

## Supporting Information

# NF- $\kappa$ B inhibitors, unique $\gamma$ -pyranol- $\gamma$ -lactams with sulfide and sulfoxide moieties from Hawaiian plant *Lycopodiella cernua* derived fungus *Paraphaeosphaeria neglecta* FT462

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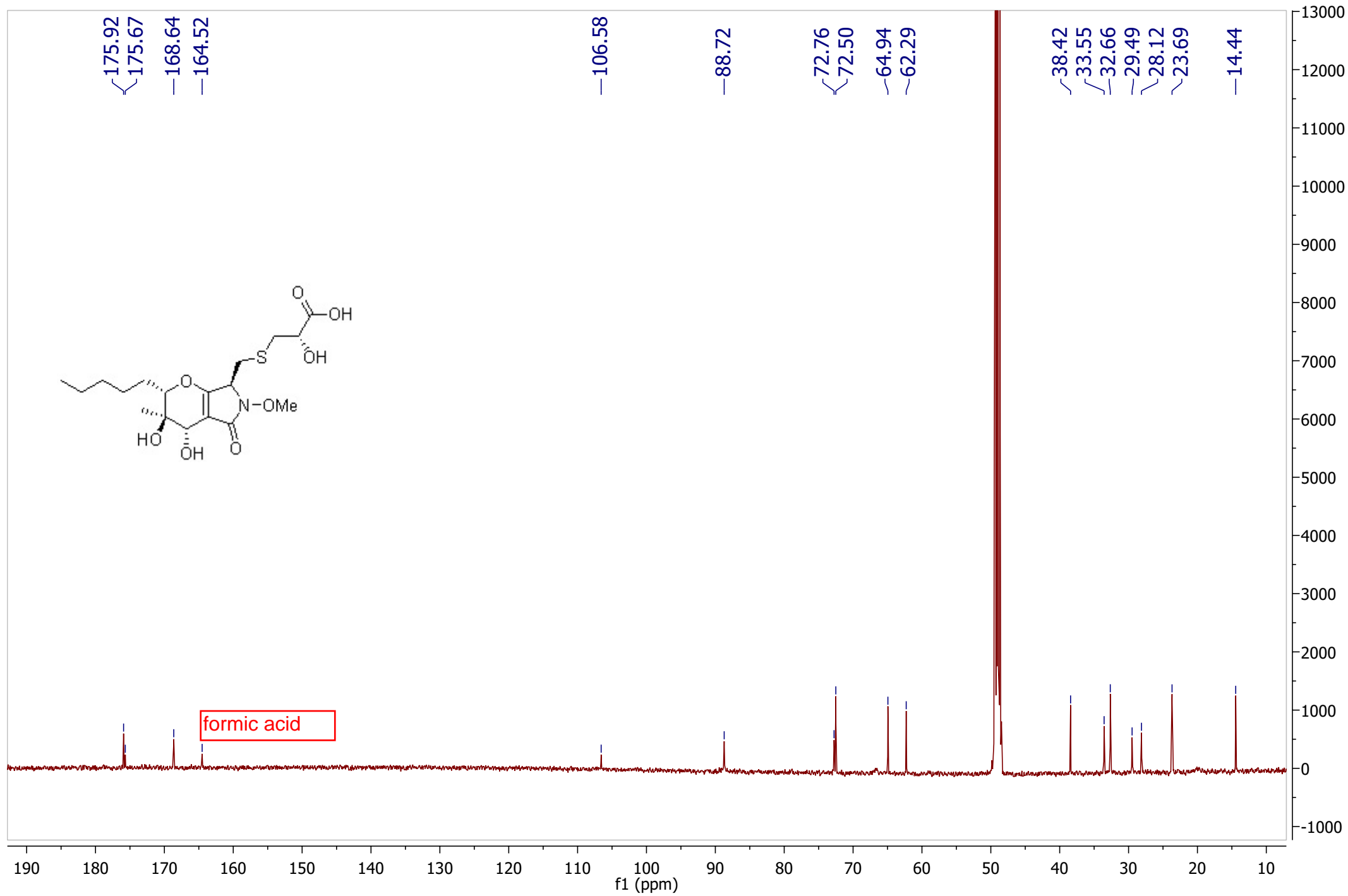
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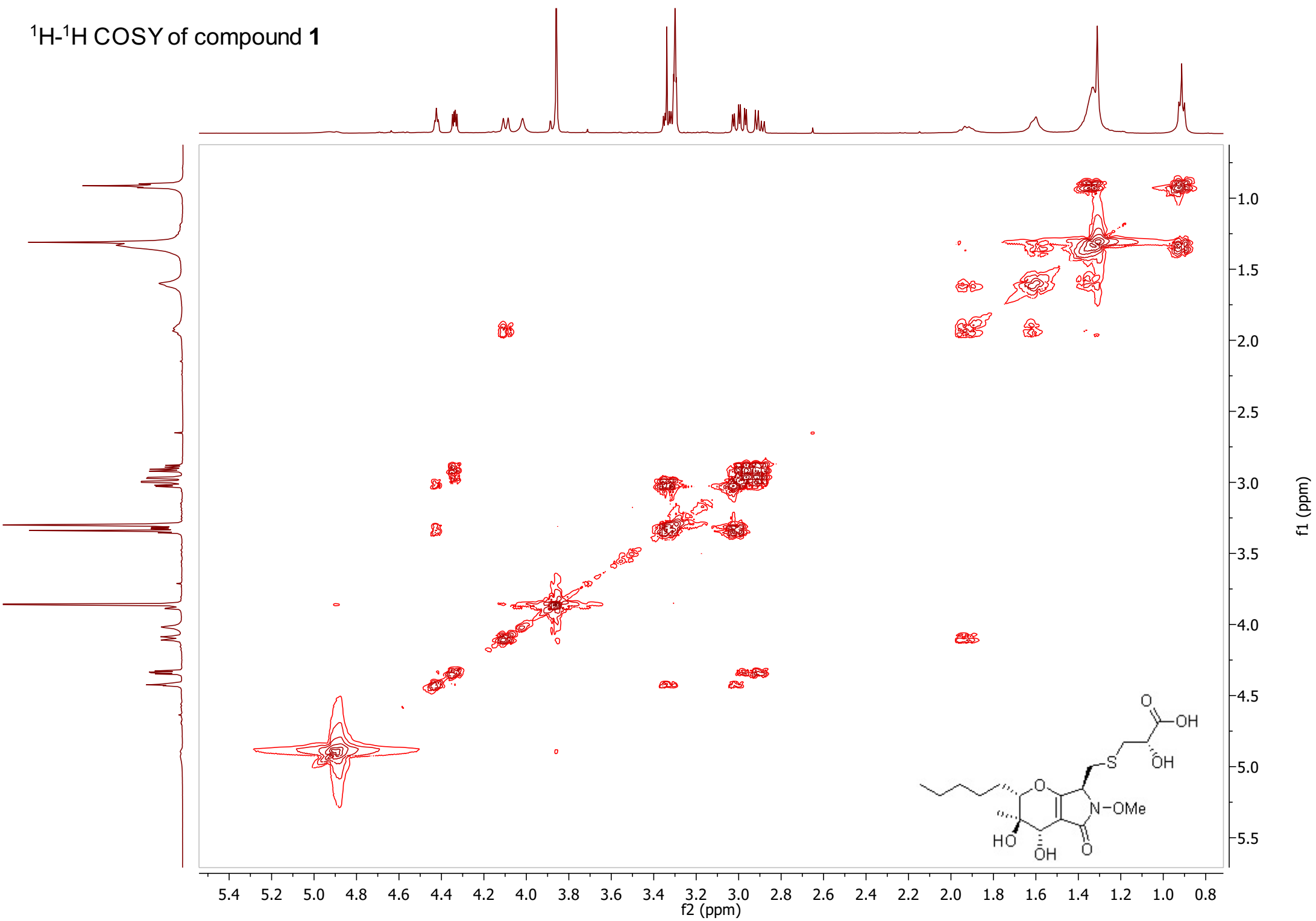
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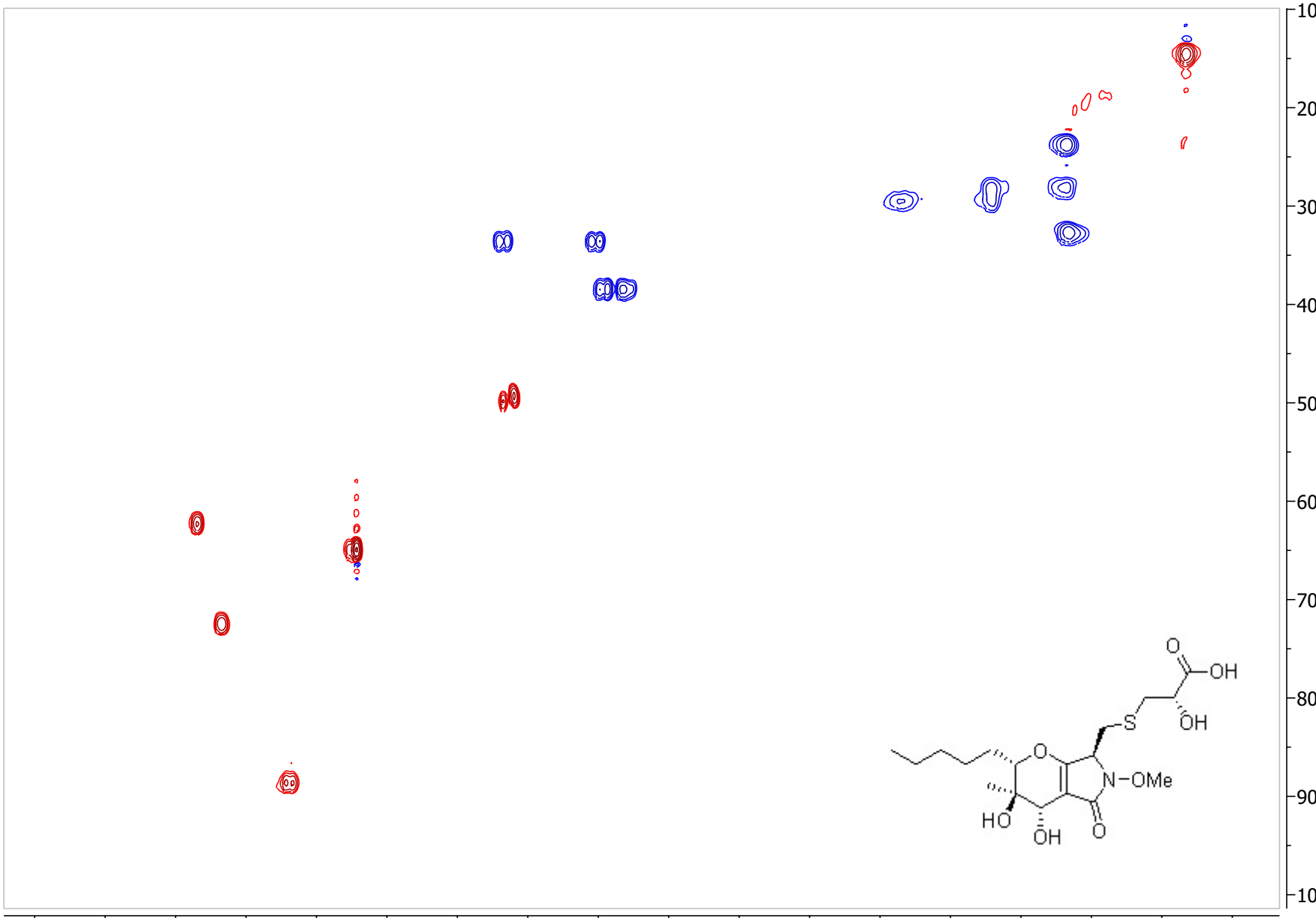
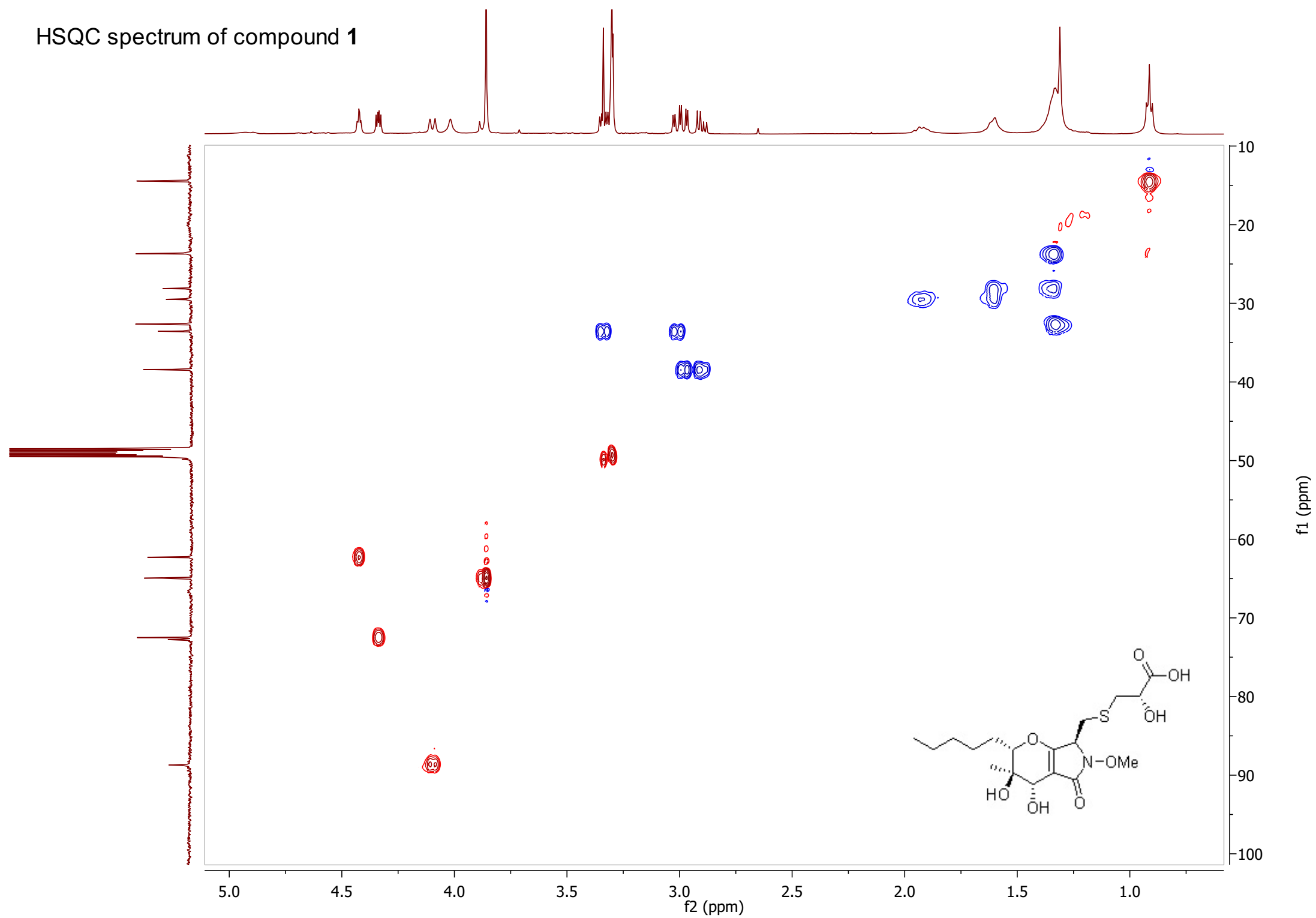
# <sup>13</sup>C NMR spectrum of compound 1



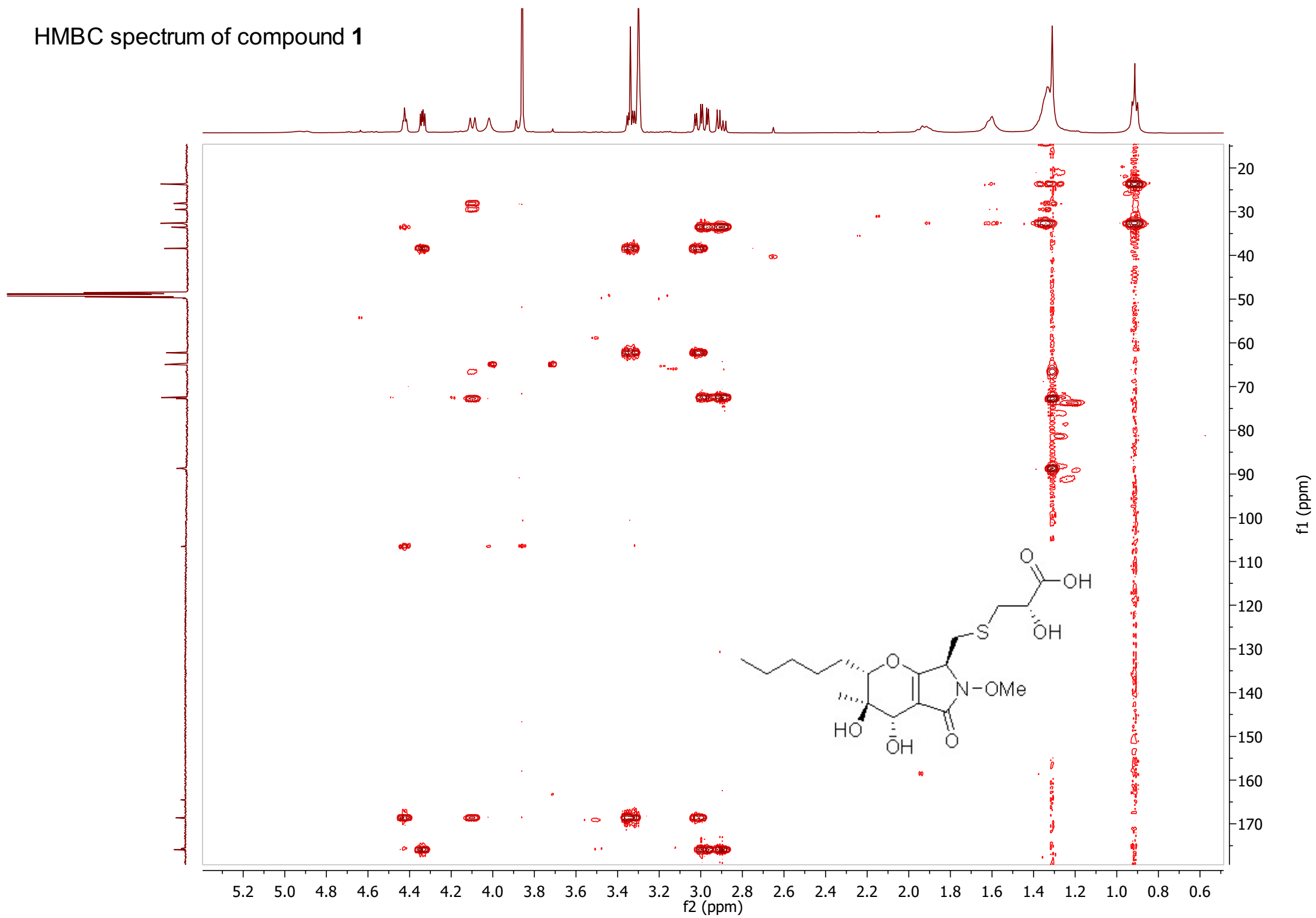
# $^1\text{H}$ - $^1\text{H}$ COSY of compound **1**



# HSQC spectrum of compound 1

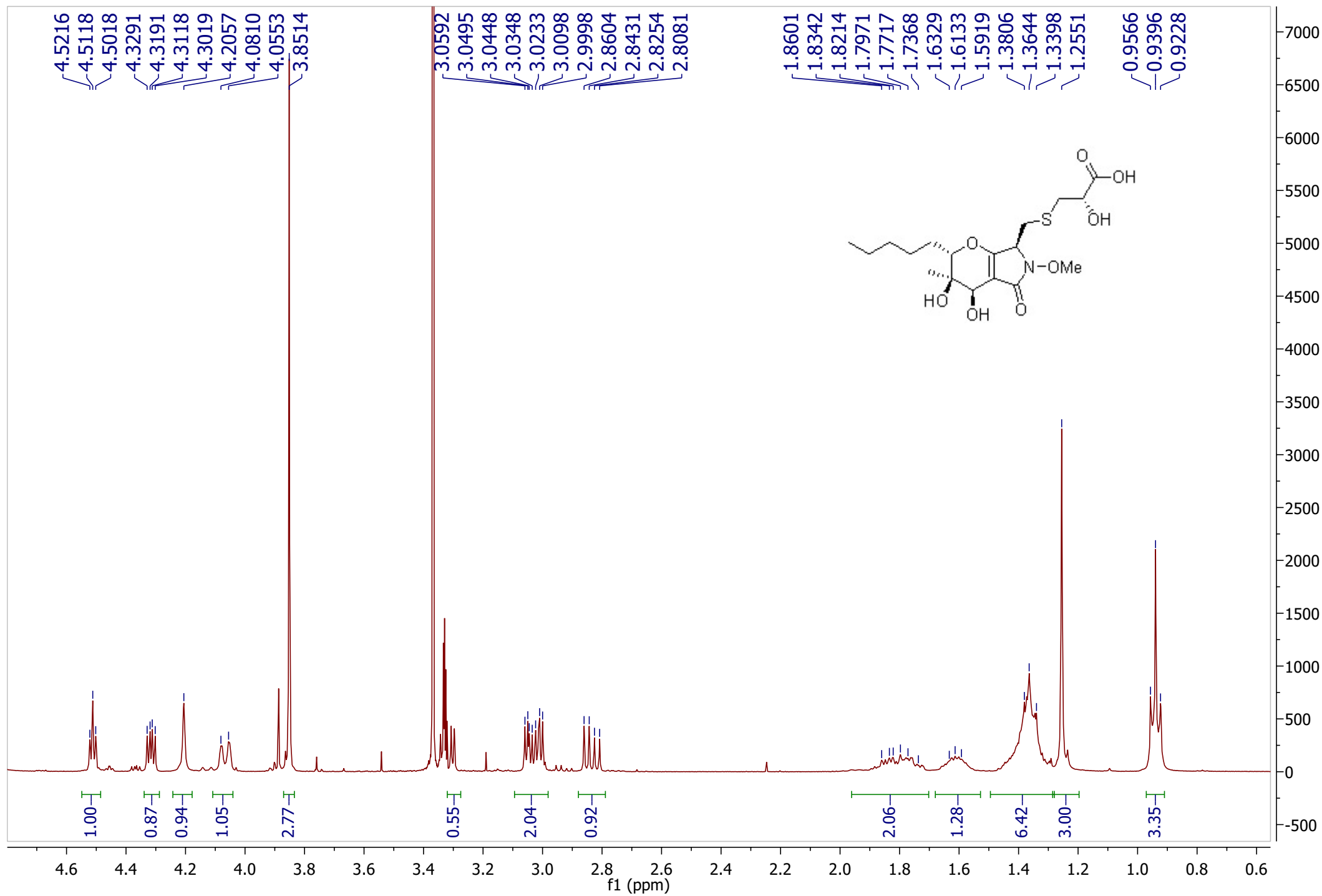


# HMBC spectrum of compound 1

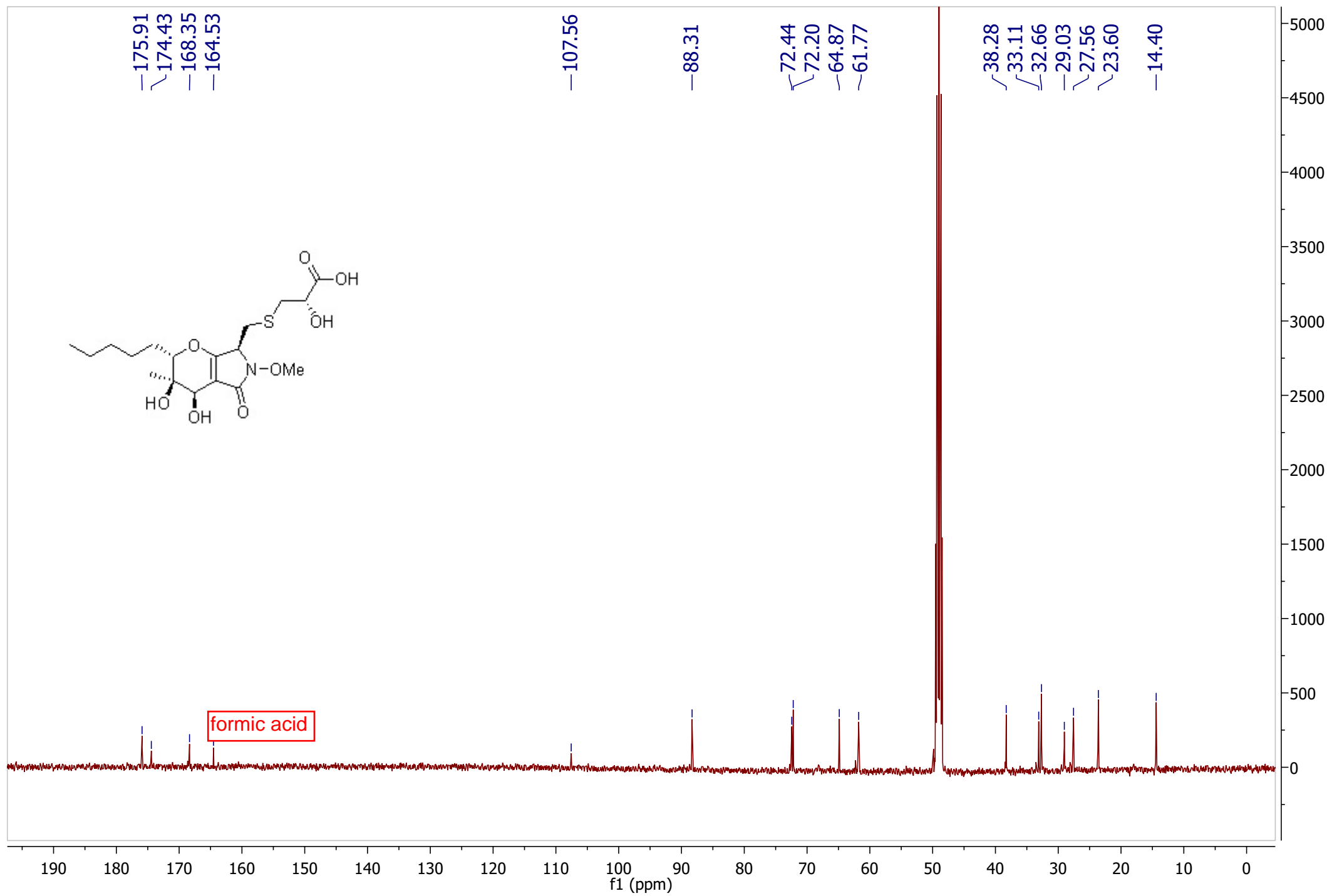




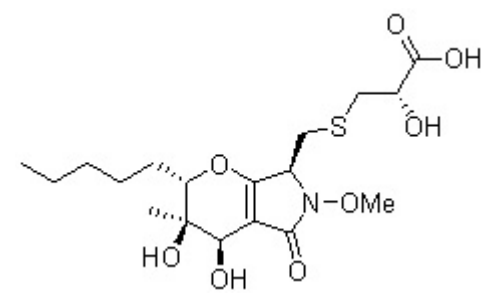
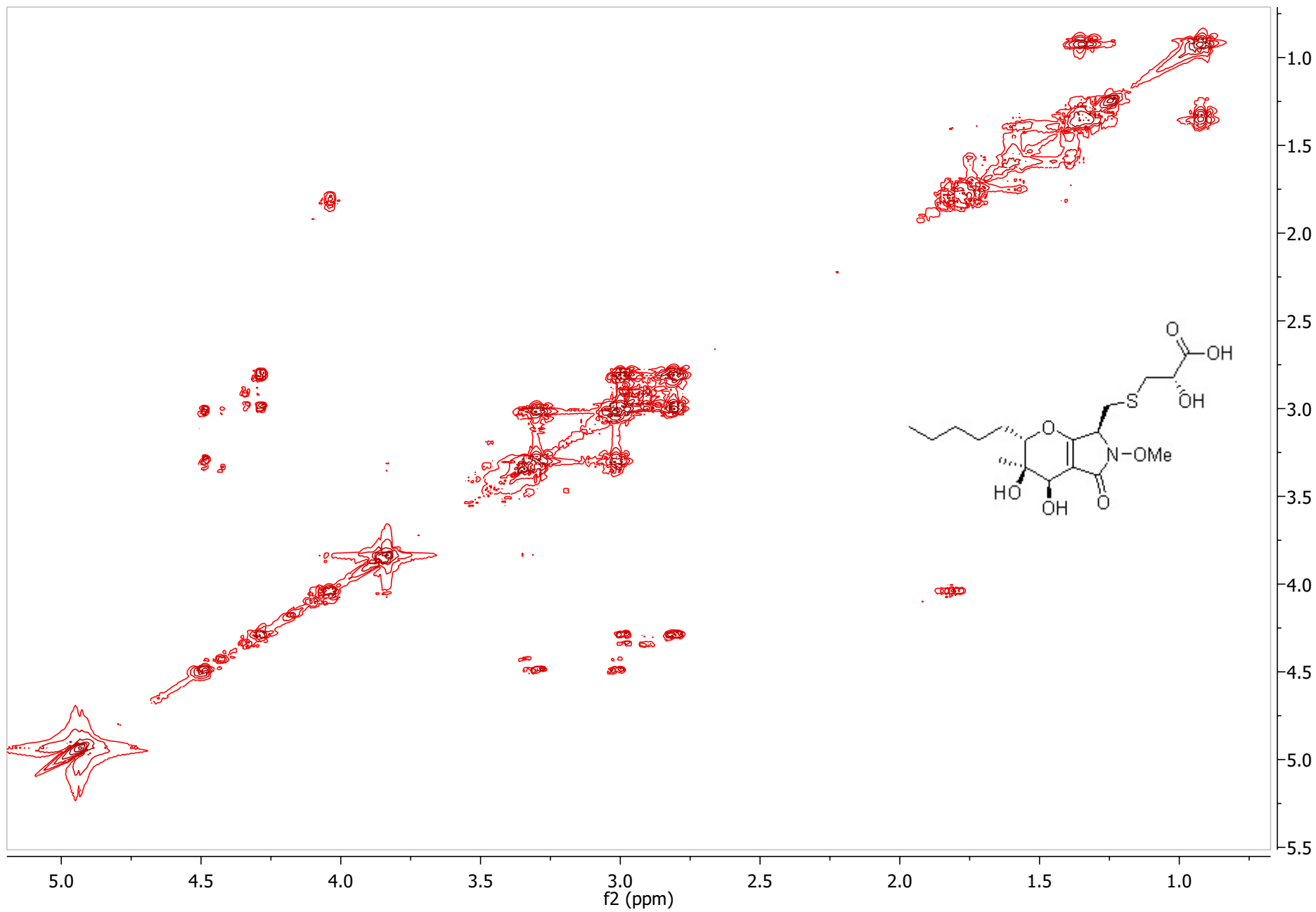
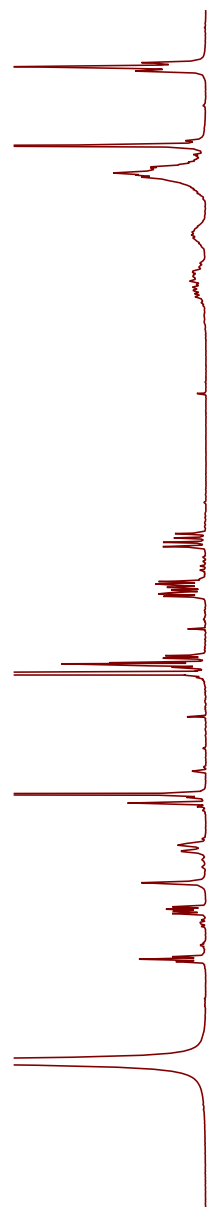
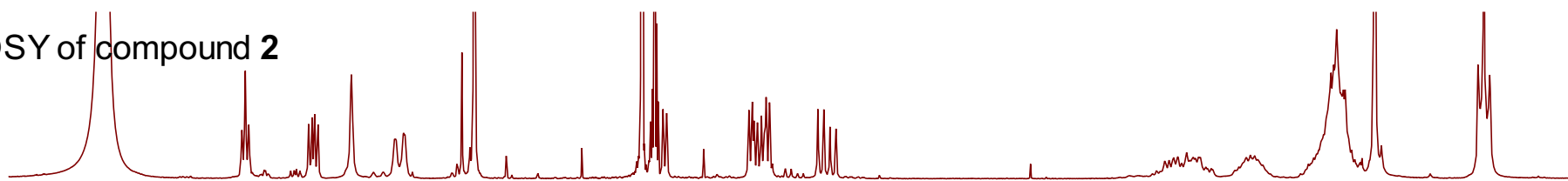
<sup>1</sup>H NMR spectrum of compound **2** (500 MHz in methanol-d<sub>4</sub>)



