

## Supplementary Information

### **Eight Membered Cyclic-Borasiloxanes: Synthesis, Structural, Photophysical, Steric Strain and DFT calculations**

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**Table S1**The optimized structures of borasiloxanes **1-5** at B3LYP/6-31+G\*\* level of theory.

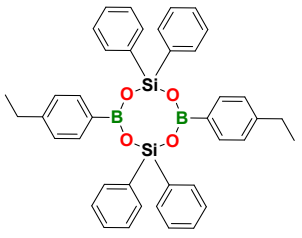

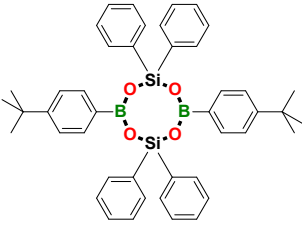
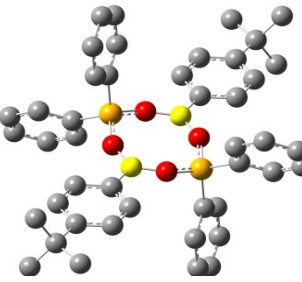
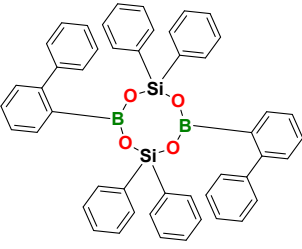
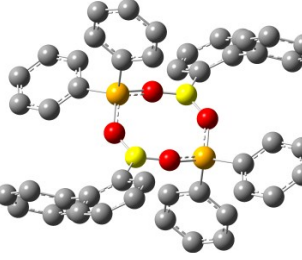
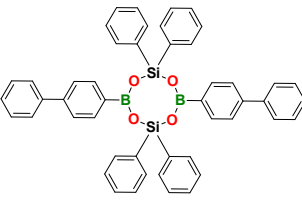

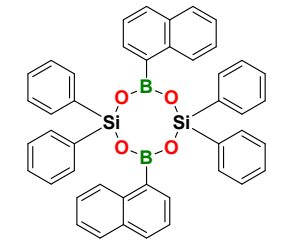
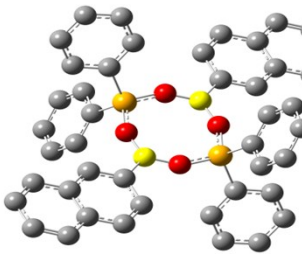
Compound	Structures	Optimized structures	Energy (Hartree)
1			-2477.352
2			-2634.615
3			-2782.198
4			-2782.219
5			-2782.219

Table S2. Cartesian coordinates of compound **1-5**, optimized at B3LYP/6-31+G\*\* level of theory

Compound 1				Compound 2			
Atoms	Coordinates			Atoms	Coordinates		
	X	Y	Z		X	Y	Z
Si	0.228209	-2.07302	-0.02985	Si	0.025701	2.085285	0.05216
O	-1.15569	0.854704	0.818066	O	-1.37246	1.223922	-0.15003
O	1.497705	0.699949	0.073786	O	1.384297	1.154287	-0.10304
C	0.103644	-1.67419	0.829748	C	0.04501	3.372809	-1.30559
C	-0.4793	-0.08816	-1.80823	C	0.048215	2.81275	1.77742
B	2.295829	1.803301	0.190151	B	2.043026	-0.03863	-0.0024
B	-1.64775	2.058851	1.24698	B	-2.04292	0.038489	0.001084
C	-0.18199	-1.82755	2.199313	C	-0.63397	3.159459	-2.51957
C	0.493802	-2.81573	0.105423	C	0.755119	4.57774	-1.14952
C	-1.83055	-0.20686	-2.18651	C	-1.13968	3.278515	2.372919
C	0.4913	-0.06041	-2.82745	C	1.245297	2.935298	2.508068
Si	0.648093	3.862128	1.43717	Si	-0.02562	-2.08546	-0.05335
O	1.803775	3.007449	0.619072	O	1.372567	-1.22408	0.148686
C	3.811636	1.694751	-0.18824	C	3.609149	-0.05139	-0.04293
O	-0.84962	3.162207	1.363343	O	-1.38419	-1.15441	0.101883
C	-3.16355	2.167395	1.625378	C	-3.60903	0.05133	0.042279
H	-0.4993	-0.96785	2.783544	H	-1.20321	2.245244	-2.66436
C	-0.07297	-3.07204	2.824418	C	-0.59759	4.10922	-3.54354
C	0.604043	-4.06314	0.725445	C	0.794411	5.531305	-2.16994
H	0.704852	-2.73609	-0.9584	H	1.275908	4.782896	-0.21713
H	-2.60582	-0.22054	-1.42477	H	-2.08258	3.188992	1.839587
C	-2.19905	-0.29668	-3.53073	C	-1.13339	3.847211	3.648533
C	0.127472	-0.15283	-4.17402	C	1.25699	3.506339	3.783921
H	1.542071	0.042495	-2.56956	H	2.177408	2.574149	2.081514
C	0.54448	5.536358	0.607497	C	-0.04494	-3.37294	1.304435
C	1.127379	3.9502	3.245405	C	-0.04841	-2.81307	-1.77854
C	4.645048	2.831008	-0.21623	C	4.341277	-1.22731	0.186717
C	4.400551	0.460709	-0.51018	C	4.349209	1.116253	-0.31034
C	-3.99695	1.031133	1.653377	C	-4.34106	1.22819	-0.18284
C	-3.75247	3.401437	1.94732	C	-4.34911	-1.11708	0.306248
H	-0.29814	-3.16754	3.883096	H	-1.12922	3.923828	-4.47292
C	0.321856	-4.1926	2.087919	C	0.118278	5.297181	-3.37045
H	0.904952	-4.93153	0.145867	H	1.346932	6.455804	-2.02662
H	-3.24821	-0.38188	-3.79988	H	-2.06286	4.194684	4.091065
C	-1.21907	-0.27175	-4.52752	C	0.06701	3.963905	4.355787
H	0.893394	-0.12698	-4.94428	H	2.192027	3.588868	4.331224
C	0.830297	5.689806	-0.76202	C	0.63422	-3.15968	2.518344
C	0.15416	6.677835	1.331831	C	-0.75519	-4.57779	1.14835
C	2.478627	4.068905	3.623705	C	1.13934	-3.27898	-2.3742
C	0.156773	3.922364	4.264622	C	-1.24565	-2.93557	-2.50896
H	4.223255	3.802926	0.025503	H	3.808382	-2.15064	0.398064
C	5.992507	2.732963	-0.55165	C	5.738434	-1.24112	0.156859
C	5.755074	0.358267	-0.84013	C	5.741105	1.103341	-0.34689

H	3.7894	-0.43766	-0.49181	H	3.820682	2.046222	-0.50185
H	-3.57516	0.059218	1.41165	H	-3.80813	2.152186	-0.39109
C	-5.34441	1.129173	1.988815	C	-5.73819	1.242207	-0.15176
C	-5.10699	3.503872	2.277273	C	-5.741	-1.10405	0.343735
H	-3.14132	4.299805	1.928945	H	-3.82064	-2.04783	0.494131
H	0.404627	-5.1617	2.572209	H	0.145178	6.038161	-4.16468
H	-1.5041	-0.34076	-5.57371	H	0.07373	4.405344	5.348608
H	1.147734	4.830159	-1.34625	H	1.203613	-2.24555	2.663079
C	0.721303	6.934327	-1.38707	C	0.597837	-4.1095	3.542255
C	0.043942	7.925274	0.711863	C	-0.79447	-5.53139	2.168733
H	-0.05704	6.598125	2.395623	H	-1.27609	-4.78284	0.215978
H	3.253899	4.082649	2.861975	H	2.082349	-3.18948	-1.84105
C	2.84711	4.158657	4.967928	C	1.132764	-3.84775	-3.64978
C	0.520591	4.014713	5.611196	C	-1.25761	-3.50673	-3.78476
H	-0.894	3.819458	4.006717	H	-2.17766	-2.57433	-2.08225
H	6.608832	3.629883	-0.5677	H	6.249696	-2.17823	0.346332
C	6.576345	1.493371	-0.86878	C	6.473646	-0.076	-0.11146
H	6.167898	-0.61781	-1.07403	H	6.264989	2.029841	-0.56384
H	-5.96073	0.23225	2.004866	H	-6.2494	2.180115	-0.3374
C	-5.92826	2.368764	2.305942	C	-6.47347	0.076289	0.112981
H	-5.51982	4.479947	2.511177	H	-6.26489	-2.03119	0.557951
H	0.946624	7.029898	-2.44571	H	1.129597	-3.92423	4.471573
C	0.326316	8.054823	-0.65056	C	-0.11819	-5.29737	3.369175
H	-0.25709	8.793613	1.291448	H	-1.3471	-6.45584	2.02542
H	3.896273	4.243862	5.237092	H	2.062126	-4.19532	-4.09246
C	1.867132	4.133641	5.964715	C	-0.06777	-3.96442	-4.3568
H	-0.24533	3.988807	6.381454	H	-2.19275	-3.58925	-4.33188
C	8.053485	1.442958	-1.22474	H	-0.14507	-6.03839	4.163367
C	-7.4054	2.419171	2.661899	H	-0.0747	-4.40594	-5.34957
H	0.243562	9.023948	-1.13481	C	8.011968	-0.04803	-0.15702
H	2.152153	4.202598	7.010914	C	8.477983	0.402532	-1.56371
H	8.21786	2.089394	-2.09806	C	8.541554	0.952575	0.900176
H	8.618135	1.91141	-0.40702	C	8.635196	-1.42719	0.135813
C	8.645447	0.059809	-1.51068	H	8.123894	-0.29095	-2.33404
H	-7.56978	1.772689	3.535189	H	8.105929	1.400303	-1.81512
H	-7.97005	1.950769	1.844157	H	9.572893	0.432051	-1.60818
C	-7.99734	3.80231	2.947917	H	8.229128	0.658491	1.908061
H	9.711681	0.147488	-1.7427	H	9.637171	0.982489	0.877537
H	8.159967	-0.4212	-2.36677	H	8.176134	1.96792	0.719073
H	8.547618	-0.60879	-0.64844	H	9.727045	-1.35279	0.092088
H	-9.06358	3.714626	3.17994	H	8.369111	-1.79231	1.133666

Compound 3				Compound 4			
Atoms	Coordinates			Atoms	Coordinates		
	X	Y	Z		X	Y	Z
Si	-1.03093	-1.61327	0.770454	Si	0.028665	2.098062	-0.18331
O	-1.84994	-0.17393	0.607216	O	-1.34444	1.196783	-0.00039

