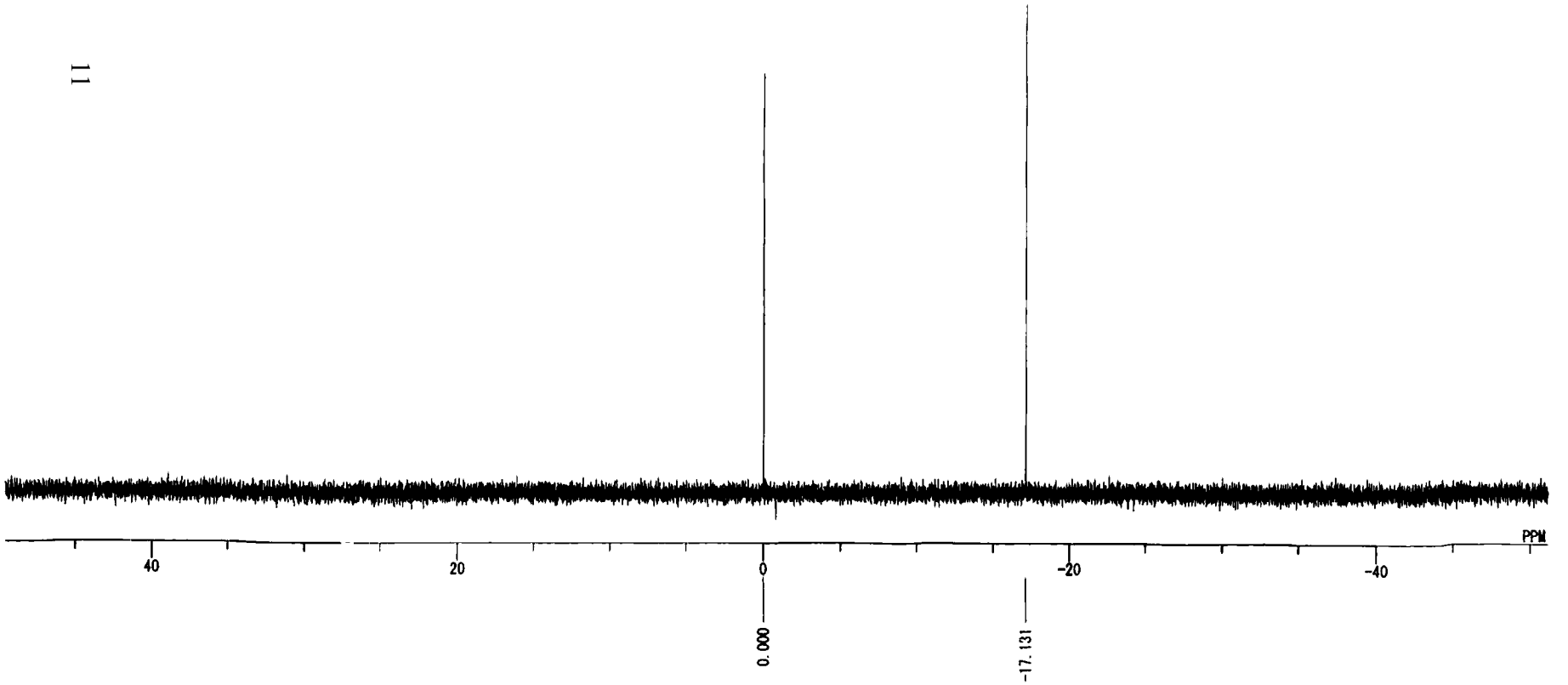
^{13}C NMR

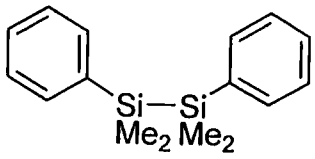

164.065
140.836
136.070
121.745
120.566
77.317
77.000
76.683
33.180
15.435
1.956
180
160
140
120
100
80
60
40
20
0
ppm