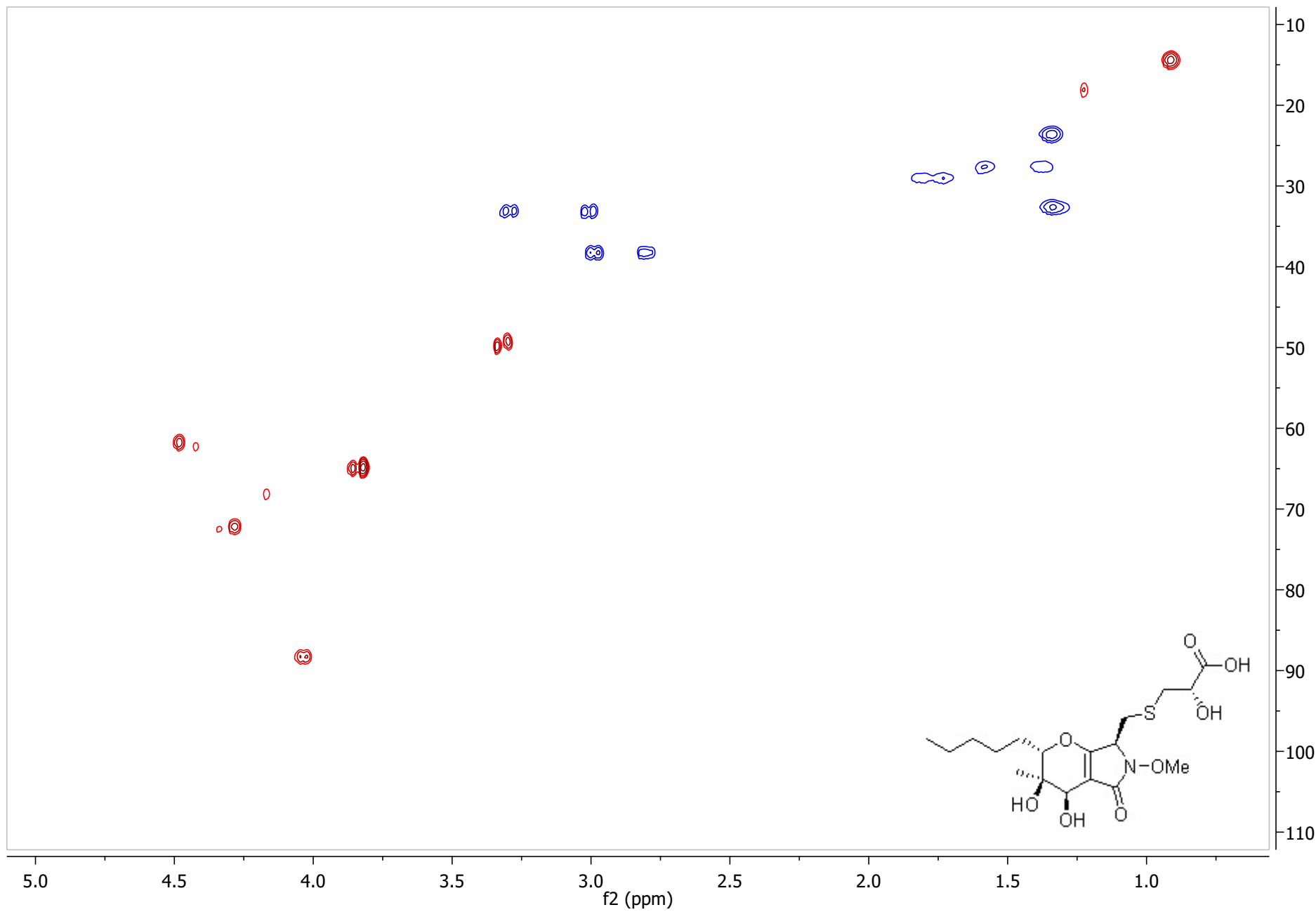
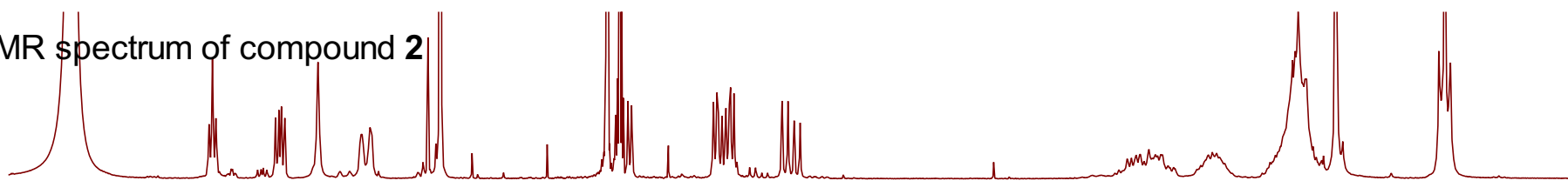
# <sup>13</sup>C NMR spectrum of compound 2



$^1\text{H}$ - $^1\text{H}$  COSY of compound 2



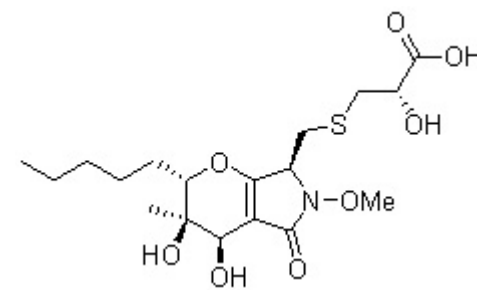
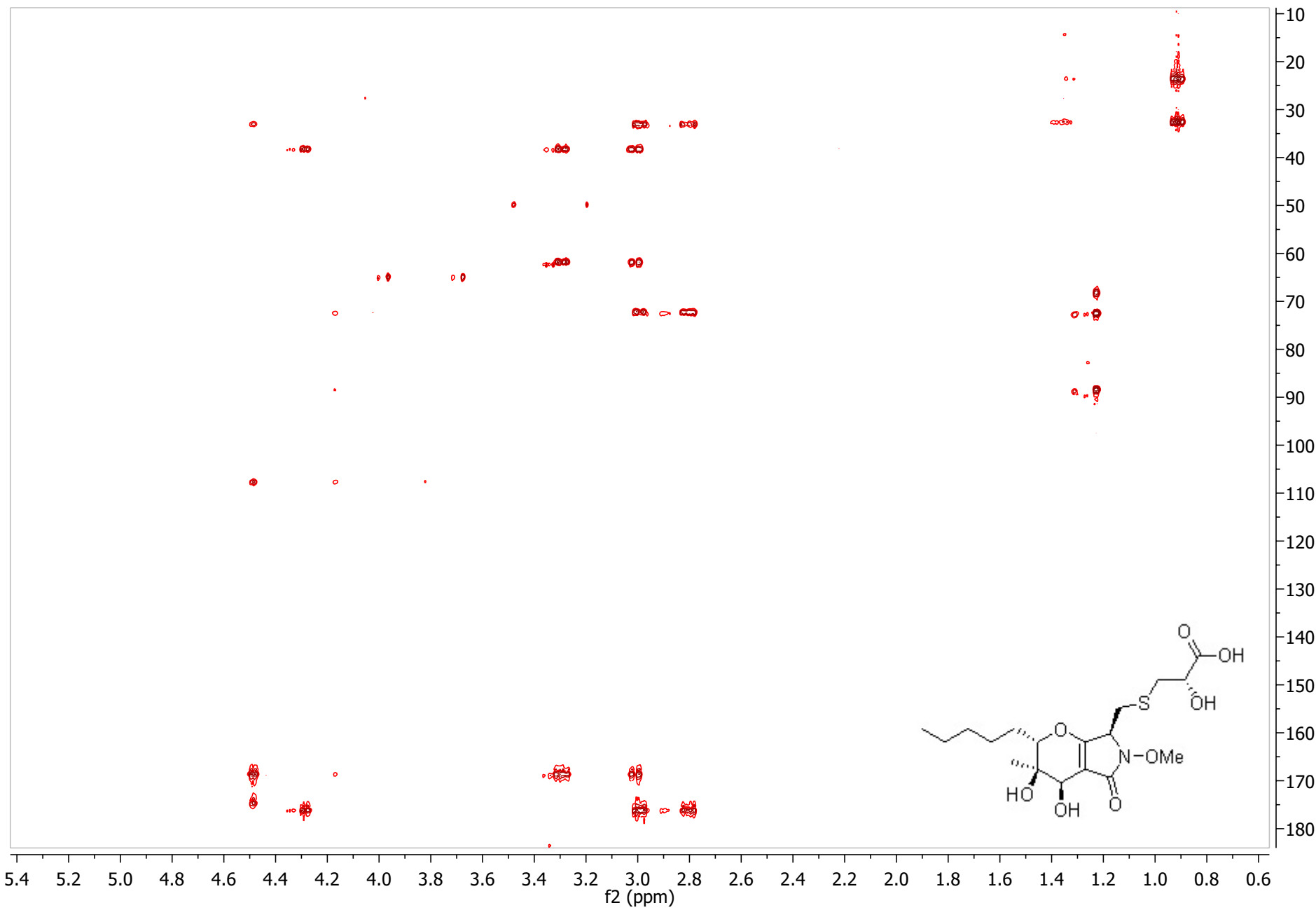
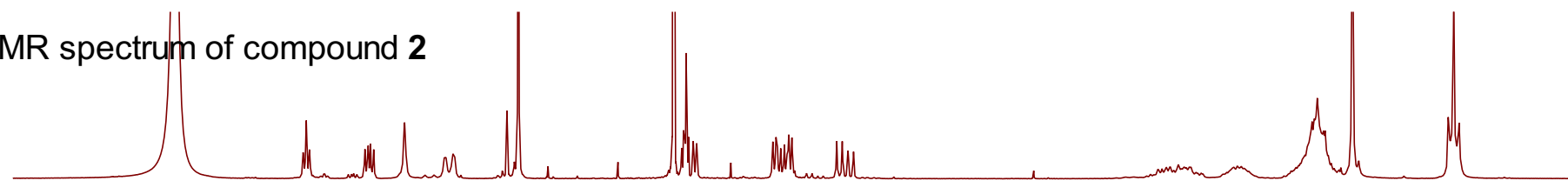
# HSQC NMR spectrum of compound 2



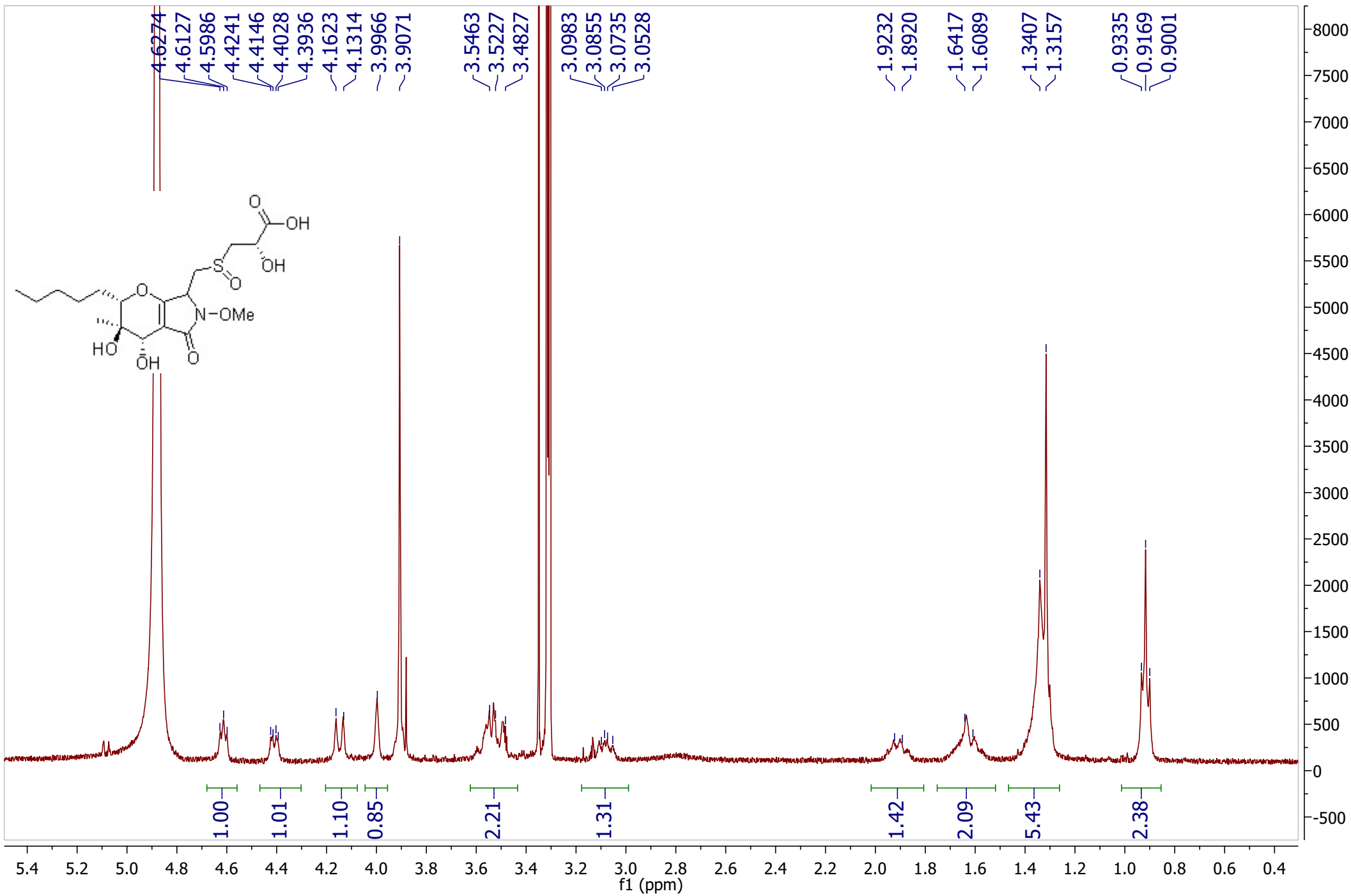
f1 (ppm)

f2 (ppm)

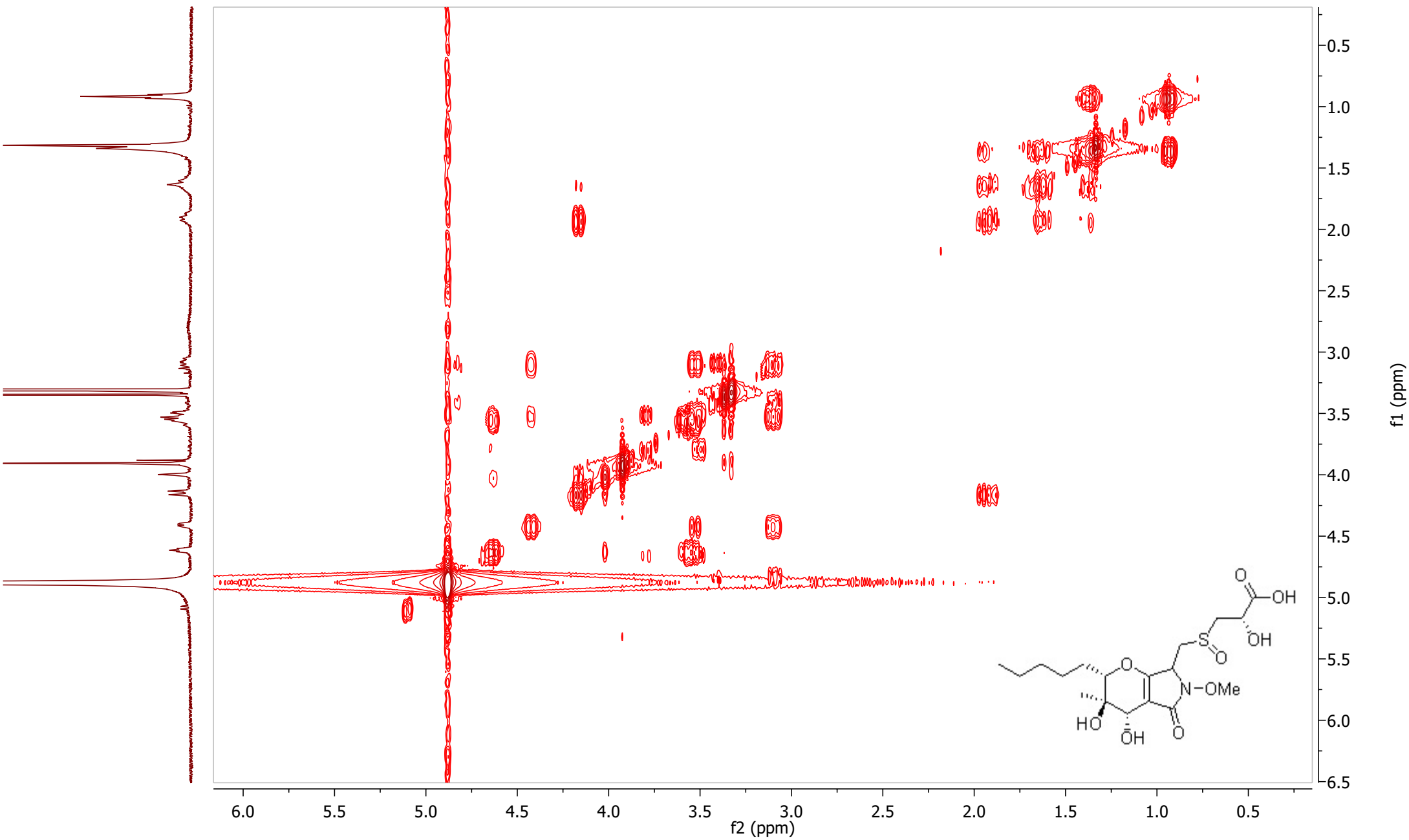
# HMBC NMR spectrum of compound 2



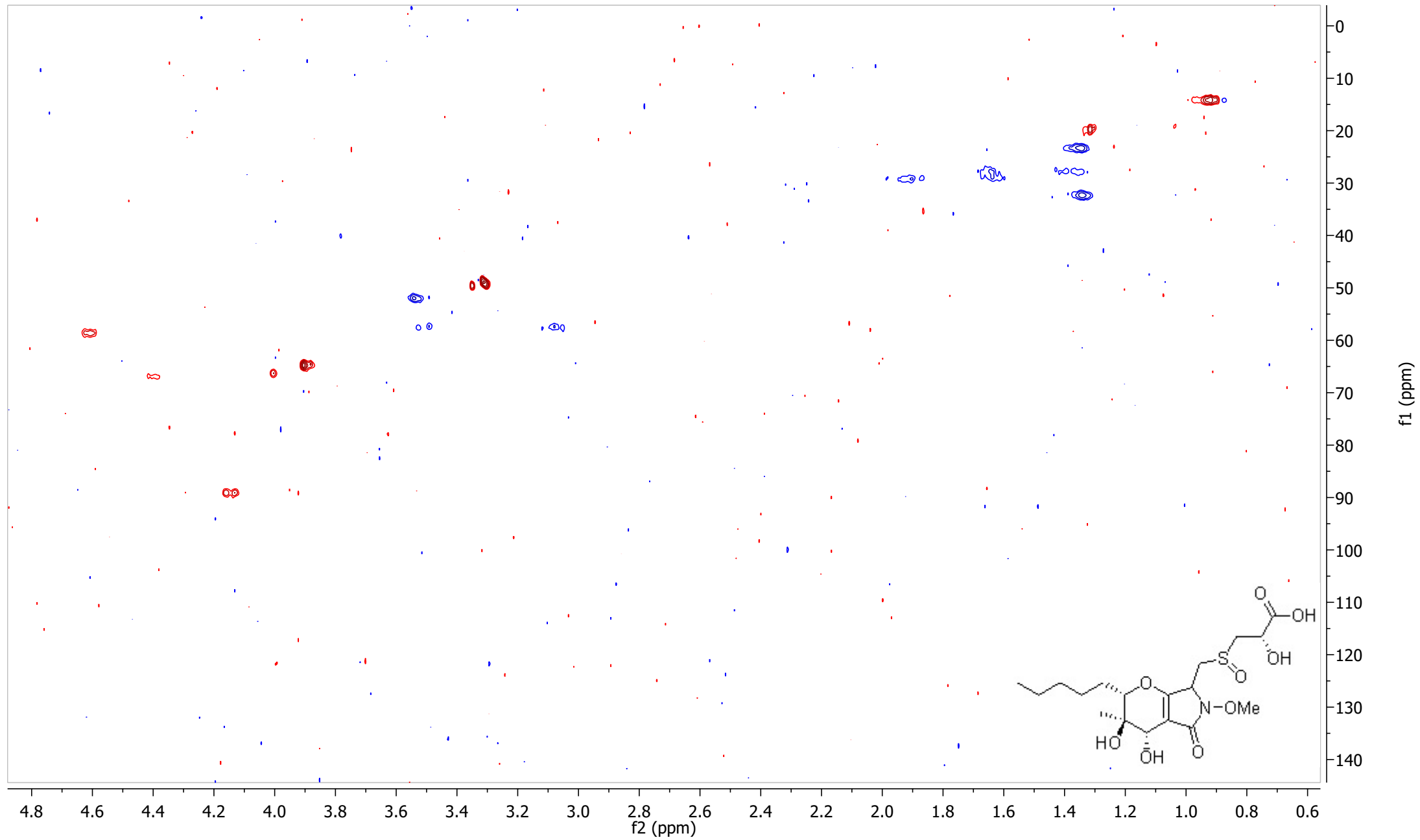
<sup>1</sup>H NMR spectrum of compound **3** (400 MHz in methanol-d<sub>4</sub>)