O	0.369917	-1.61956	-0.10695	O	1.408421	1.193084	-0.05592
C	-2.13001	-2.96672	0.108258	C	0.01791	3.36646	1.192264
C	-0.57761	-1.84006	2.576208	C	0.036486	2.863362	-1.89227
B	1.57059	-1.16619	-0.57238	B	2.038624	-0.01959	-0.02219
B	-1.57279	1.165765	0.559618	B	-2.03868	0.019526	0.021952
C	-1.59994	-4.2474	-0.14436	C	0.88086	4.477706	1.141102
C	-3.50021	-2.75534	-0.12927	C	-0.82878	3.239471	2.308319
C	-1.23914	-2.7836	3.382414	C	-1.02402	3.695393	-2.30074
C	0.420319	-1.04612	3.17527	C	1.083101	2.633845	-2.80365
Si	1.031499	1.614115	-0.77746	Si	-0.02872	-2.09814	0.183122
O	1.848883	0.173422	-0.61731	O	1.344345	-1.19683	1.06E-05
C	2.582745	-2.22698	-1.1604	C	3.606147	-0.05972	-0.0275
O	-0.37073	1.618803	0.097734	O	-1.40846	-1.19314	0.055763
C	-2.58244	2.224595	1.155492	C	-3.6062	0.059673	0.027395
H	-0.54283	-4.43906	0.023544	H	1.538196	4.614231	0.285333
C	-2.41046	-5.28247	-0.61581	C	0.904446	5.422544	2.169141
H	-3.9338	-1.77621	0.048495	H	-1.51321	2.398091	2.371946
C	-4.31374	-3.7895	-0.60227	C	-0.8097	4.182206	3.339873
H	-2.01276	-3.4137	2.951816	H	-1.84757	3.897482	-1.61985
C	-0.91802	-2.93131	4.735512	C	-1.04243	4.271684	-3.57209
H	0.957105	-0.30634	2.585248	H	1.917766	2.000716	-2.51623
C	0.742032	-1.18694	4.526864	C	1.070089	3.209039	-4.07792
C	2.129311	2.965245	-0.10881	C	-0.01801	-3.36663	-1.19237
C	0.582209	1.847125	-2.58358	C	-0.0364	-2.86335	1.892111
C	2.019159	-3.20637	-2.00263	C	4.369344	1.122293	0.004387
C	3.991676	-2.21288	-1.00605	C	4.309296	-1.27841	-0.06349
C	-2.01573	3.202436	1.997222	C	-4.36943	-1.12232	-0.00474
C	-3.99233	2.207886	1.009854	C	-4.30932	1.278362	0.063764
H	-1.98235	-6.26279	-0.8055	H	1.577767	6.273073	2.108604
C	-3.77117	-5.05372	-0.84514	C	0.058302	5.274889	3.272257
H	-5.36822	-3.60323	-0.78381	H	-1.47218	4.064401	4.193004
H	-1.44129	-3.66876	5.337457	H	-1.87205	4.908141	-3.86712
C	0.072572	-2.13257	5.310194	C	0.006791	4.028292	-4.4641
H	1.512212	-0.56033	4.968057	H	1.888689	3.01727	-4.76615
C	1.598934	4.244804	0.148546	C	-0.88065	-4.4781	-1.14092
C	3.499284	2.752743	0.129531	C	0.82832	-3.23945	-2.30868
C	1.243429	2.795617	-3.38423	C	1.023942	-3.69572	2.30032
C	-0.41141	1.052482	-3.18891	C	-1.08264	-2.63338	2.803809
H	0.939219	-3.23919	-2.1173	H	3.858338	2.080511	0.02946
C	2.803954	-4.11637	-2.7125	C	5.762364	1.09129	0.001992
C	4.685236	-1.30073	-0.05402	C	5.702116	-1.31735	-0.06787
C	4.772951	-3.14038	-1.71712	H	-3.85845	-2.08054	-0.03009
H	-0.93511	3.237263	2.105242	C	-5.76245	-1.09128	-0.00224
C	-2.79807	4.107375	2.715948	C	-5.70214	1.317333	0.068275
C	-4.68957	1.297204	0.059079	H	-0.00508	4.476122	-5.45393
C	-4.77132	3.130661	1.729825	H	-1.53771	-4.61477	-0.28496

H	0.323071	-2.24476	6.361128	C	-0.90429	-5.42298	-2.16892
H	0.541828	4.436897	-0.01894	H	1.512499	-2.39789	-2.37254
C	2.408995	5.277808	0.625122	C	0.809178	-4.18223	-3.3402
H	3.933192	1.774529	-0.05205	H	1.84719	-3.89817	1.619175
C	4.312308	3.784848	0.607828	C	1.042565	-4.27189	3.571722
H	2.014073	3.426133	-2.94891	H	-1.9172	-2.00001	2.516591
C	0.925702	2.947927	-4.73762	C	-1.06942	-3.20845	4.078125
H	-0.94703	0.308052	-2.6037	H	6.319986	2.023387	0.004457
C	-0.7296	1.197769	-4.54086	C	6.457307	-0.13109	-0.03467
H	2.33611	-4.84766	-3.36543	H	6.212503	-2.27618	-0.06954
C	4.19207	-4.07735	-2.57159	H	-6.32009	-2.02337	-0.0049
C	4.26165	-1.1937	1.281679	C	-6.45736	0.131106	0.034804
C	5.826873	-0.5808	-0.44778	H	-6.2125	2.276175	0.070255
H	5.849282	-3.14392	-1.57113	H	-1.57737	-6.27369	-2.10816
H	-2.3277	4.836971	3.368883	C	-0.05851	-5.27514	-3.27229
C	-4.18704	4.065634	2.584112	H	1.471379	-4.06427	-4.19353
C	-4.28	1.202871	-1.28206	H	1.872056	-4.90861	3.866544
C	-5.82306	0.567969	0.459367	C	-0.00628	-4.02803	4.46405
H	-5.84855	3.132786	1.590339	H	-1.88773	-3.01633	4.766599
H	1.980573	6.257185	0.818772	H	-0.0737	-6.00986	-4.07257
C	3.76945	5.048104	0.855165	H	0.005757	-4.47577	5.453924
H	5.366588	3.597708	0.789731	H	0.073463	6.00958	4.072565
H	1.448511	3.689369	-5.33507	H	3.751382	-2.21039	-0.07885
C	-0.06089	2.14869	-5.31838	H	-3.75139	2.210331	0.079346
H	-1.49628	0.570316	-4.98694	C	7.942555	-0.16872	-0.03601
H	4.820284	-4.78311	-3.10764	C	8.641682	-1.1022	-0.82205
H	3.399988	-1.7644	1.616669	C	8.689428	0.727179	0.74979
C	4.955832	-0.39609	2.193632	C	10.03689	-1.13859	-0.82322
H	6.161276	-0.63757	-1.47964	H	8.08776	-1.78839	-1.45587
C	6.52269	0.217704	0.462615	C	10.08464	0.691053	0.750293
H	-4.81333	4.768189	3.126622	H	8.172064	1.440397	1.384601
H	-3.42791	1.784047	-1.62319	C	10.76561	-0.24208	-0.03658
C	-4.97856	0.407147	-2.19227	H	10.55515	-1.86284	-1.44552
H	-6.1478	0.61636	1.494704	H	10.63999	1.386994	1.372879
C	-6.52305	-0.22875	-0.44933	H	11.85139	-0.27041	-0.03657
H	4.401262	5.849921	1.227041	C	-7.9426	0.168793	0.036256
H	-0.30876	2.264442	-6.36956	C	-8.64164	1.101954	0.822753
H	4.616024	-0.33718	3.223655	C	-8.68957	-0.72673	-0.74988
C	6.091647	0.311246	1.789329	C	-10.0368	1.138419	0.824009
H	7.399994	0.767893	0.133927	H	-8.08765	1.78784	1.456853
H	-4.65011	0.358727	-3.22654	C	-10.0848	-0.69053	-0.7503
C	-6.10509	-0.31084	-1.7809	H	-8.17228	-1.4397	-1.38503
H	-7.3937	-0.78637	-0.11563	C	-10.7657	0.242298	0.037017
H	6.634823	0.926891	2.500419	H	-10.555	1.862423	1.44666
H	-6.65184	-0.92484	-2.49065	H	-10.6402	-1.38617	-1.37316
H	-4.40338	-5.85713	-1.2129	H	-11.8514	0.270688	0.037082

Compound 5

Atoms	Coordinates			Atoms	Coordinates		
	X	Y	Z		X	Y	Z
Si	-0.32468	2.074737	-0.15112	H	-4.0892	1.497037	0.022085
O	-1.55781	0.972091	-0.09062	C	-5.86755	0.269853	0.020835
O	1.161028	1.386438	0.080509	C	-5.43872	-2.14739	-0.04786
C	-0.39184	2.860122	-1.8496	H	-3.38899	-2.74017	-0.09672
C	-0.55678	3.30312	1.24098	H	-0.48917	4.51972	-5.38945
B	2.012256	0.316129	0.065542	H	-1.13768	5.844096	4.155756
B	-2.01309	-0.31519	-0.05968	H	2.034365	-1.6616	2.581829
C	-1.32529	2.447798	-2.81838	C	1.364346	-3.04378	4.083867
C	0.502489	3.892345	-2.1931	C	-0.47049	-4.48892	3.456515
C	-1.60829	4.238313	1.190424	H	-1.23352	-4.24191	1.46766
C	0.283626	3.316885	2.368455	H	2.269687	-4.26137	-0.32923
Si	0.323967	-2.07404	0.152786	C	1.821679	-5.13941	-2.23444
O	1.556819	-0.97105	0.094236	C	-0.07735	-4.21746	-3.41394
C	3.559855	0.577959	0.044688	H	-1.11161	-2.61139	-2.42979
O	-1.16179	-1.38539	-0.07695	C	6.369831	1.071136	0.000465
C	-3.56062	-0.57759	-0.04183	C	6.790303	-1.35281	-0.05999
H	-2.03255	1.658086	-2.58182	H	5.817063	3.165987	0.05415
C	-1.36144	3.03881	-4.08469	C	-6.37026	-1.07278	-0.00405
C	0.472053	4.485529	-3.45696	C	-6.79251	1.350601	0.066891
H	1.232913	4.241182	-1.46692	H	-5.81606	-3.167	-0.06625
H	-2.26849	4.265344	0.326636	H	2.094717	-2.71066	4.815962
C	-1.81999	5.145825	2.230609	C	0.464748	-4.06337	4.405144
C	0.077513	4.223407	3.412198	H	-1.17192	-5.28207	3.699908
H	1.110016	2.6144	2.430951	H	2.640459	-5.85103	-2.17568
C	0.392187	-2.86193	1.85009	C	0.977643	-5.1314	-3.34899
C	0.556493	-3.29983	-1.2415	H	-0.73905	-4.20913	-4.27565
C	4.461152	-0.47668	0.006196	C	7.776399	1.276791	-0.02377
C	4.083875	1.906457	0.061578	H	6.40474	-2.3691	-0.07485
C	-4.46262	0.476337	-0.00029	C	8.148794	-1.1212	-0.08301
C	-4.08371	-1.9063	-0.06535	C	-7.77672	-1.2795	0.017091
H	-2.09078	2.704482	-4.81724	H	-6.40767	2.367088	0.0871
C	-0.46193	4.058431	-4.40615	C	-8.1509	1.117928	0.087064
H	1.173464	5.278663	-3.70049	H	0.492927	-4.52585	5.38785
H	-2.63786	5.858359	2.170467	H	1.139605	-5.83547	-4.16047
C	-0.97632	5.138567	3.345436	C	8.645916	0.207317	-0.06468
H	0.73892	4.215613	4.274153	H	8.158079	2.294549	-0.00994
C	1.32698	-2.45124	2.818281	H	8.844295	-1.95478	-0.11594
C	-0.50218	-3.89419	2.193428	C	-8.64705	-0.21085	0.061762
C	1.609158	-4.23381	-1.19276	H	-8.15765	-2.29744	-0.00213
C	-0.28431	-3.3129	-2.36867	H	-8.84703	1.950865	0.123105
H	4.087043	-1.49722	-0.01134	H	9.718352	0.37897	-0.08308
C	5.866172	-0.27123	-0.01778	H	-9.7194	-0.38332	0.077799