1b

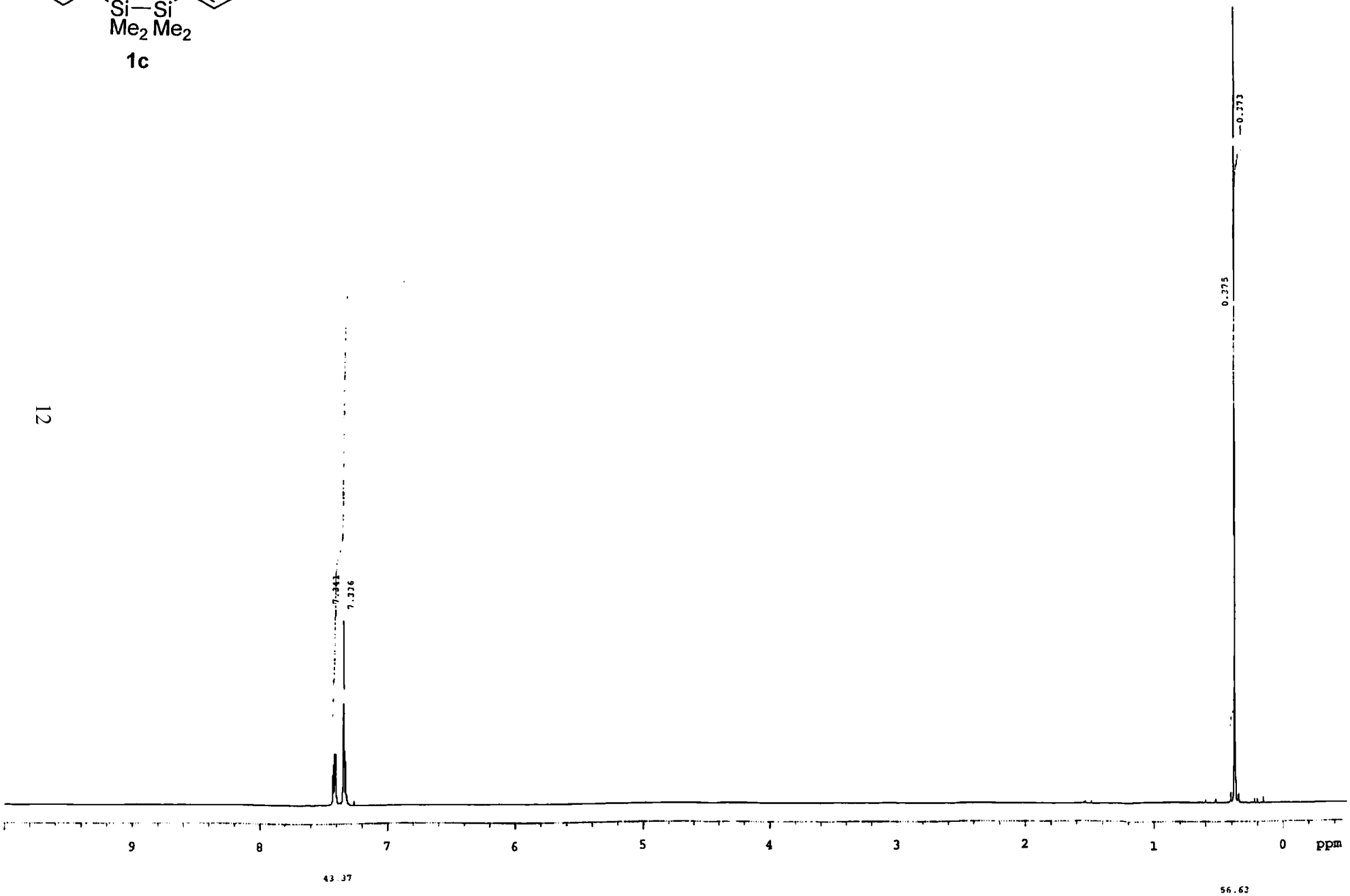
^{29}Si NMR



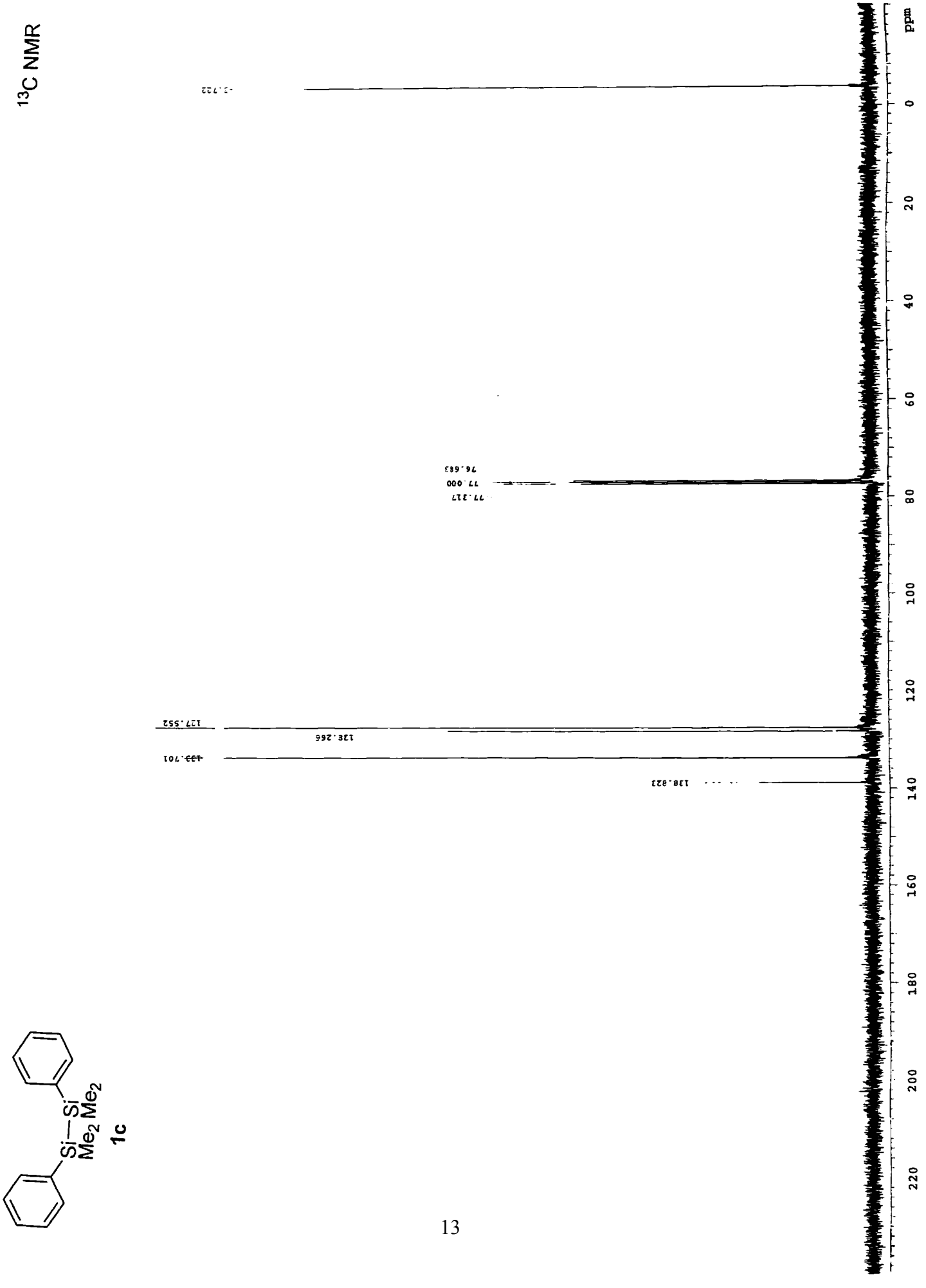


1c

^{1}H NMR

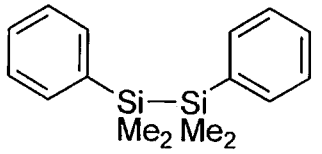


^{13}C NMR


-2.722
77.317
77.000
76.683
138.266
127.552
139.701
138.823
ppm
0
20
40
60
80
100
120
140
160
180
200
220