$^1\text{H}$ - $^1\text{H}$  COSY of compound **3**

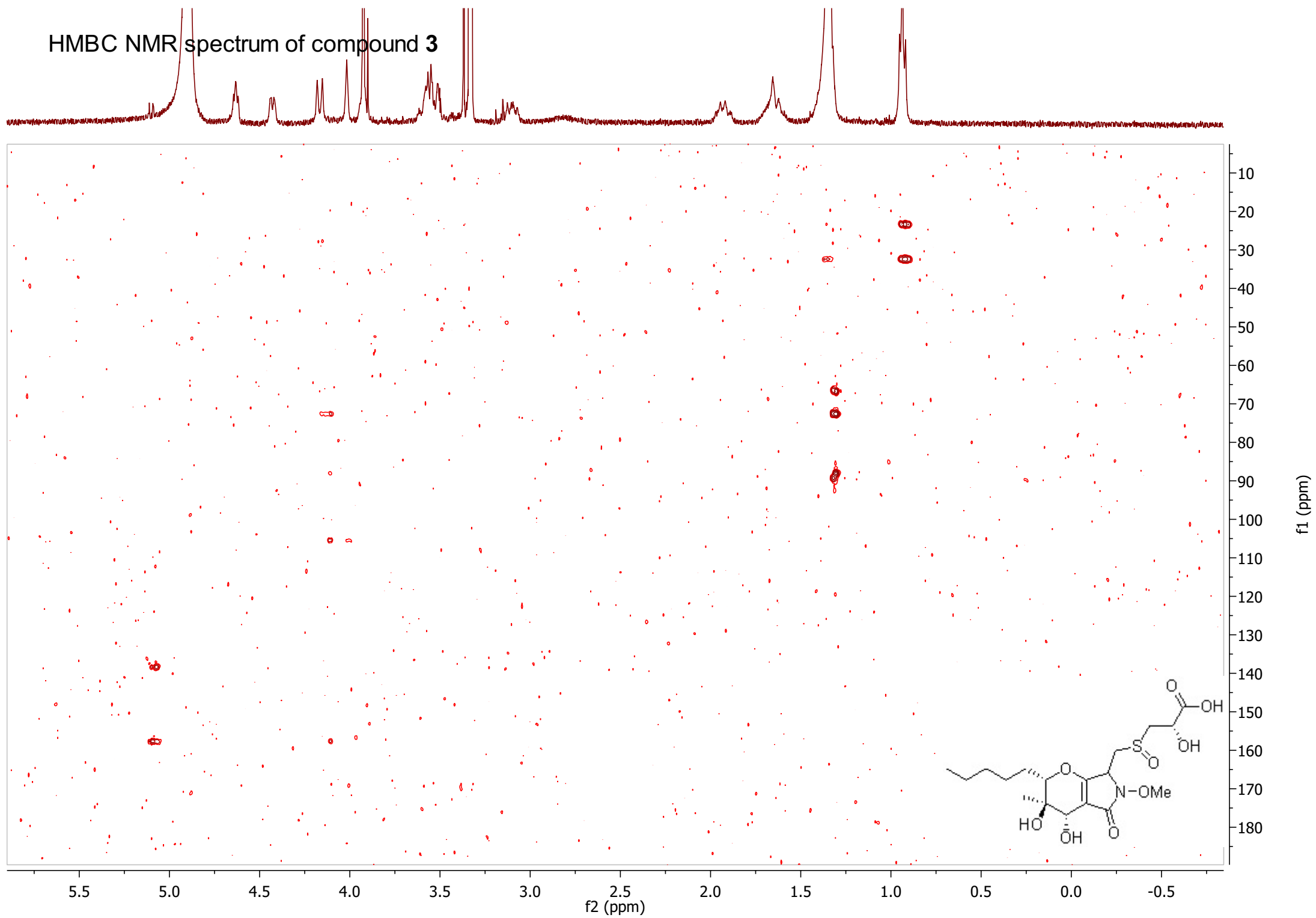


# HSQC NMR spectrum of compound 3

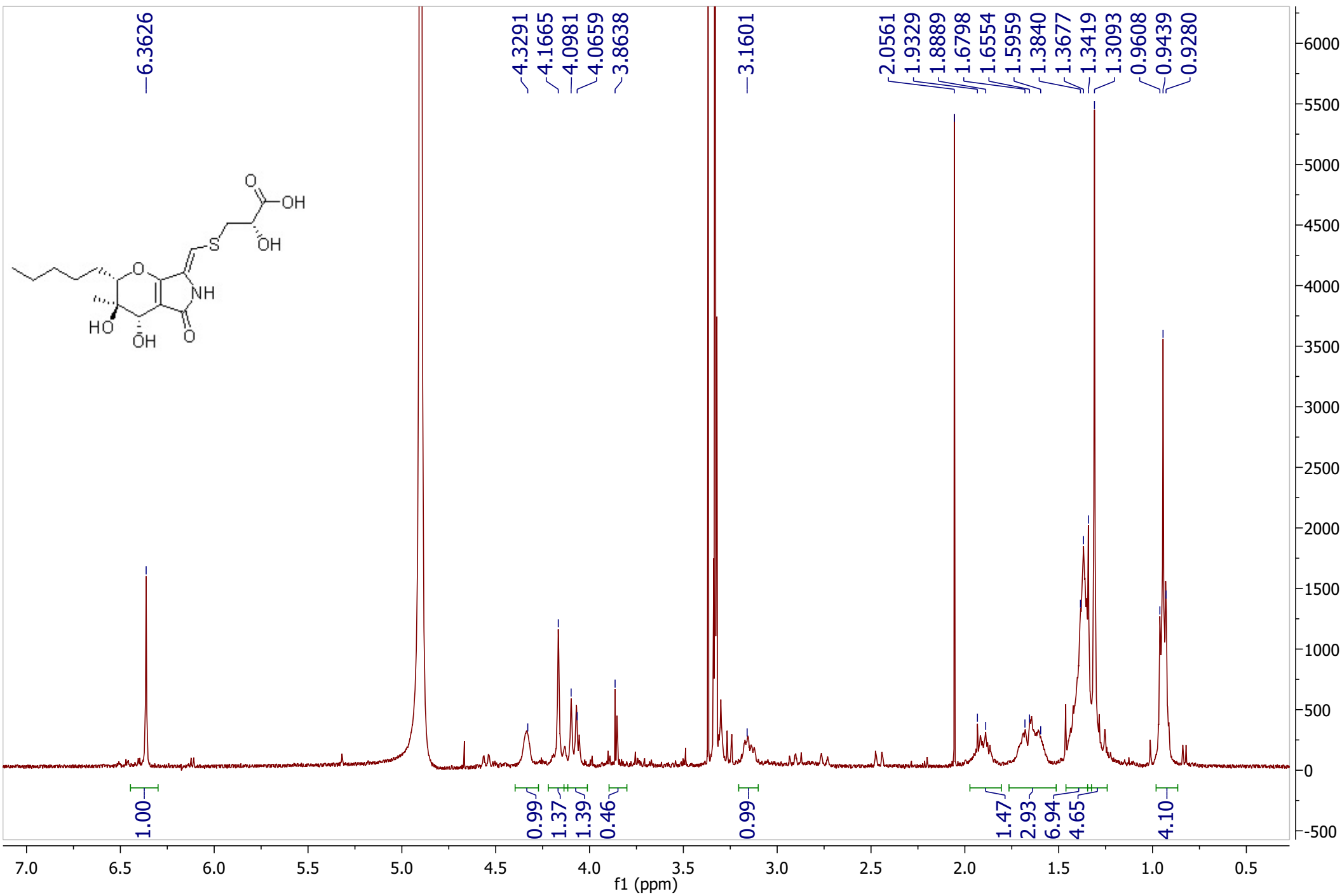




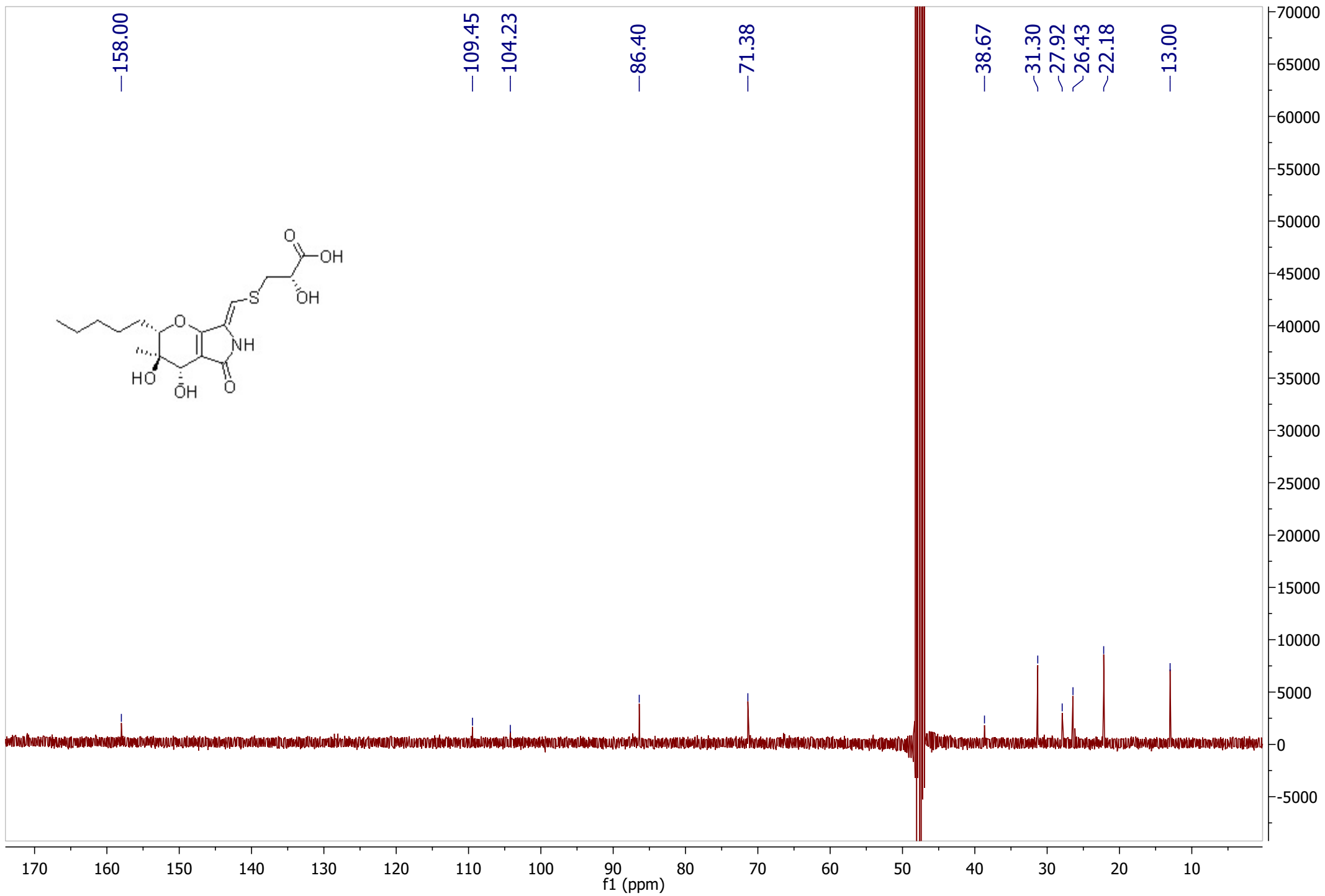
# HMBC NMR spectrum of compound 3



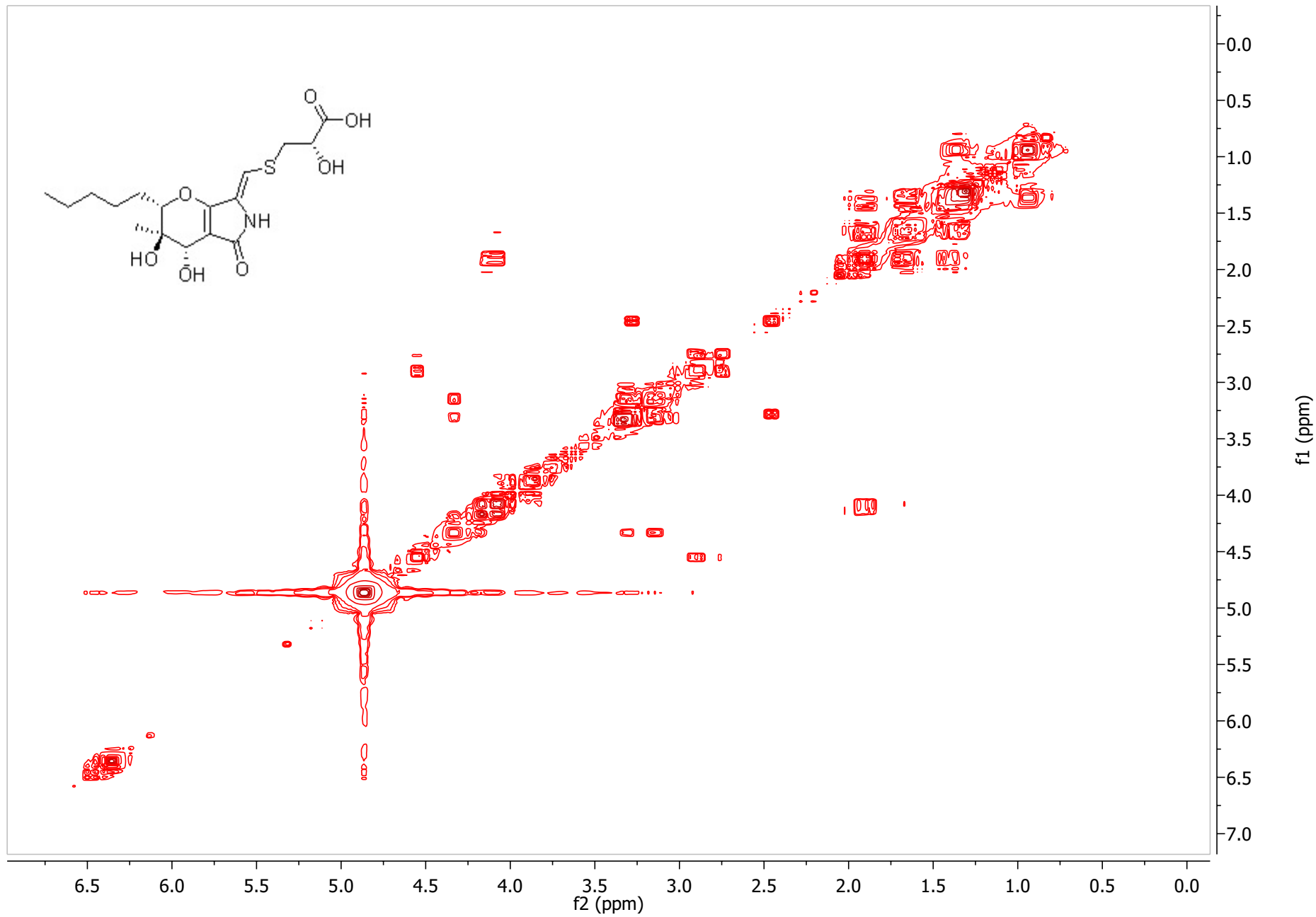
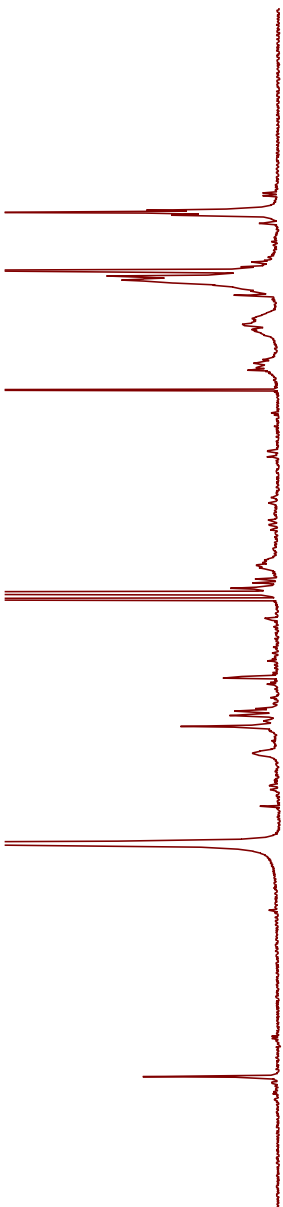
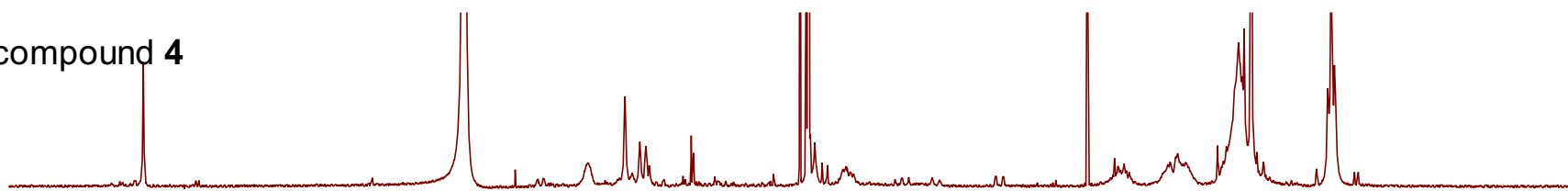
<sup>1</sup>H NMR spectrum of compound **4** (400 MHz in methanol-d<sub>4</sub>)



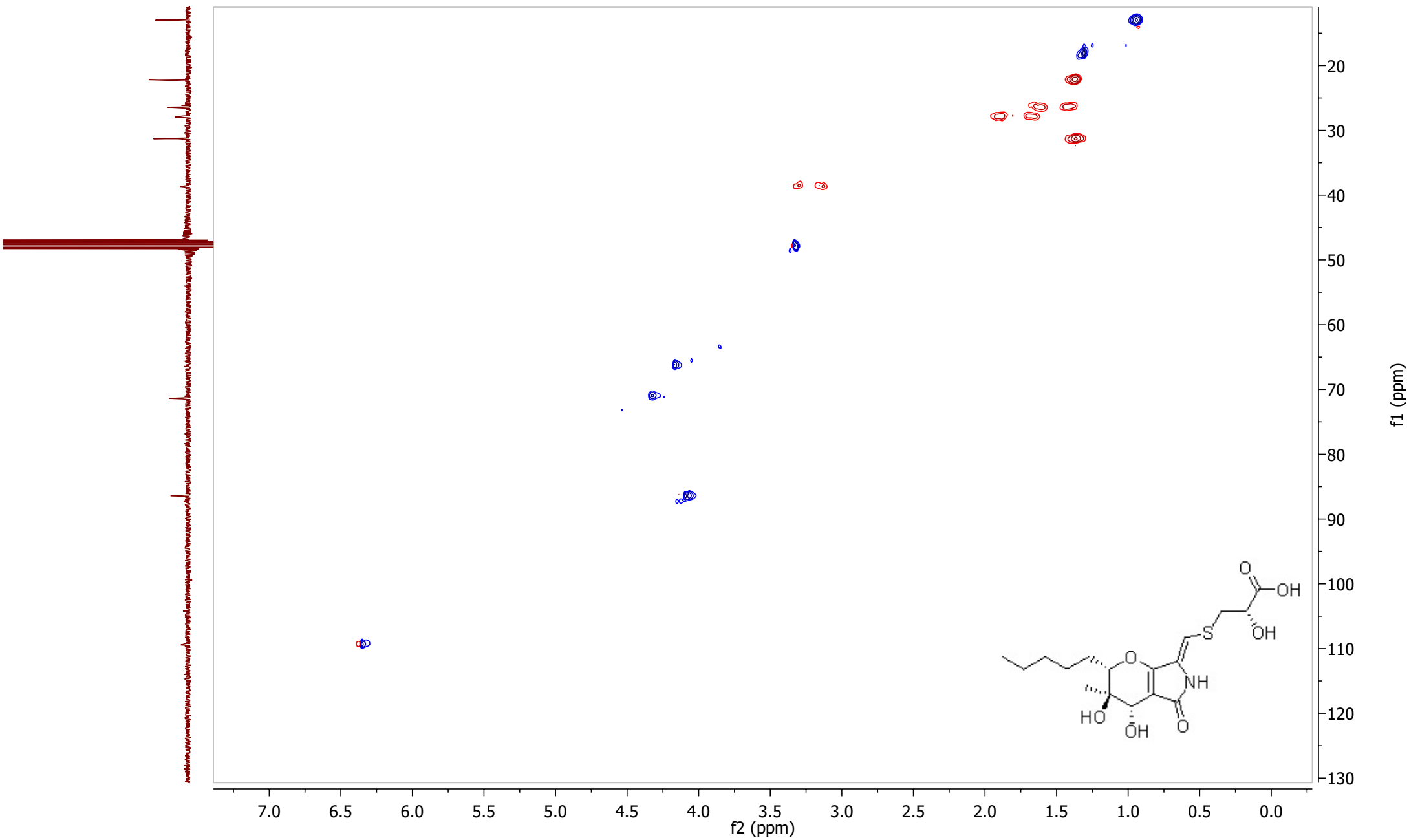
<sup>13</sup>C NMR spectrum of compound **4**



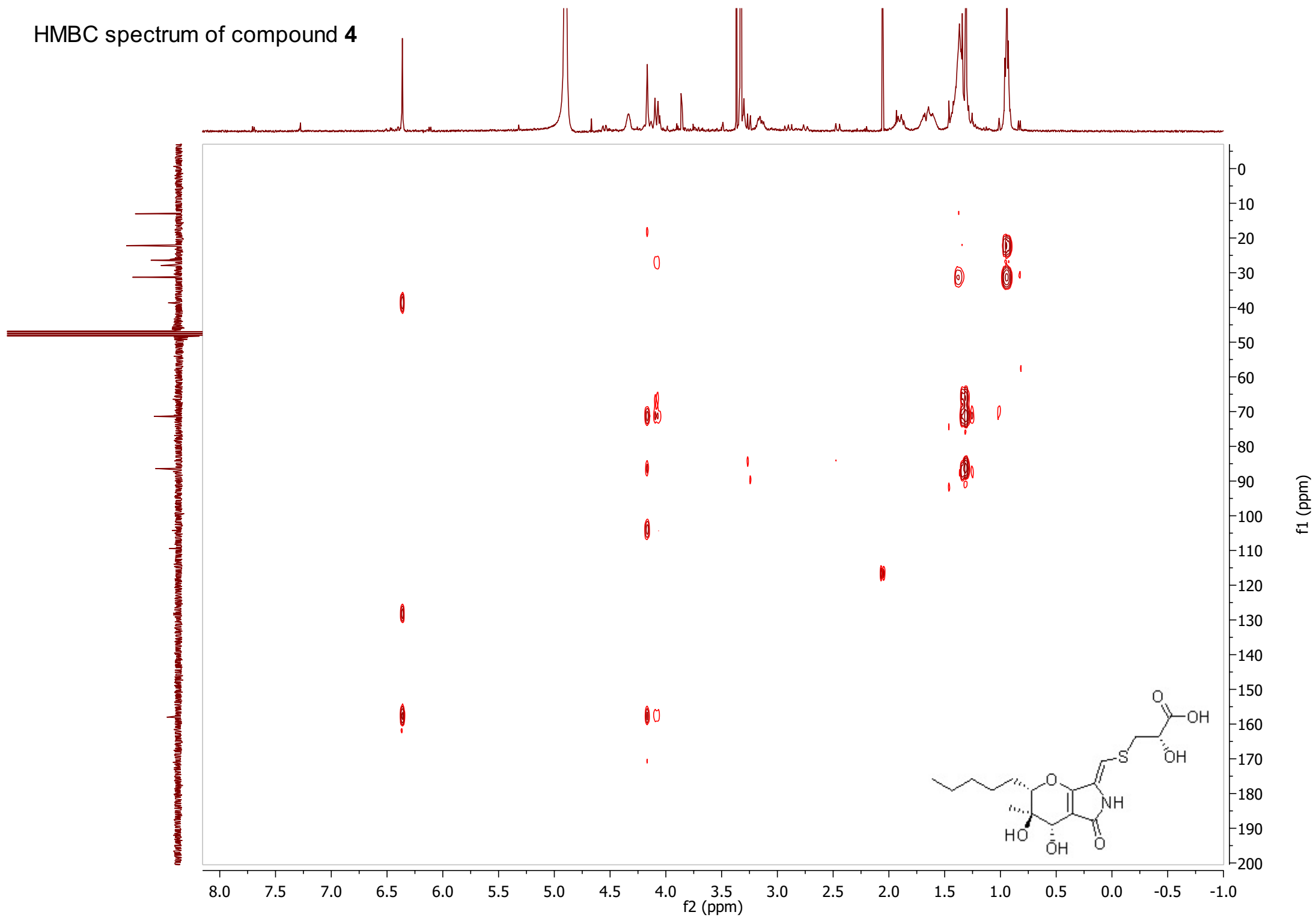
$^1\text{H}$ - $^1\text{H}$  COSY of compound **4**



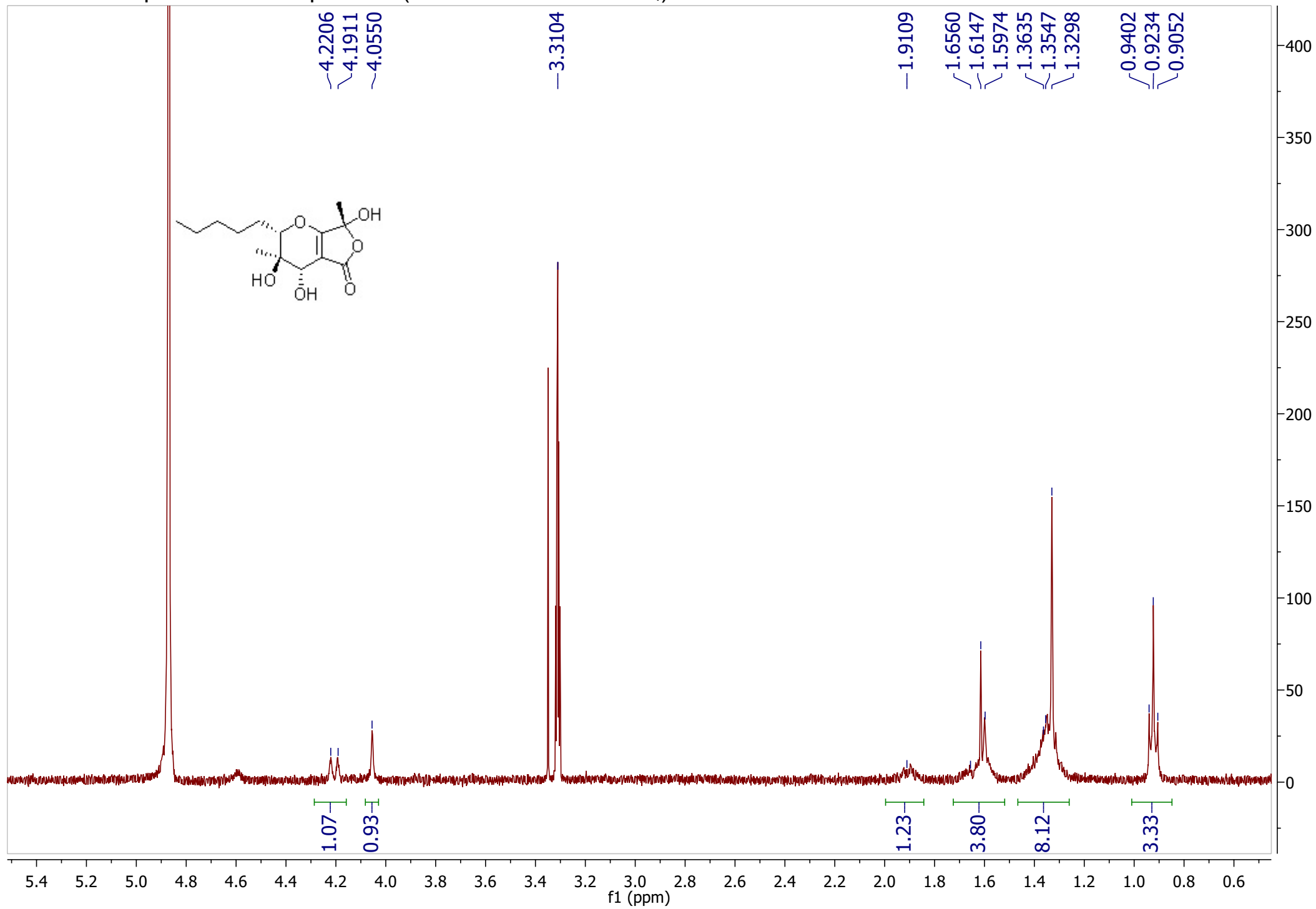
# HSQC NMR spectrum of compound 4



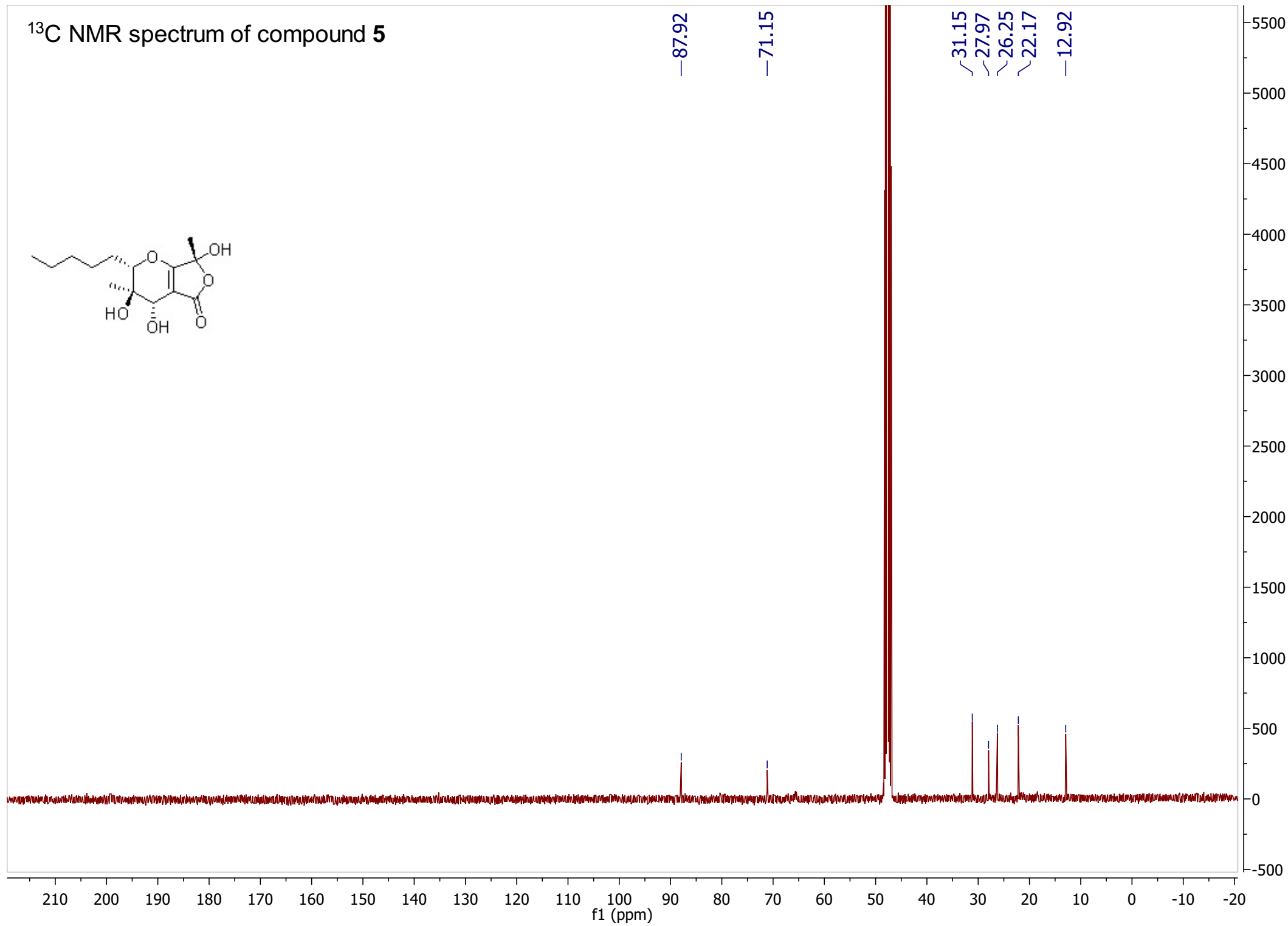
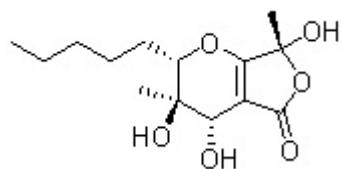
HMBC spectrum of compound 4



<sup>1</sup>H NMR spectrum of compound **5** (400 MHz in methanol-*d*<sub>4</sub>)