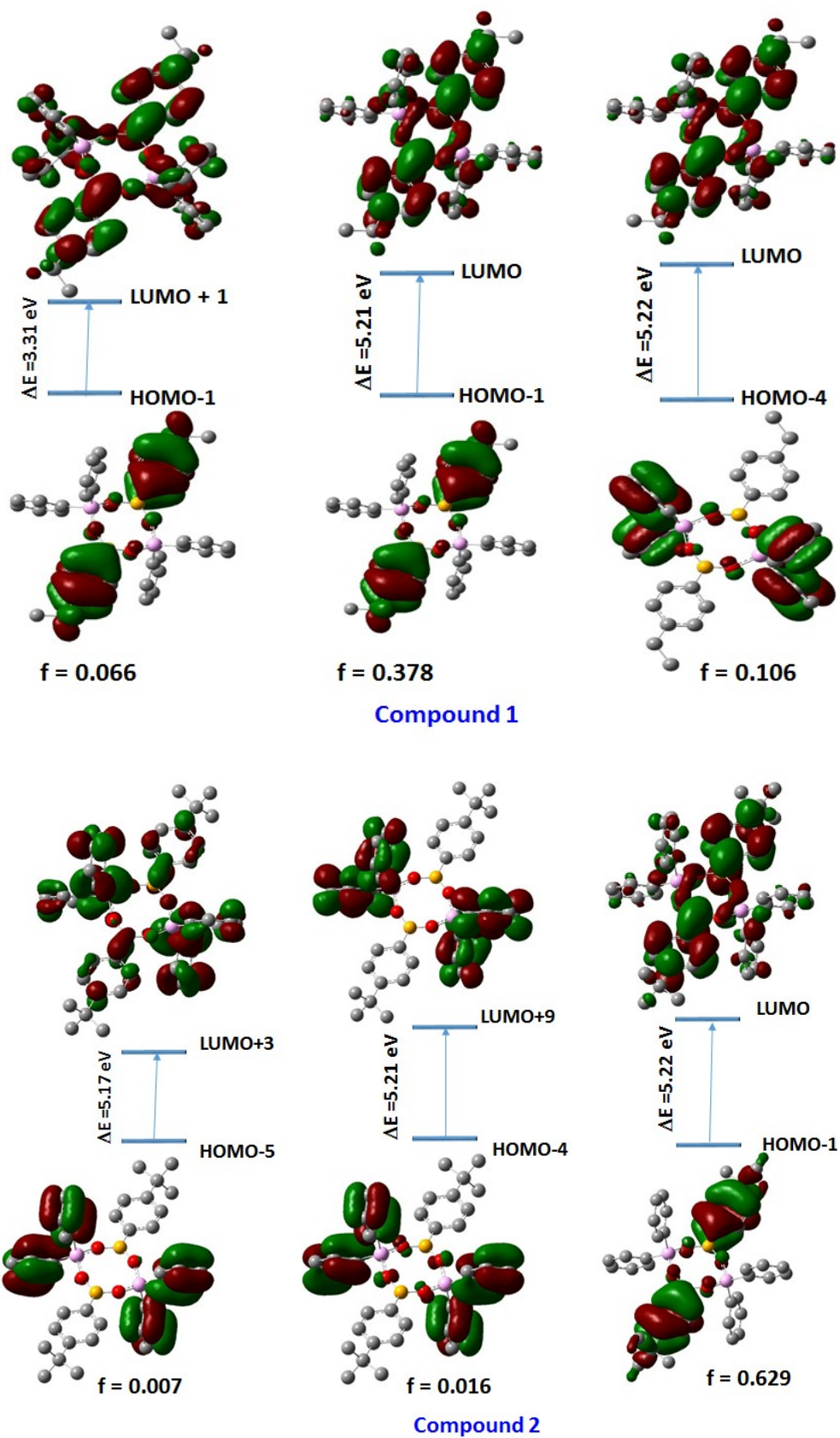
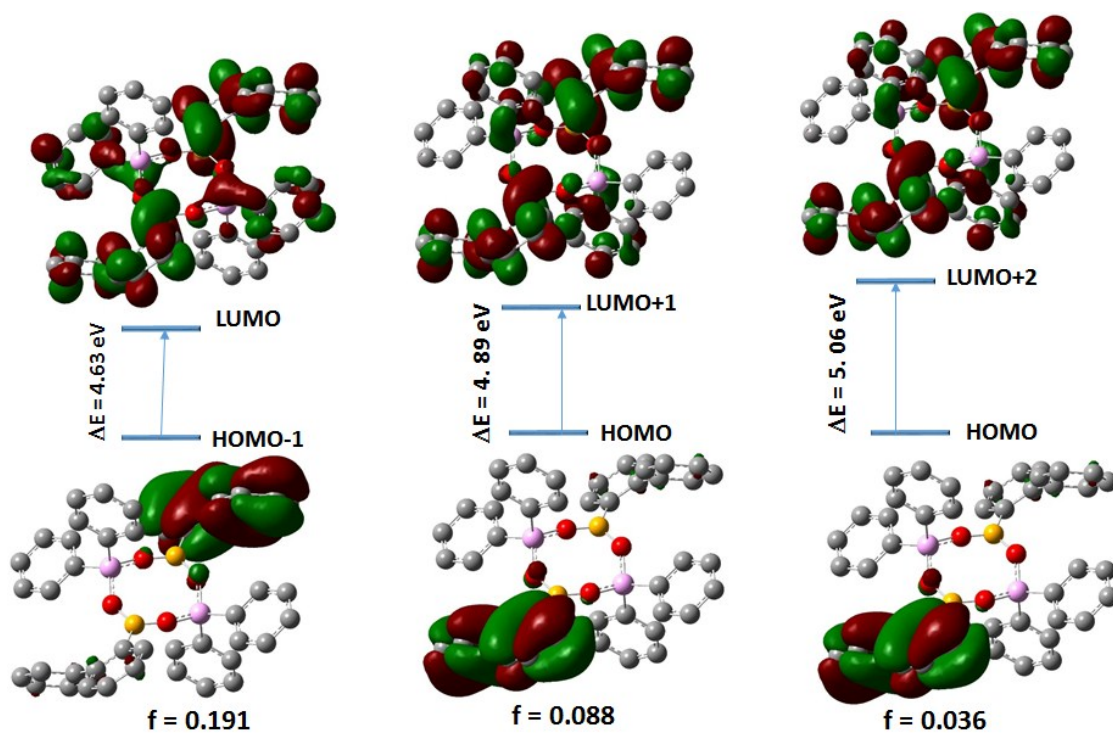
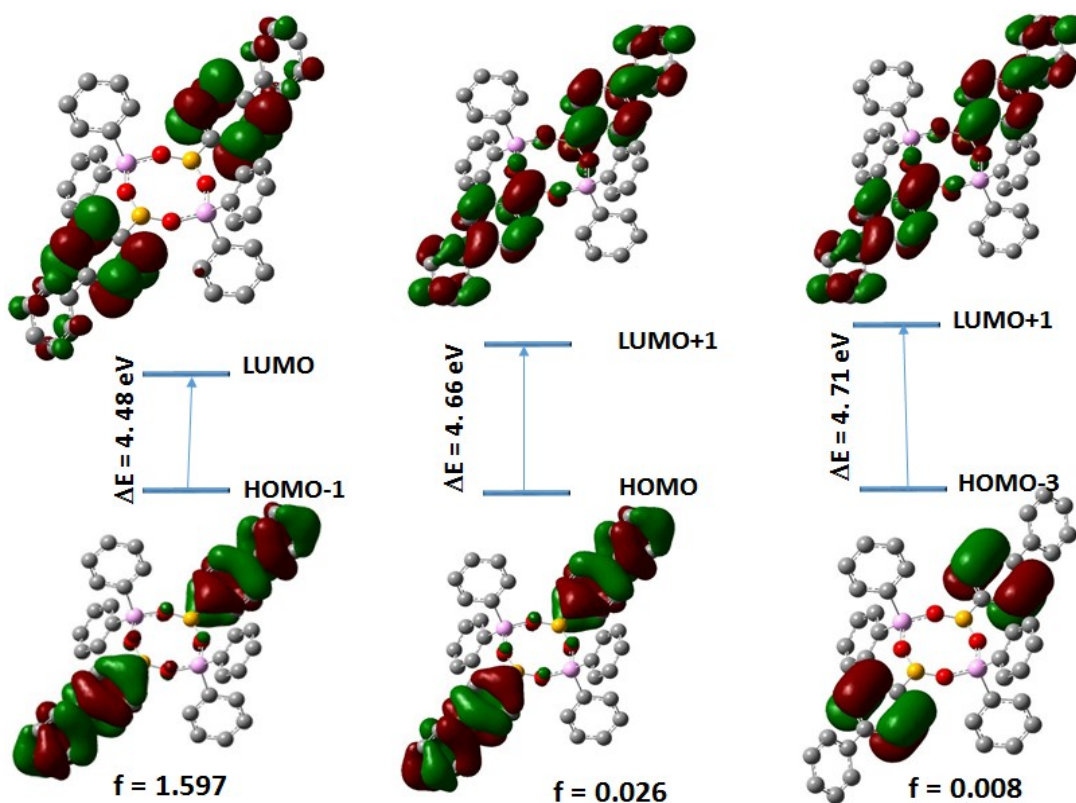


Fig. S1. Frontier molecular orbital energy density plots of **1** and **2**, calculated using TD-DFT with B3LYP/6-31+G\*\* level of theory.





Compound 3



Compound 4

Fig. S2. Frontier molecular orbital energy density plots of **3** and **4**, calculated using TD-DFT with B3LYP/6-31+G\*\* level of theory.

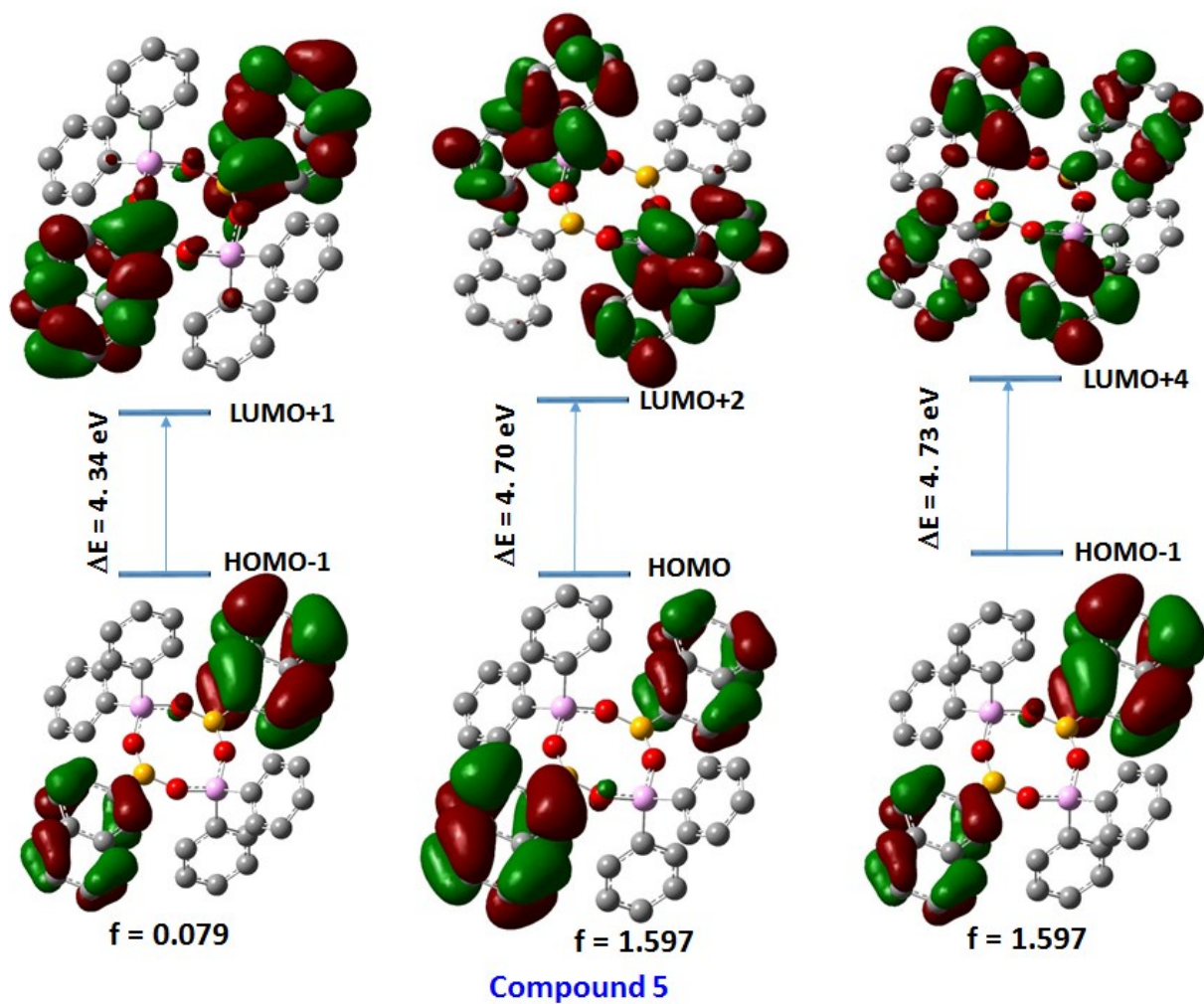


Fig. S3. Frontier molecular orbital energy density plots of **5**, calculated using TD-DFT with B3LYP/6-31+G\*\* level of theory.