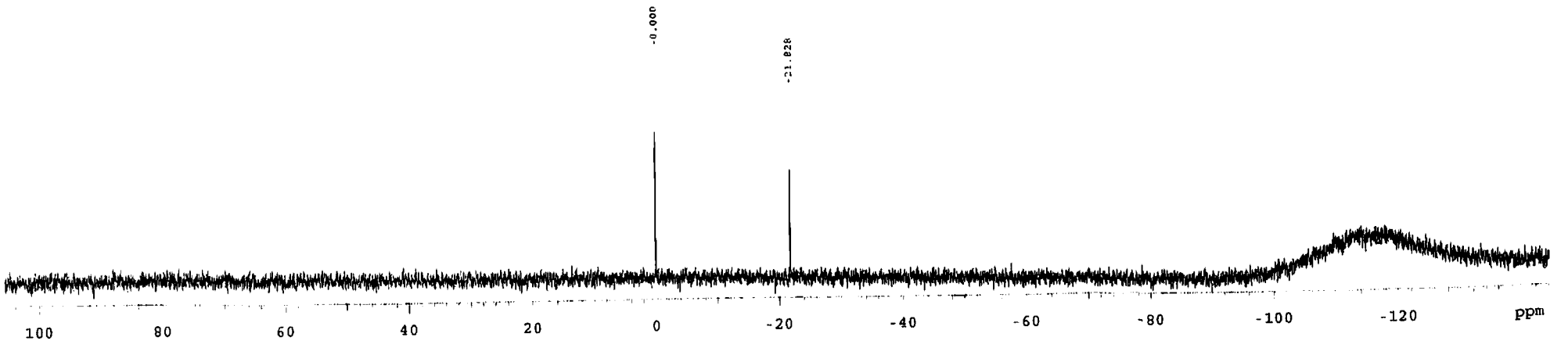
Si
Si
Me2
Me2

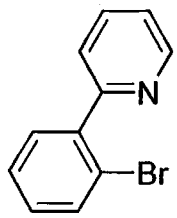
1c



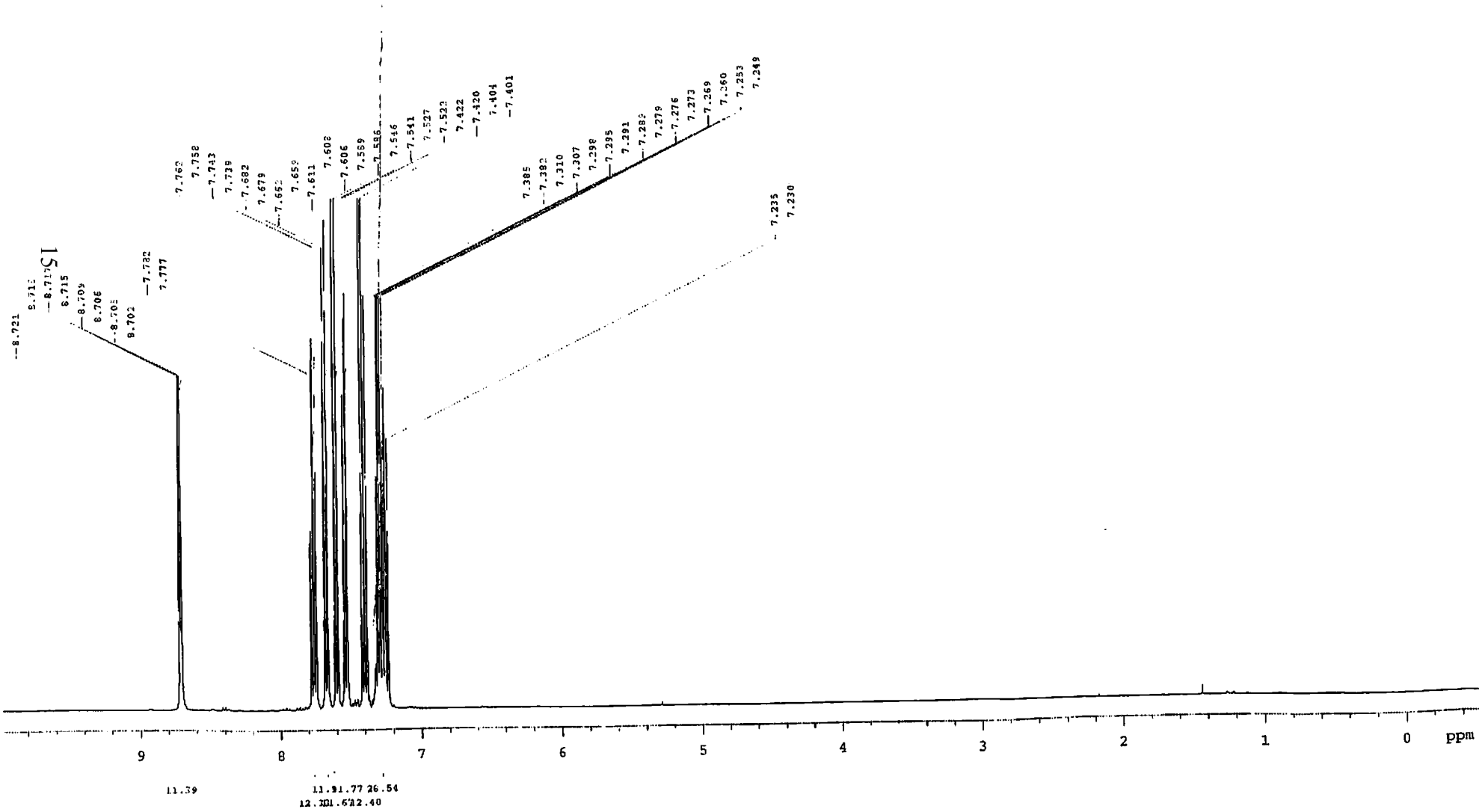
1c

^{29}Si NMR

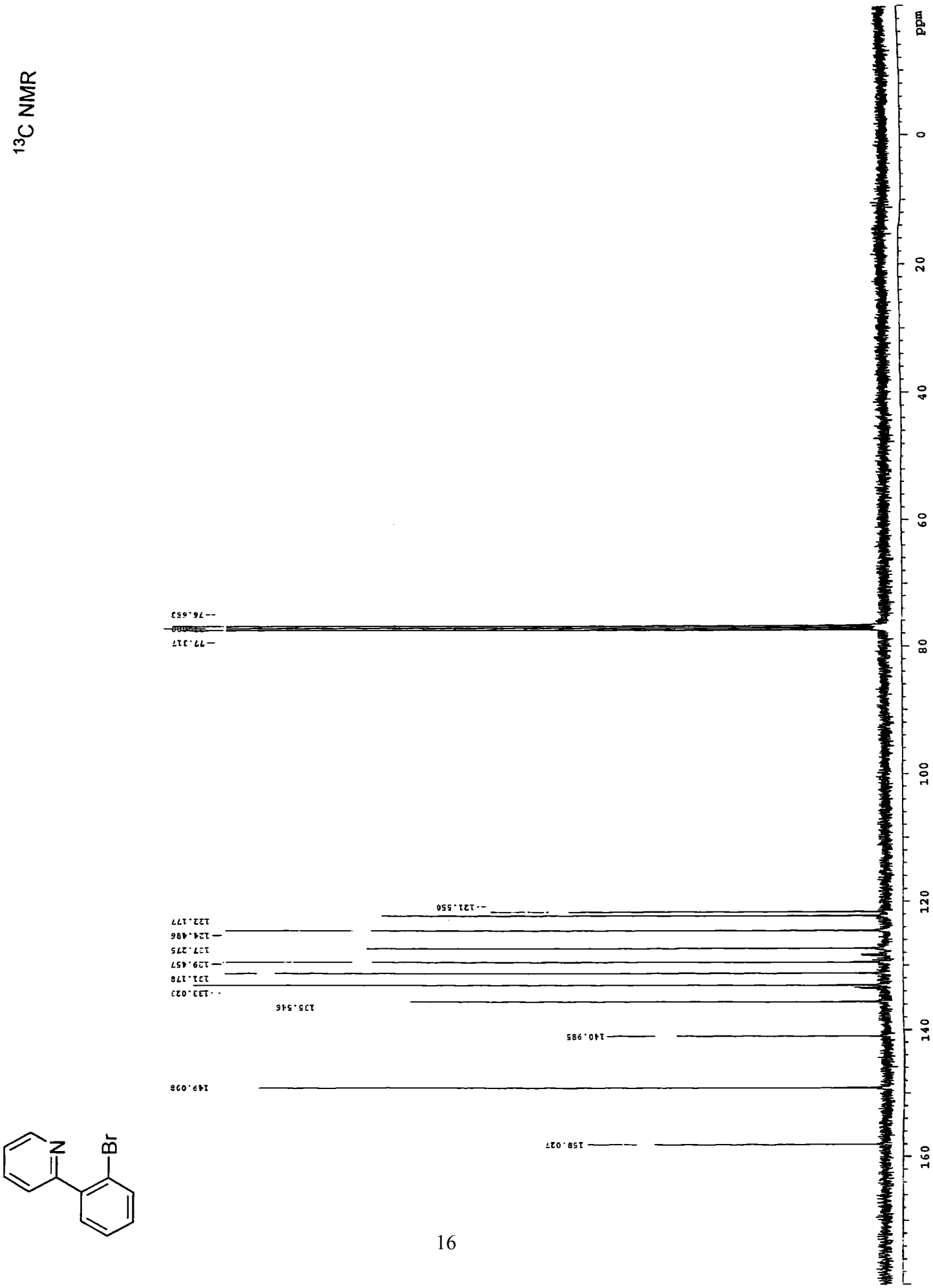



N
Br

^{1}H NMR

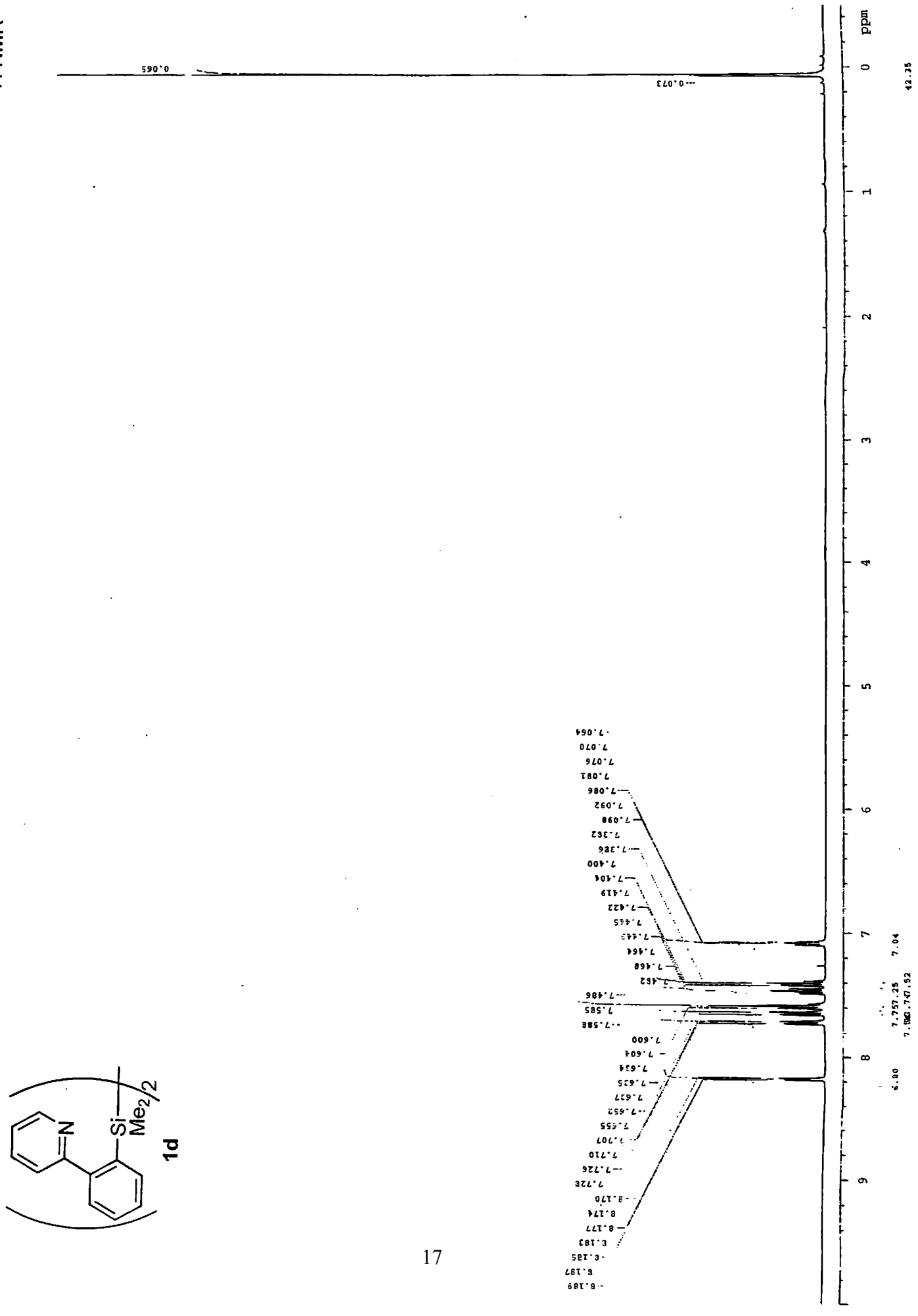

8.721
8.715
8.709
8.706
8.703
8.702
7.782
7.777
7.762
7.758
7.743
7.739
7.682
7.679
7.659
7.611
7.608
7.606
7.589
7.586
7.546
7.541
7.527
7.523
7.422
7.420
7.404
7.401
7.385
7.380
7.310
7.307
7.298
7.295
7.291
7.282
7.279
7.276
7.273
7.269
7.260
7.253
7.249
7.235
7.230
9
8
7
6
5
4
3
2
1
0
ppm