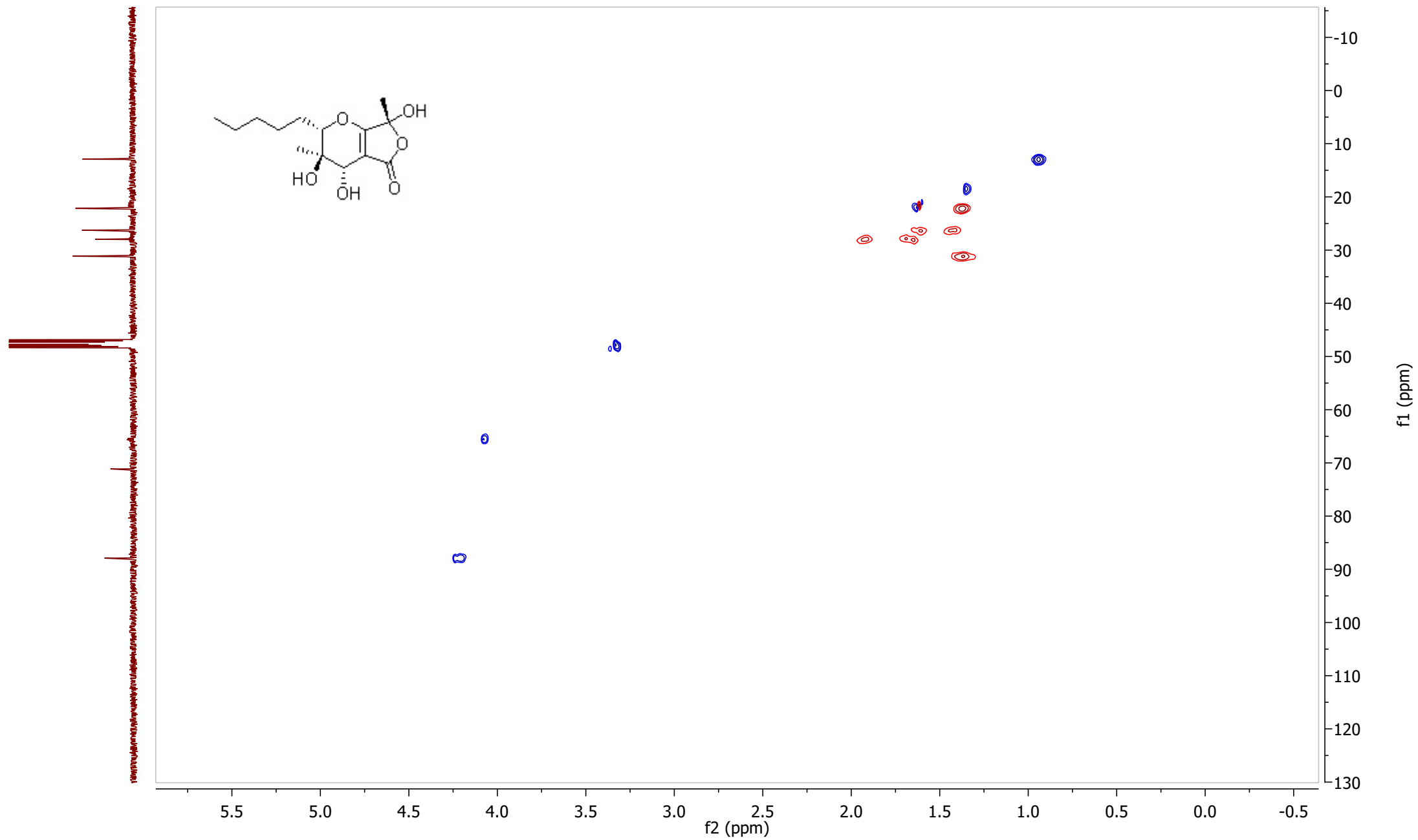


<sup>13</sup>C NMR spectrum of compound **5**

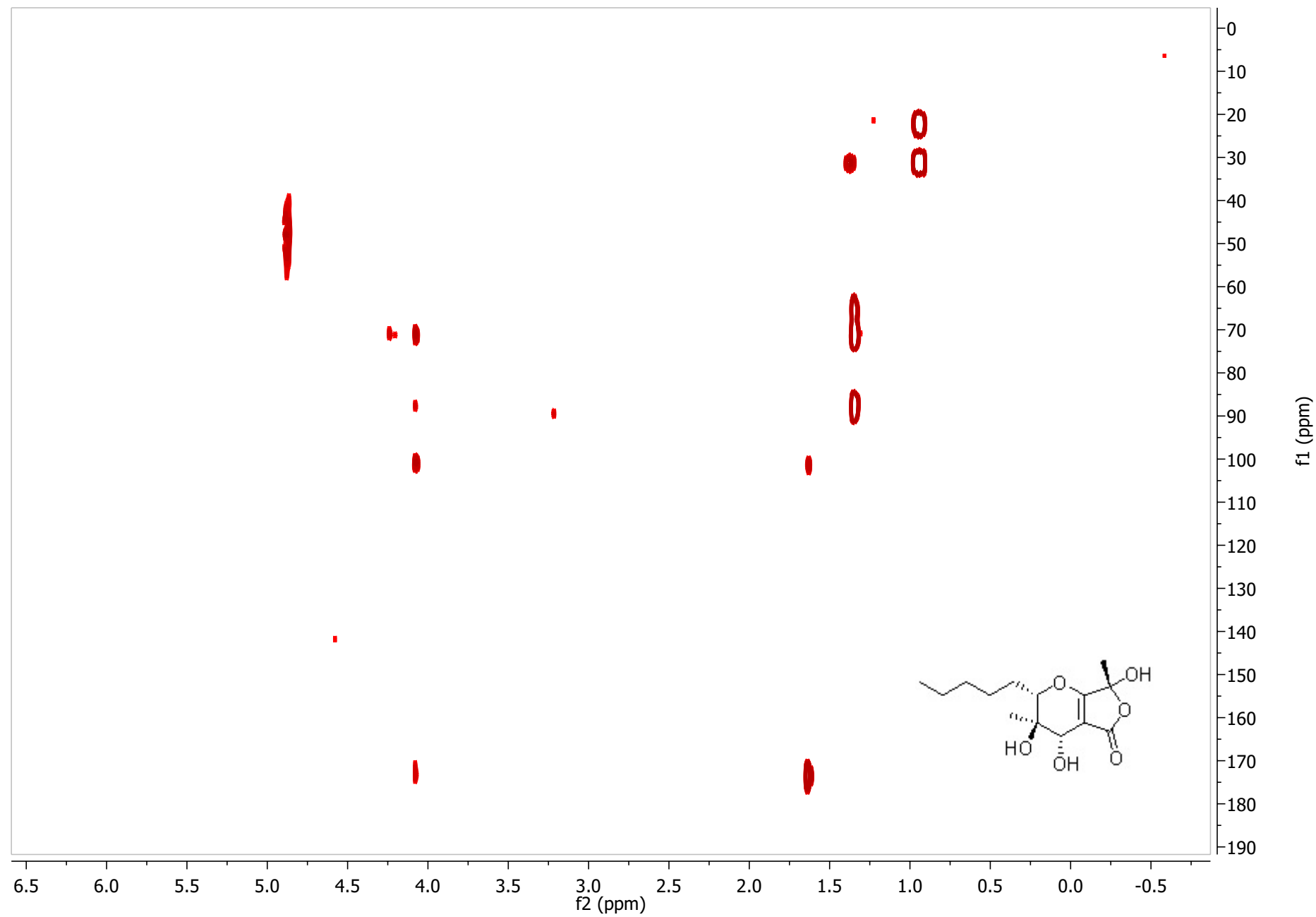




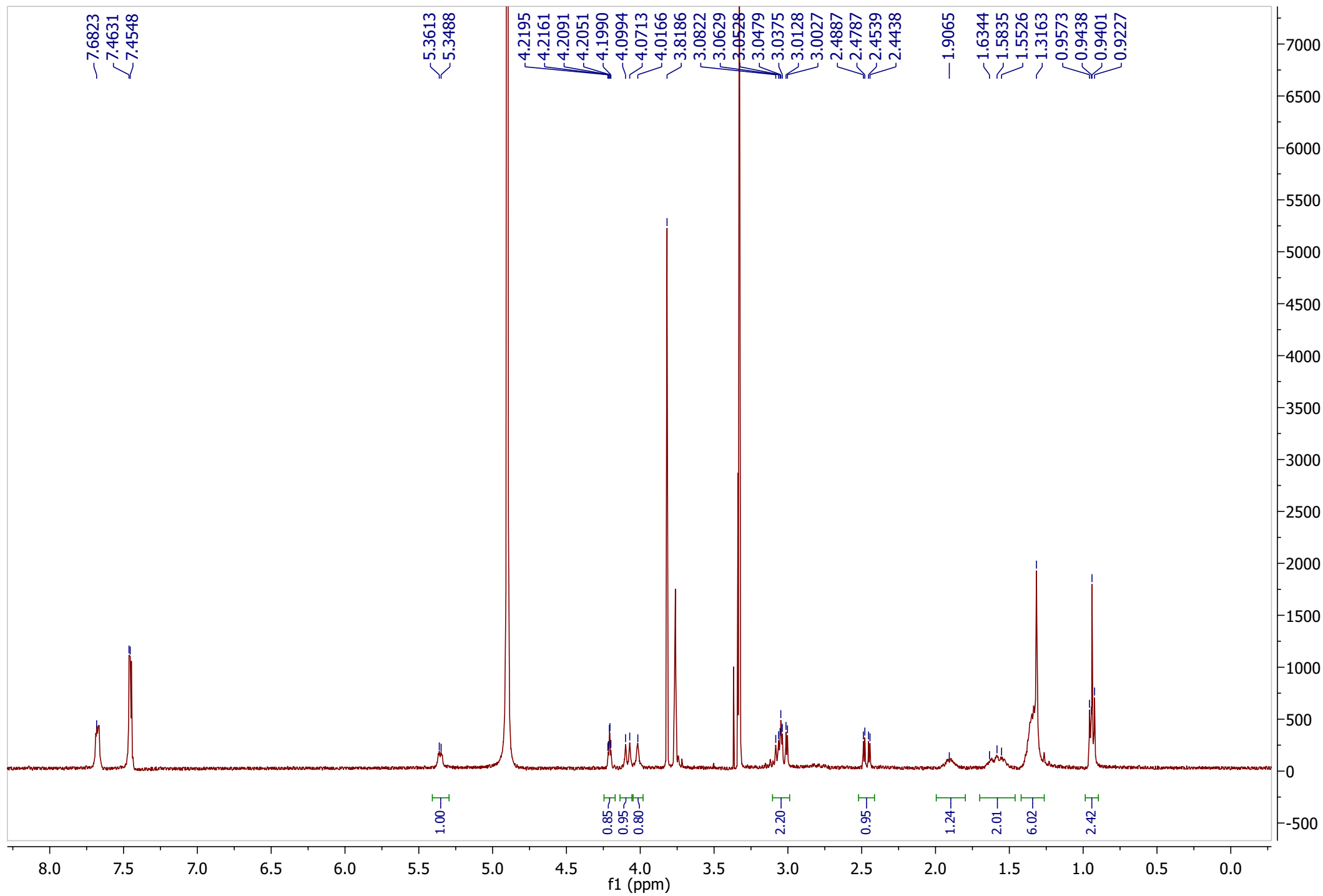
# HSQC spectrum of compound 5



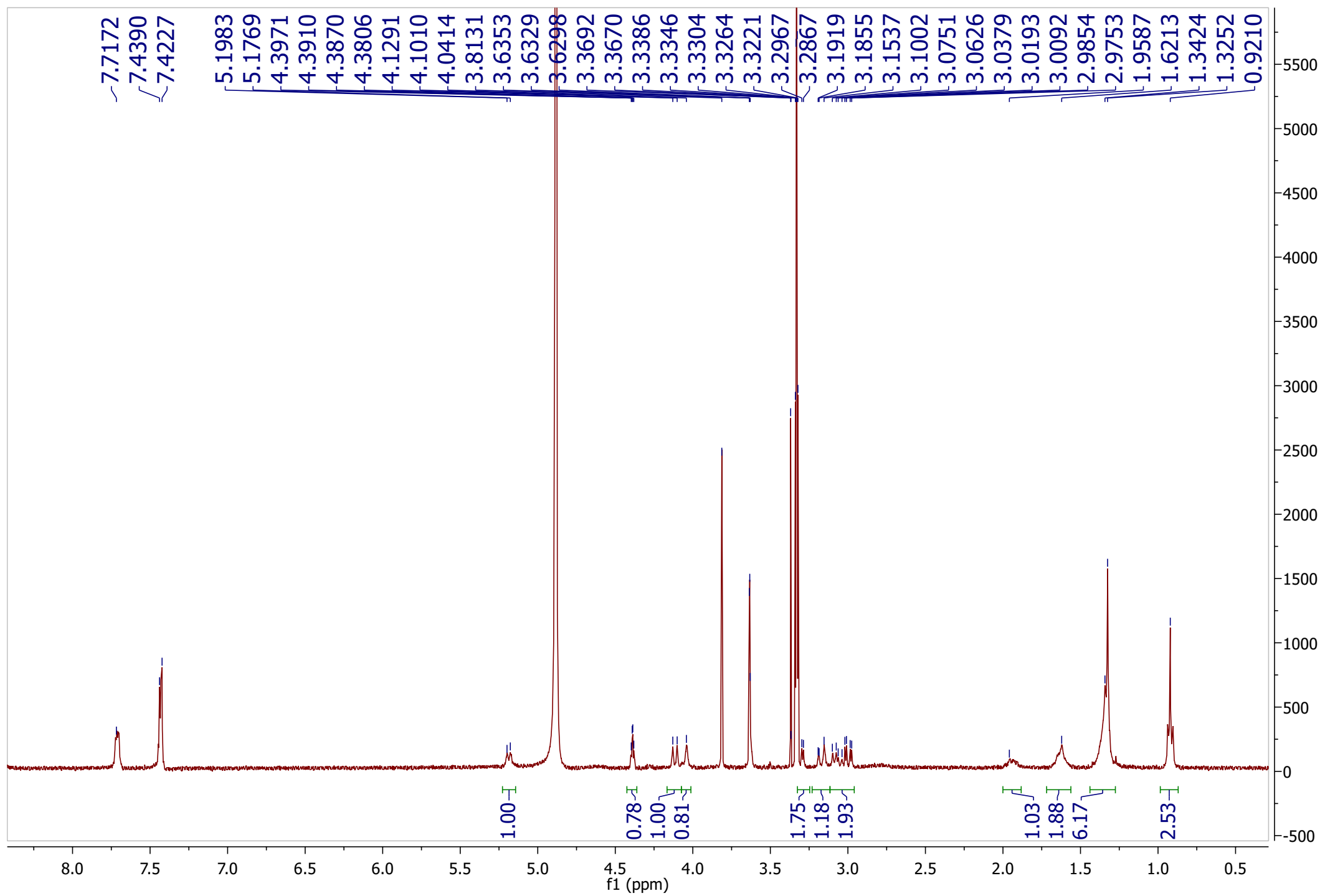
# HMBC spectrum of compound 5



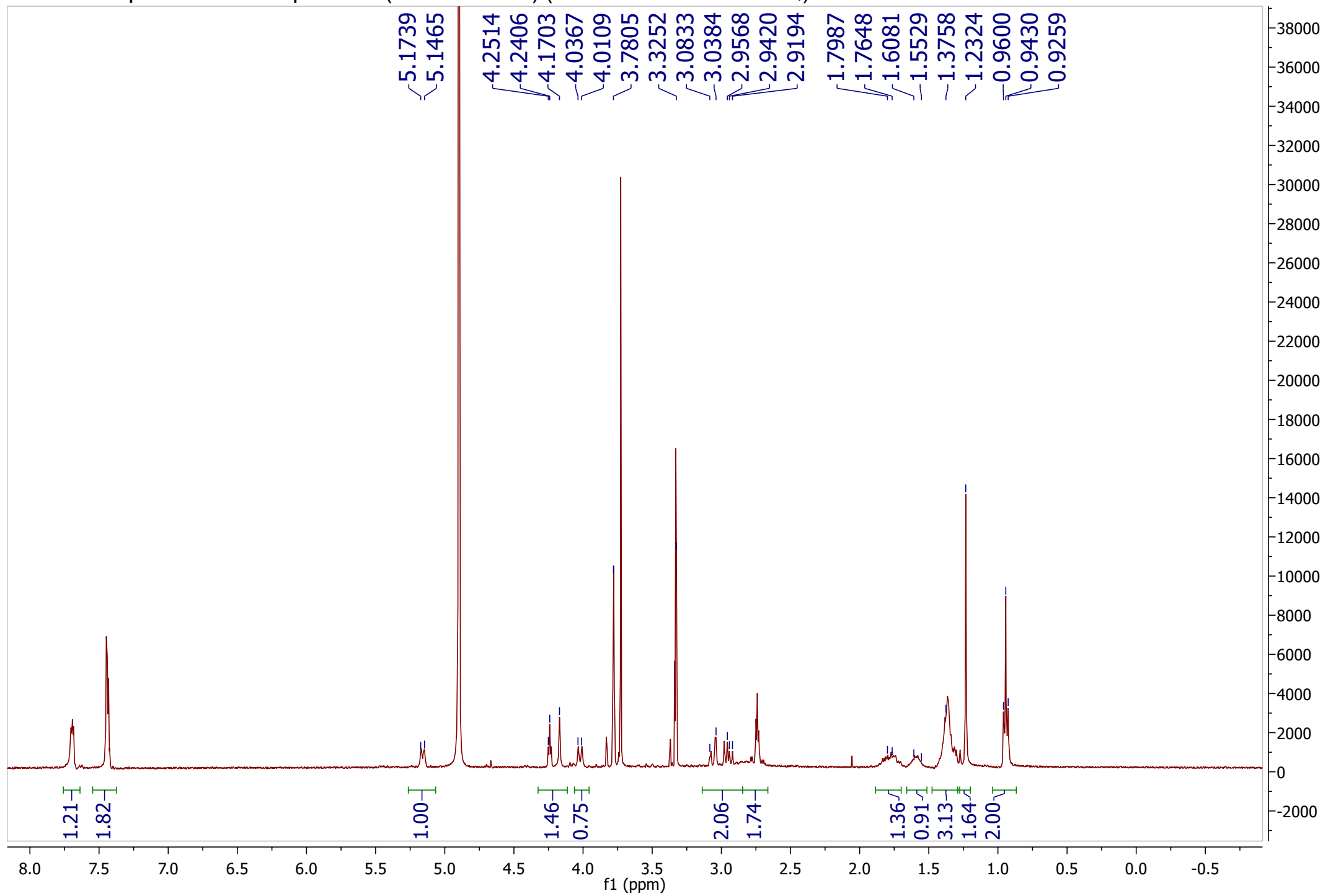
<sup>1</sup>H NMR spectrum of compound **7** (*R*-MTPA of **1**) (400 MHz in methanol-*d*<sub>4</sub>)



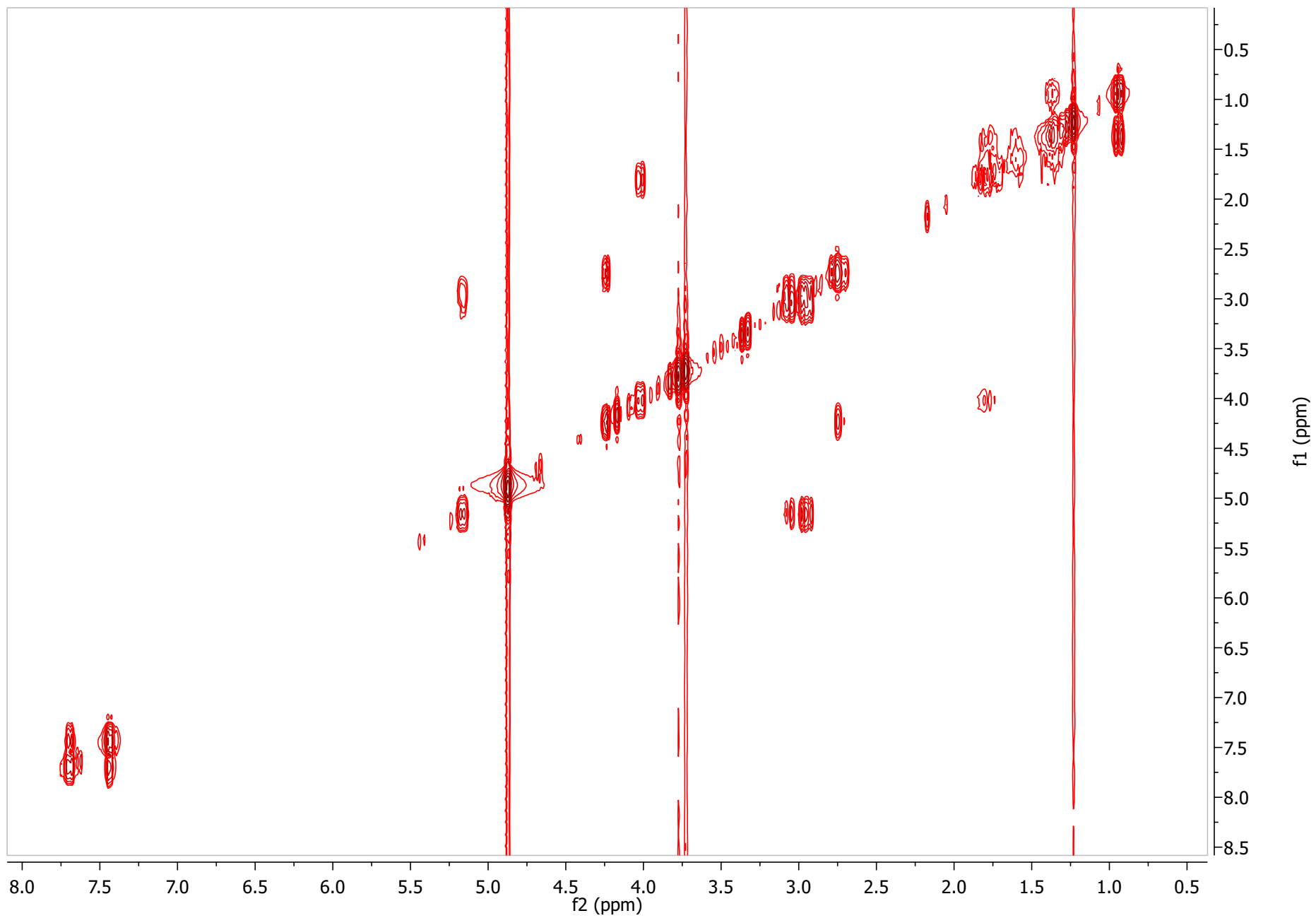
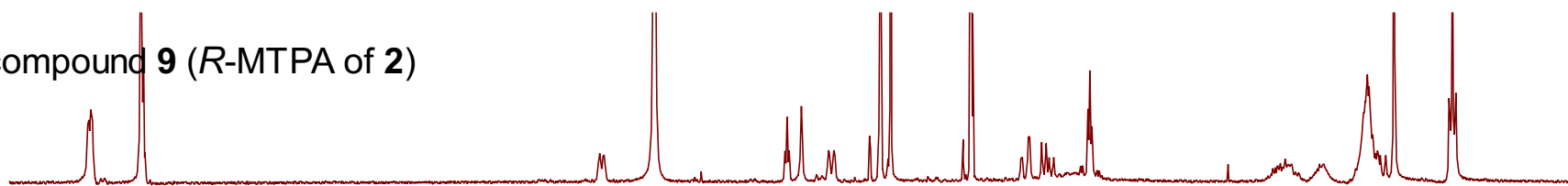
<sup>1</sup>H NMR spectrum of compound **8** (S-MTPA of **1**) (400 MHz in methanol-d<sub>4</sub>)



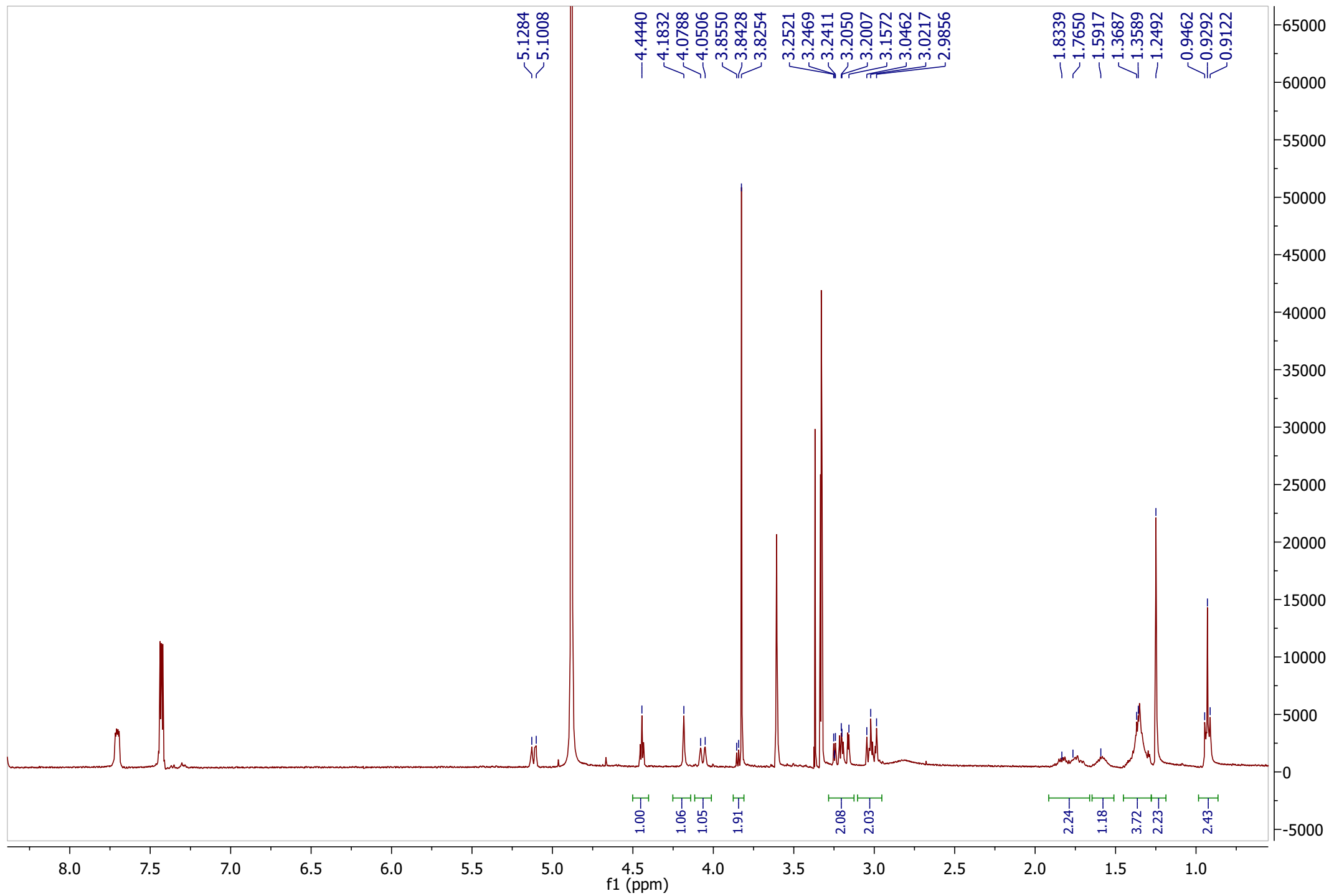
$^1\text{H}$  NMR spectrum of compound **9** (*R*-MTPA of **1**) (400 MHz in methanol- $d_4$ )



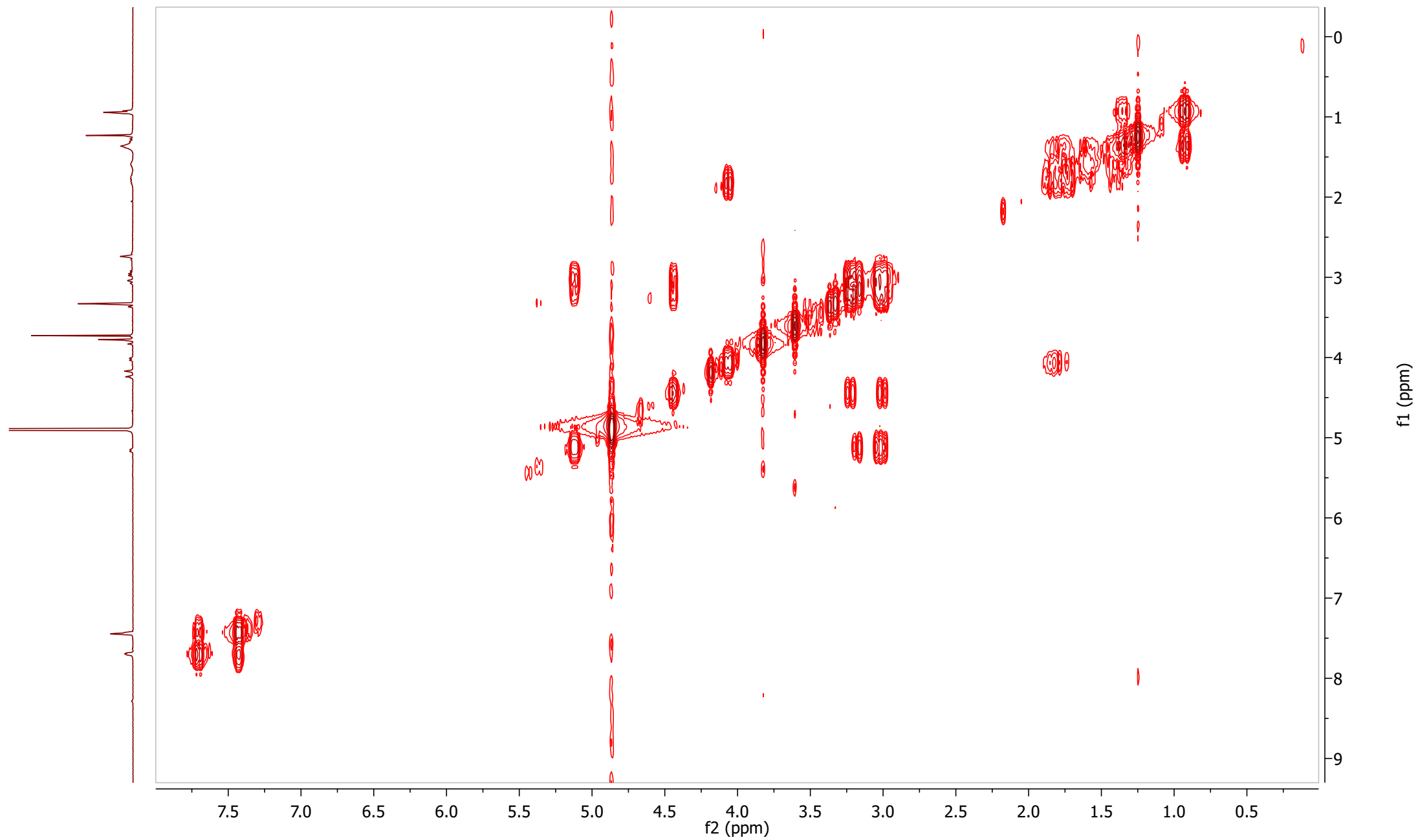
$^1\text{H}$ - $^1\text{H}$  COSY of compound **9** (*R*-MTPA of **2**)



$^1\text{H}$  NMR spectrum of compound **10** (S-MTPA of **2**) (400 MHz in methanol- $d_4$ )

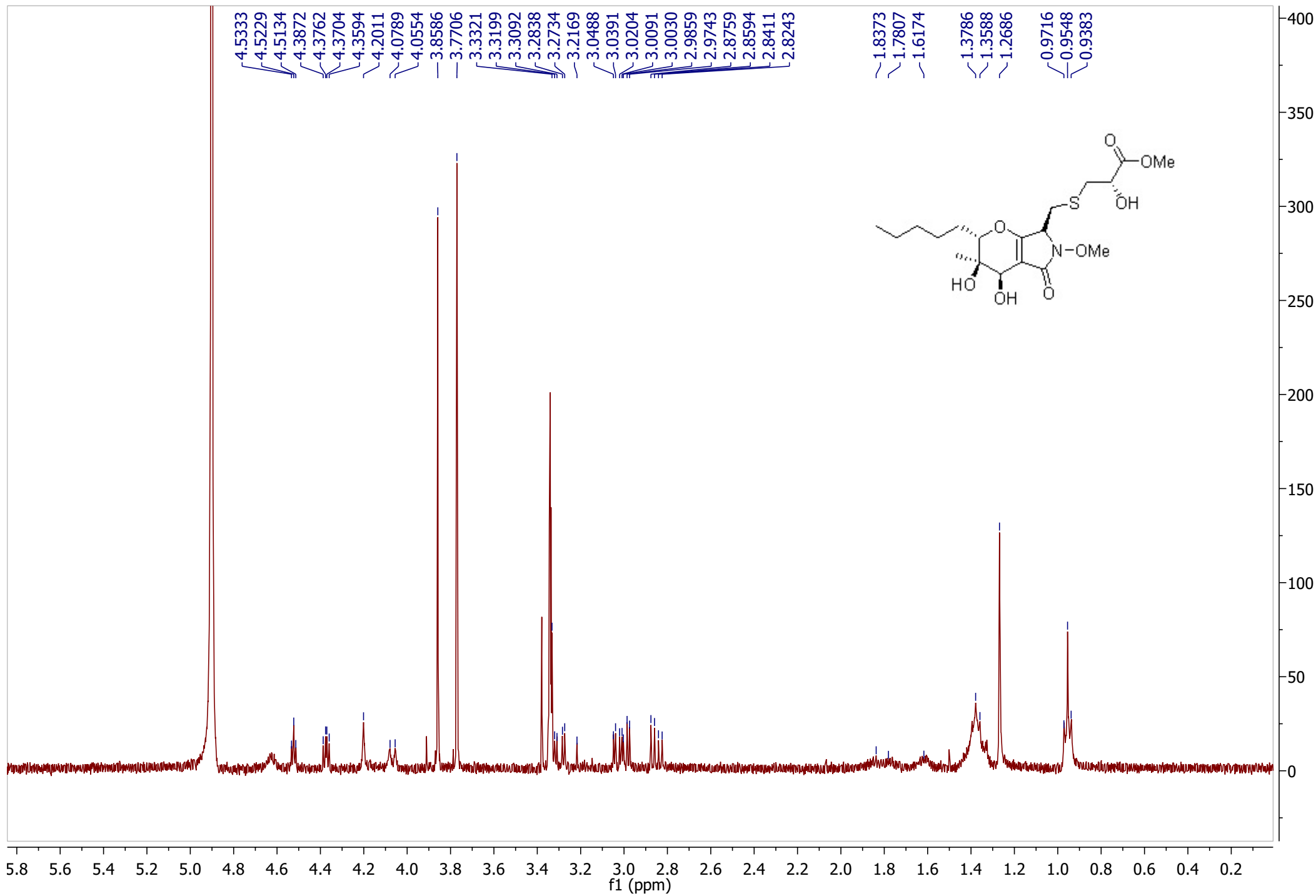


$^1\text{H}$ - $^1\text{H}$  COSY of compound **10** (S-MTPA of **2**)

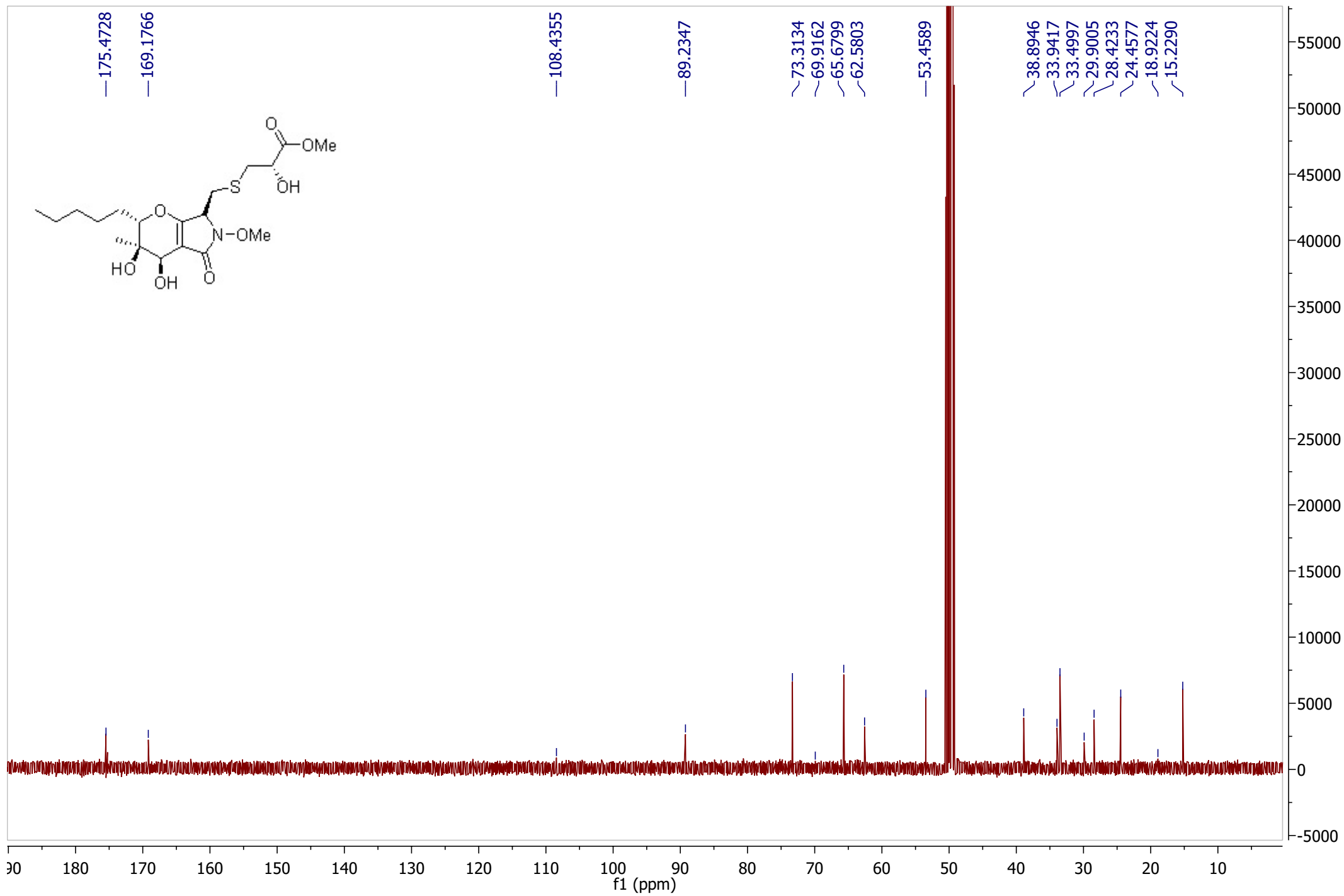




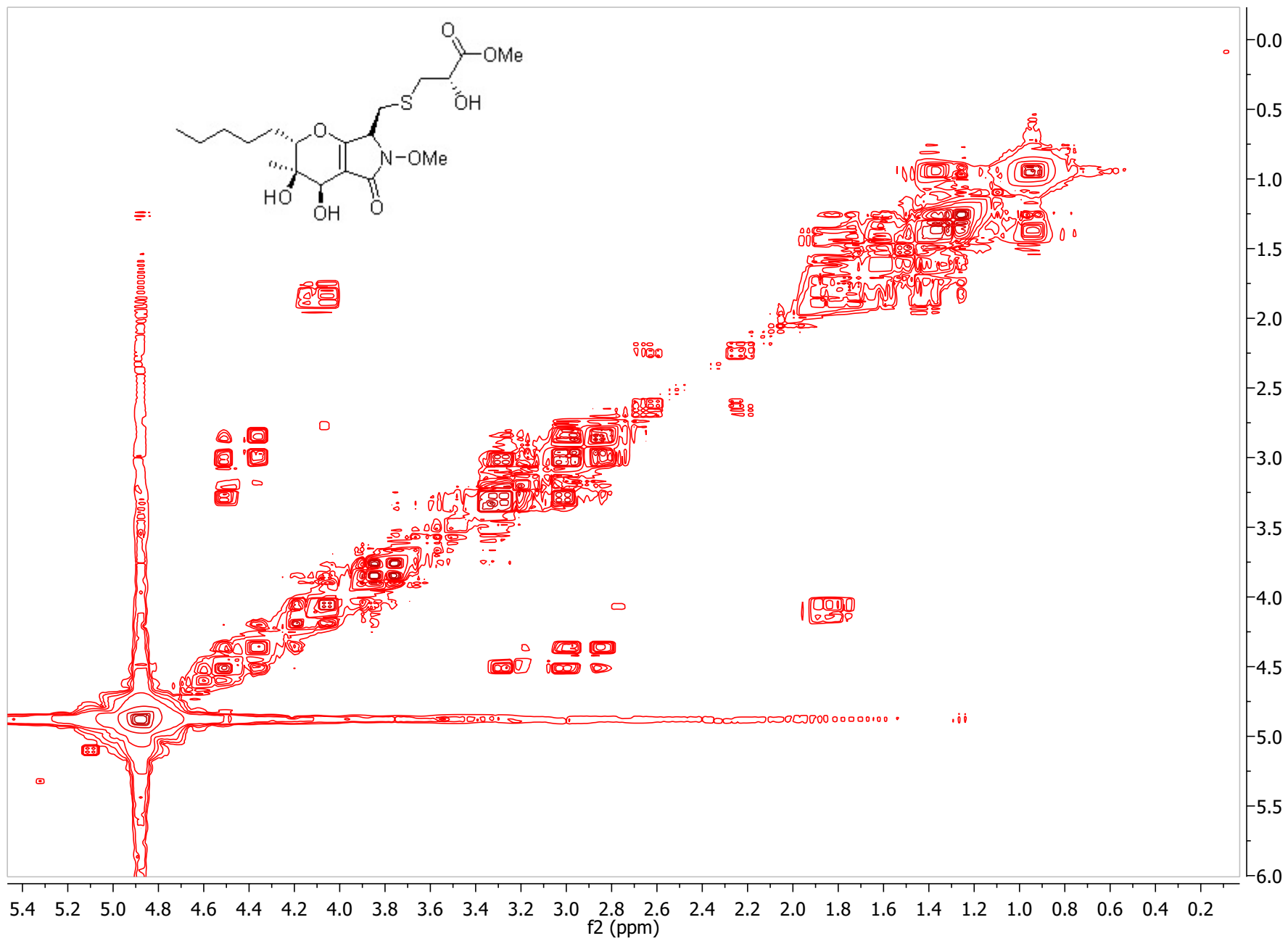
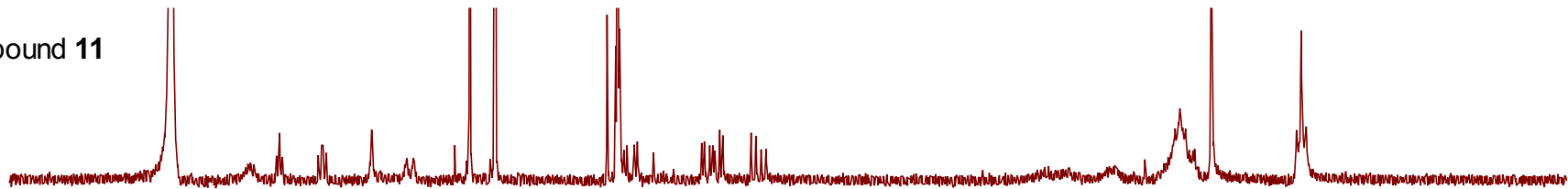
<sup>1</sup>H NMR spectrum of compound **11** (400 MHz in methanol-d<sub>4</sub>)