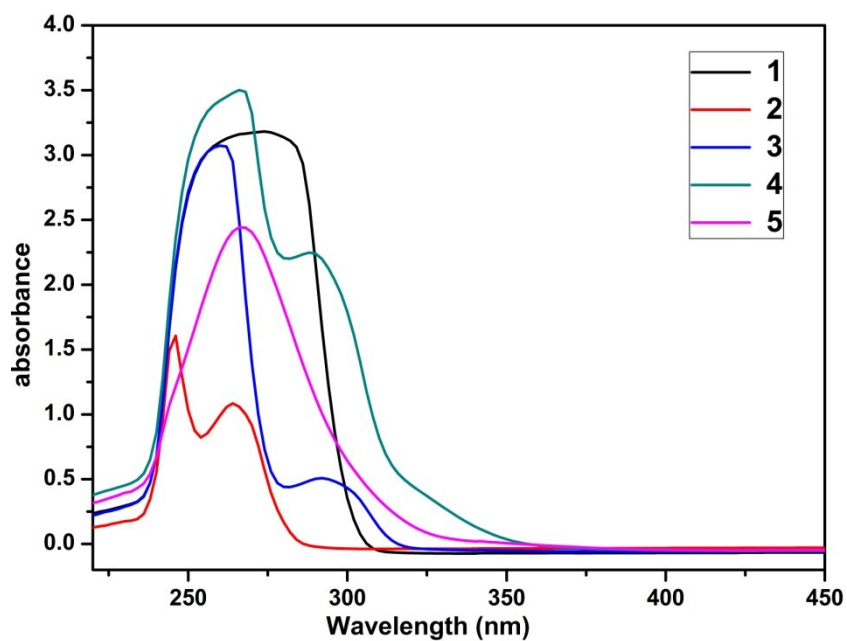


Fig. S4. UV spectra of compounds **1-5** in chloroform.

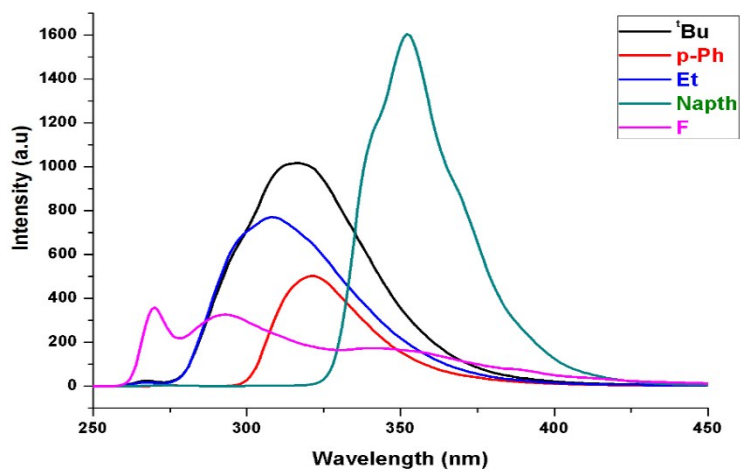


Fig. S5. Fluorescence spectra of compounds **1-5** in chloroform.

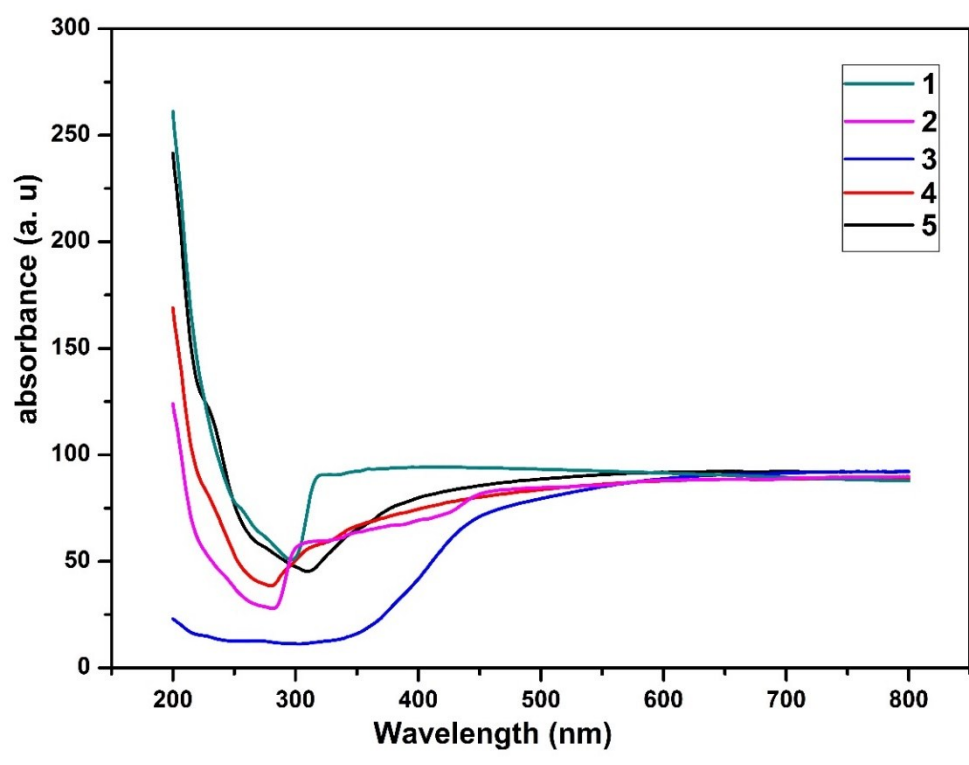


Fig. S6. Diffuse reflectance spectra of compounds 1-5.

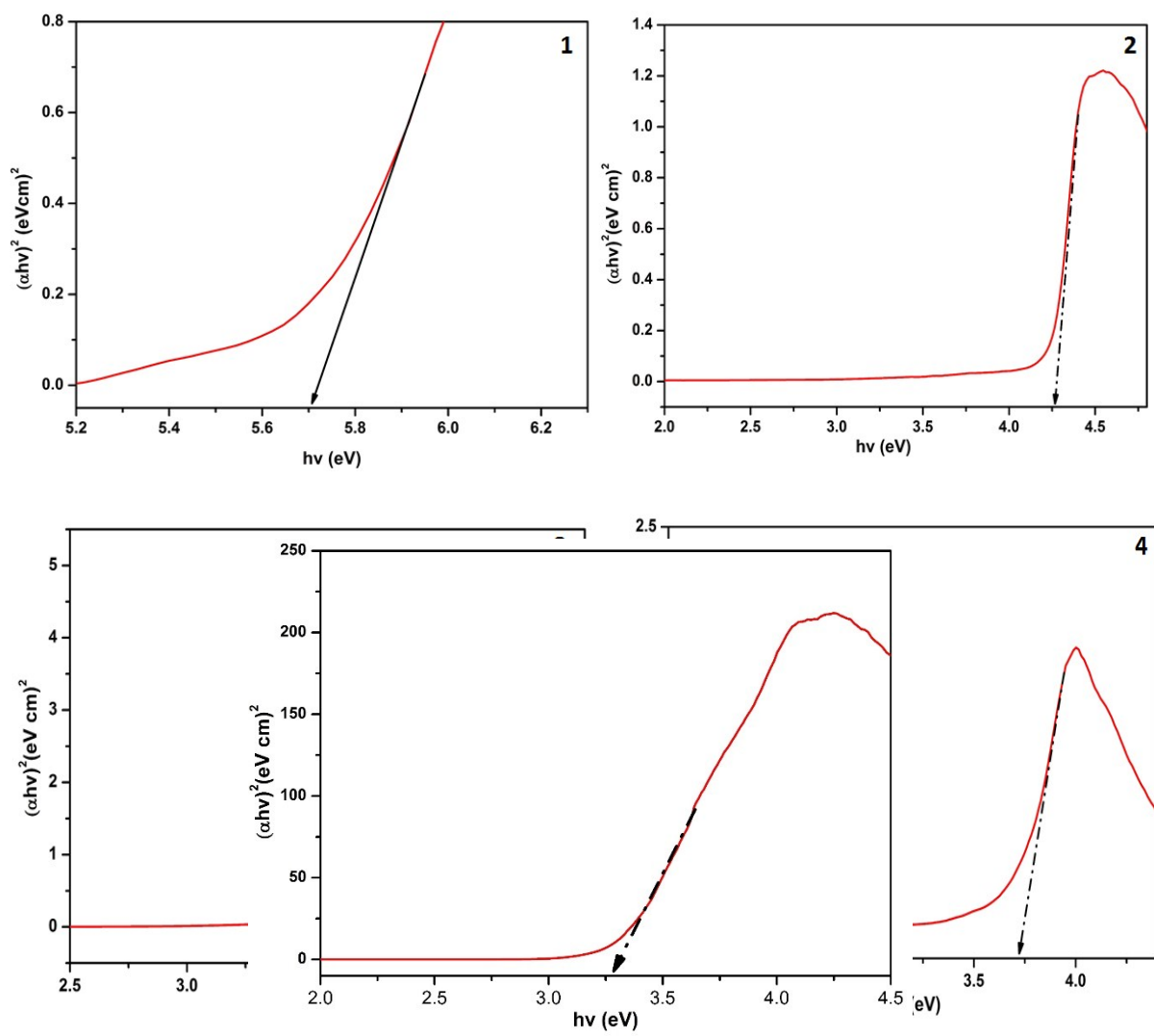


Fig. S7. Bang gap values of Tau's plot for compounds 1-5.

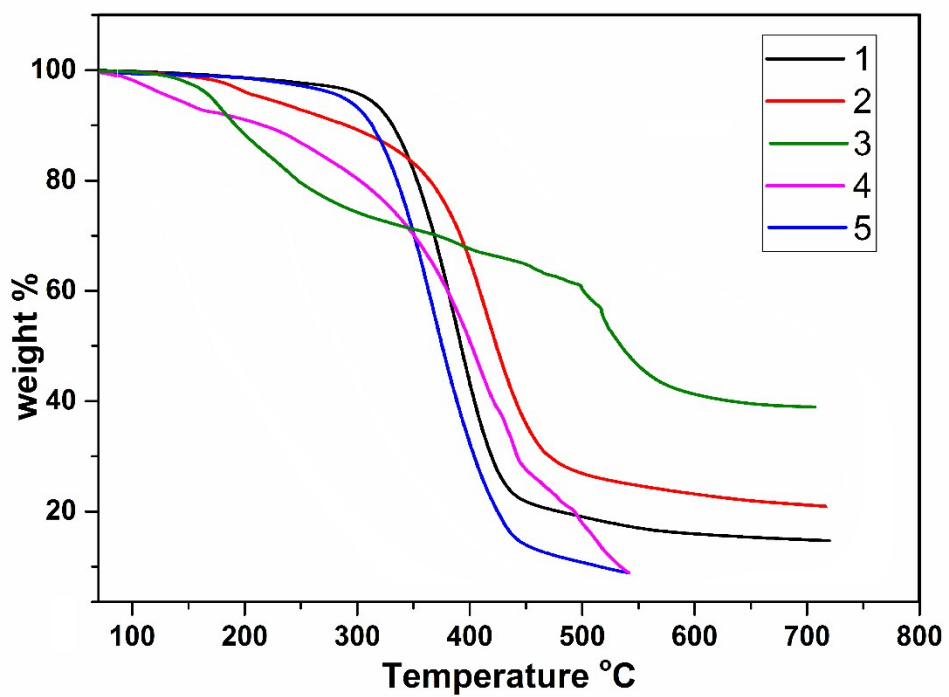


Fig. S8. TGA spectra of compounds 1-5.