11.39
11.91 77 26.54
12.301.672.40

^{13}C NMR


158.027
149.098
140.985
135.546
133.023
131.178
129.457
127.275
124.486
123.177
121.550
77.317
76.653
ppm
0
20
40
60
80
100
120
140
160

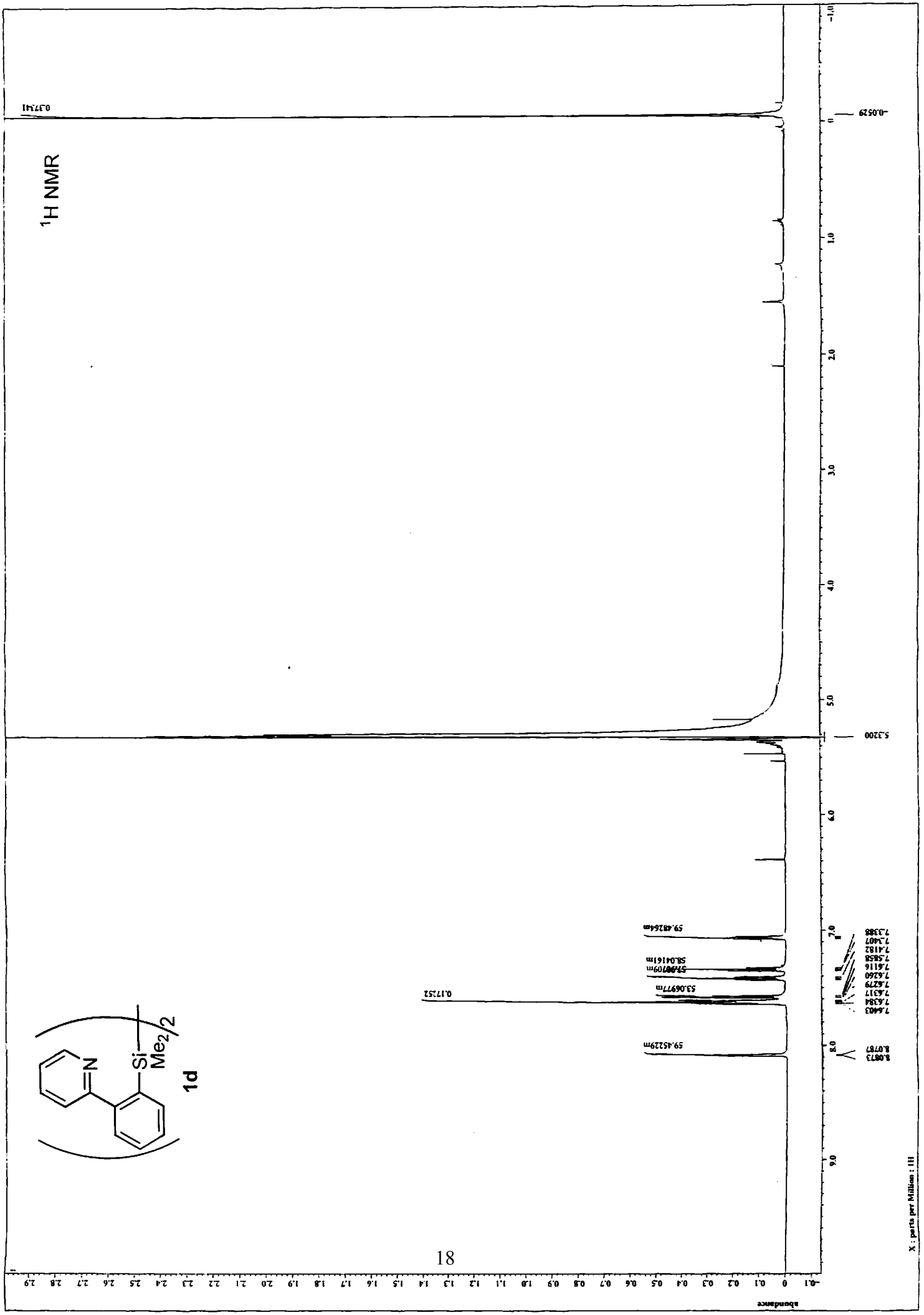
N
Br

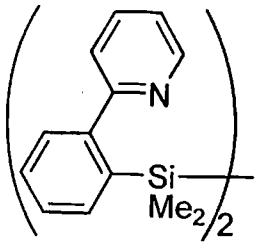
^{1}H NMR


0.065
0.073
ppm
0
1
2
3
4
5
6
7
8
9
7.064
7.070
7.076
7.081
7.086
7.092
7.098
7.362
7.386
7.400
7.404
7.419
7.422
7.445
7.463
7.464
7.468
7.482
7.486
7.585
7.588
7.600
7.604
7.634
7.635
7.637
7.652
7.655
7.707
7.710
7.726
7.728
8.170
8.174
8.177
8.183
8.185
8.187
8.189