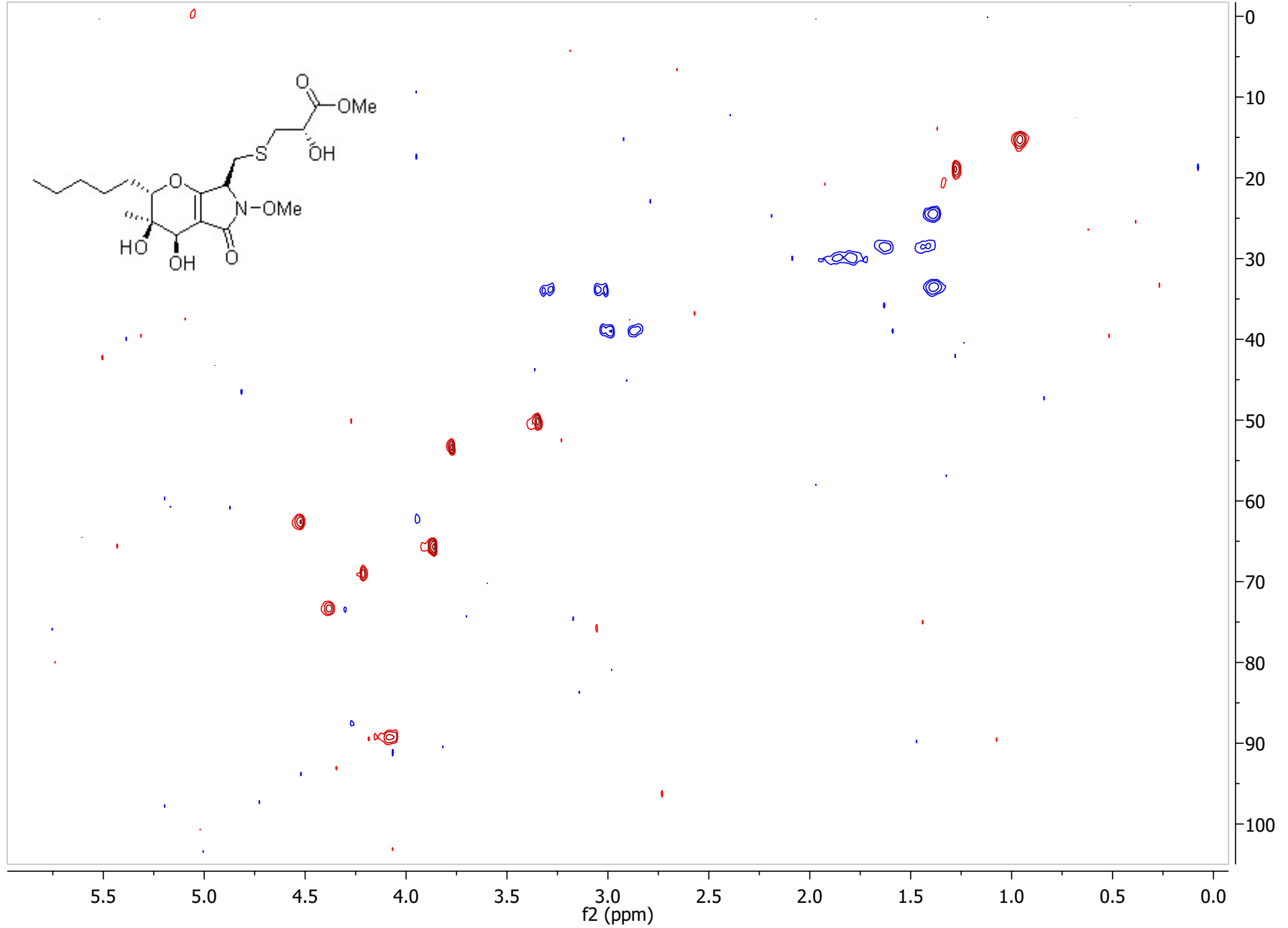
$^{13}\text{C}$  NMR spectrum of compound **11**



$^1\text{H}$ - $^1\text{H}$  COSY of compound **11**

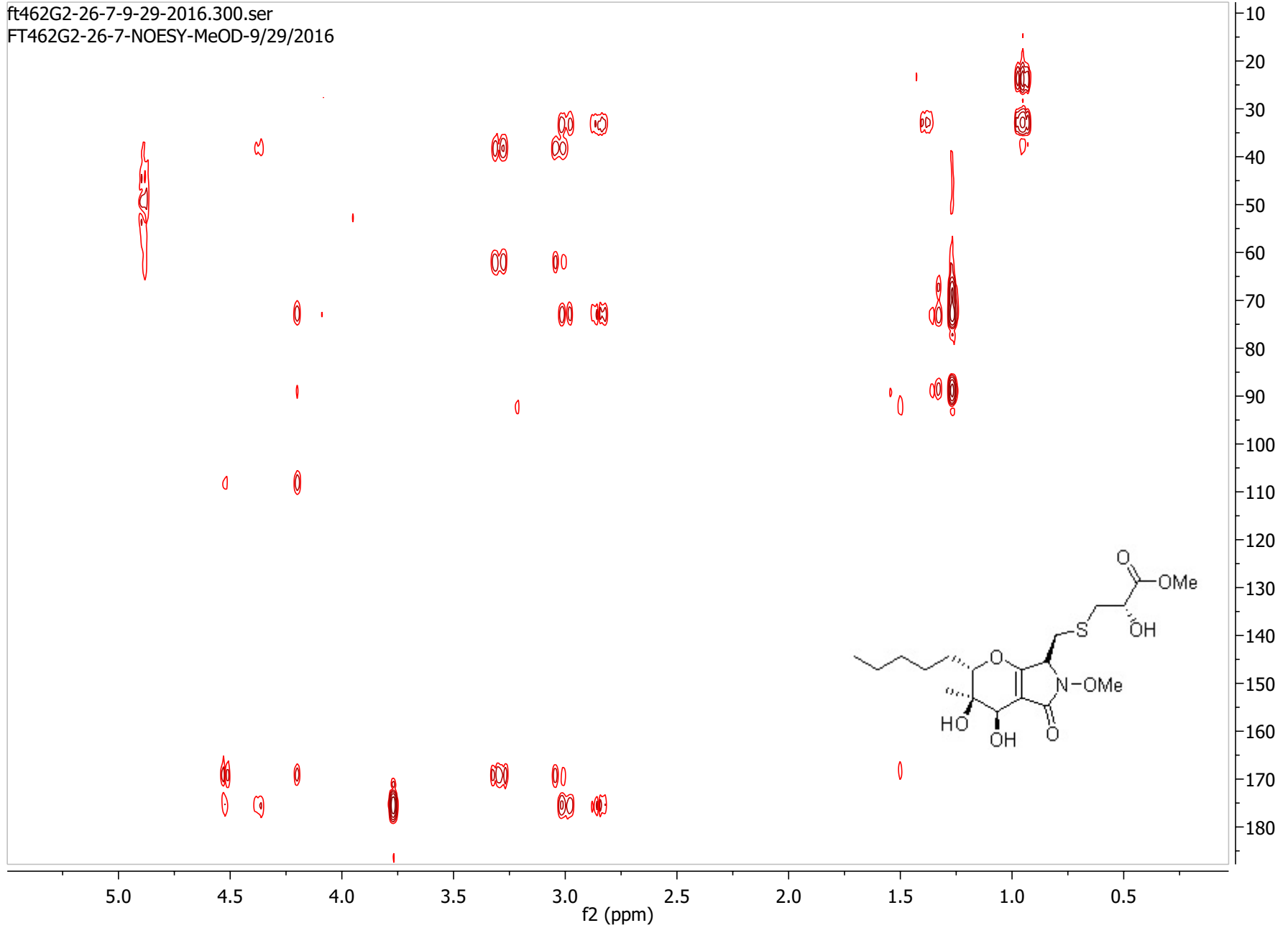


HSQC spectrum of compound 11



HMBC spectrum of compound 11

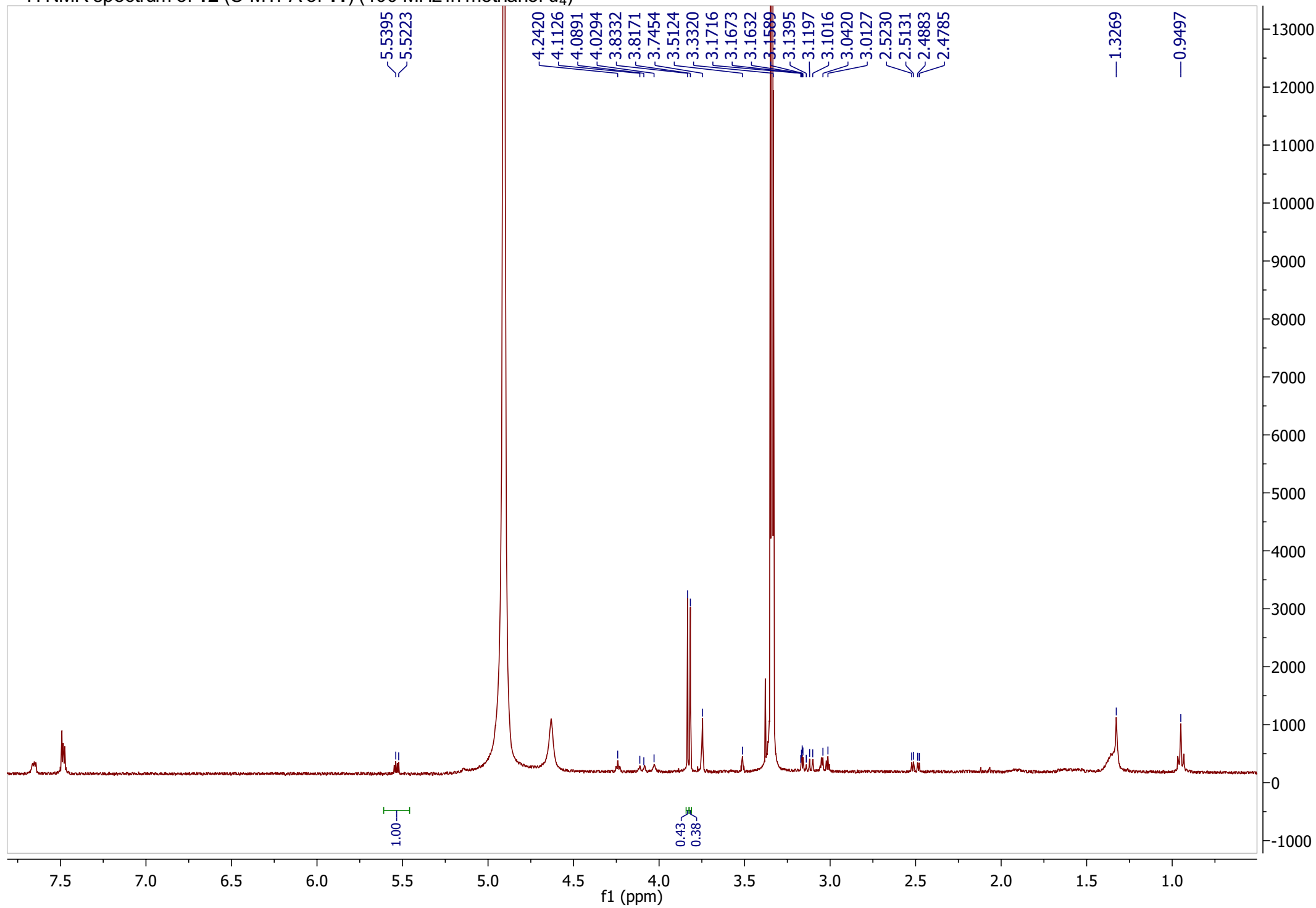
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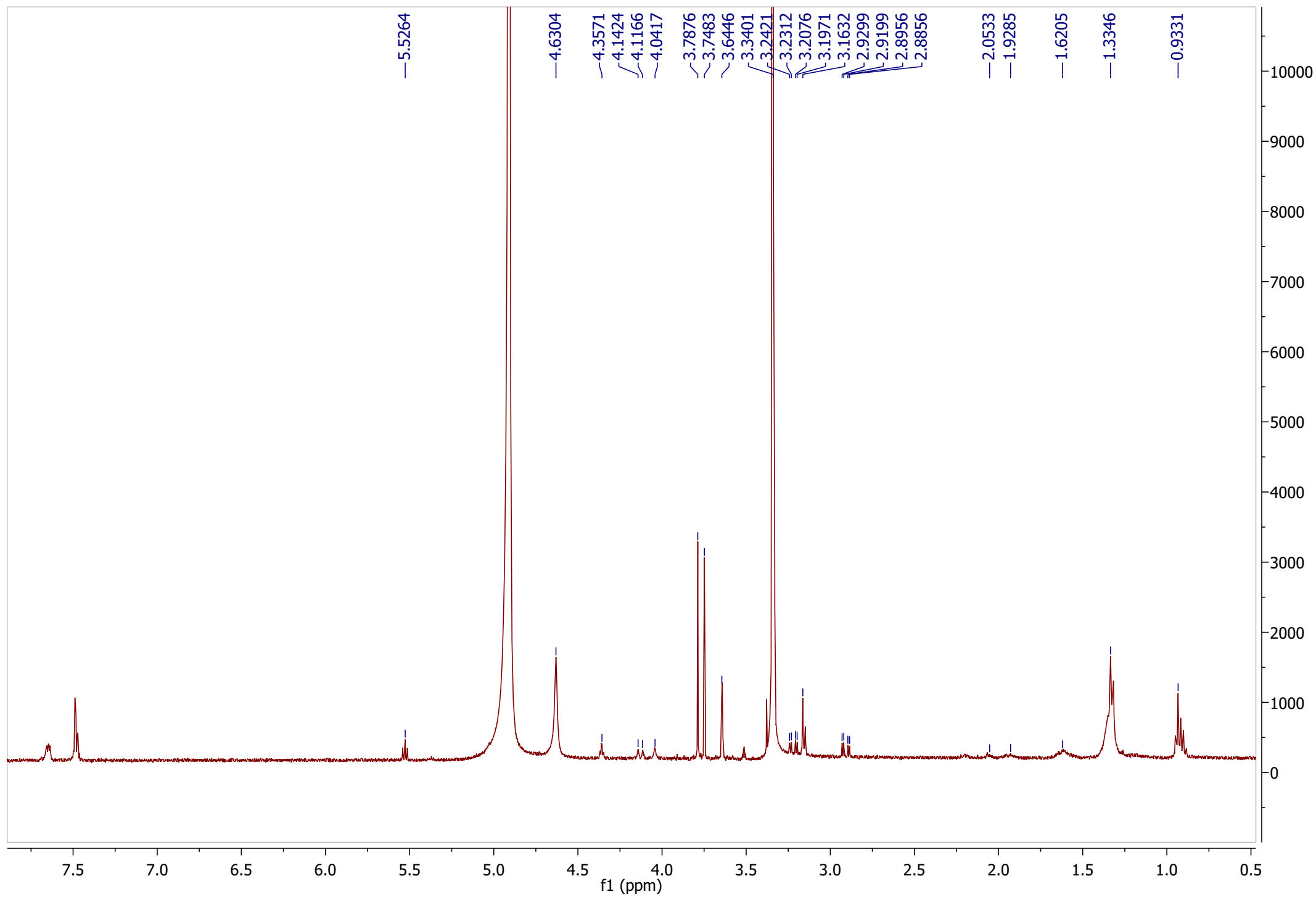
f1 (ppm)

f2 (ppm)

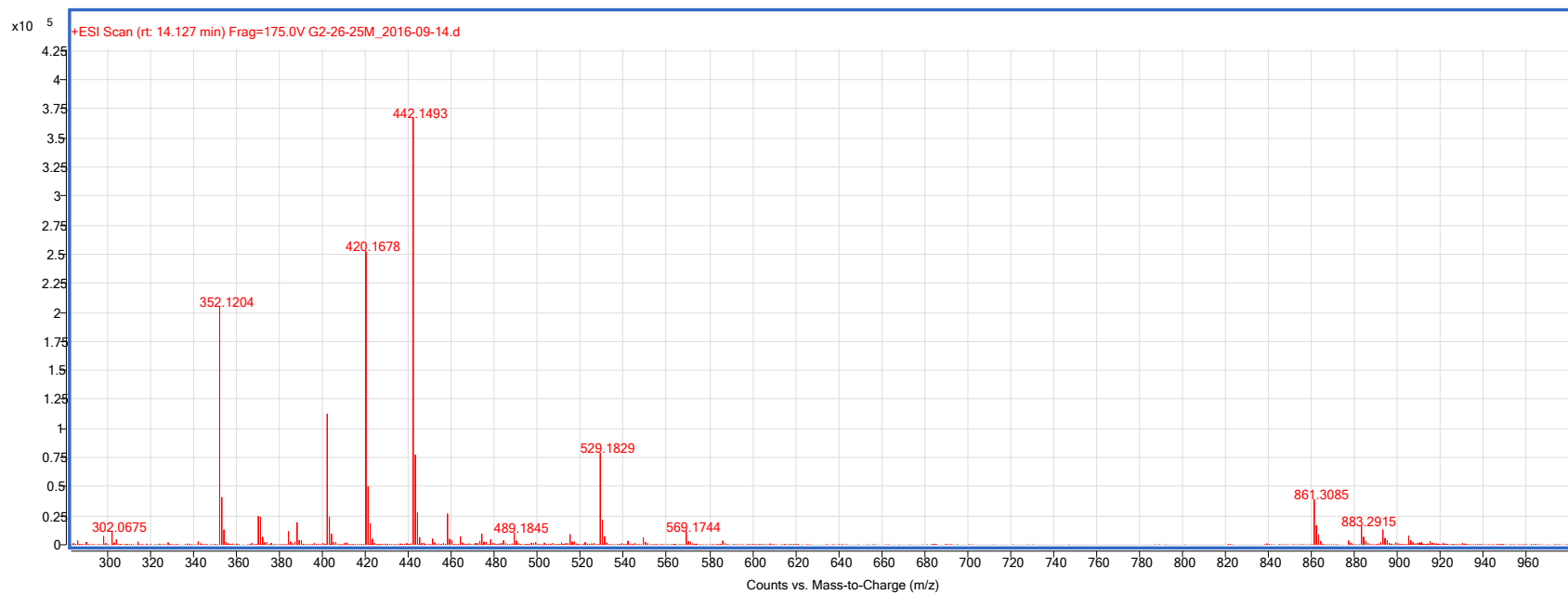
<sup>1</sup>H NMR spectrum of **12** (S-MTPA of **11**) (400 MHz in methanol-*d*<sub>4</sub>)



<sup>1</sup>H NMR spectrum of **13** (R-MTPA of **11**) (400 MHz in methanol-*d*<sub>4</sub>)