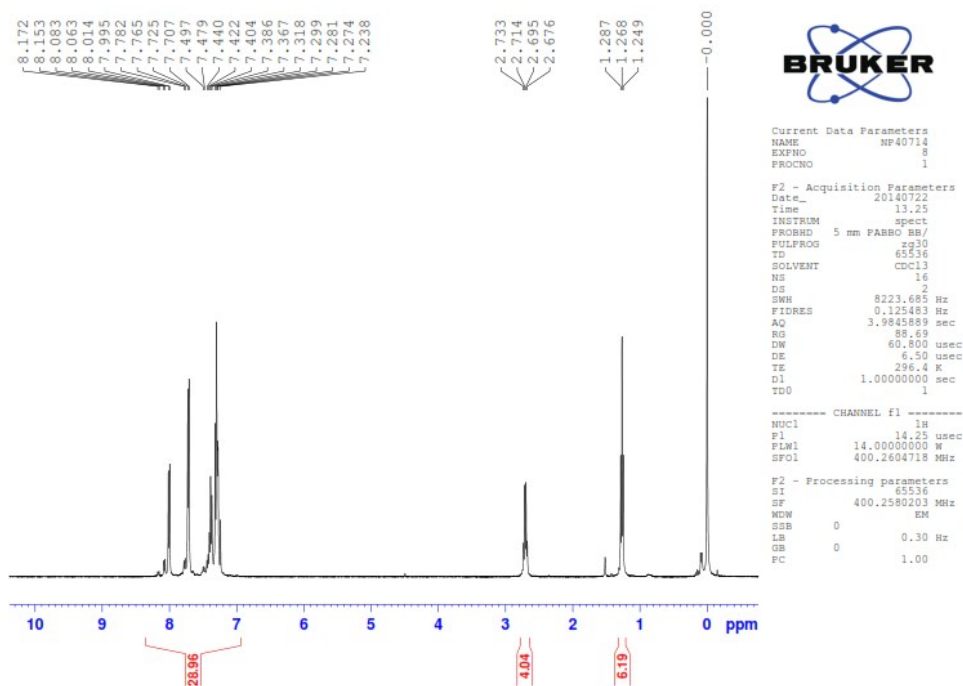


Fig. S9.  $^1\text{H}$  NMR spectrum of compound **1** in  $\text{CDCl}_3$  at 23  $^\circ\text{C}$

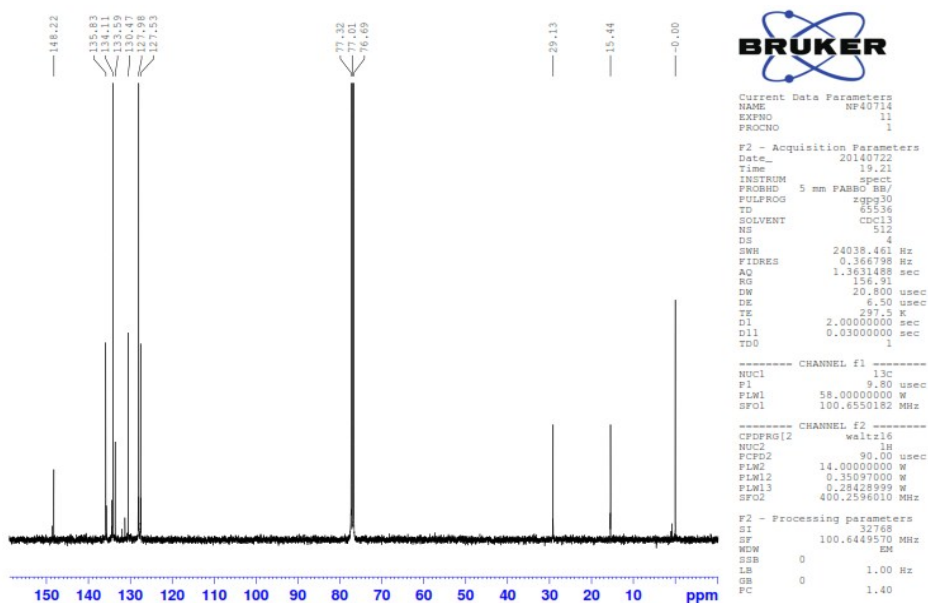


Fig. S10.  $^{13}\text{C}$  NMR spectrum of compound **1** in  $\text{CDCl}_3$  at 23  $^\circ\text{C}$



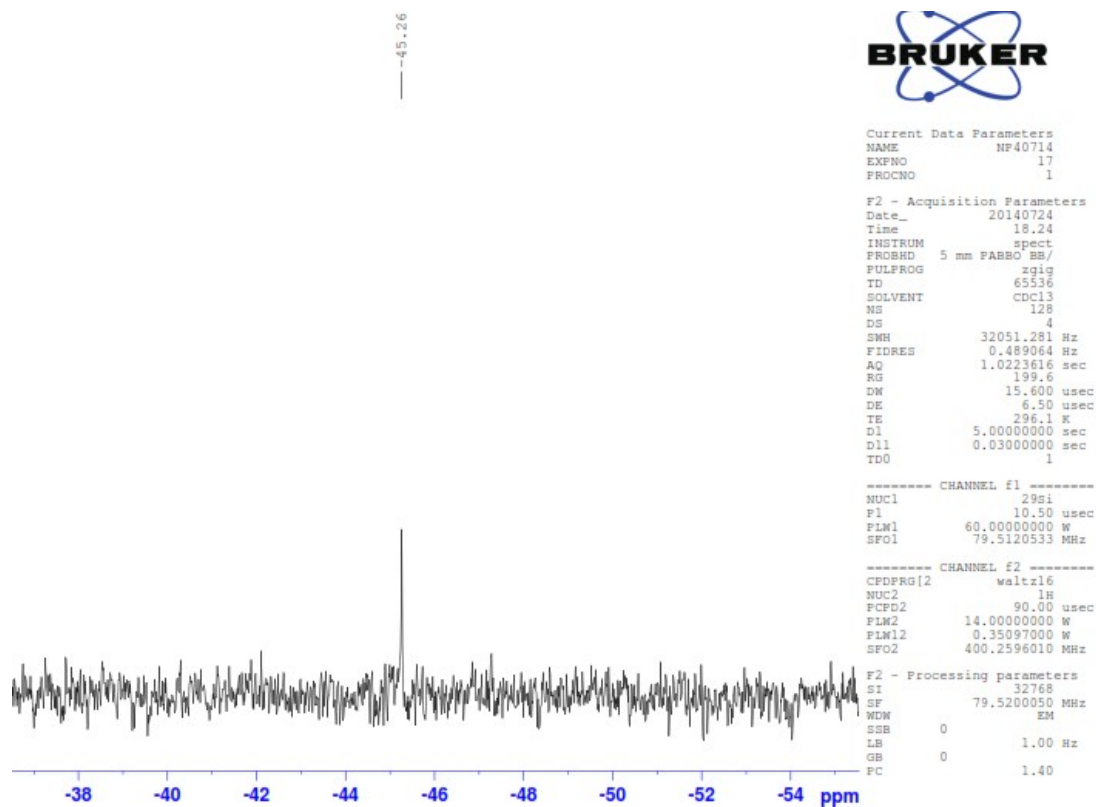


Fig. S11.  $^{29}\text{Si}$  NMR spectrum of compound **1** in  $\text{CDCl}_3$  at 23 °C

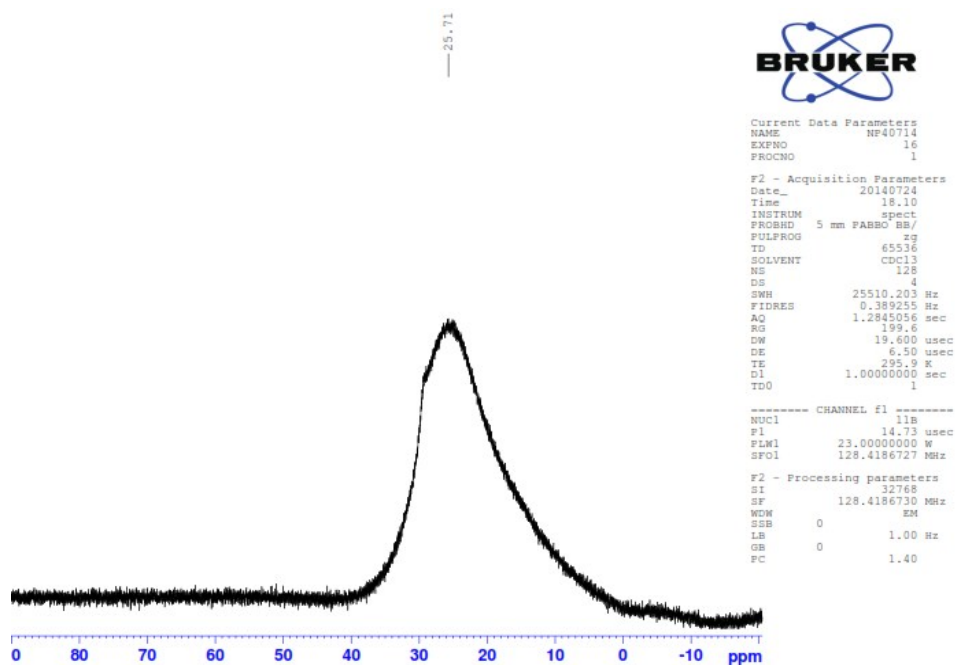


Fig. S12.  $^{11}\text{B}$  NMR spectrum of compound **1** in  $\text{CDCl}_3$  at 22 °C



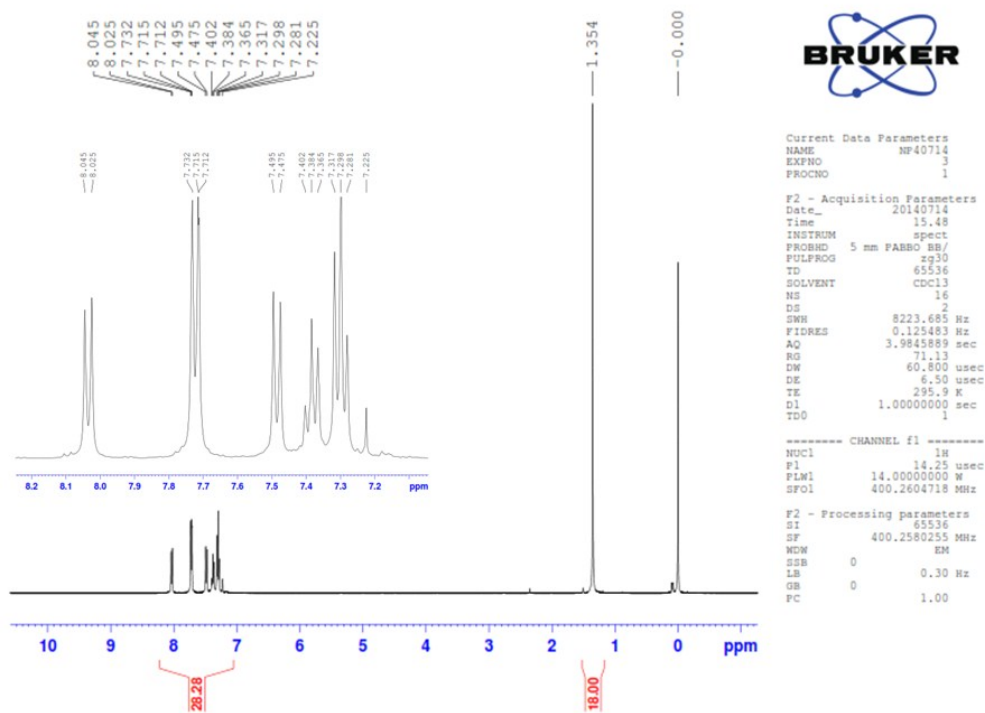


Fig. S13.  $^1\text{H}$  NMR spectrum of compound **2** in  $\text{CDCl}_3$  at 23  $^\circ\text{C}$