N
Si
Me2/2

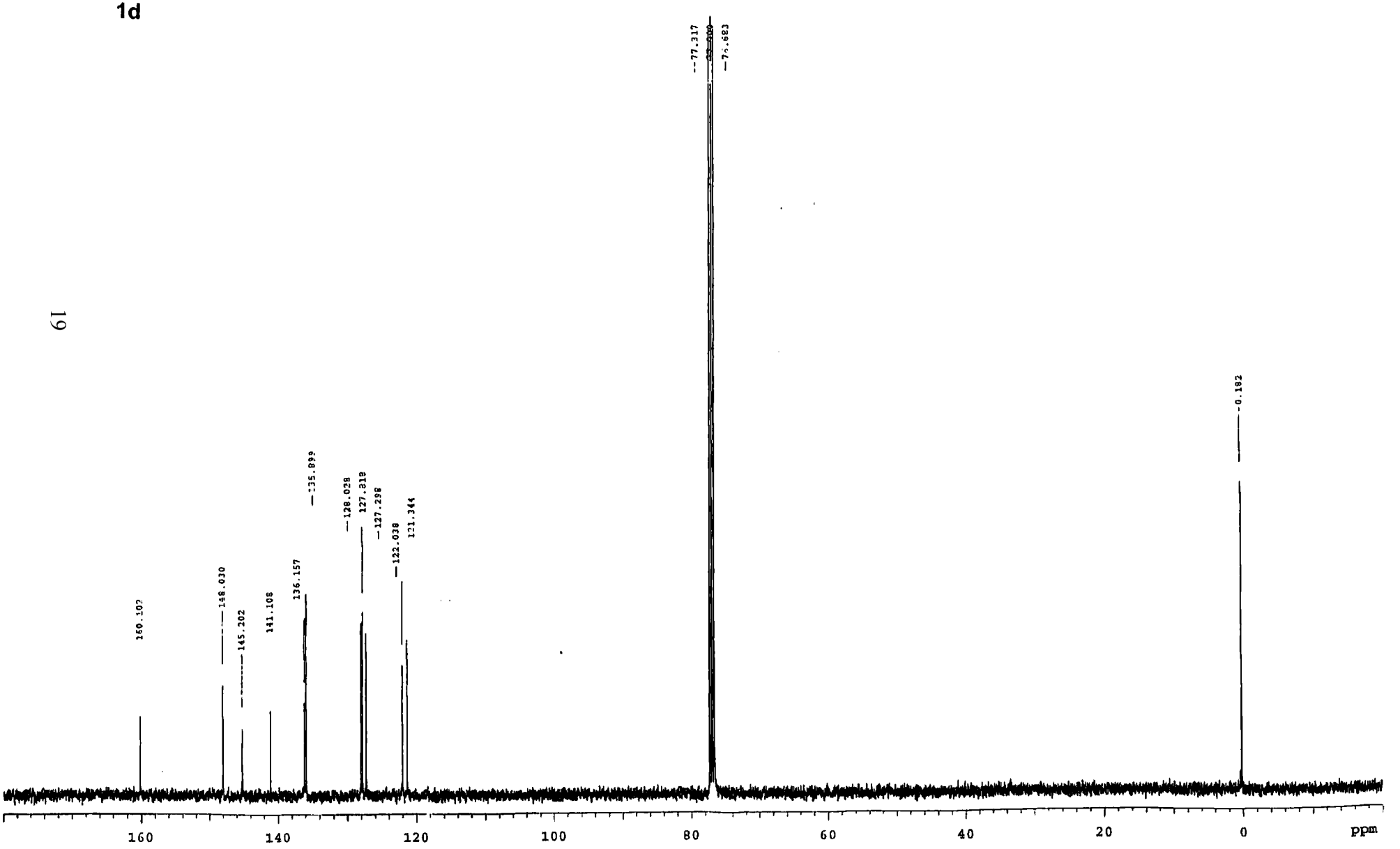
1d

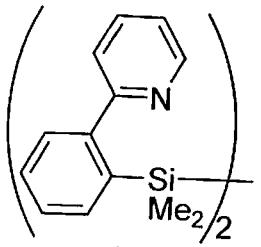

^{1}H NMR
1d
Si
Me2
N


N
Si
Me2
2

1d

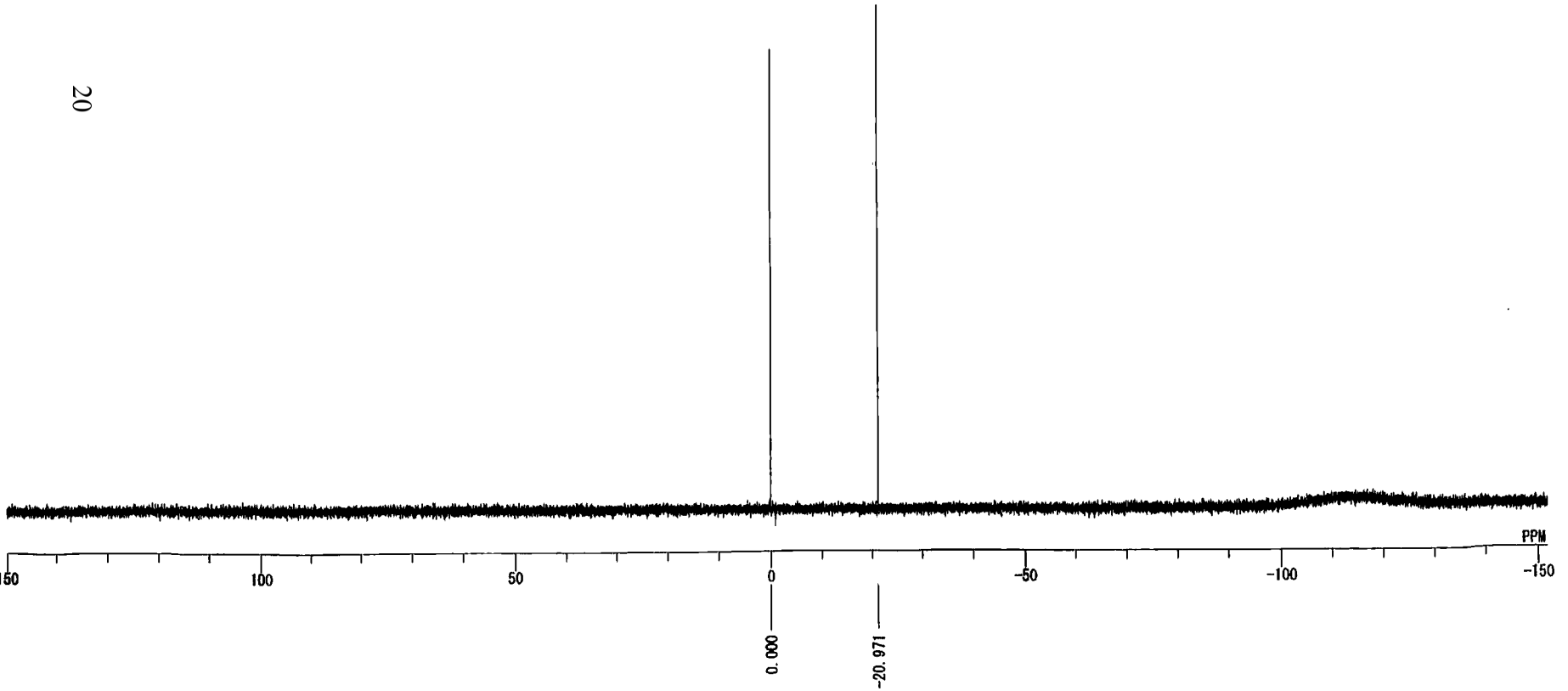