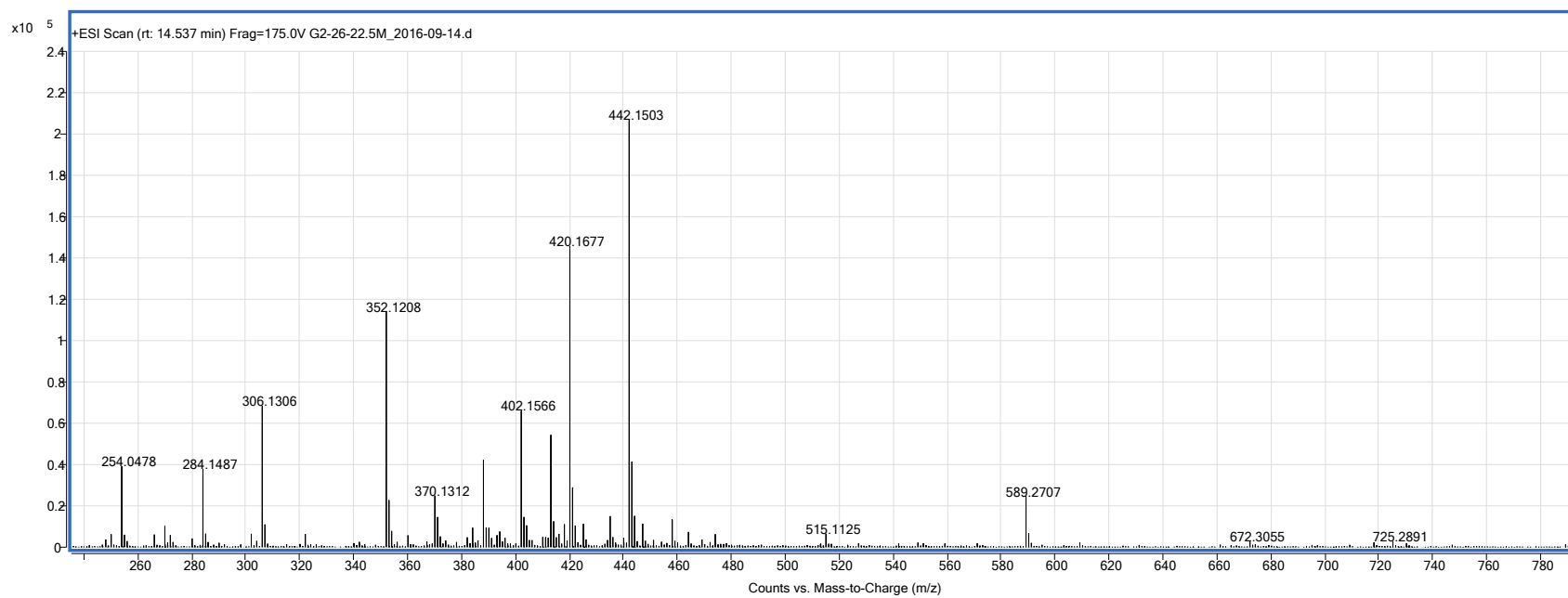


# HRESIMS spectrum of compound 1

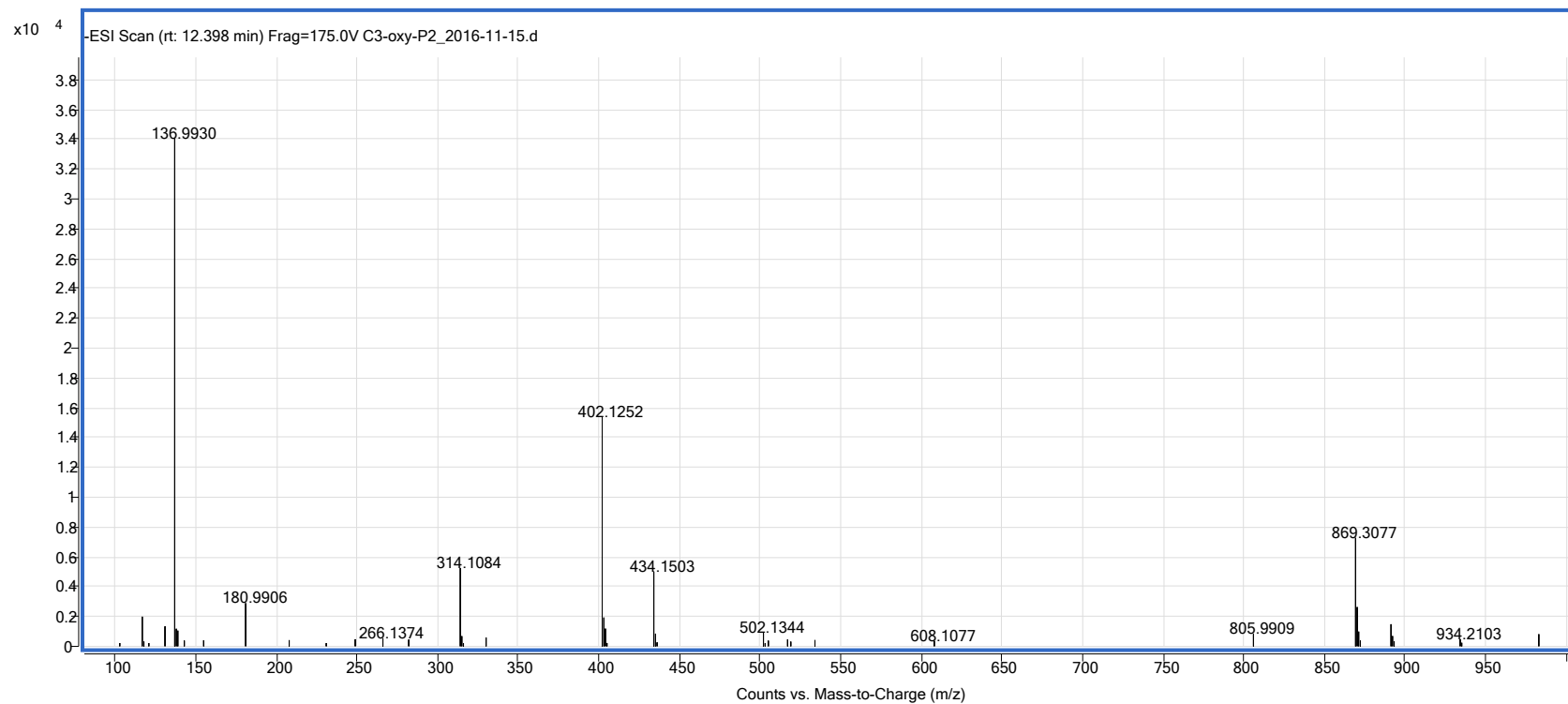




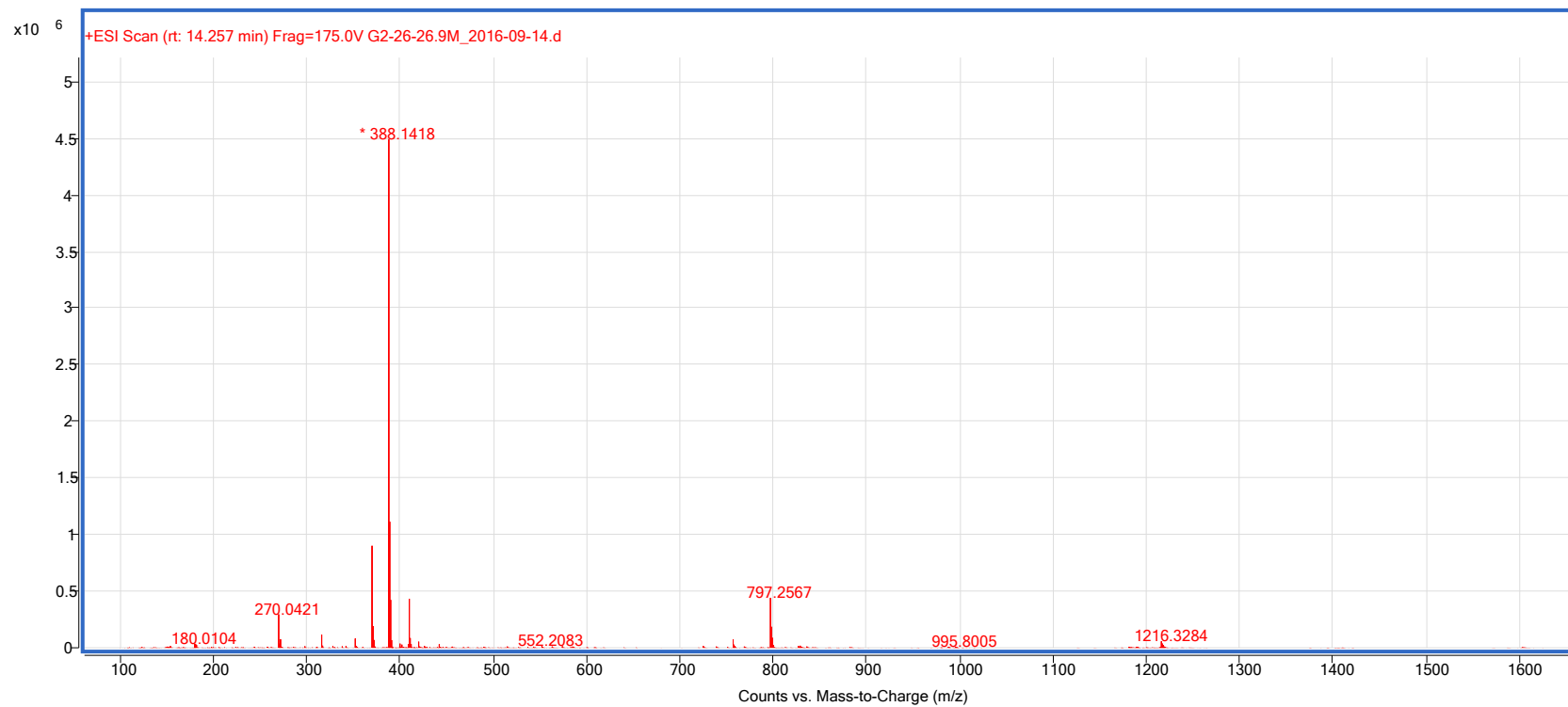
## HRESIMS spectrum of compound 2



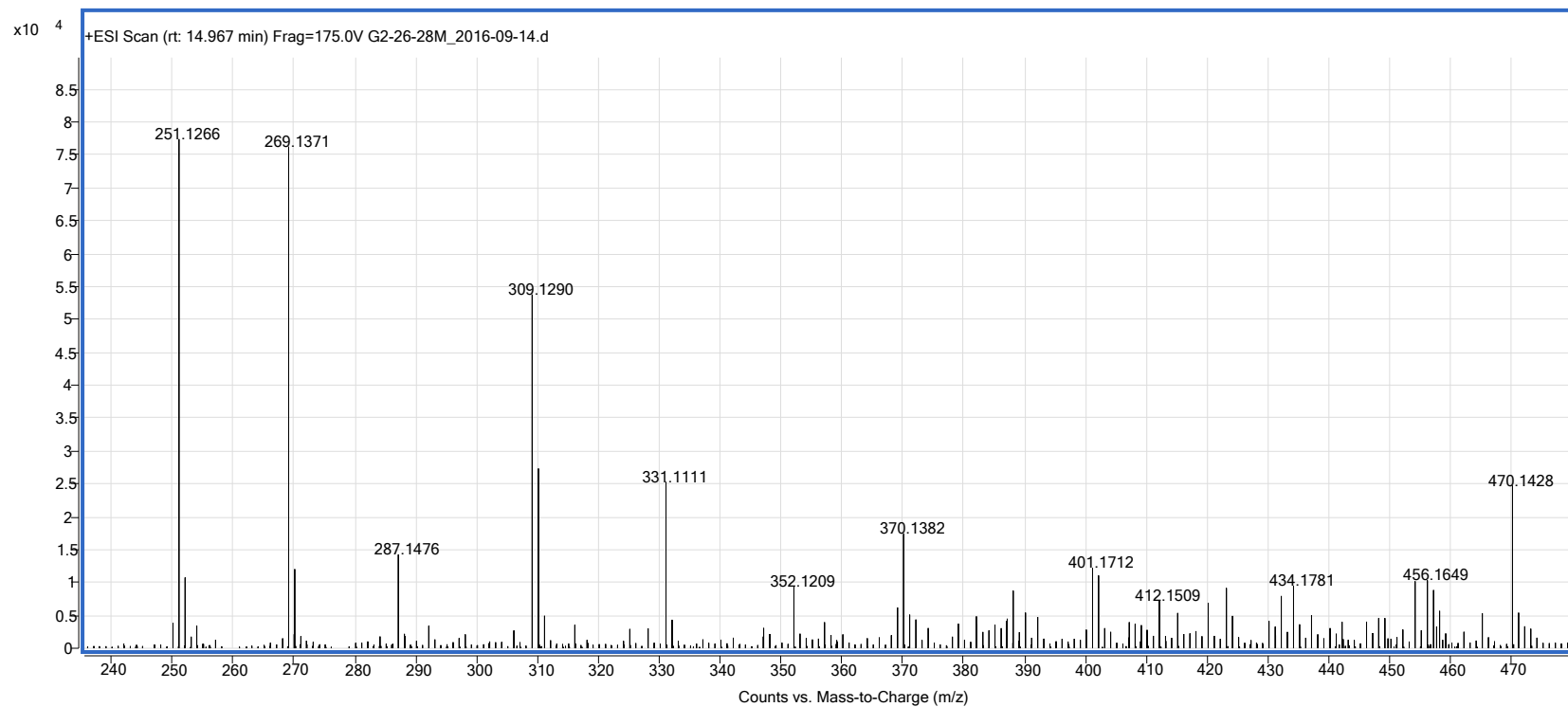
### HRESIMS spectrum of compound 3



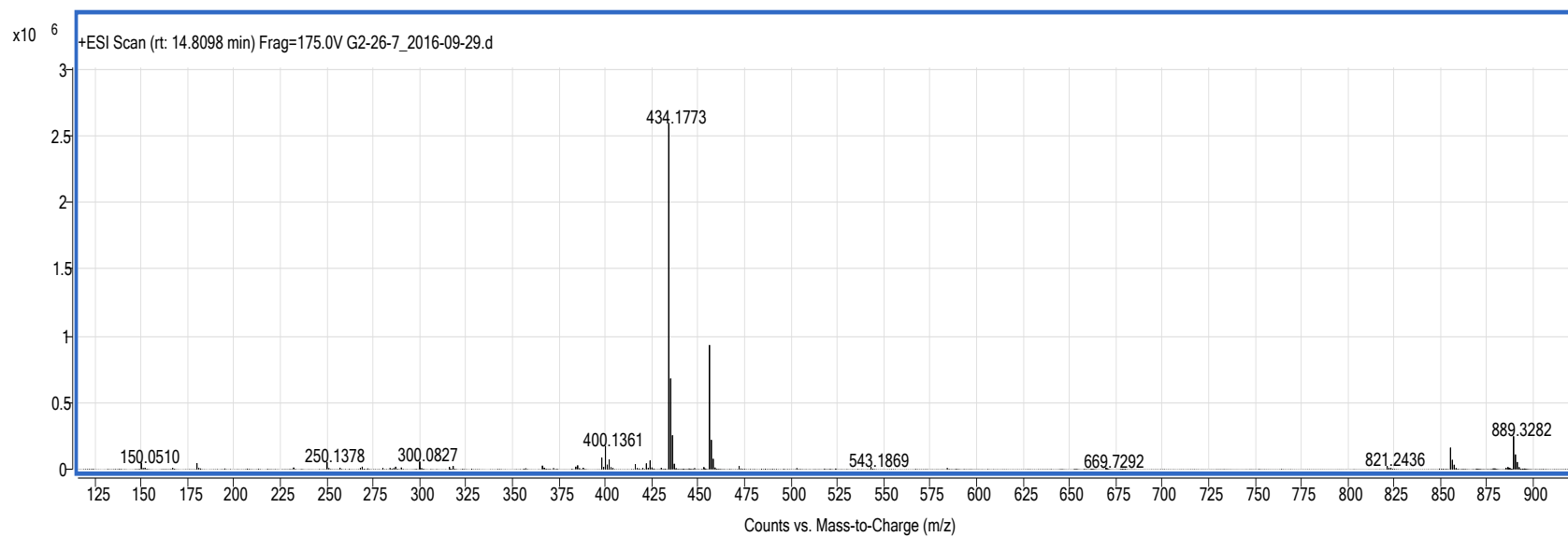
# HRESIMS spectrum of compound 4



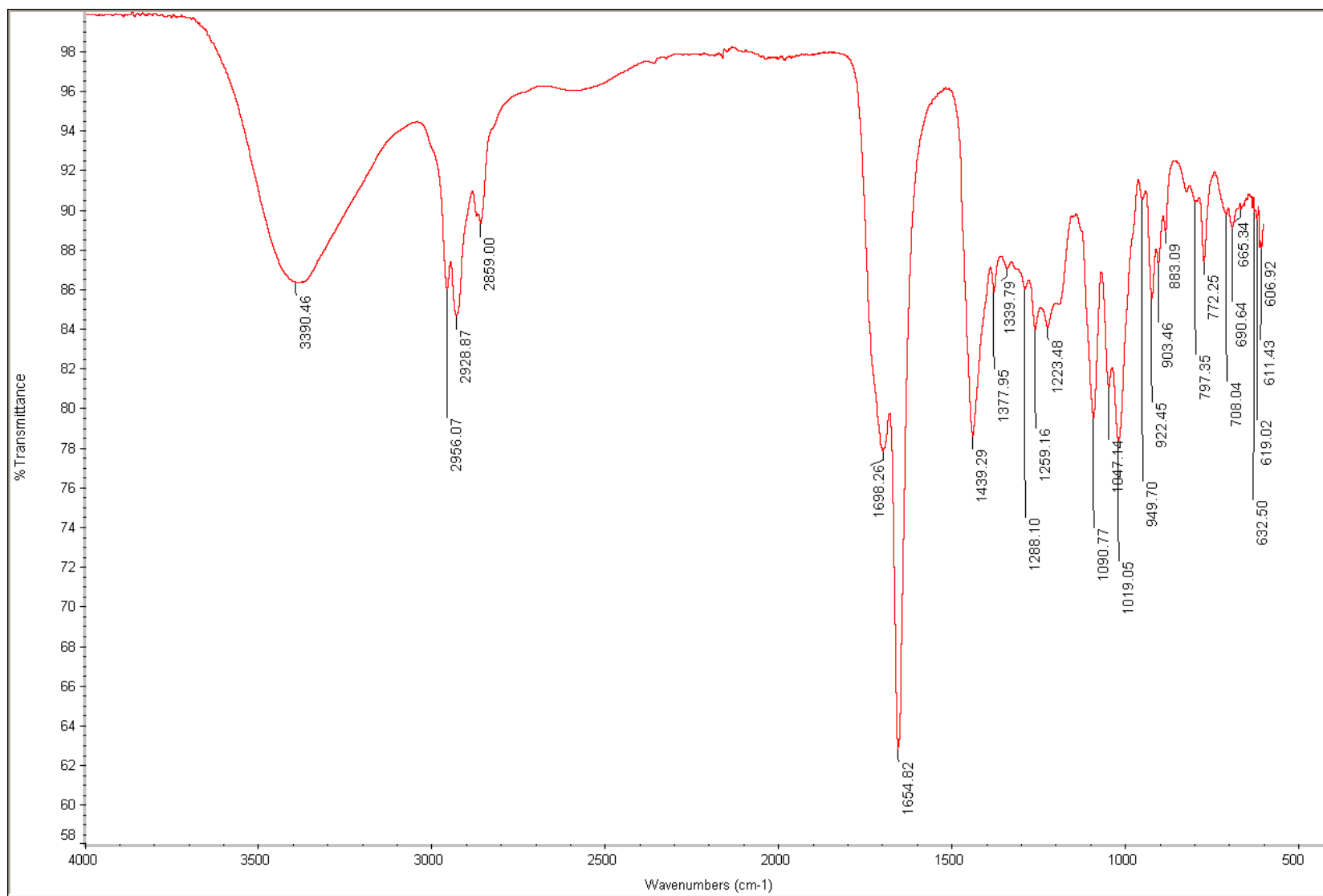
# HRESIMS spectrum of compound 5



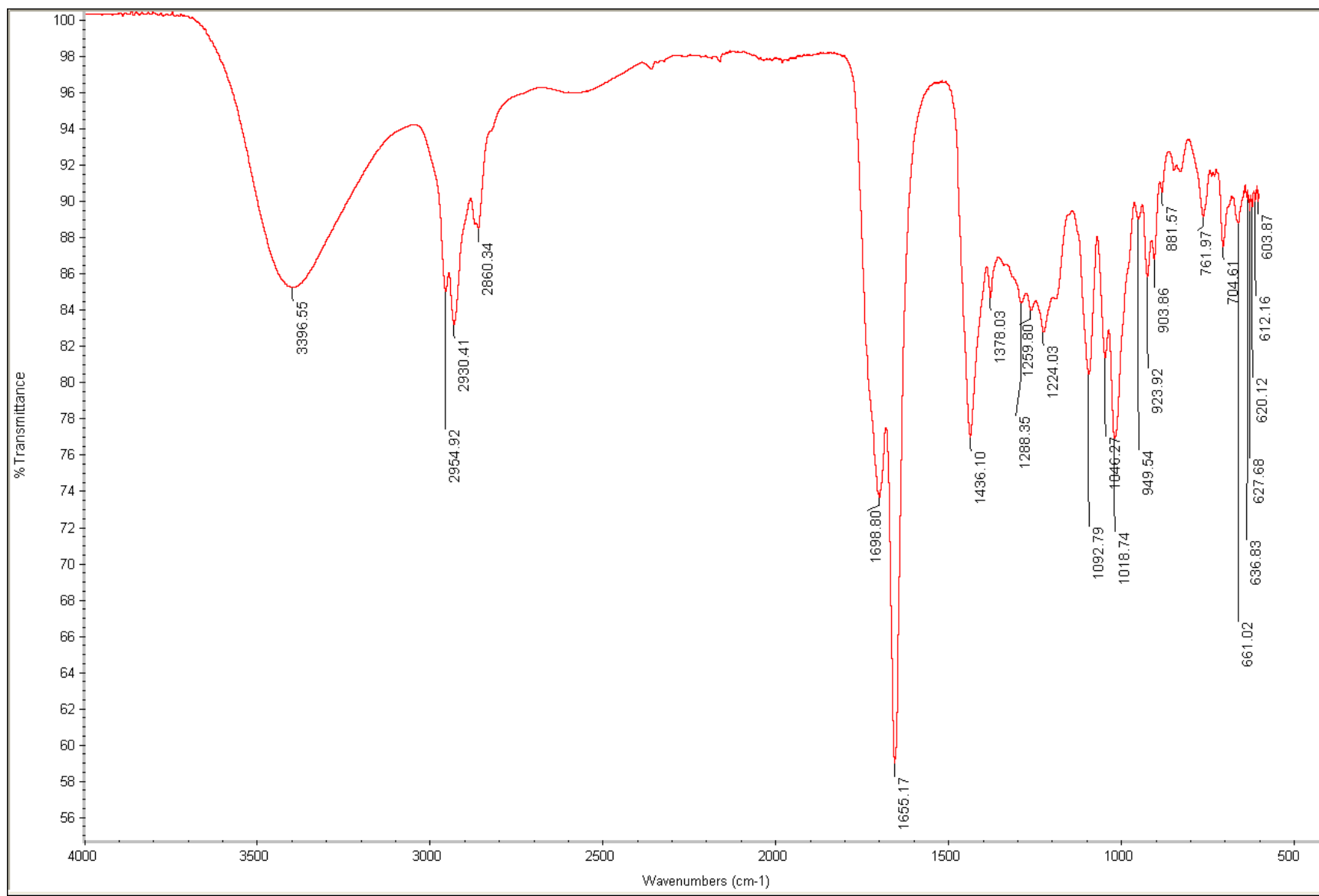
### HRESIMS spectrum of compound **11**



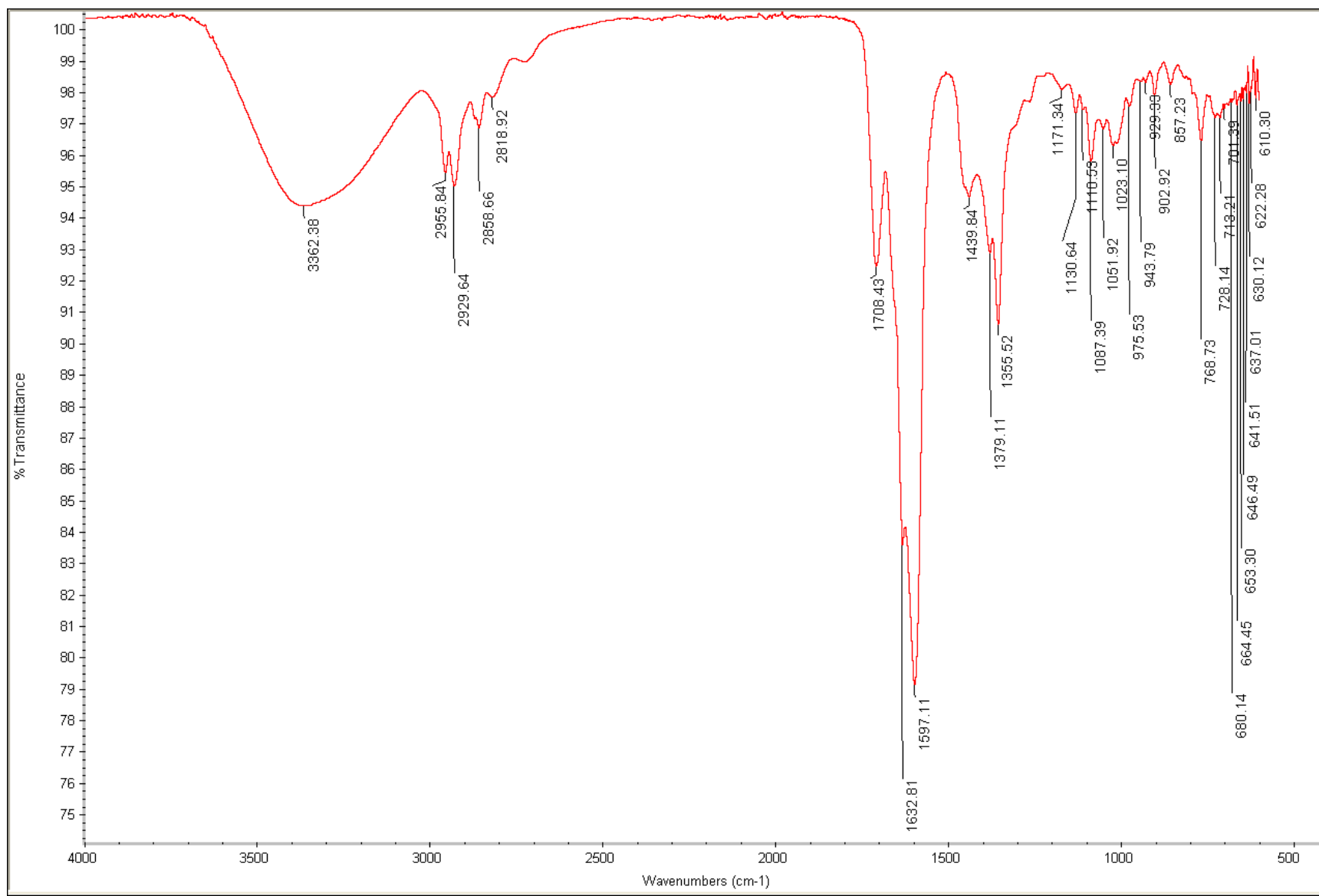
# IR spectrum of compound 1



## IR spectrum of compound 2



### IR spectrum of compound 3

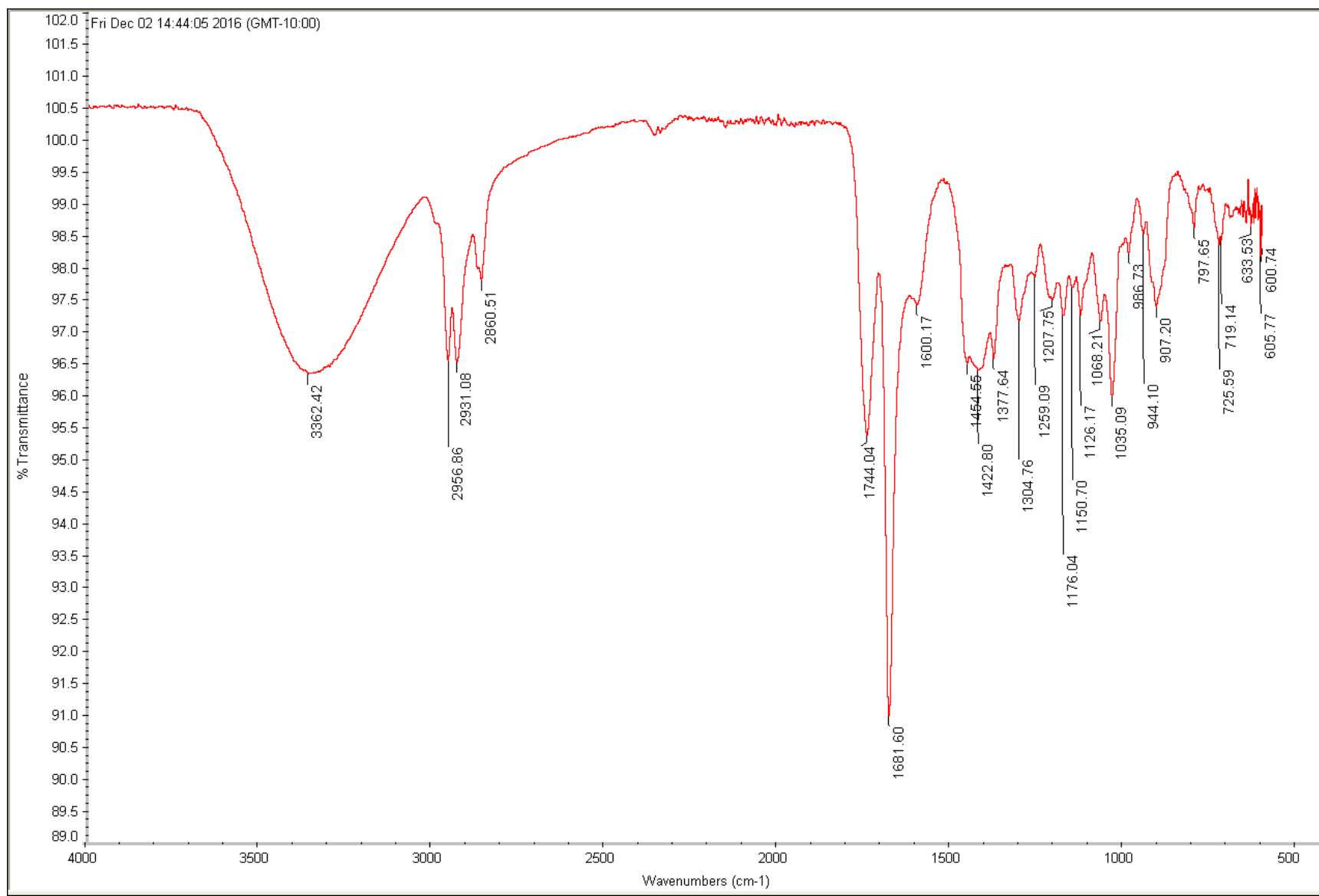




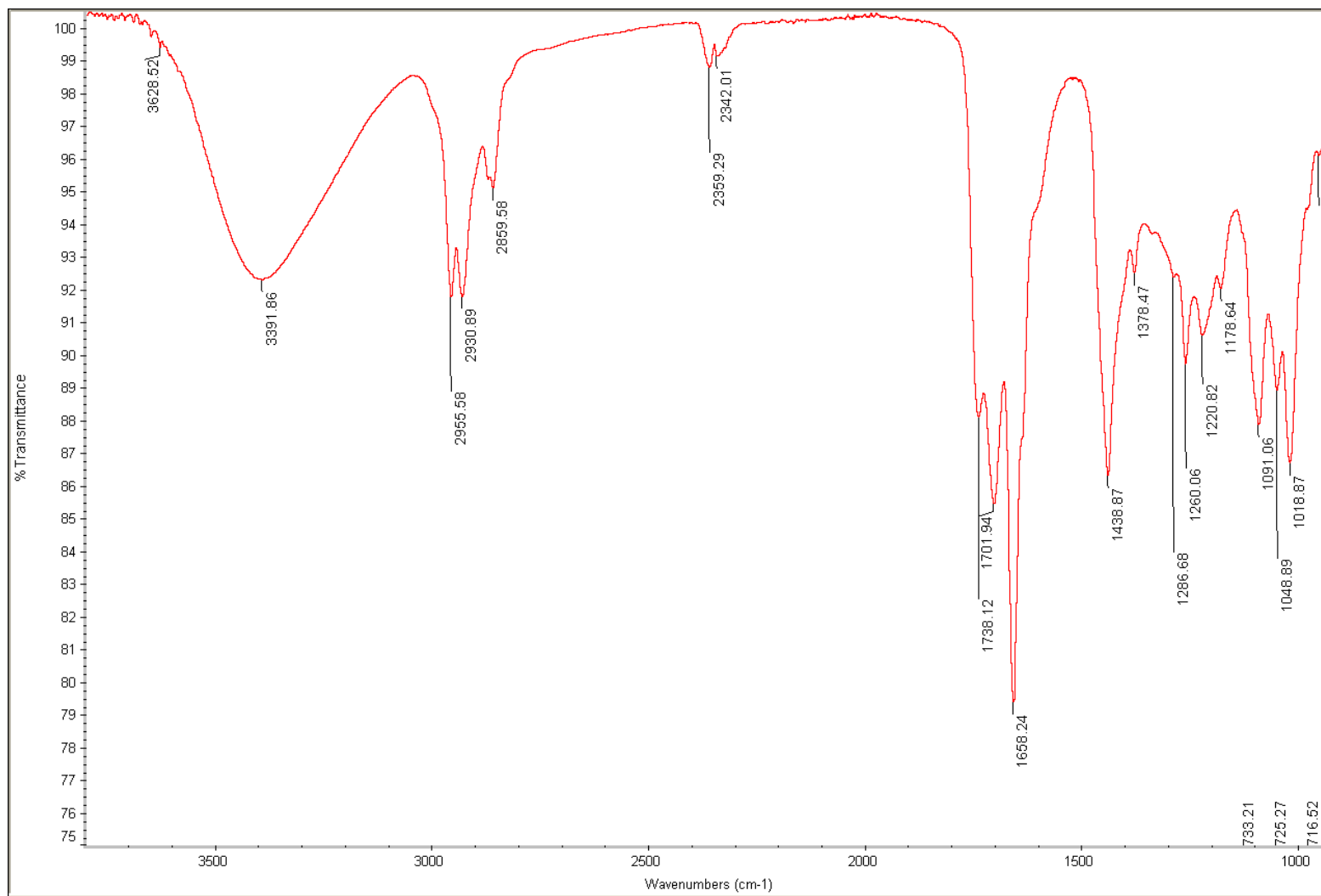
# IR spectrum of compound 4



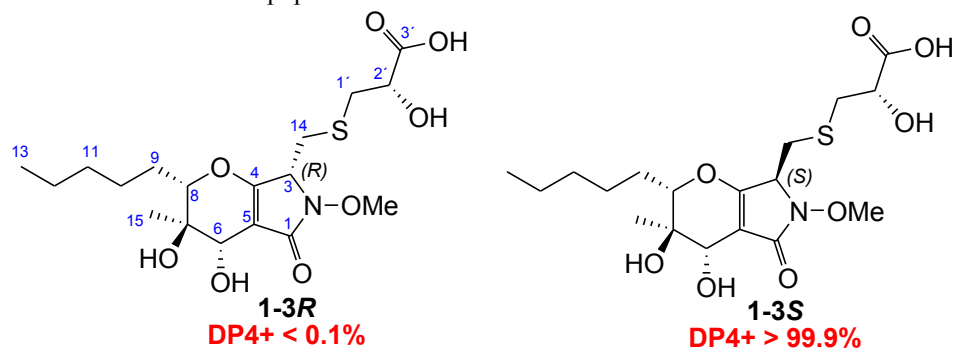
# IR spectrum of compound 5



IR spectrum of compound **11**

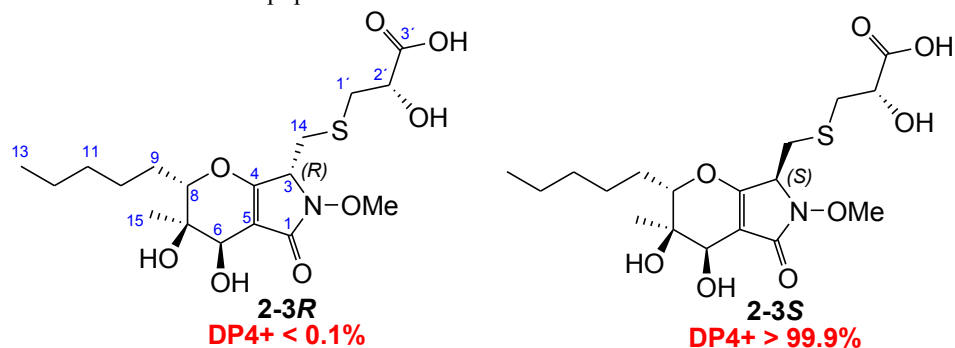


**Table S1.** NMR Boltzmann averaged isotropic magnetic shielding values ( $\sigma$ ), unscaled ( $\delta_u$ ) and scaled ( $\delta_s$ ) chemical shifts calculated at the PCM/mPW1PW91/6-31+G\*\*//PCM/B3LYP/6-31G\* (solvent: MeOH) level of theory for all significantly populated conformers of **1-3R** and **1-3S**.



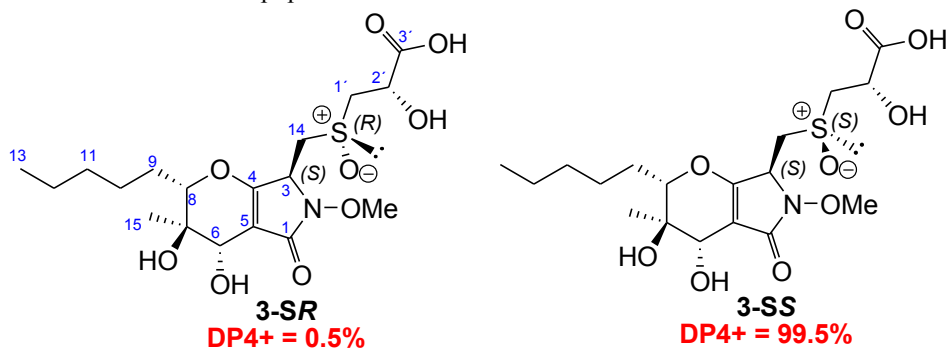
Atom	$\delta_{\text{exp}}$	$\sigma$		$\delta_u$		Unscaled Error (abs[ $\delta_{\text{exp}} - \delta_u$ ])		$\delta_s$		Scaled Error (abs[ $\delta_{\text{exp}} - \delta_s$ ])	
		1-3R	1-3S	1-3R	1-3S	1-3R	1-3S	1-3R	1-3S	1-3R	1-3S
C-1	175.7	23.8124	23.5001	173.0	173.3	2.7	2.4	175.1	175.8	0.6	0.1
C-2-OMe	65	131.1340	130.9314	65.6	65.8	0.6	0.8	64.2	64.1	0.8	0.9
C-3	62.3	131.9584	131.0416	64.8	65.7	2.5	3.4	63.4	64.0	1.1	1.7
C-4	168.6	29.7100	29.8394	167.1	166.9	1.5	1.7	169.0	169.2	0.4	0.6
C-5	106.6	90.6774	90.1192	106.1	106.7	0.5	0.1	106.0	106.5	0.6	0.1
C-6	66.6	123.1411	127.7651	73.6	69.0	7.0	2.4	72.5	67.4	5.9	0.8
C-7	72.8	122.7622	120.5333	74.0	76.2	1.2	3.4	72.9	74.9	0.1	2.1
C-8	88.7	108.7863	107.2456	88.0	89.5	0.7	0.8	87.3	88.7	1.4	0.0
C-9	29.5	166.0610	165.0125	30.7	31.8	1.2	2.3	28.2	28.7	1.3	0.8
C-10	28.1	165.9693	166.4093	30.8	30.4	2.7	2.3	28.2	27.2	0.1	0.9
C-11	32.7	161.3876	161.7262	35.4	35.1	2.7	2.4	33.0	32.1	0.3	0.6
C-12	23.7	169.4222	169.7023	27.4	27.1	3.7	3.4	24.7	23.8	1.0	0.1
C-13	14.4	180.1769	180.4343	16.6	16.3	2.2	1.9	13.6	12.6	0.8	1.8
C-14	33.6	158.0250	159.8961	38.8	36.9	5.2	3.3	36.5	34.0	2.9	0.4
C-15	20.0	181.0685	174.7048	15.7	22.1	4.3	2.1	12.7	18.6	7.3	1.4
C-1'	38.4	153.5293	152.4577	43.2	44.3	4.8	5.9	41.1	41.7	2.7	3.3
C-2'	72.5	123.5034	123.6006	73.3	73.2	0.8	0.7	72.1	71.7	0.4	0.8
C-3'	175.9	24.0218	25.2190	172.8	171.6	3.1	4.3	174.8	174.0	1.1	1.9
					<b>MAE</b>	<b>2.6</b>	<b>2.4</b>		<b>CMAE</b>	<b>1.6</b>	<b>1.0</b>
H-2-OMe	3.86	27.6149	27.6453	3.94	3.91	0.08	0.05	3.82	3.88	0.04	0.02
H-3	4.42	27.2243	27.3386	4.33	4.21	0.09	0.21	4.19	4.18	0.23	0.24
H-6	4.02	26.8670	27.3352	4.68	4.22	0.66	0.20	4.52	4.18	0.50	0.16
H-8	4.10	27.4749	27.2540	4.08	4.30	0.02	0.20	3.95	4.26	0.15	0.16
H-9a	1.93	29.6440	29.3996	1.91	2.15	0.02	0.22	1.91	2.16	0.02	0.23
H-9b	1.60	29.8971	30.0588	1.65	1.49	0.05	0.11	1.67	1.51	0.07	0.09
H-10a	1.60	29.8380	29.9079	1.71	1.64	0.11	0.04	1.73	1.66	0.13	0.06
H-10b	1.37	30.3328	30.3318	1.22	1.22	0.15	0.15	1.26	1.25	0.11	0.12
H-11	1.35	30.2660	30.3501	1.28	1.20	0.07	0.15	1.32	1.23	0.03	0.12
H-12	1.36	30.2109	30.2393	1.34	1.31	0.02	0.05	1.38	1.34	0.02	0.02
H-13	0.91	30.6189	30.6641	0.93	0.89	0.02	0.02	0.99	0.92	0.08	0.01
H-14	3.18	28.4127	28.3619	3.14	3.19	0.04	0.01	3.07	3.18	0.11	0.00
H-15	1.31	30.4426	30.1350	1.11	1.42	0.20	0.11	1.16	1.44	0.15	0.13
H-1'	2.94	28.5211	28.7722	3.03	2.78	0.09	0.16	2.97	2.78	0.03	0.16
H-2'	4.34	27.0490	27.1919	4.50	4.36	0.16	0.02	4.35	4.32	0.01	0.02
					<b>MAE</b>	<b>0.12</b>	<b>0.11</b>		<b>CMAE</b>	<b>0.11</b>	<b>0.10</b>

**Table S2.** NMR Boltzmann averaged isotropic magnetic shielding values ( $\sigma$ ), unscaled ( $\delta_u$ ) and scaled ( $\delta_s$ ) chemical shifts calculated at the PCM/mPW1PW91/6-31+G\*\*//PCM/B3LYP/6-31G\* (solvent: MeOH) level of theory for all significantly populated conformers of **2-3R** and **2-3S**.