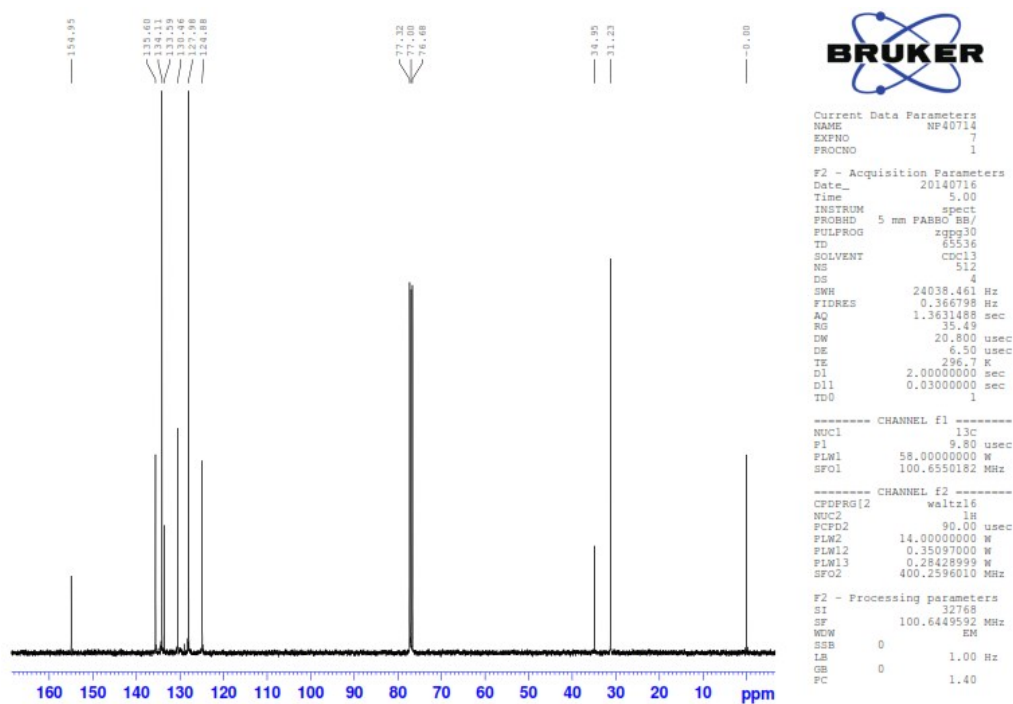


Fig. S14.  $^{13}\text{C}$  NMR spectrum of compound **2** in  $\text{CDCl}_3$  at 23  $^\circ\text{C}$

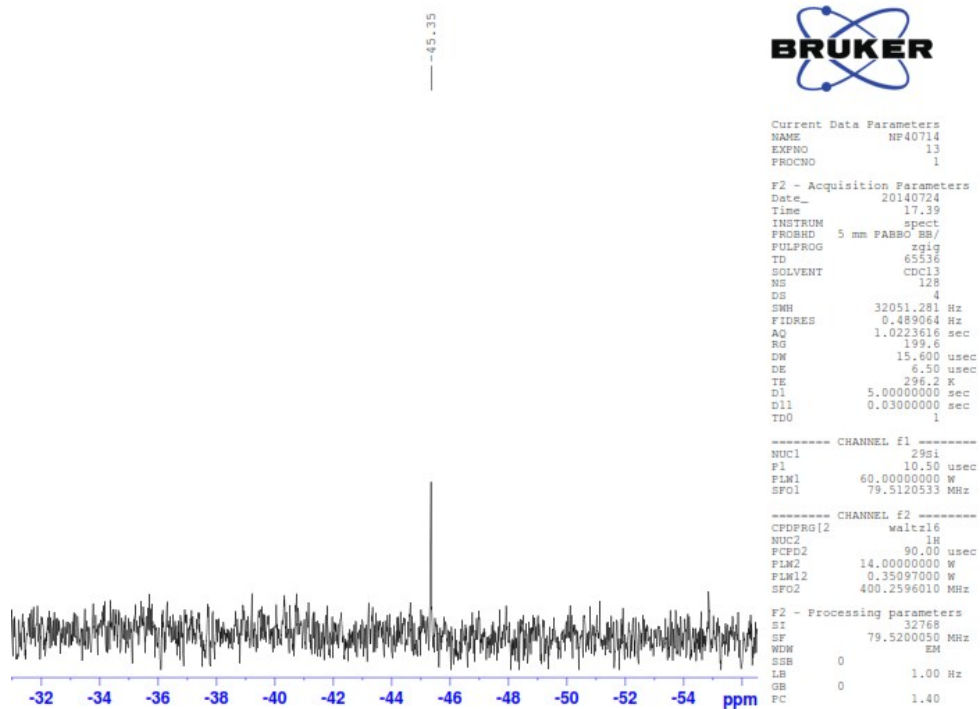


Fig. S15.  $^{29}\text{Si}$  NMR spectrum of compound **2** in  $\text{CDCl}_3$  at 23 °C

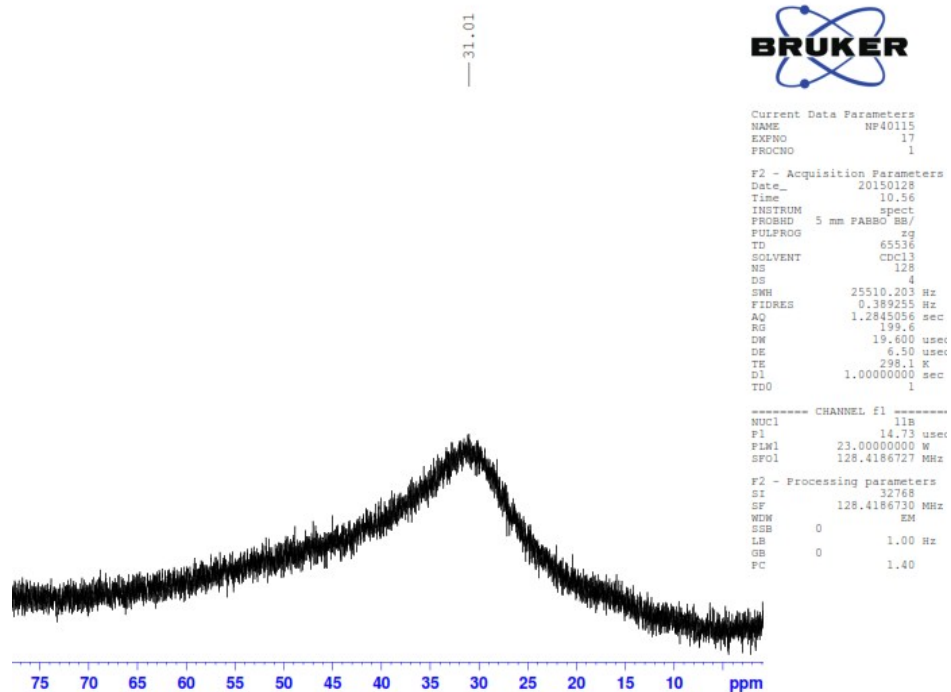


Fig. S16.  $^{11}\text{B}$  NMR spectrum of compound **2** in  $\text{CDCl}_3$  at 25 °C

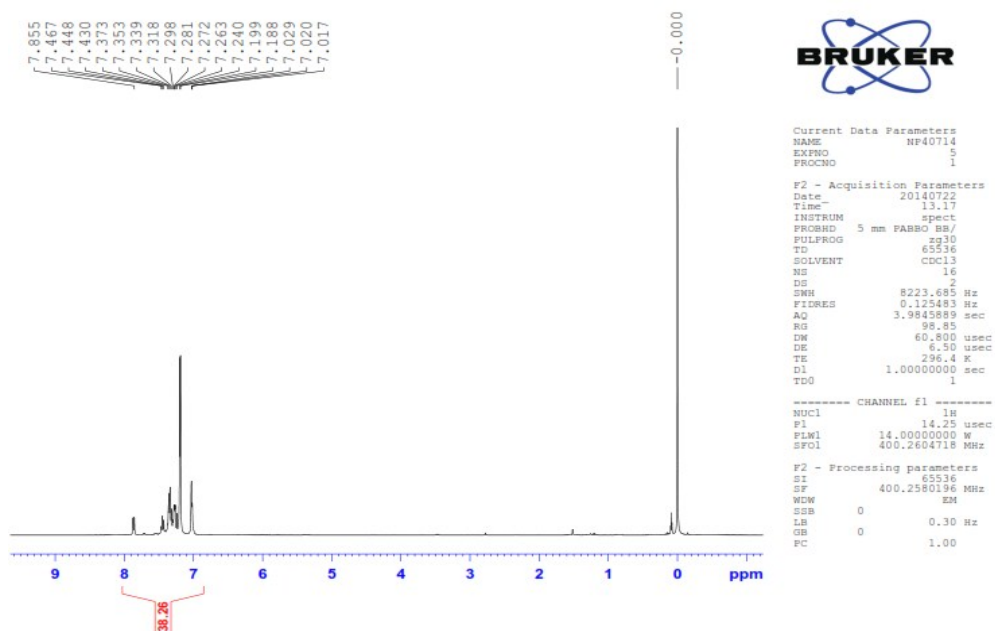


Fig. S17.  $^1\text{H}$  NMR spectrum of compound **3** in  $\text{CDCl}_3$  at 23  $^\circ\text{C}$

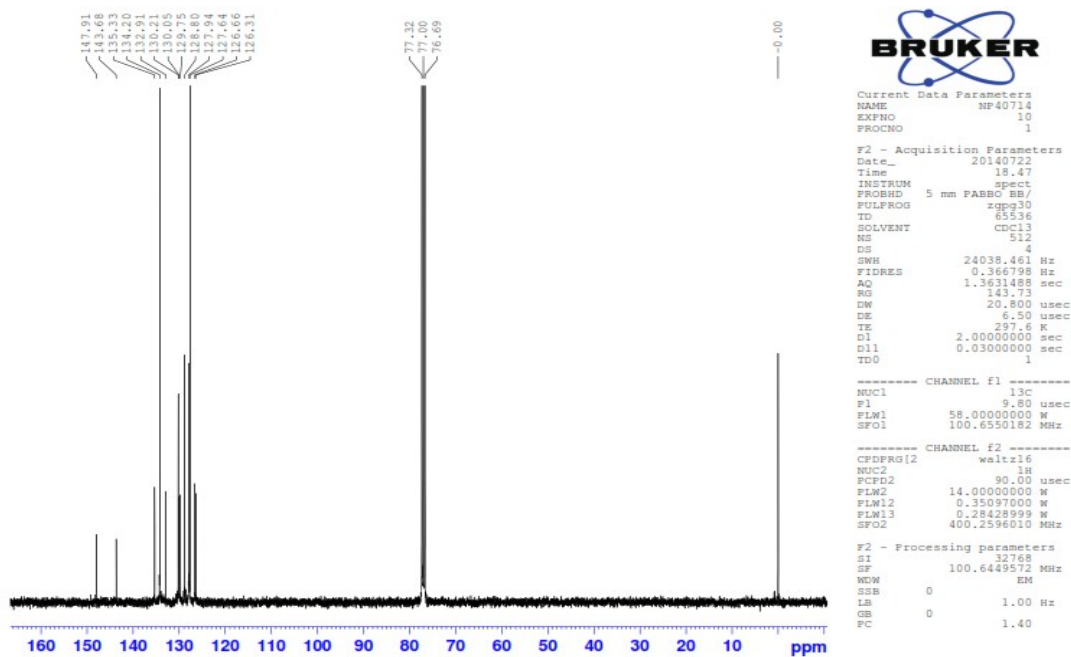


Fig. S18.  $^{13}\text{C}$  NMR spectrum of compound **3** in  $\text{CDCl}_3$  at 23  $^\circ\text{C}$