^{13}C NMR

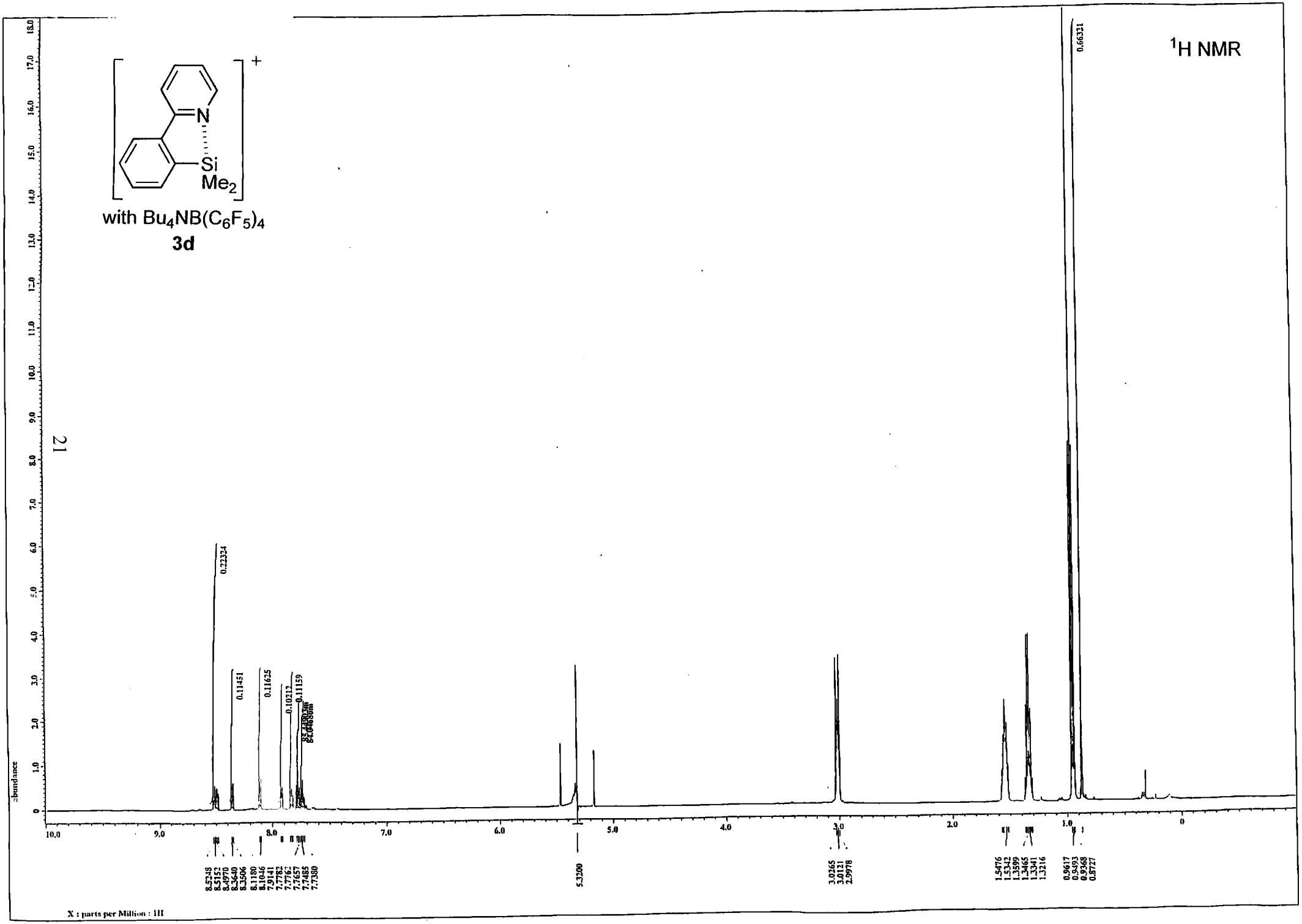

160.102
148.030
145.202
141.108
136.157
135.899
128.028
127.819
127.298
122.038
121.344
77.317
0.182
160
140
120
100
80
60
40
20
0
ppm