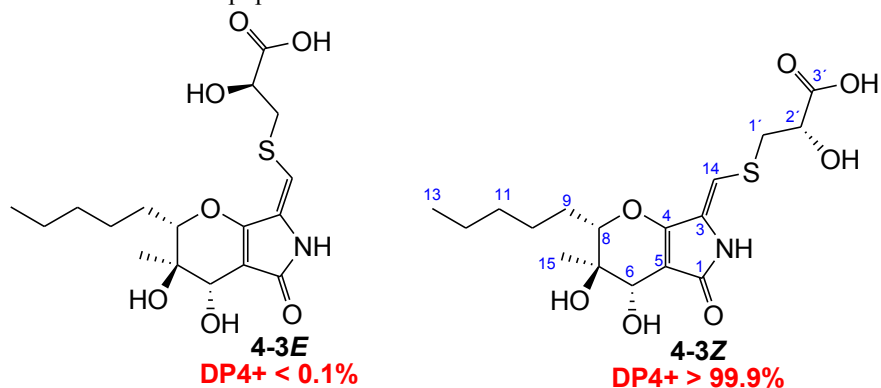
Atom	$\delta_{\text{exp}}$	$\sigma$		$\delta_u$		Unscaled Error ( $\text{abs}[\delta_{\text{exp}} - \delta_u]$ )		$\delta_s$		Scaled Error ( $\text{abs}[\delta_{\text{exp}} - \delta_s]$ )	
		2-3R	2-3S	2-3R	2-3S	2-3R	2-3S	2-3R	2-3S	2-3R	2-3S
C-1	174.4	23.4424	25.2218	173.3	171.6	1.1	2.8	175.1	174.2	0.7	0.2
C-2-OMe	64.9	131.1884	131.4106	65.6	65.4	0.7	0.5	64.1	64.1	0.8	0.8
C-3	61.8	131.4890	132.5861	65.3	64.2	3.5	2.4	63.8	62.9	2.0	1.1
C-4	168.4	26.5264	29.2157	170.3	167.6	1.9	0.8	171.9	170.1	3.5	1.7
C-5	107.6	90.5787	91.1411	106.2	105.6	1.4	2.0	105.9	105.9	1.7	1.7
C-6	68.2	129.1848	129.9190	67.6	66.9	0.6	1.3	66.2	65.6	2.0	2.6
C-7	72.4	125.5052	123.0531	71.3	73.7	1.1	1.3	69.9	72.8	2.5	0.4
C-8	88.3	111.7136	109.3985	85.1	87.4	3.2	0.9	84.2	86.9	4.1	1.4
C-9	29.0	165.7895	164.8904	31.0	31.9	2.0	2.9	28.4	29.4	0.6	0.4
C-10	27.6	165.8398	166.2538	30.9	30.5	3.3	2.9	28.4	27.9	0.8	0.3
C-11	32.7	161.4149	161.6138	35.4	35.2	2.7	2.5	33.0	32.8	0.3	0.1
C-12	23.6	169.4214	169.6266	27.4	27.2	3.8	3.6	24.7	24.4	1.1	0.8
C-13	14.4	180.1837	180.4248	16.6	16.4	2.2	2.0	13.6	13.2	0.8	1.2
C-14	33.1	157.0026	160.6738	39.8	36.1	6.7	3.0	37.5	33.7	4.4	0.6
C-15	20.0	176.6961	174.8124	20.1	22.0	0.1	2.0	17.2	19.1	2.8	0.9
C-1'	38.3	152.9430	152.3963	43.8	44.4	5.5	6.1	41.7	42.3	3.4	4.0
C-2'	72.2	123.2263	124.5835	73.6	72.2	1.4	0.0	72.3	71.2	0.1	1.0
C-3'	175.9	23.6376	23.1214	173.1	173.7	2.8	2.2	174.9	176.4	1.0	0.5
					<b>MAE</b>	<b>2.4</b>	<b>2.2</b>		<b>CMAE</b>	<b>1.8</b>	<b>1.1</b>
H-2-OMe	3.82	27.6124	27.6871	3.94	3.86	0.12	0.04	3.88	3.80	0.06	0.02
H-3	4.48	27.2339	27.1905	4.32	4.36	0.16	0.12	4.24	4.27	0.24	0.21
H-6	4.17	27.3517	27.0902	4.20	4.46	0.03	0.29	4.13	4.37	0.04	0.20
H-8	4.04	27.4521	27.2938	4.10	4.26	0.06	0.22	4.03	4.17	0.01	0.13
H-9a	1.80	29.6499	29.9128	1.90	1.64	0.10	0.16	1.91	1.70	0.11	0.10
H-9b	1.73	29.9741	30.0609	1.58	1.49	0.15	0.24	1.60	1.56	0.13	0.17
H-10a	1.58	29.8575	30.0035	1.69	1.55	0.11	0.03	1.71	1.61	0.13	0.03
H-10b	1.37	30.2772	30.2671	1.27	1.28	0.10	0.09	1.30	1.36	0.07	0.01
H-11	1.33	30.2600	30.3340	1.29	1.22	0.04	0.11	1.32	1.30	0.01	0.03
H-12	1.34	30.1980	30.2482	1.35	1.30	0.01	0.04	1.38	1.38	0.04	0.04
H-13	0.91	30.6183	30.6525	0.93	0.90	0.02	0.01	0.98	1.00	0.07	0.09
H-14	3.15	28.4286	28.4065	3.12	3.14	0.03	0.01	3.09	3.12	0.06	0.03
H-15	1.23	30.5246	30.3499	1.03	1.20	0.20	0.03	1.07	1.28	0.16	0.05
H-1'	2.89	28.5625	28.5838	2.99	2.97	0.09	0.07	2.96	2.95	0.07	0.06
H-2'	4.29	26.9347	27.2095	4.62	4.34	0.33	0.05	4.53	4.25	0.24	0.04
					<b>MAE</b>	<b>0.10</b>	<b>0.10</b>		<b>CMAE</b>	<b>0.10</b>	<b>0.08</b>

**Table S3.** NMR Boltzmann averaged isotropic magnetic shielding values ( $\sigma$ ), unscaled ( $\delta_u$ ) and scaled ( $\delta_s$ ) chemical shifts calculated at the PCM/mPW1PW91/6-31+G\*\*//PCM/B3LYP/6-31G\* (solvent: MeOH) level of theory for all significantly populated conformers of **3-SR** and **3-SS**.



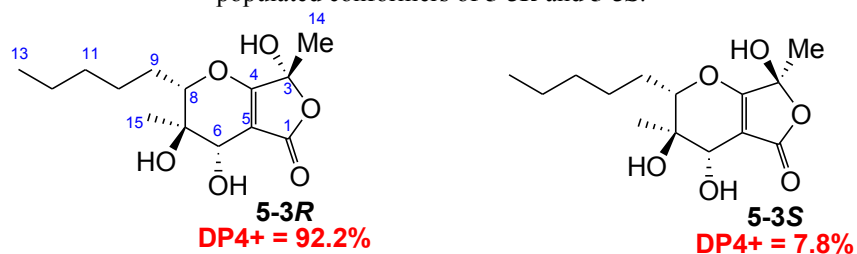
Atom	$\delta_{\text{exp}}$	$\sigma$		$\delta_u$		Unscaled Error ( $ \delta_{\text{exp}} - \delta_u $ )		$\delta_s$		Scaled Error ( $ \delta_{\text{exp}} - \delta_s $ )	
		3-SR	3-SS	3-SR	3-SS	3-SR	3-SS	3-SR	3-SS	3-SR	3-SS
C-2-OMe	64.8	131.2915	131.1198	65.5	65.7	0.7	0.9	64.2	63.9	0.6	0.9
C-3	58.6	136.1571	134.2567	60.6	62.5	2.0	3.9	59.2	60.7	0.6	2.1
C-4	169.3	30.9885	29.8370	165.8	166.9	3.5	2.4	167.2	167.7	2.1	1.6
C-5	105.6	89.8349	90.2849	106.9	106.5	1.3	0.9	106.8	105.8	1.2	0.2
C-6	66.3	124.1714	124.4510	72.6	72.3	6.3	6.0	71.5	70.7	5.2	4.4
C-7	72.4	121.8746	122.4500	74.9	74.3	2.5	1.9	73.9	72.8	1.5	0.4
C-8	89.1	107.3824	107.3040	89.4	89.5	0.3	0.4	88.8	88.3	0.3	0.8
C-9	29.2	166.0848	165.7240	30.7	31.1	1.5	1.9	28.5	28.4	0.7	0.8
C-10	27.7	166.2908	165.6435	30.5	31.1	2.8	3.4	28.3	28.5	0.6	0.8
C-11	32.3	161.3588	161.4001	35.4	35.4	3.1	3.1	33.3	32.9	1.0	0.6
C-12	23.4	169.4536	169.4640	27.3	27.3	3.9	3.9	25.0	24.6	1.6	1.2
C-13	14.2	180.2276	179.7549	16.6	17.0	2.4	2.8	13.9	14.0	0.3	0.2
C-14	52.1	140.4336	138.4176	56.3	58.4	4.2	6.3	54.8	56.4	2.7	4.3
C-15	19.8	179.6857	179.6991	17.1	17.1	2.7	2.7	14.5	14.1	5.3	5.7
C-1'	57.4	143.1502	142.8836	53.6	53.9	3.8	3.5	52.0	51.8	5.4	5.6
C-2'	66.9	128.4567	126.7194	68.3	70.1	1.4	3.2	67.1	68.4	0.2	1.5
					<i>MAE</i>	<b>2.7</b>	<b>2.9</b>		<i>CMAE</i>	<b>1.8</b>	<b>1.9</b>
H-2-OMe	3.90	27.5866	27.6096	3.96	3.94	0.06	0.04	3.93	3.92	0.03	0.02
H-3	4.61	27.1517	27.1953	4.40	4.36	0.21	0.25	4.36	4.32	0.25	0.29
H-6	4.00	26.9468	27.0765	4.60	4.47	0.60	0.47	4.56	4.44	0.56	0.44
H-8	4.15	27.4476	27.3809	4.10	4.17	0.05	0.02	4.07	4.14	0.08	0.01
H-9a	1.91	29.6700	29.7226	1.88	1.83	0.03	0.08	1.91	1.85	0.00	0.06
H-9b	1.64	29.7738	29.7779	1.78	1.77	0.14	0.13	1.81	1.80	0.17	0.16
H-10a	1.64	29.9627	29.8861	1.59	1.66	0.05	0.02	1.62	1.69	0.02	0.05
H-10b	1.40	30.2308	30.2888	1.32	1.26	0.08	0.14	1.36	1.30	0.04	0.10
H-11	1.34	30.2718	30.2872	1.28	1.26	0.06	0.08	1.32	1.30	0.02	0.04
H-12	1.35	30.2228	30.1691	1.33	1.38	0.02	0.03	1.37	1.41	0.02	0.06
H-13	0.92	30.6157	30.6351	0.93	0.92	0.01	0.00	0.99	0.96	0.07	0.04
H-14	3.54	28.3458	28.2194	3.20	3.33	0.34	0.21	3.20	3.32	0.34	0.22
H-15	1.32	30.3815	30.3785	1.17	1.17	0.15	0.15	1.22	1.21	0.10	0.11
H-1'	3.30	28.4383	28.2384	3.11	3.31	0.18	0.02	3.11	3.30	0.19	0.01
H-2'	4.40	26.9017	27.0323	4.65	4.52	0.25	0.12	4.60	4.48	0.20	0.08
					<i>MAE</i>	<b>0.15</b>	<b>0.12</b>		<i>CMAE</i>	<b>0.14</b>	<b>0.11</b>

**Table S4.** NMR Boltzmann averaged isotropic magnetic shielding values ( $\sigma$ ), unscaled ( $\delta_u$ ) and scaled ( $\delta_s$ ) chemical shifts calculated at the PCM/mPW1PW91/6-31+G\*\*//PCM/B3LYP/6-31G\* (solvent: MeOH) level of theory for all significantly populated conformers of **4-3E** and **4-3Z**.



Atom	$\delta_{\text{exp}}$	$\sigma$		$\delta_u$		Unscaled Error (abs[ $\delta_{\text{exp}} - \delta_u$ ])		$\delta_s$		Scaled Error (abs[ $\delta_{\text{exp}} - \delta_s$ ])	
		4-3E	4-3Z	4-3E	4-3Z	4-3E	4-3Z	4-3E	4-3Z	4-3E	4-3Z
C-1	175.0	32.1868	30.9502	164.6	165.8	10.4	9.2	167.7	169.4	7.3	5.6
C-3	130.2	72.8896	69.1313	123.9	127.6	6.3	2.6	125.0	129.3	5.2	0.9
C-4	159.5	39.9567	40.6332	156.8	156.1	2.7	3.4	159.5	159.2	0.0	0.3
C-5	105.7	91.1701	93.1350	105.6	103.6	0.1	2.1	105.8	104.1	0.1	1.6
C-6	67.5	123.0434	122.7562	73.7	74.0	6.2	6.5	72.4	73.1	4.9	5.6
C-7	73.0	122.2488	122.2200	74.5	74.6	1.5	1.6	73.2	73.6	0.2	0.6
C-8	87.6	108.7573	109.3215	88.0	87.5	0.4	0.1	87.4	87.1	0.2	0.5
C-9	29.1	165.8330	165.8193	30.9	31.0	1.8	1.9	27.5	27.9	1.6	1.2
C-10	27.7	165.7511	165.8652	31.0	30.9	3.3	3.2	27.6	27.8	0.1	0.1
C-11	32.5	161.2187	161.3375	35.6	35.4	3.1	2.9	32.4	32.6	0.1	0.1
C-12	23.4	169.3530	169.4581	27.4	27.3	4.0	3.9	23.8	24.1	0.4	0.7
C-13	13.9	180.2878	179.9037	16.5	16.9	2.6	3.0	12.4	13.1	1.5	0.8
C-14	110.5	73.1882	80.5010	123.6	116.3	13.1	5.8	124.7	117.4	14.2	6.9
C-15	18.8	180.8295	181.1981	15.9	15.6	2.9	3.2	11.8	11.8	7.0	7.0
C-1'	39.8	151.8481	151.4867	44.9	45.3	5.1	5.5	42.2	42.9	2.4	3.1
C-2'	72.2	123.4194	124.0875	73.4	72.7	1.2	0.5	72.0	71.7	0.2	0.5
C-3'	175.5	23.8207	23.7082	173.0	173.1	4.0	3.5	176.4	176.9	2.8	2.2
					<i>MAE</i>	<i>4.1</i>	<i>3.4</i>		<i>CMAE</i>	<i>2.9</i>	<i>2.2</i>
H-6	4.13	26.7868	26.7830	4.76	4.77	0.63	0.64	4.43	4.48	0.30	0.35
H-8	4.03	27.4563	27.5248	4.09	4.03	0.06	0.00	3.83	3.81	0.20	0.22
H-9a	1.86	29.6270	29.6552	1.92	1.90	0.06	0.04	1.87	1.87	0.01	0.01
H-9b	1.66	29.7952	29.8795	1.76	1.67	0.10	0.01	1.72	1.67	0.06	0.01
H-10	1.48	30.0119	30.0757	1.54	1.47	0.06	0.01	1.52	1.49	0.04	0.01
H-11	1.34	30.2474	30.2719	1.30	1.28	0.04	0.06	1.31	1.31	0.03	0.03
H-12	1.34	30.1970	30.2062	1.35	1.34	0.01	0.00	1.36	1.37	0.02	0.03
H-13	0.91	30.6071	30.6329	0.94	0.92	0.03	0.01	0.99	0.98	0.08	0.07
H-14	6.31	24.7342	24.8516	6.82	6.70	0.51	0.39	6.29	6.24	0.02	0.07
H-15	1.28	30.4140	30.4476	1.14	1.10	0.14	0.18	1.16	1.15	0.12	0.13
H-1'	3.19	28.3553	28.3076	3.20	3.24	0.01	0.05	3.02	3.10	0.17	0.09
H-2'	4.29	26.9019	26.9277	4.65	4.62	0.36	0.33	4.33	4.35	0.04	0.06
					<i>MAE</i>	<i>0.17</i>	<i>0.14</i>		<i>CMAE</i>	<i>0.09</i>	<i>0.09</i>

**Table S5.** NMR Boltzmann averaged isotropic magnetic shielding values ( $\sigma$ ), unscaled ( $\delta_u$ ) and scaled ( $\delta_s$ ) chemical shifts calculated at the PCM/mPW1PW91/6-31+G\*\*//PCM/B3LYP/6-31G\* (solvent: MeOH) level of theory for all significantly populated conformers of **5-3R** and **5-3S**.



Atom	$\delta_{\text{exp}}$	$\sigma$		$\delta_u$		Unscaled Error (abs[ $\delta_{\text{exp}} - \delta_u$ ])		$\delta_s$		Scaled Error (abs[ $\delta_{\text{exp}} - \delta_s$ ])	
		5-3R	5-3S	5-3R	5-3S	5-3R	5-3S	5-3R	5-3S	5-3R	5-3S
C-1	174.7	30.1186	30.1382	166.7	166.6	8.0	8.1	169.6	169.6	5.1	5.1
C-3	102.5	92.8282	92.5063	104.0	104.3	1.5	1.8	104.3	104.7	1.8	2.2
C-4	174.7	24.3932	24.3599	172.4	172.4	2.3	2.3	175.5	175.6	0.8	0.9
C-5	102.0	93.1896	93.7808	103.6	103.0	1.6	1.0	104.0	103.3	2.0	1.3
C-6	66.5	125.0119	124.6208	71.8	72.2	5.3	5.7	70.9	71.2	4.4	4.7
C-7	72.4	122.5304	122.6374	74.2	74.1	1.8	1.7	73.4	73.3	1.0	0.9
C-8	88.6	106.8554	106.7124	89.9	90.1	1.3	1.5	89.7	89.9	1.1	1.3
C-9	28.9	165.9589	165.8647	30.8	30.9	1.9	2.0	28.2	28.3	0.7	0.6
C-10	27.2	166.2754	166.1219	30.5	30.7	3.3	3.5	27.9	28.0	0.7	0.8
C-11	32.1	161.5856	161.5418	35.2	35.2	3.1	3.1	32.8	32.8	0.7	0.7
C-12	23.1	169.7554	169.5599	27.0	27.2	3.9	4.1	24.3	24.4	1.2	1.3
C-13	13.9	180.3135	180.4119	16.5	16.4	2.6	2.5	13.3	13.1	0.6	0.8
C-14	22.9	173.3273	173.0114	23.5	23.8	0.6	0.9	20.6	20.8	2.3	2.1
C-15	19.4	179.3773	179.6340	17.4	17.1	2.0	2.3	14.3	13.9	5.1	5.5
					<b>MAE</b>	<b>2.8</b>	<b>2.9</b>		<b>CMAE</b>	<b>2.0</b>	<b>2.0</b>
H-6	4.05	27.0075	26.9616	4.54	4.59	0.49	0.54	4.27	4.30	0.22	0.25
H-8	4.17	27.3531	27.3594	4.20	4.19	0.03	0.02	3.96	3.94	0.21	0.23
H-9a	1.90	29.6428	29.6909	1.91	1.86	0.01	0.04	1.87	1.82	0.03	0.08
H-9b	1.66	29.7881	29.7174	1.76	1.83	0.10	0.17	1.74	1.80	0.08	0.14
H-10	1.49	30.0454	30.0537	1.51	1.50	0.02	0.01	1.50	1.50	0.01	0.01
H-11	1.34	30.2572	30.2499	1.29	1.30	0.05	0.04	1.31	1.32	0.03	0.02
H-12	1.35	30.2291	30.2298	1.32	1.32	0.03	0.03	1.33	1.34	0.02	0.01
H-13	0.92	30.6186	30.6102	0.93	0.94	0.01	0.02	0.98	0.99	0.06	0.07
H-14	1.64	29.8662	29.8849	1.68	1.67	0.04	0.03	1.67	1.65	0.03	0.01
H-15	1.32	30.3666	30.3883	1.18	1.16	0.14	0.16	1.21	1.19	0.11	0.13
					<b>MAE</b>	<b>0.09</b>	<b>0.11</b>		<b>CMAE</b>	<b>0.08</b>	<b>0.09</b>



Cartesian Coordinates of all significantly populated conformers found for all compounds under study at the PCM/B3LYP/6-31G\* level of theory.

### 1-3R-c1

B3LYP/6-31G\* geometry

O 0	0.961248	-0.880736	-0.855789
C 0	0.347093	-3.162214	-0.502072
C 0	2.121991	-2.223141	0.921462
C 0	1.540049	-3.531706	0.322362
C 0	2.262483	-1.191368	-0.237284
C 0	0.155939	-1.927914	-1.006804
C 0	-1.143032	-1.826488	-1.769604
N 0	-1.768790	-3.108391	-1.393606
C 0	-0.804842	-3.984948	-0.837190
O 0	-2.590682	-3.659018	-2.393525
C 0	-3.900889	-3.922616	-1.869947
C 0	-2.005200	-0.597910	-1.470805
S 0	-2.566138	-0.576624	0.286428
C 0	-2.820695	1.220788	0.543480
C 0	-4.043485	1.776454	-0.212822
C 0	-4.275600	3.228156	0.223339
O 0	-5.232995	1.050613	0.061799
O 0	-3.510738	4.127046	-0.052761
O 0	-5.372783	3.418910	0.967388
O 0	-0.974921	-5.185618	-0.644578
O 0	1.219872	-4.440962	1.371609
O 0	3.468258	-2.460182	1.345511
C 0	1.276175	-1.701226	2.088533
C 0	2.887368	0.141264	0.152862
C 0	3.243221	1.025501	-1.051113
C 0	3.885778	2.355421	-0.638216
C 0	4.260533	3.246511	-1.829589
C 0	4.902376	4.573097	-1.410465
H 0	2.327511	-3.969381	-0.311380
H 0	2.861932	-1.664248	-1.025641
H 0	-0.936784	-1.834041	-2.849405
H 0	-4.469288	-4.308473	-2.719542
H 0	-4.367301	-3.006651	-1.492183
H 0	-3.857937	-4.675722	-1.077546
H 0	-2.867504	-0.594010	-2.141503
H 0	-1.412559	0.301833	-1.661196
H 0	-1.924075	1.779580	0.263975
H 0	-2.971780	1.326557	1.622514
H 0	-3.836451	1.790306	-1.290487
H 0	-4.988285	0.114170	0.193133
H 0	-5.822314	2.545808	1.032764
H 0	0.672238	-5.140897	0.971153
H 0	3.432145	-3.196741	1.979132
H 0	1.759438	-0.831390	2.540979
H 0	0.268681	-1.415588	1.770241
H 0	1.180005	-2.480291	2.849405
H 0	2.201388	0.678287	0.819169
H 0	3.790282	-0.080565	0.732137
H 0	2.339263	1.223717	-1.641586
H 0	3.931460	0.477412	-1.710910
H 0	3.196556	2.903423	0.021249
H 0	4.786139	2.153820	-0.038956
H 0	3.360659	3.447435	-2.428037
H 0	4.949215	2.698434	-2.488138
H 0	4.222921	5.159655	-0.779603
H 0	5.160616	5.185618	-2.282019
H 0	5.822314	4.403320	-0.837159

Free Energy (PCM/B3LYP/6-31G\*) = -1757.654959

Number of imaginary frequencies = 0

### 1-3R-c2

B3LYP/6-31G\* geometry

O 0	0.096526	-0.822439	0.173369
C 0	-1.721191	0.531599	0.925309
C 0	0.028119	1.606303	-0.440348
C 0	-1.105218	1.854259	0.594504
C 0	0.889968	0.415209	0.075723
C 0	-1.120253	-0.648908	0.683598
C 0	-1.993012	-1.819863	1.063477
N 0	-3.081034	-1.102114	1.757260
C 0	-3.052026	0.272544	1.456854

O 0	-4.336855	-1.721394	1.737563
C 0	-4.796067	-1.986491	3.079555
C 0	-2.450651	-2.693515	-0.122197
S 0	-3.361252	-1.799423	-1.449093
C 0	-5.058199	-2.536060	-1.372538
C 0	-6.177200	-1.490812	-1.286211
C 0	-6.102686	-0.505493	-2.469229
O 0	-6.221280	-0.739073	-0.082671
O 0	-6.131165	-0.857303	-3.630429
O 0	-6.004312	0.775067	-2.099927
O 0	-3.977347	1.060182	1.644201
O 0	-2.055542	2.777346	0.068494
O 0	0.925082	2.721399	-0.428252
C 0	-0.521272	1.378356	-1.852582
C 0	2.113567	0.084282	-0.767678
C 0	3.052727	-0.936725	-0.109247
C 0	4.286560	-1.243252	-0.967163
C 0	5.237318	-2.261096	-0.323973
C 0	6.467638	-2.564106	-1.185361
H 0	-0.629065	2.291295	1.486759
H 0	1.200018	0.652841	1.101578
H 0	-1.466148	-2.478351	1.765562
H 0	-4.094170	-2.648082	3.593837
H 0	-5.761284	-2.480133	2.952558
H 0	-4.916373	-1.050634	3.630429
H 0	-3.076851	-3.507434	0.246988
H 0	-1.557002	-3.137289	-0.568699
H 0	-5.114194	-3.204383	-0.510577
H 0	-5.214675	-3.125010	-2.278405
H 0	-7.125631	-2.034975	-1.397595
H 0	-5.499876	-1.006553	0.527090
H 0	-5.997775	0.756428	-1.110885
H 0	-2.873474	2.659931	0.587317
H 0	0.393750	3.507434	-0.640120
H 0	0.303197	1.282251	-2.563555
H 0	-1.139169	2.230345	-2.147417
H 0	-1.142451	0.479546	-1.913107
H 0	1.786640	-0.289757	-1.745501
H 0	2.648924	1.023124	-0.946133
H 0	2.503725	-1.866741	0.086941
H 0	3.375397	-0.553724	0.869862
H 0	3.962686	-1.620386	-1.948562
H 0	4.834168	-0.309756	-1.164567
H 0	4.688939	-3.193235	-0.127084
H 0	5.560709	-1.884267	0.656795
H 0	6.176675	-2.973665	-2.160700
H 0	7.125631	-3.294031	-0.699826
H 0	7.055033	-1.656000	-1.369620

Free Energy (PCM/B3LYP/6-31G\*) = -1757.654904

Number of imaginary frequencies = 0

### 1-3R-c3

B3LYP/6-31G\* geometry

O 0	1.292311	-0.594236	-0.213857
C 0	0.236750	-2.699400	-0.609733
C 0	2.631949	-2.708596	-0.043818
C 0	1.496930	-3.493928	-0.752591
C 0	2.575543	-1.236728	-0.550739
C 0	0.224747	-1.374457	-0.364643
C 0	-1.176960	-0.837884	-0.193887
N 0	-1.942091	-2.103633	-0.183886
C 0	-1.134787	-3.175664	-0.642409
O 0	-3.215845	-2.028026	-0.795292
C 0	-4.213396	-2.632317	0.048928
C 0	-1.326804	0.000803	1.082391
S 0	-2.997105	0.674128	1.437296
C 0	-3.184754	2.017415	0.188488
C 0	-4.039837	1.652168	-1.044736
C 0	-5.472027	1.293379	-0.646643
O 0	-3.482118	0.640002	-1.844531
O 0	-5.976465	0.202863	-0.813236
O 0	-6.106406	2.332464	-0.073604
O 0	-1.555478	-4.288638	-0.947336
O 0	1.388900	-4.796809	-0.185248
O 0	3.896175	-3.194627	-0.505084
C 0	2.543083	-2.817854	1.482646
C 0	3.671260	-0.322449	-0.019412

C 0 3.724118 1.040726 -0.724002  
C 0 4.837362 1.944910 -0.180421  
C 0 4.905881 3.310432 -0.876163  
C 0 6.018376 4.210644 -0.328874  
H 0 1.782910 -3.580576 -1.812627  
H 0 2.616773 -1.265586 -1.646972  
H 0 -1.468166 -0.243525 -1.067947  
H 0 -4.226008 -2.153669 1.031534  
H 0 -4.023468 -3.704172 0.141756  
H 0 -5.158103 -2.452552 -0.466875  
H 0 -0.612338 0.828821 1.051099  
H 0 -1.089243 -0.615271 1.954912  
H 0 -2.190182 2.322038 -0.148557  
H 0 -3.639241 2.865839 0.706889  
H 0 -4.091862 2.555302 -1.665938  
H 0 -3.661701 -0.227826 -1.425627  
H 0 -7.003065 2.034061 0.175244  
H 0 0.559429 -5.177266 -0.527473  
H 0 3.900663 -4.152230 -0.336552  
H 0 1.627234 -2.365151 1.874721  
H 0 2.549813 -3.870510 1.776978  
H 0 3.401435 -2.321432 1.942252  
H 0 3.527655 -0.177843 1.058276  
H 0 4.624173 -0.847235 -0.148872  
H 0 2.756345 1.547158 -0.615371  
H 0 3.874093 0.885118 -1.802250  
H 0 4.689039 2.095874 0.899176  
H 0 5.805991 1.434312 -0.286964  
H 0 3.937210 3.819100 -0.769449  
H 0 5.054104 3.159712 -1.954912  
H 0 5.878039 4.407204 0.741353  
H 0 6.040629 5.177266 -0.845266  
H 0 7.003065 3.743093 -0.453162  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.654843  
Number of imaginary frequencies = 0

### 1-3R-c4

B3LYP/6-31G\* geometry  
O 0 1.854594 -1.152064 -0.240684  
C 0 1.693046 -3.487800 -0.694858  
C 0 3.918935 -2.576259 -0.174803  
C 0 3.157728 -3.722979 -0.889531  
C 0 3.272921 -1.233431 -0.627112  
C 0 1.166734 -2.281767 -0.400108  
C 0 -0.327216 -2.353866 -0.188276  
N 0 -0.511440 -3.821811 -0.184168  
C 0 0.628059 -4.477315 -0.691317  
O 0 -1.752265 -4.254110 -0.685106  
C 0 -2.398901 -5.112650 0.265799  
C 0 -0.850601 -1.729604 1.113989  
S 0 -0.865301 0.112652 1.142869  
C 0 -2.629033 0.516982 0.840477  
C 0 -3.044124 0.521302 -0.644510  
C 0 -4.503342 0.957557 -0.759564  
O 0 -2.897023 -0.742322 -1.256397  
O 0 -5.394481 0.189445 -1.066633  
O 0 -4.686837 2.247736 -0.454032  
O 0 0.685088 -5.667000 -1.000552  
O 0 3.579086 -4.982161 -0.370583  
O 0 5.257502 -2.514570 -0.678490  
C 0 3.930331 -2.752172 1.347748  
C 0 3.943253 0.024342 -0.090207  
C 0 3.438166 1.314792 -0.751075  
C 0 4.140462 2.569100 -0.216139  
C 0 3.651562 3.866278 -0.873122  
C 0 4.356558 5.116693 -0.337347  
H 0 3.422993 -3.663382 -1.957143  
H 0 3.286008 -1.217975 -1.724511  
H 0 -0.872098 -1.923427 -1.035631  
H 0 -3.361604 -5.359814 -0.188193  
H 0 -2.556671 -4.599361 1.220369  
H 0 -1.816500 -6.025117 0.424074  
H 0 -0.242668 -2.061308 1.960171  
H 0 -1.874631 -2.071567 1.278264  
H 0 -2.766895 1.518033 1.259846  
H 0 -3.258471 -0.176541 1.407964  
H 0 -2.419707 1.241432 -1.184730

H 0 -3.781282 -1.155510 -1.250029  
H 0 -5.643088 2.442195 -0.512963  
H 0 2.921980 -5.635540 -0.675316  
H 0 5.643088 -3.396969 -0.544199  
H 0 2.923294 -2.710358 1.773952  
H 0 4.361985 -3.723725 1.601853  
H 0 4.536883 -1.969227 1.809962  
H 0 3.791245 0.077414 0.994761  
H 0 5.020309 -0.083928 -0.258877  
H 0 2.355634 1.407275 -0.595194  
H 0 3.591154 1.247780 -1.838090  
H 0 3.989690 2.634784 0.871612  
H 0 5.225734 2.472054 -0.368613  
H 0 2.567364 3.962656 -0.719629  
H 0 3.801072 3.799565 -1.960171  
H 0 4.197124 5.229252 0.742268  
H 0 3.985382 6.025117 -0.825755  
H 0 5.439055 5.064559 -0.508341  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.65458  
Number of imaginary frequencies = 0

### 1-3R-c5

B3LYP/6-31G\* geometry  
O 0 -0.429809 -1.560244 -0.861847  
C 0 -2.446443 -2.784455 -0.489146  
C 0 -0.504387 -3.322579 0.925870  
C 0 -1.838054 -3.865205 0.347926  
C 0 0.295910 -2.688511 -0.251059  
C 0 -1.738716 -1.764438 -1.011374  
C 0 -2.612146 -0.819326 -1.799322  
N 0 -3.946839 -1.321203 -1.419474  
C 0 -3.848540 -2.603476 -0.835466  
O 0 -4.920673 -1.176660 -2.424724  
C 0 -6.066464 -0.482582 -1.910184  
C 0 -2.423009 0.680021 -1.553065  
S 0 -2.650777 1.208000 0.199366  
C 0 -0.928030 1.573100 0.727572  
C 0 -0.367435 2.924799 0.257836  
C 0 -1.258385 4.094397 0.664011  
O 0 -0.178321 2.953927 -1.141605  
O 0 -1.711659 4.882130 -0.144146  
O 0 -1.467875 4.158940 1.983276  
O 0 -4.792889 -3.362554 -0.629374  
O 0 -2.692630 -4.278997 1.410850  
O 0 0.307205 -4.422823 1.349645  
C 0 -0.737340 -2.352295 2.089340  
C 0 1.683925 -2.174937 0.106701  
C 0 2.521045 -1.773260 -1.116406  
C 0 3.918960 -1.269453 -0.736528  
C 0 4.770706 -0.867723 -1.947768  
C 0 6.164324 -0.360848 -1.562430  
H 0 -1.583635 -4.737561 -0.274822  
H 0 0.377053 -3.449791 -1.037464  
H 0 -2.463554 -0.999955 -2.874676  
H 0 -6.746654 -0.395815 -2.760924  
H 0 -5.795940 0.514070 -1.545410  
H 0 -6.542094 -1.057662 -1.110327  
H 0 -3.156737 1.221620 -2.155758  
H 0 -1.432234 1.000322 -1.878196  
H 0 -0.270403 0.773952 0.378143  
H 0 -0.944249 1.545554 1.820485  
H 0 0.601672 3.064975 0.762779  
H 0 -0.705847 3.708073 -1.468942  
H 0 -2.044140 4.927626 2.162878  
H 0 -3.572973 -4.416561 1.015035  
H 0 -0.224251 -4.927626 1.988388  
H 0 -1.301855 -1.467352 1.779670  
H 0 -1.309069 -2.853720 2.874676  
H 0 0.219772 -2.030614 2.507808  
H 0 1.589752 -1.321344 0.789176  
H 0 2.191265 -2.972330 0.660586  
H 0 1.993817 -0.994642 -1.682535  
H 0 2.615063 -2.637496 -1.789895  
H 0 3.823103 -0.407573 -0.059631  
H 0 4.444700 -2.049130 -0.165534  
H 0 4.242970 -0.090397 -2.518424  
H 0 4.867798 -1.729485 -2.623214