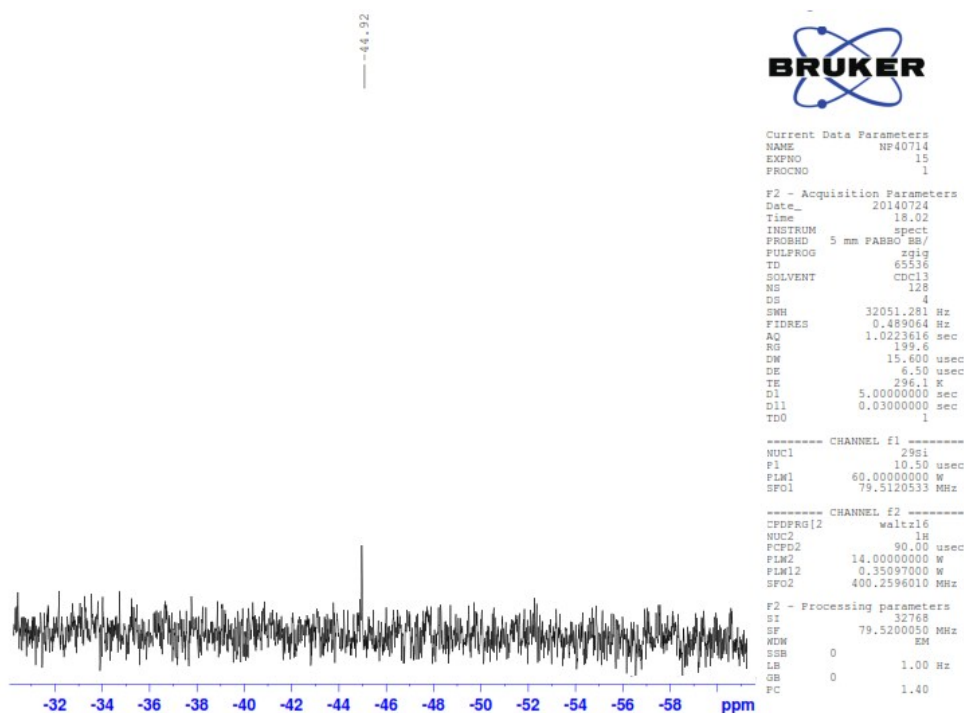


Fig. S19.  $^{29}\text{Si}$  NMR spectrum of compound **3** in  $\text{CDCl}_3$  at 23 °C

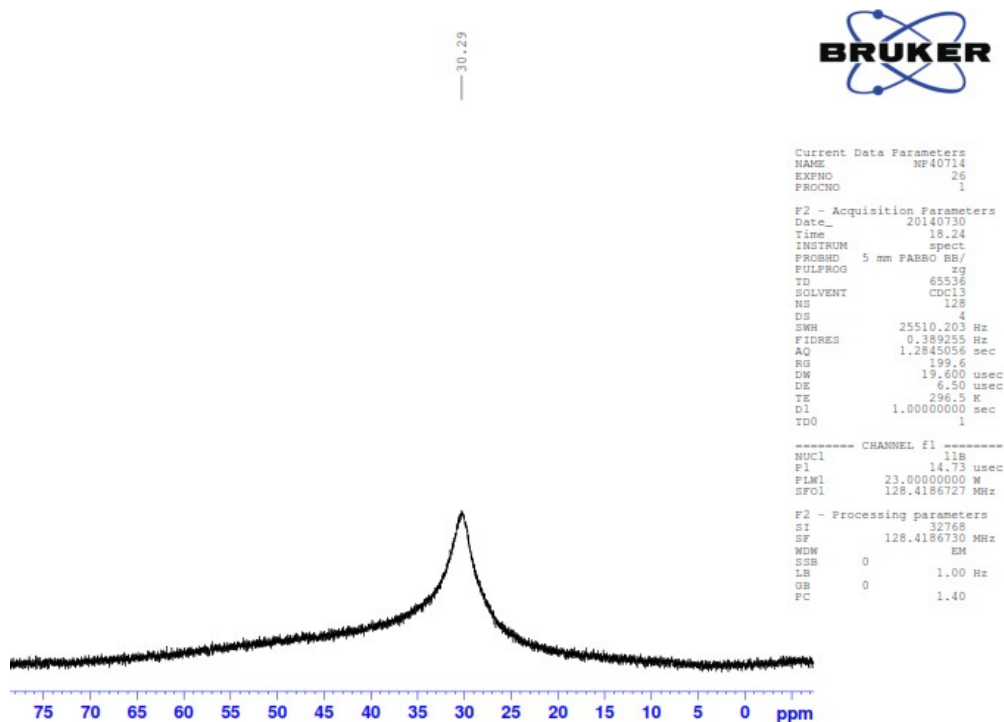


Fig. S20.  $^{11}\text{B}$  NMR spectrum of compound **3** in  $\text{CDCl}_3$  at 23 °C

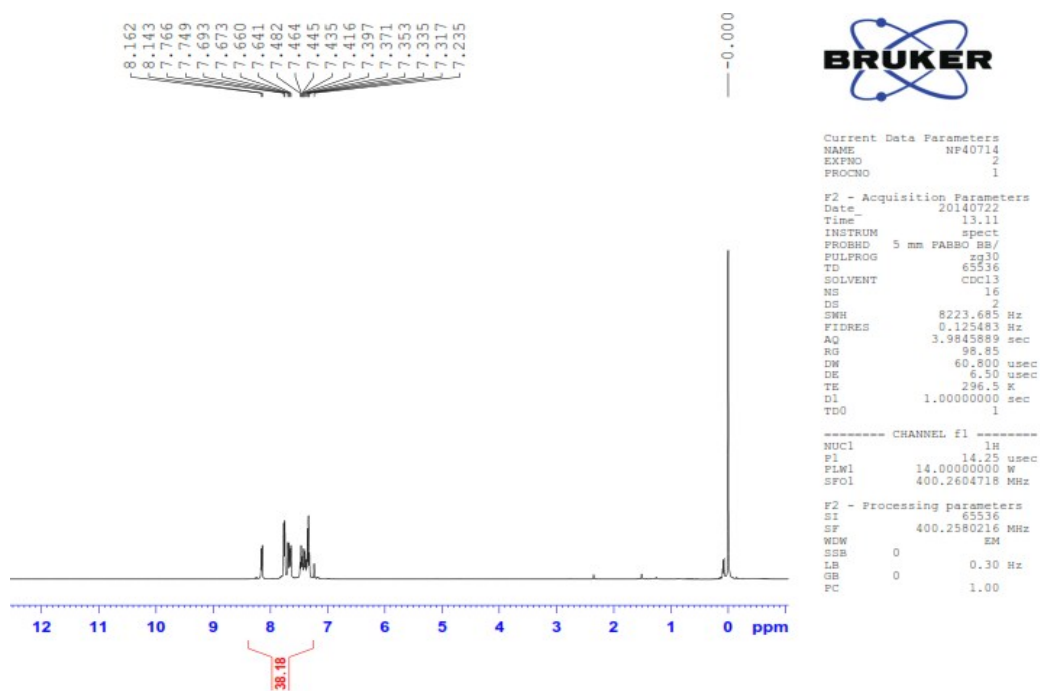


Fig. S21.  $^1\text{H}$  NMR spectrum of compound **4** in  $\text{CDCl}_3$  at 23  $^\circ\text{C}$

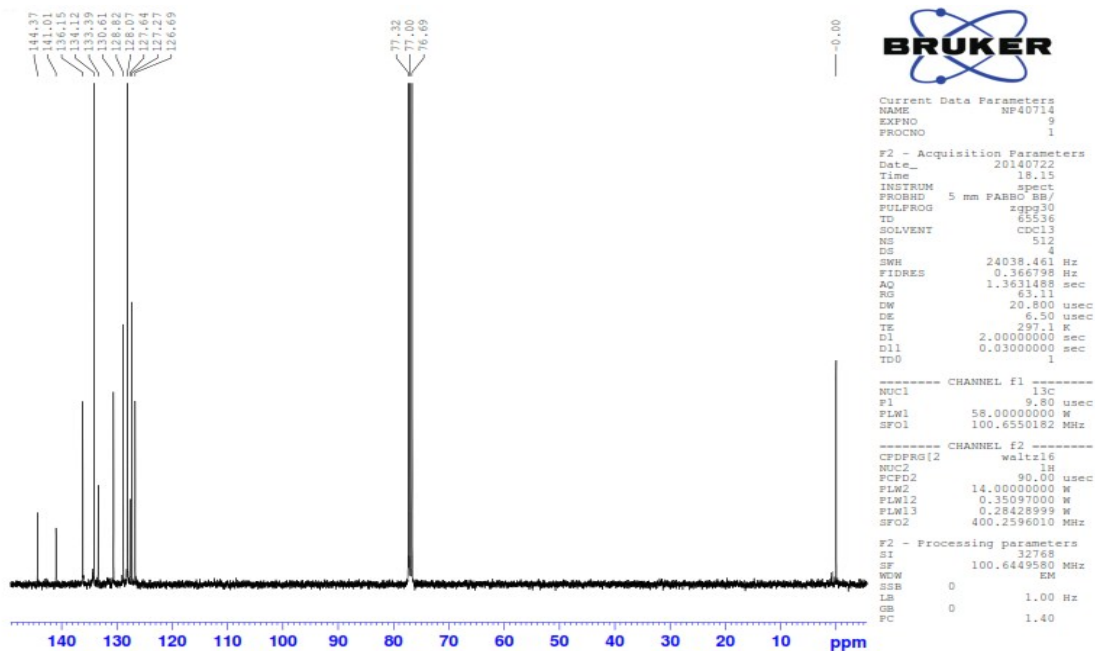


Fig. S22.  $^{13}\text{C}$  NMR spectrum of compound **4** in  $\text{CDCl}_3$  at 24  $^\circ\text{C}$

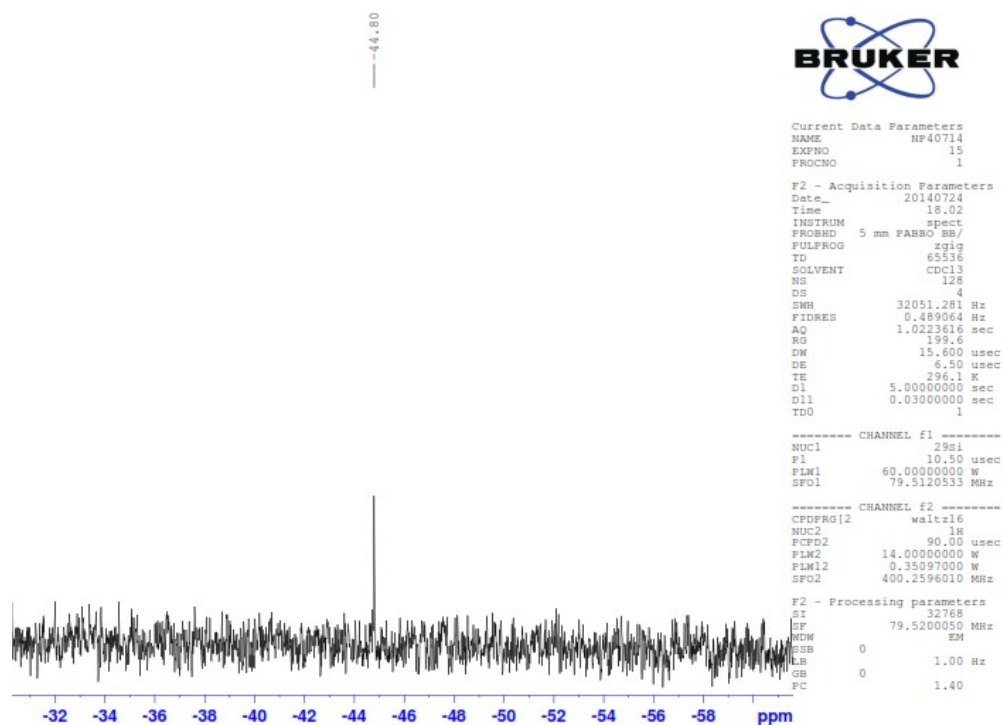


Fig. S23.  $^{29}\text{Si}$  NMR spectrum of compound **4** in  $\text{CDCl}_3$  at 23 °C