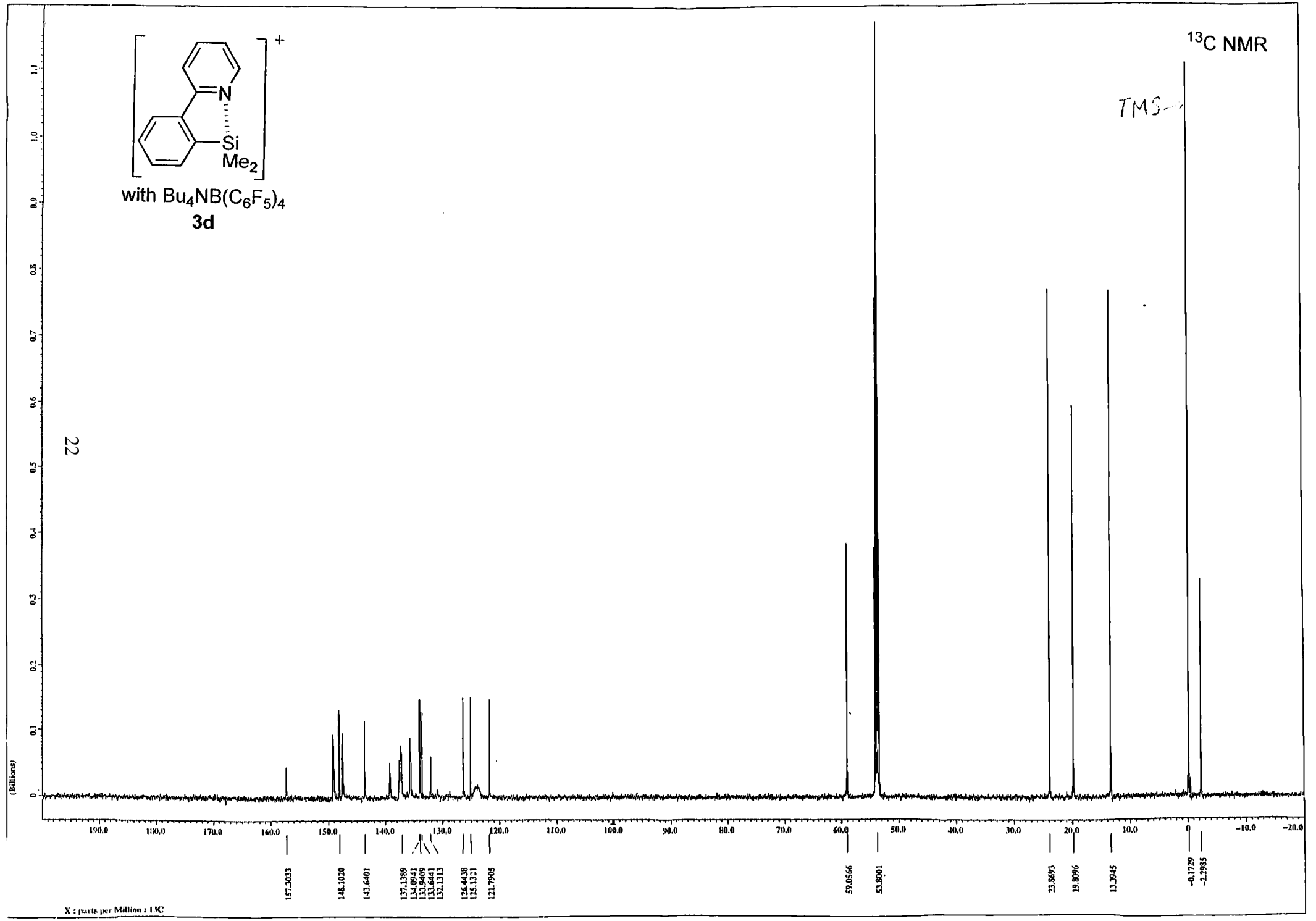


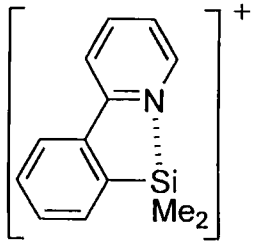
1d

^{29}Si NMR




with $Bu_4NB(C_6F_5)_4$
3d
^{1}H NMR
Abundance
X : parts per Million : 1H

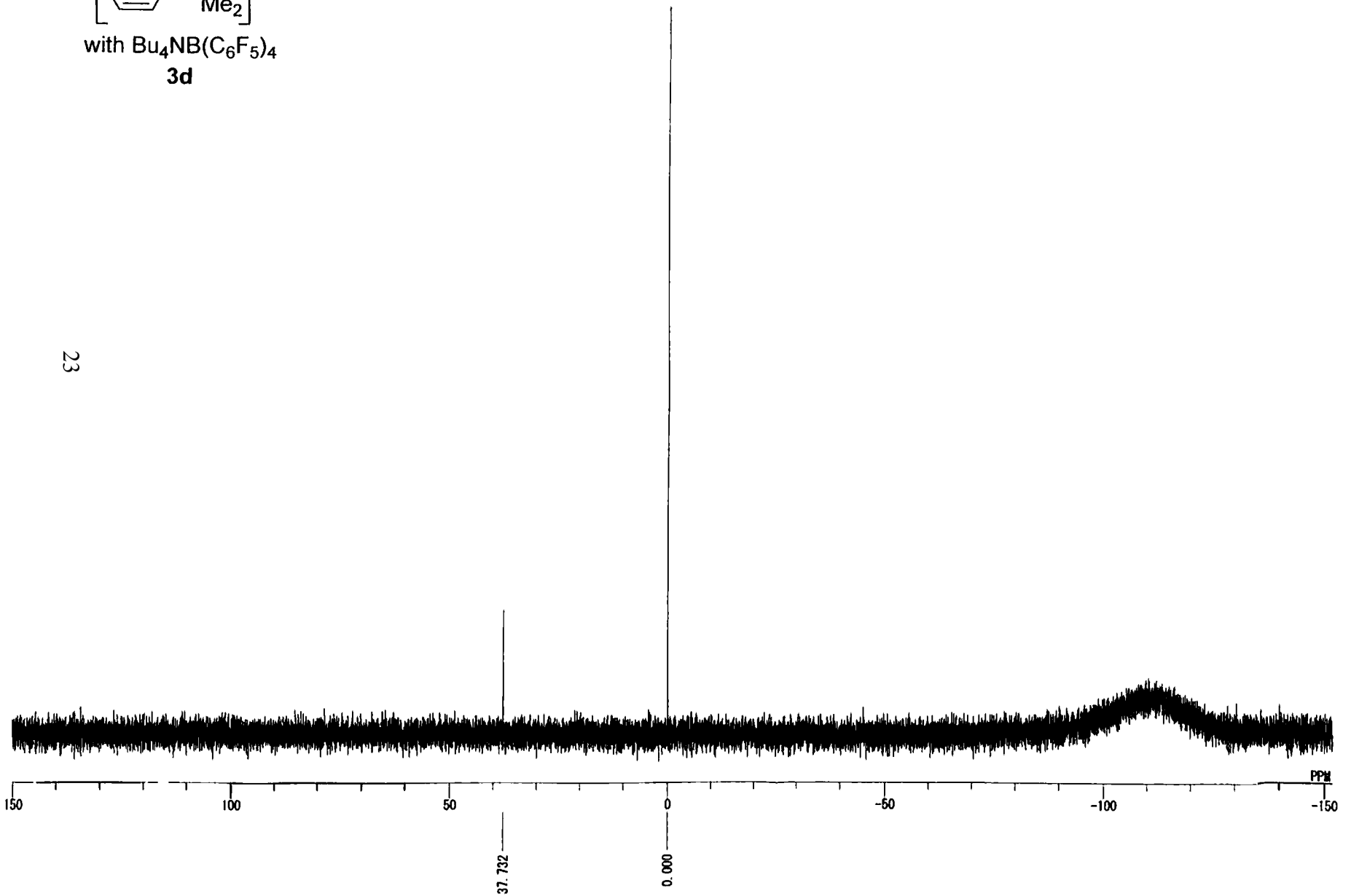

with $Bu_4NB(C_6F_5)_4$
3d
^{13}C NMR
TMS
157.3033
148.1020
143.6401
137.1389
134.0941
133.9409
133.6441
132.1313
126.4438
125.1331
121.7905
59.0566
53.8001
23.8693
19.8096
13.3945
-0.1729
-2.2985
X : parts per Million : 13C



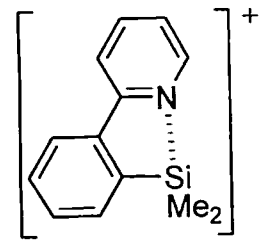
with $Bu_4NB(C_6F_5)_4$

3d

^{29}Si NMR

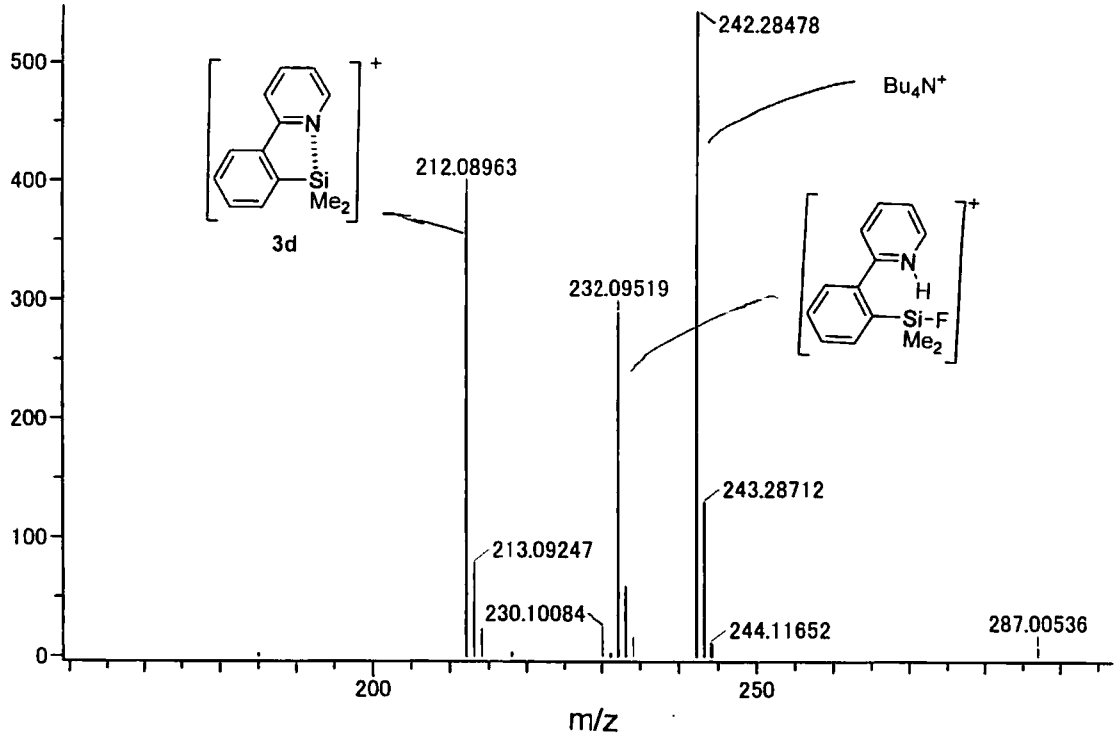


CSI-MS

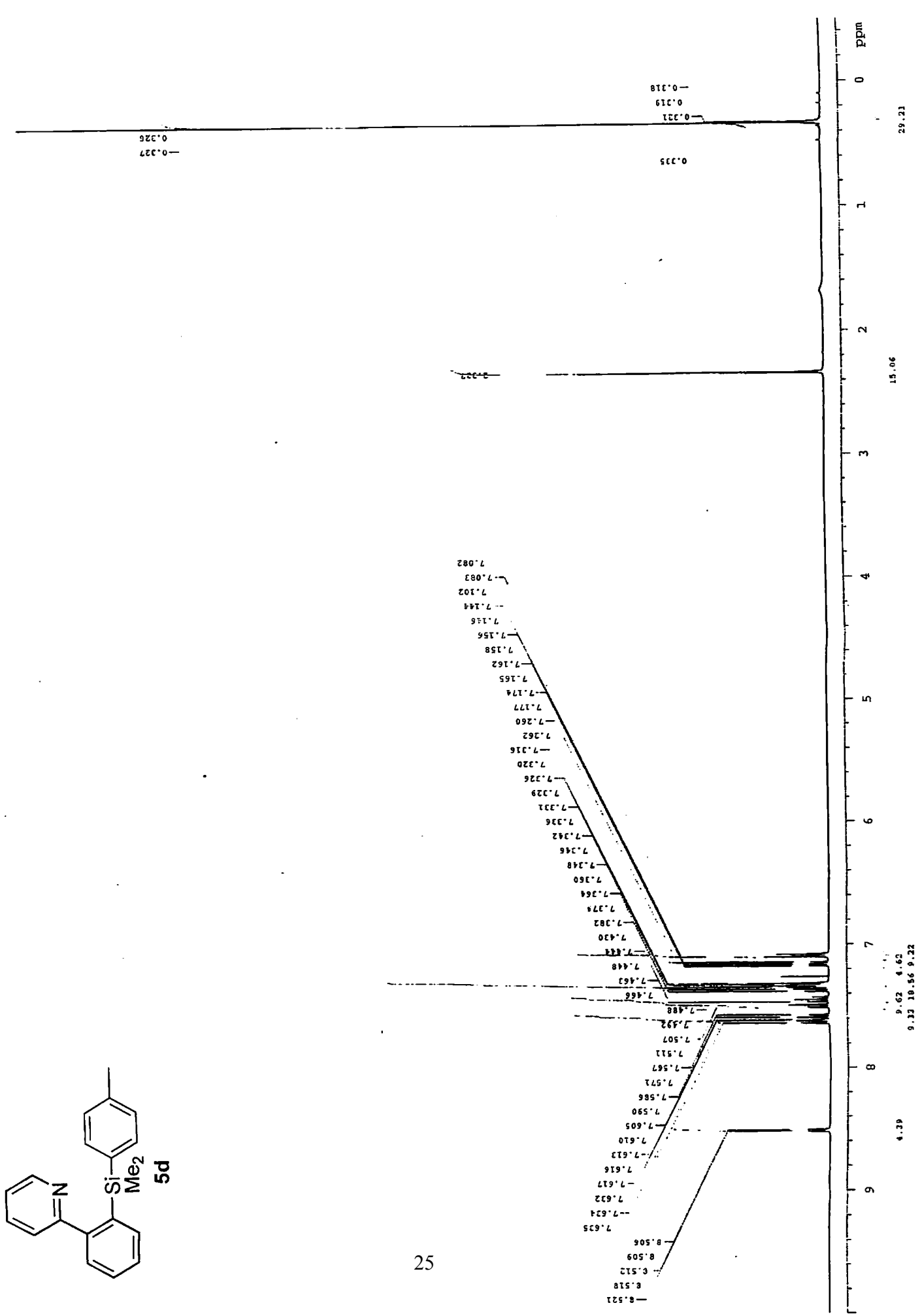


with $Bu_4NB(C_6F_5)_4$

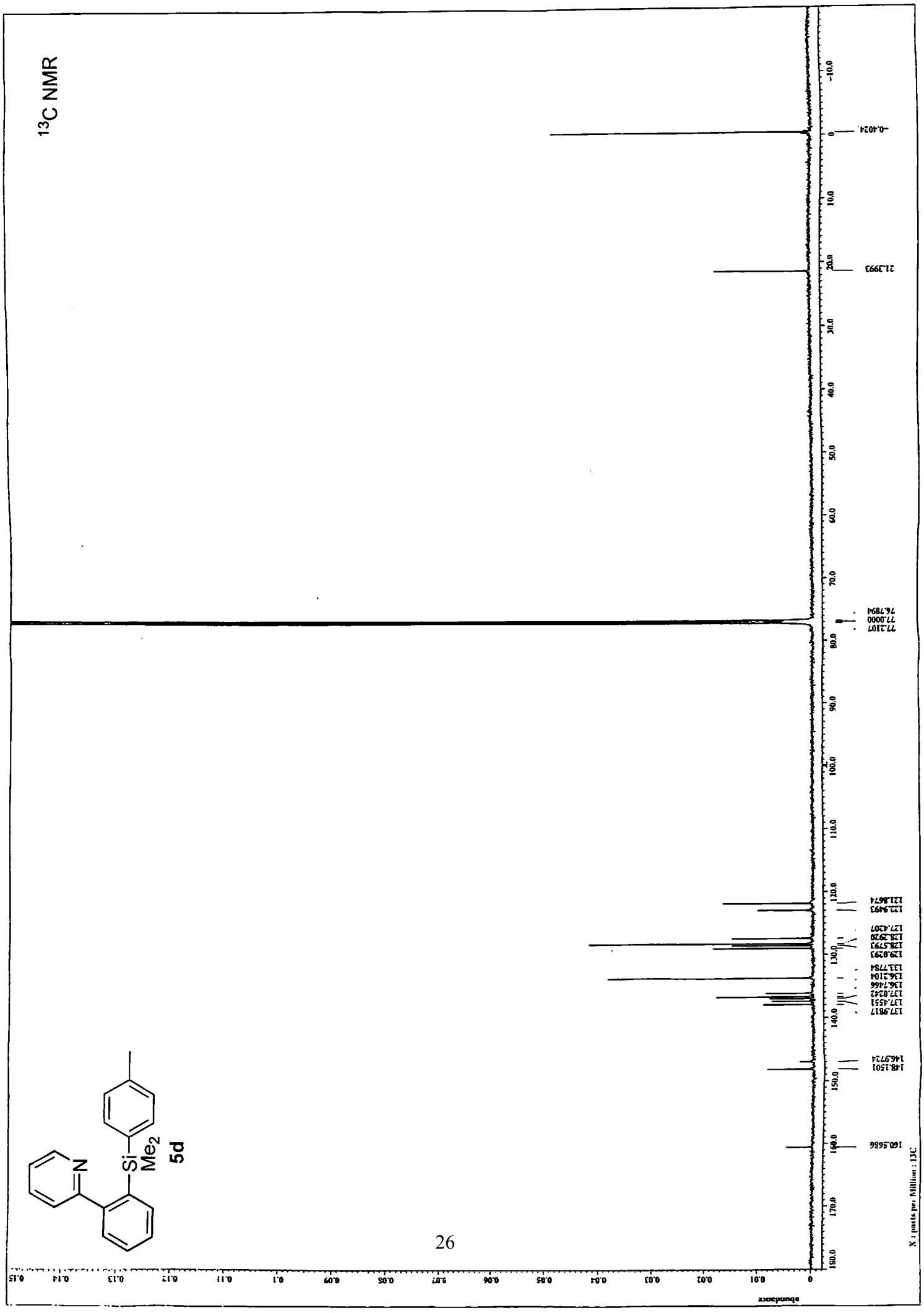
3d



^{1}H NMR



5d


^{13}C NMR
-0.4024
21.3993
77.2107
77.0000
76.7894
121.8674
127.9812
127.4207
128.2920
128.5793
129.0293
133.7784
136.2104
136.7466
137.0342
137.4551
137.9817
146.9724
148.1501
160.5686
X : parts per Million : 13C
Abundance
Si
Me$_2$
N
5d