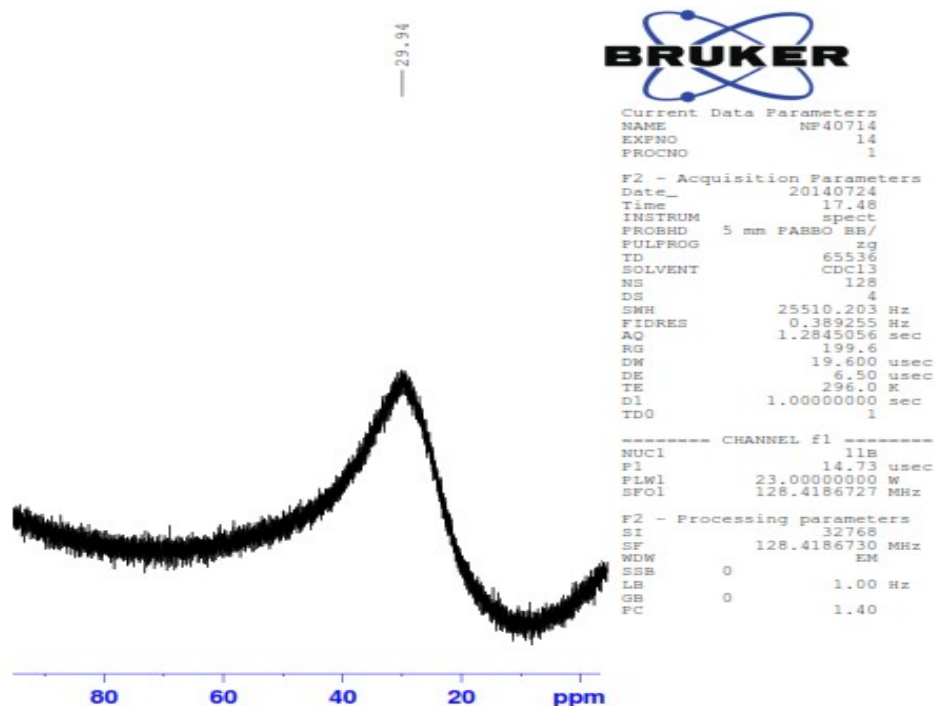


Fig. S24.  $^{11}\text{B}$  NMR spectrum of compound **4** in  $\text{CDCl}_3$  at 23 °C

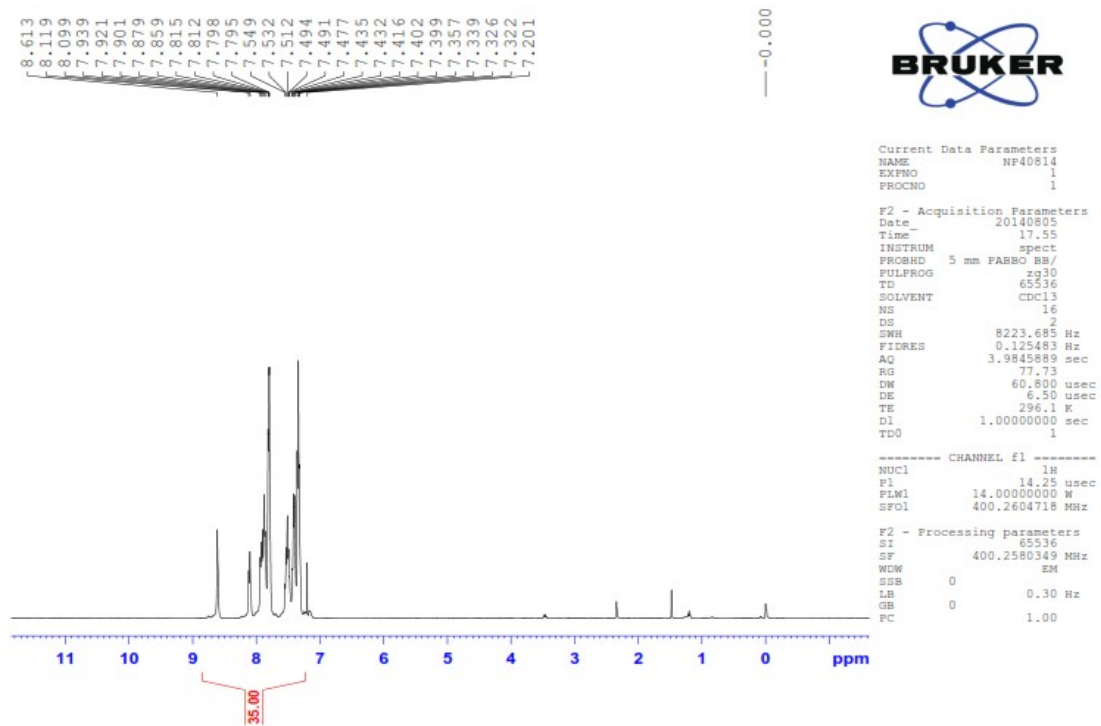


Fig. S25.  $^1\text{H}$  NMR spectrum of compound **5** in  $\text{CDCl}_3$  at 23  $^\circ\text{C}$

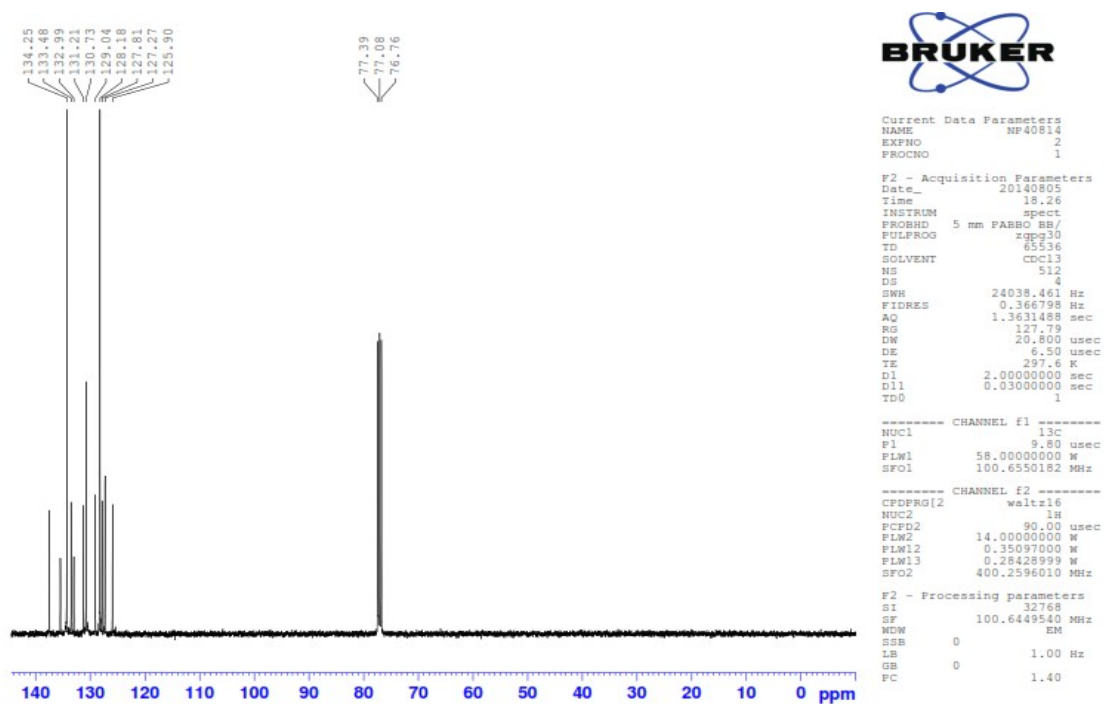


Fig. S26.  $^{13}\text{C}$  NMR spectrum of compound **5** in  $\text{CDCl}_3$  at 24  $^\circ\text{C}$



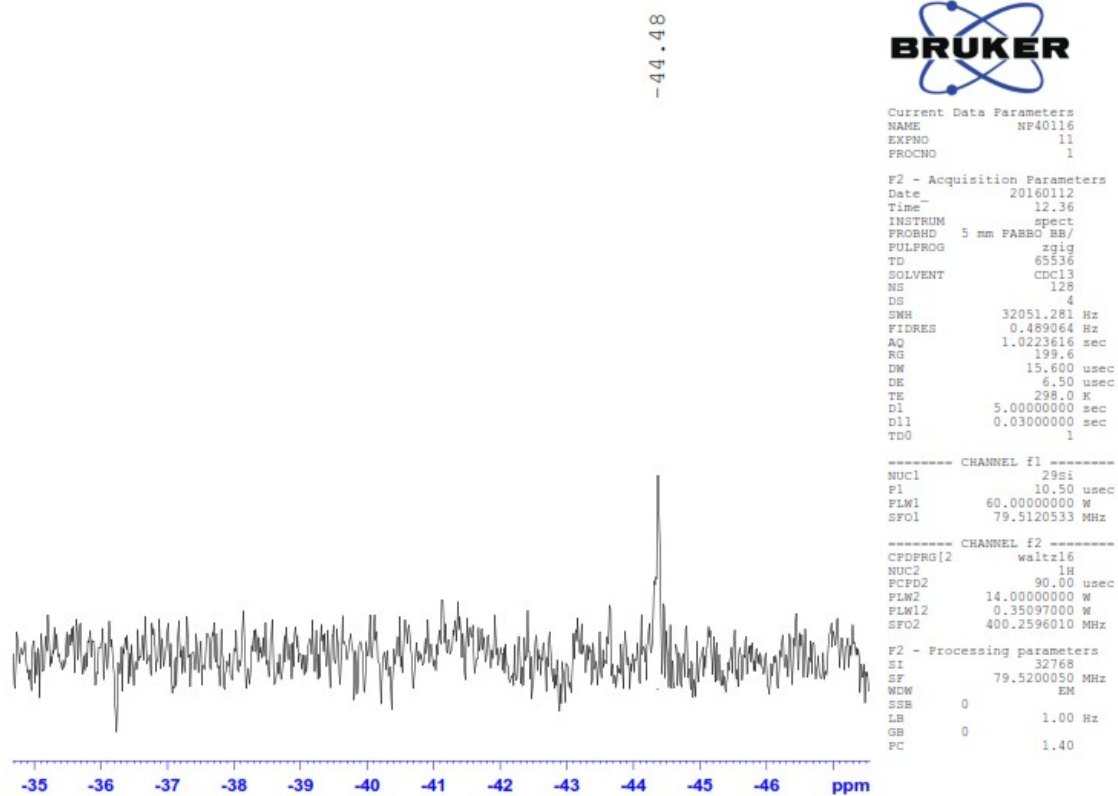


Fig. S27.  $^{29}\text{Si}$  NMR spectrum of compound **4** in  $\text{CDCl}_3$  at 24 °C

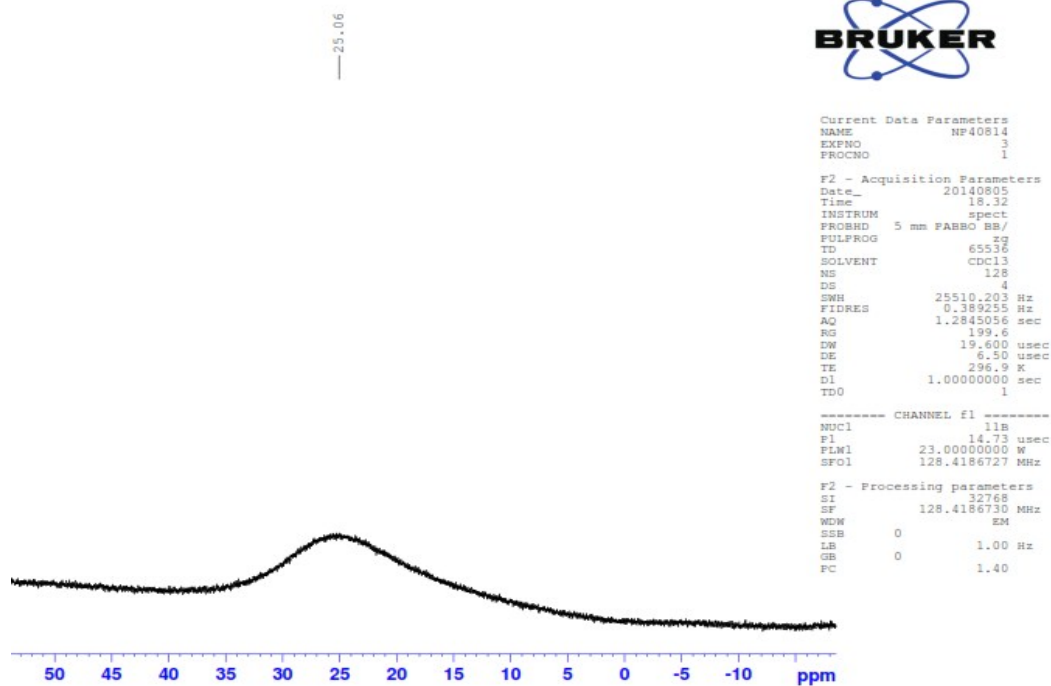


Fig. S28.  $^{11}\text{B}$  NMR spectrum of compound **5** in  $\text{CDCl}_3$  at 23 °C