H O 6.098463 0.520471 -0.912332  
H O 6.746654 -0.079810 -2.447534  
H O 6.729547 -1.129796 -1.021190  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.654275  
Number of imaginary frequencies = 0

### 1-3R-c6

B3LYP/6-31G\* geometry

O O -0.362117 -1.517664 -0.869429  
C O -2.281490 -2.887346 -0.486843  
C O -0.313498 -3.254909 0.943604  
C O -1.595424 -3.909183 0.364211  
C O 0.444451 -2.577227 -0.236994  
C O -1.651301 -1.821448 -1.017218  
C O -2.593933 -0.944748 -1.804005  
N O -3.887597 -1.539959 -1.415744  
C O -3.694368 -2.809180 -0.826649  
O O -4.875275 -1.469500 -2.414862  
C O -6.059552 -0.844187 -1.898844  
C O -2.509650 0.562946 -1.553589  
S O -2.758742 1.053311 0.207966  
C O -1.086495 1.652625 0.682640  
C O -0.742037 3.073858 0.209828  
C O -1.765338 4.101726 0.681845  
O O -0.631038 3.146315 -1.196045  
O O -2.375627 4.818215 -0.088405  
O O -1.903746 4.129017 2.011838  
O O -4.581321 -3.632349 -0.611387  
O O -2.421747 -4.377748 1.426642  
O O 0.577949 -4.281432 1.390969  
C O -0.633939 -2.287512 2.088330  
C O 1.784594 -1.951201 0.124198  
C O 2.605441 -1.513678 -1.097563  
C O 3.952937 -0.891421 -0.711282  
C O 4.791966 -0.455938 -1.919609  
C O 6.133447 0.171035 -1.526160  
H O -1.268228 -4.765186 -0.247179  
H O 0.591806 -3.341041 -1.011313  
H O -2.439261 -1.114016 -2.880181  
H O -6.747930 -0.805011 -2.746499  
H O -5.849009 0.169519 -1.541578  
H O -6.494835 -1.442253 -1.092847  
H O -3.280791 1.055873 -2.151021  
H O -1.544758 0.951872 -1.881519  
H O -0.337123 0.955826 0.299736  
H O -1.057424 1.613647 1.774959  
H O 0.223224 3.341482 0.667982  
H O -1.297202 3.799548 -1.485069  
H O -2.573647 4.804860 2.234699  
H O -3.289532 -4.577693 1.029506  
H O 0.080255 -4.818215 2.030860  
H O -1.269762 -1.460379 1.757994  
H O -1.165522 -2.821851 2.880181  
H O 0.289813 -1.877873 2.504934  
H O 1.615855 -1.092465 0.785592  
H O 2.344386 -2.694537 0.702187  
H O 2.027016 -0.793344 -1.690366  
H O 2.777996 -2.383725 -1.747669  
H O 3.778165 -0.022190 -0.059922  
H O 4.528149 -1.611847 -0.110840  
H O 4.214772 0.260851 -2.520825  
H O 4.970002 -1.325053 -2.568630  
H O 5.985674 1.061455 -0.902381  
H O 6.707889 0.473845 -2.409221  
H O 6.747930 -0.535374 -0.954223  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.654057  
Number of imaginary frequencies = 0

### 1-3R-c7

B3LYP/6-31G\* geometry

O O -0.419179 -0.305750 0.108769  
C O 0.820621 -2.346694 0.049126  
C O -1.204374 -2.193173 -1.346169  
C O -0.222035 -3.167717 -0.639167  
C O -1.592678 -1.082728 -0.322802  
C O 0.666242 -1.043731 0.342707  
C O 1.889033 -0.466774 1.012123

N O 2.688076 -1.696421 1.180996  
C O 2.165657 -2.760679 0.439293  
O O 4.074237 -1.563483 1.249863  
C O 4.541485 -1.853711 2.578649  
C O 2.592177 0.667535 0.243638  
S O 3.047436 0.265830 -1.498677  
C O 4.882876 0.136322 -1.442059  
C O 5.608552 1.479528 -1.599847  
C O 5.620658 2.321606 -0.308598  
O O 5.122067 2.263002 -2.686362  
O O 5.831966 1.861400 0.794883  
O O 5.421847 3.628536 -0.513084  
O O 2.730975 -3.827925 0.201926  
O O 0.342011 -4.073835 -1.584951  
O O -2.435835 -2.875158 -1.608107  
C O -0.620531 -1.630542 -2.646400  
C O -2.623261 -0.077414 -0.818596  
C O -3.154266 0.851540 0.282852  
C O -4.203109 1.842076 -0.237995  
C O -4.748447 2.779979 0.846869  
C O -5.799397 3.762533 0.319910  
H O -0.814148 -3.735504 0.096582  
H O -1.968106 -1.584619 0.578494  
H O 1.619549 -0.057667 1.995236  
H O 4.320955 -2.891477 2.845736  
H O 4.094260 -1.172867 3.310056  
H O 5.621440 -1.697601 2.535786  
H O 3.492873 0.961799 0.782850  
H O 1.914145 1.524253 0.218889  
H O 5.141425 -0.505949 -2.287646  
H O 5.184102 -0.362102 -0.519859  
H O 6.661059 1.264182 -1.823537  
H O 4.151039 2.136239 -2.707917  
H O 5.264113 3.728494 -1.480962  
H O 1.160701 -4.417720 -1.178287  
H O -2.214497 -3.647158 -2.155905  
H O -1.364012 -1.009167 -3.152178  
H O 0.276698 -1.029606 -2.469276  
H O -0.343875 -2.453867 -3.310056  
H O -2.182483 0.519923 -1.625933  
H O -3.449595 -0.648000 -1.256117  
H O -2.318849 1.404802 0.731031  
H O -3.593429 0.245105 1.088283  
H O -3.764950 2.442678 -1.048875  
H O -5.037582 1.284103 -0.688145  
H O -3.914473 3.339808 1.293426  
H O -5.182718 2.179572 1.658872  
H O -5.384076 4.400055 -0.470475  
H O -6.169623 4.417720 1.116891  
H O -6.661059 3.230703 -0.102439  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.65399  
Number of imaginary frequencies = 0

### 1-3R-c8

B3LYP/6-31G\* geometry

O O 0.284554 -0.147278 -0.140438  
C O -1.382380 1.556087 0.013776  
C O 0.487690 1.917640 -1.551787  
C O -0.618102 2.616493 -0.712515  
C O 1.209757 0.892019 -0.626124  
C O -0.911660 0.312224 0.220308  
C O -1.904602 -0.553264 0.959801  
N O -2.925414 0.465566 1.291837  
C O -2.733803 1.645797 0.554815  
O O -4.239256 0.024029 1.452404  
C O -4.655861 0.139755 2.827196  
C O -2.435972 -1.758499 0.169537  
S O -3.127703 -1.289807 -1.478179  
C O -4.422206 -2.583174 -1.695474  
C O -5.827855 -2.113941 -1.316670  
C O -6.353513 -1.034541 -2.284329  
O O -5.975596 -1.684283 0.030568  
O O -6.149621 -1.041395 -3.479754  
O O -7.108686 -0.099863 -1.691362  
O O -3.544633 2.561473 0.437702  
O O -1.454418 3.402854 -1.557602  
O O 1.503099 2.872996 -1.876038

C 0	-0.072172	1.279056	-2.827232
C 0	2.387289	0.163932	-1.259792
C 0	3.219550	-0.646727	-0.256244
C 0	4.405577	-1.361496	-0.915926
C 0	5.257810	-2.168671	0.071571
C 0	6.440444	-2.879056	-0.594950
H 0	-0.101963	3.276054	0.003372
H 0	1.544525	1.434921	0.267249
H 0	-1.453029	-0.944431	1.880254
H 0	-4.648204	1.188419	3.135099
H 0	-4.010092	-0.455014	3.479754
H 0	-5.674301	-0.253015	2.845288
H 0	-3.217090	-2.248061	0.754139
H 0	-1.612216	-2.464065	0.033322
H 0	-4.145133	-3.464953	-1.113388
H 0	-4.417997	-2.856117	-2.752503
H 0	-6.503107	-2.972579	-1.428839
H 0	-5.246464	-1.068514	0.263683
H 0	-7.099089	-0.313291	-0.730350
H 0	-2.281915	3.553566	-1.062303
H 0	1.065595	3.586222	-2.370939
H 0	0.744610	0.875486	-3.431078
H 0	-0.776355	0.470789	-2.608010
H 0	-0.601383	2.034075	-3.414265
H 0	2.015195	-0.496514	-2.052564
H 0	3.016077	0.920500	-1.741451
H 0	2.578021	-1.385242	0.241705
H 0	3.590703	0.024521	0.531870
H 0	4.033011	-2.031957	-1.704684
H 0	5.041380	-0.619554	-1.421451
H 0	4.622104	-2.909848	0.576433
H 0	5.630359	-1.498614	0.859471
H 0	6.097557	-3.586222	-1.360517
H 0	7.033201	-3.440827	0.136182
H 0	7.108686	-2.159775	-1.084638

Free Energy (PCM/B3LYP/6-31G\*) = -1757.653944  
Number of imaginary frequencies = 0

### 1-3R-c9

B3LYP/6-31G\* geometry

O 0	0.923165	-0.035178	-0.122917
C 0	-0.618210	1.783313	0.016689
C 0	1.348523	2.050391	-1.448095
C 0	0.252373	2.804438	-0.643933
C 0	1.944863	0.950611	-0.518877
C 0	-0.252788	0.500463	0.198033
C 0	-1.352534	-0.320237	0.829276
N 0	-2.288793	0.766856	1.186742
C 0	-1.985712	1.950363	0.495024
O 0	-3.639080	0.429477	1.308152
C 0	-4.101169	0.668342	2.653940
C 0	-1.939775	-1.407258	-0.093960
S 0	-2.546464	-0.748431	-1.704815
C 0	-4.182323	-1.557030	-1.891467
C 0	-5.244860	-1.094346	-0.882301
C 0	-6.604004	-1.725612	-1.220675
O 0	-5.413470	0.315459	-0.862962
O 0	-6.749241	-2.903154	-1.473418
O 0	-7.628901	-0.864433	-1.194803
O 0	-2.734660	2.917175	0.369880
O 0	-0.486723	3.664073	-1.508503
O 0	2.444507	2.938825	-1.690759
C 0	0.815182	1.488675	-2.769938
C 0	3.107209	0.157966	-1.102017
C 0	3.818393	-0.722837	-0.065165
C 0	4.985037	-1.521636	-0.659421
C 0	5.713198	-2.389744	0.374531
C 0	6.875701	-3.191091	-0.220221
H 0	0.776247	3.411655	0.111442
H 0	2.260987	1.442879	0.410041
H 0	-0.991221	-0.819874	1.736363
H 0	-4.021691	1.730562	2.897805
H 0	-3.528219	0.067262	3.365154
H 0	-5.147627	0.357205	2.651139
H 0	-2.761287	-1.907211	0.422069
H 0	-1.156459	-2.148163	-0.274549
H 0	-4.082282	-2.644038	-1.853156

H 0	-4.490832	-1.281679	-2.904974
H 0	-4.981304	-1.458186	0.118752
H 0	-4.819418	0.668711	-0.169616
H 0	-7.236469	0.013922	-0.978806
H 0	-1.321549	3.868314	-1.046344
H 0	2.085183	3.694312	-2.185984
H 0	1.631377	1.034113	-3.337477
H 0	0.036578	0.735998	-2.614242
H 0	0.383095	2.297195	-3.365154
H 0	2.739610	-0.461338	-1.929372
H 0	3.813137	0.878501	-1.528991
H 0	3.094773	-1.414363	0.385618
H 0	4.191041	-0.088018	0.751887
H 0	4.611513	-2.161839	-1.472405
H 0	5.703459	-0.828644	-1.122097
H 0	4.993219	-3.078460	0.839087
H 0	6.087836	-1.748265	1.184909
H 0	6.527096	-3.868314	-1.009880
H 0	7.374414	-3.798668	0.543773
H 0	7.628901	-2.527114	-0.662454

Free Energy (PCM/B3LYP/6-31G\*) = -1757.65391  
Number of imaginary frequencies = 0

### 1-3R-c10

B3LYP/6-31G\* geometry

O 0	1.052881	-1.063187	-0.291914
C 0	0.682578	-3.419200	-0.279065
C 0	2.730507	-2.575108	0.796718
C 0	2.063098	-3.812728	0.138890
C 0	2.487452	-1.356402	-0.143271
C 0	0.283592	-2.142378	-0.433091
C 0	-1.178630	-2.049198	-0.804971
N 0	-1.463756	-3.489758	-1.035976
C 0	-0.451392	-4.303102	-0.516577
O 0	-2.781010	-3.921728	-0.869390
C 0	-3.347459	-4.285121	-2.139159
C 0	-2.085841	-1.456432	0.292327
S 0	-1.971015	0.370074	0.452169
C 0	-3.143381	0.939835	-0.844495
C 0	-4.625801	0.924204	-0.441357
C 0	-4.891279	1.724115	0.830695
O 0	-5.104677	-0.392994	-0.265035
O 0	-5.457031	1.246858	1.795535
O 0	-4.457669	2.986885	0.754762
O 0	-0.519049	-5.519056	-0.330705
O 0	2.056770	-4.913321	1.046042
O 0	4.151747	-2.748757	0.793127
C 0	2.227181	-2.339347	2.225113
C 0	3.155631	-0.058405	0.290074
C 0	3.080188	1.051977	-0.767455
C 0	3.788313	2.339023	-0.326265
C 0	3.715364	3.461360	-1.369489
C 0	4.431790	4.742072	-0.929156
H 0	2.674606	-4.072512	-0.740311
H 0	2.841684	-1.638404	-1.143574
H 0	-1.309294	-1.490233	-1.738600
H 0	-4.369720	-4.595560	-1.911700
H 0	-2.793529	-5.116416	-2.585883
H 0	-3.360989	-3.431598	-2.825141
H 0	-1.816729	-1.872660	1.267251
H 0	-3.123397	-1.713553	0.082785
H 0	-3.015243	0.333677	-1.745589
H 0	-2.842703	1.962136	-1.087875
H 0	-5.185665	1.417503	-1.252766
H 0	-5.496493	-0.419284	0.629456
H 0	-4.667866	3.433178	1.598517
H 0	1.364213	-5.523543	0.726020
H 0	4.330598	-3.578110	1.267754
H 0	1.156764	-2.114204	2.252021
H 0	2.394880	-3.237431	2.825141
H 0	2.769958	-1.507450	2.681212
H 0	2.697216	0.288054	1.224354
H 0	4.202508	-0.291399	0.513392
H 0	2.028935	1.272210	-0.993090
H 0	3.530174	0.691432	-1.704019
H 0	3.346780	2.692842	0.617313
H 0	4.842901	2.116802	-0.105169

H O 2.661029 3.686373 -1.584463  
H O 4.150039 3.105296 -2.314404  
H O 3.997838 5.140691 -0.003616  
H O 4.360200 5.523543 -1.694477  
H O 5.496493 4.555235 -0.741567  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.653849  
Number of imaginary frequencies = 0

### 1-3R-c11

B3LYP/6-31G\* geometry

O O 0.388080 -0.693137 -0.793411  
C O -0.840011 -2.664398 -0.233195  
C O 0.904329 -1.920633 1.336885  
C O 0.090860 -3.144434 0.835511  
C O 1.466517 -1.179185 0.086607  
C O -0.632849 -1.533047 -0.934153  
C O -1.743521 -1.274016 -1.923851  
N O -2.726618 -2.282171 -1.484592  
C O -2.110006 -3.241614 -0.645773  
O O -3.524780 -2.796298 -2.521776  
C O -4.915184 -2.631990 -2.204828  
C O -2.282034 0.156120 -1.973120  
S O -3.038326 0.659025 -0.367297  
C O -3.023630 2.497463 -0.568677  
C O -4.382397 3.102237 -0.203698  
C O -4.660557 3.044079 1.312208  
O O -5.470376 2.536889 -0.928145  
O O -3.827689 3.296541 2.156502  
O O -5.925340 2.730082 1.619673  
O O -2.611419 -4.312299 -0.313298  
O O -0.596382 -3.748433 1.928127  
O O 2.070610 -2.384652 2.024751  
C O 0.072255 -1.010396 2.246669  
C O 2.353868 0.020877 0.388935  
C O 3.080248 0.571535 -0.846525  
C O 3.978874 1.770560 -0.518081  
C O 4.716133 2.331401 -1.740828  
C O 5.611369 3.529247 -1.406731  
H O 0.817770 -3.861444 0.422153  
H O 2.026511 -1.913486 -0.506264  
H O -1.399095 -1.530521 -2.936054  
H O -5.182812 -3.215644 -1.318970  
H O -5.448855 -3.014767 -3.078000  
H O -5.161972 -1.576867 -2.046867  
H O -3.022094 0.240825 -2.772538  
H O -1.449680 0.829929 -2.192861  
H O -2.798879 2.725523 -1.612837  
H O -2.250606 2.932958 0.066811  
H O -4.356053 4.167123 -0.465578  
H O -5.275814 1.581392 -1.020522  
H O -6.377754 2.555351 0.762406  
H O -1.252078 -4.355167 1.537730  
H O 1.755584 -2.962821 2.740152  
H O 0.701504 -0.214109 2.652480  
H O -0.332396 -1.593428 3.078000  
H O -0.767763 -0.554886 1.713446  
H O 1.745213 0.811229 0.844742  
H O 3.084032 -0.296350 1.141441  
H O 2.343197 0.864405 -1.605310  
H O 3.688192 -0.227222 -1.295855  
H O 3.370465 2.567251 -0.064774  
H O 4.713972 1.476124 0.245515  
H O 3.980522 2.624390 -2.503307  
H O 5.323962 1.534997 -2.193268  
H O 5.025620 4.355167 -0.984246  
H O 6.124726 3.906338 -2.298781  
H O 6.377754 3.256671 -0.670552  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.65383  
Number of imaginary frequencies = 0

### 1-3R-c12

B3LYP/6-31G\* geometry

O O 1.880884 -1.093148 -0.472699  
C O 1.889069 -3.471534 -0.688021  
C O 3.907800 -2.397471 0.222734  
C O 3.364534 -3.651037 -0.513932  
C O 3.352933 -1.141331 -0.513068

C O 1.284743 -2.268517 -0.658353  
C O -0.215791 -2.383847 -0.796234  
N O -0.376054 -3.848589 -0.693797  
C O 0.870748 -4.497870 -0.845055  
O O -1.428596 -4.371181 -1.472260  
C O -2.256548 -5.230664 -0.673513  
C O -0.964658 -1.583893 0.272093  
S O -2.782629 -1.595727 -0.032121  
C O -3.338329 -0.372026 1.220125  
C O -3.232196 1.099403 0.792360  
C O -3.990028 1.386039 -0.500686  
O O -1.886930 1.500294 0.634901  
O O -3.464073 1.913359 -1.462111  
O O -5.274969 1.019113 -0.447398  
O O 1.020335 -5.705295 -1.019342  
O O 3.686473 -4.824464 0.228181  
O O 5.324242 -2.319697 0.035504  
C O 3.566256 -2.415060 1.716877  
C O 3.846782 0.197108 0.019353  
C O 3.462179 1.387300 -0.871183  
C O 3.974884 2.725715 -0.325035  
C O 3.597386 3.925630 -1.203123  
C O 4.109694 5.260412 -0.652120  
H O 3.869363 -3.688757 -1.492171  
H O 3.619692 -1.238143 -1.573299  
H O -0.526808 -2.059461 -1.798647  
H O -3.052331 -5.555939 -1.348161  
H O -2.683607 -4.684215 0.172967  
H O -1.687696 -6.096873 -0.323870  
H O -0.626660 -0.546677 0.247852  
H O -0.758548 -2.006428 1.260367  
H O -2.764284 -0.517909 2.139619  
H O -4.382202 -0.613356 1.436383  
H O -3.711022 1.700347 1.583192  
H O -1.827551 1.895945 -0.256284  
H O -5.691486 1.240528 -1.303425  
H O 3.155740 -5.545690 -0.157246  
H O 5.691486 -3.161612 0.354329  
H O 2.486683 -2.378727 1.891353  
H O 3.948416 -3.333279 2.170205  
H O 4.029168 -1.560457 2.216620  
H O 3.453786 0.349366 1.031913  
H O 4.936941 0.130451 0.104482  
H O 2.370259 1.429351 -0.974715  
H O 3.864235 1.227876 -1.882273  
H O 3.578175 2.880646 0.689315  
H O 5.069291 2.681802 -0.221378  
H O 2.503803 3.967594 -1.306475  
H O 3.994003 3.771207 -2.216620  
H O 3.702727 5.457906 0.347421  
H O 3.823481 6.096873 -1.300130  
H O 5.203763 5.260897 -0.570023  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.653823  
Number of imaginary frequencies = 0

### 1-3R-c13

B3LYP/6-31G\* geometry

O O 1.473559 -1.103575 -0.516597  
C O 1.513407 -3.483252 -0.676443  
C O 3.473251 -2.370621 0.312638  
C O 2.979833 -3.644041 -0.423508  
C O 2.945212 -1.138898 -0.480310  
C O 0.892292 -2.286788 -0.703365  
C O -0.600025 -2.431506 -0.899702  
N O -0.736947 -3.895281 -0.745900  
C O 0.518382 -4.532215 -0.830603  
O O -1.773339 -4.460509 -1.509744  
C O -2.650139 -5.225982 -0.669442  
C O -1.487284 -1.678194 0.104388  
S O -1.672185 0.118486 -0.250595  
C O -3.119765 0.126411 -1.384934  
C O -4.491154 0.033489 -0.697986  
C O -4.690868 1.123504 0.351017  
O O -4.686557 -1.228335 -0.092741  
O O -4.996117 0.874047 1.501450  
O O -4.514002 2.356664 -0.134901  
O O 0.692177 -5.743873 -0.948841

O	0	3.272414	-4.799727	0.357601
O	0	4.897053	-2.282797	0.198722
C	0	3.053996	-2.358076	1.786795
C	0	3.398888	0.217359	0.043122
C	0	3.066036	1.377798	-0.905498
C	0	3.535575	2.735768	-0.369020
C	0	3.221407	3.903959	-1.312397
C	0	3.691754	5.258389	-0.772052
H	0	3.534834	-3.696833	-1.373529
H	0	3.267619	-1.258547	-1.522615
H	0	-0.877344	-2.156978	-1.925952
H	0	-2.118565	-6.071021	-0.222184
H	0	-3.432232	-5.590859	-1.339546
H	0	-3.091370	-4.602371	0.115065
H	0	-1.077904	-1.764078	1.114547
H	0	-2.488443	-2.109334	0.103933
H	0	-3.027307	-0.694106	-2.101988
H	0	-3.055139	1.063856	-1.943349
H	0	-5.254071	0.193744	-1.477297
H	0	-4.923016	-1.046464	0.837537
H	0	-4.663680	2.994529	0.590393
H	0	2.750924	-5.528427	-0.027462
H	0	5.254071	-3.109316	0.565718
H	0	3.475969	-1.483653	2.288576
H	0	1.966323	-2.336698	1.903535
H	0	3.426518	-3.258295	2.282396
H	0	2.941529	0.395767	1.024033
H	0	4.481814	0.160948	0.198767
H	0	1.982966	1.408142	-1.081280
H	0	3.534290	1.190507	-1.882845
H	0	3.066218	2.923079	0.608175
H	0	4.619691	2.699794	-0.185034
H	0	2.138207	3.938809	-1.496203
H	0	3.690716	3.716276	-2.288576
H	0	3.212079	5.489980	0.187102
H	0	3.454479	6.071021	-1.468363
H	0	4.776754	5.264279	-0.609362

Free Energy (PCM/B3LYP/6-31G\*) = -1757.65367  
Number of imaginary frequencies = 0

**1-3R-c14**

B3LYP/6-31G\* geometry

O	0	0.576949	-0.866104	-0.900266
C	0	-0.160075	-3.066587	-0.334004
C	0	1.447065	-1.977331	1.178257
C	0	0.899943	-3.343429	0.684818
C	0	1.774161	-1.115298	-0.077695
C	0	-0.241187	-1.908338	-1.017030
C	0	-1.428326	-1.886827	-1.950080
N	0	-2.139876	-3.095154	-1.491560
C	0	-1.289957	-3.905326	-0.704524
O	0	-2.867076	-3.755592	-2.496204
C	0	-4.242200	-3.888219	-2.105055
C	0	-2.272534	-0.611171	-1.937159
S	0	-3.071361	-0.327920	-0.302700
C	0	-3.480703	1.453634	-0.514763
C	0	-4.571288	1.856414	0.494309
C	0	-4.848286	3.353246	0.365826
O	0	-4.212816	1.563416	1.827319
O	0	-4.521688	4.154851	1.218843
O	0	-5.449832	3.674344	-0.786201
O	0	-1.526042	-5.065427	-0.375622
O	0	0.410780	-4.096483	1.791451
O	0	2.718294	-2.180289	1.804709
C	0	0.479385	-1.284531	2.144581
C	0	2.391526	0.246333	0.212191
C	0	2.939647	0.946161	-1.039706
C	0	3.556169	2.316216	-0.731563
C	0	4.134275	3.015442	-1.968762
C	0	4.744766	4.385572	-1.656467
H	0	1.747017	-3.878668	0.227079
H	0	2.453175	-1.702706	-0.708916
H	0	-1.084191	-2.048491	-2.981830
H	0	-4.732570	-4.361295	-2.959202
H	0	-4.691472	-2.909606	-1.907299
H	0	-4.333941	-4.527229	-1.221585
H	0	-3.037422	-0.674619	-2.716269

H	0	-1.617893	0.235236	-2.166219
H	0	-3.847345	1.616572	-1.532313
H	0	-2.581157	2.059204	-0.360831
H	0	-5.490697	1.307287	0.261621
H	0	-3.839113	2.385833	2.196252
H	0	-5.561575	4.645218	-0.811004
H	0	-0.114036	-4.826755	1.414780
H	0	2.573530	-2.823113	2.519634
H	0	-0.467075	-1.021668	1.661903
H	0	0.256565	-1.951156	2.981830
H	0	0.935459	-0.372421	2.538203
H	0	3.199195	0.090452	0.935670
H	0	1.642234	0.883025	0.698279
H	0	2.134484	1.064883	-1.776384
H	0	3.697863	0.302695	-1.509224
H	0	2.794208	2.963274	-0.272300
H	0	4.349623	2.197348	0.021287
H	0	3.342517	3.130248	-2.722696
H	0	4.898189	2.369588	-2.424456
H	0	3.995459	5.065427	-1.232232
H	0	5.150554	4.857661	-2.558675
H	0	5.561575	4.298022	-0.929229

Free Energy (PCM/B3LYP/6-31G\*) = -1757.65346  
Number of imaginary frequencies = 0

**1-3R-c15**

B3LYP/6-31G\* geometry

O	0	0.477404	0.420551	-0.330371
C	0	2.308392	1.929744	-0.073945
C	0	0.534650	1.989654	1.633186
C	0	1.652191	2.814257	0.941352
C	0	-0.325746	1.323389	0.518716
C	0	1.697871	0.852472	-0.612843
C	0	2.582966	0.126697	-1.594493
N	0	3.889054	0.775698	-1.322595
C	0	3.651426	2.010013	-0.602310
O	0	4.604252	0.989370	-2.532515
C	0	5.977359	0.598809	-2.404999
C	0	2.581951	-1.402333	-1.498861
S	0	2.791832	-2.116392	0.185306
C	0	4.554801	-2.661444	0.244557
C	0	5.451078	-1.793723	1.130521
C	0	4.923580	-1.751923	2.578977
O	0	5.664777	-0.469727	0.659834
O	0	4.595200	-2.742101	3.198580
O	0	4.883945	-0.523213	3.106535
O	0	4.495453	2.883820	-0.462870
O	0	2.563968	3.294617	1.924111
O	0	-0.372929	2.884950	2.282380
C	0	1.105049	0.982609	2.638467
C	0	-1.514755	0.509642	1.011292
C	0	-2.466803	0.082464	-0.114750
C	0	-3.661478	-0.733881	0.394155
C	0	-4.623313	-1.161058	-0.721804
C	0	-5.813176	-1.980744	-0.211925
H	0	1.161911	3.667679	0.447595
H	0	-0.674267	2.121325	-0.148504
H	0	2.284817	0.392561	-2.618356
H	0	6.071870	-0.471080	-2.193456
H	0	6.481571	1.179941	-1.628387
H	0	6.415158	0.823217	-3.380399
H	0	3.342421	-1.815073	-2.166549
H	0	1.611184	-1.760793	-1.851756
H	0	4.953499	-2.709101	-0.771883
H	0	4.549136	-3.673464	0.654457
H	0	6.435209	-2.279106	1.177322
H	0	4.931491	-0.194457	0.063250
H	0	5.192342	0.080069	2.388832
H	0	3.320542	3.673464	1.441968
H	0	0.157514	3.415688	2.900752
H	0	0.290506	0.470114	3.156461
H	0	1.741364	0.233235	2.157776
H	0	1.711259	1.508909	3.380399
H	0	-1.148416	-0.374750	1.546466
H	0	-2.050457	1.127559	1.740187
H	0	-1.913578	-0.505560	-0.858467
H	0	-2.833159	0.978208	-0.637055

H 0 -3.294108 -1.628639 0.918113  
H 0 -4.212649 -0.146081 1.143180  
H 0 -4.070292 -1.745181 -1.471039  
H 0 -4.991535 -0.266274 -1.243593  
H 0 -5.477253 -2.900692 0.282447  
H 0 -6.481571 -2.267845 -1.031896  
H 0 -6.403907 -1.410681 0.515991  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.653339  
Number of imaginary frequencies = 0

### 1-3R-c16

B3LYP/6-31G\* geometry

O 0 1.897864 -1.049017 -0.855487  
C 0 1.588036 -3.404423 -0.608230  
C 0 3.410435 -2.351539 0.665939  
C 0 2.907697 -3.679876 0.040885  
C 0 3.293003 -1.242833 -0.422026  
C 0 1.199215 -2.173700 -0.992603  
C 0 -0.199363 -2.174274 -1.565329  
N 0 -0.613701 -3.554278 -1.240176  
C 0 0.504873 -4.337347 -0.875009  
O 0 -1.478046 -4.136723 -2.188866  
C 0 -2.616013 -4.716666 -1.531827  
C 0 -1.088518 -1.086911 -0.956749  
S 0 -2.718508 -1.018916 -1.811560  
C 0 -3.409817 0.539090 -1.137334  
C 0 -4.026425 0.402144 0.269918  
C 0 -4.654882 1.733436 0.679101  
O 0 -3.080662 0.024268 1.247511  
O 0 -4.187511 2.436175 1.554558  
O 0 -5.736248 2.045256 -0.045523  
O 0 0.503023 -5.561462 -0.763631  
O 0 2.821128 -4.684478 1.048024  
O 0 4.815727 -2.453437 0.916157  
C 0 2.662648 -2.004358 1.958121  
C 0 3.814016 0.127823 -0.011366  
C 0 3.917365 1.118422 -1.179915  
C 0 4.435750 2.494640 -0.744475  
C 0 4.552911 3.495268 -1.901386  
C 0 5.063510 4.870750 -1.459940  
H 0 3.654505 -3.981198 -0.710639  
H 0 3.835543 -1.595205 -1.308444  
H 0 -0.157624 -2.062054 -2.657577  
H 0 -2.305467 -5.533552 -0.874376  
H 0 -3.236367 -5.106881 -2.342445  
H 0 -3.169027 -3.958866 -0.968594  
H 0 -0.593737 -0.119525 -1.087963  
H 0 -1.236958 -1.265029 0.109151  
H 0 -4.183455 0.843290 -1.848442  
H 0 -2.629739 1.308136 -1.133756  
H 0 -4.813887 -0.359327 0.236375  
H 0 -2.829509 0.845746 1.711118  
H 0 -6.059352 2.919465 0.249560  
H 0 2.310524 -5.418354 0.659150  
H 0 4.938764 -3.235787 1.480212  
H 0 1.596180 -1.832491 1.783152  
H 0 2.756316 -2.829701 2.668602  
H 0 3.091579 -1.105552 2.408292  
H 0 3.161909 0.540068 0.768246  
H 0 4.800640 -0.021078 0.440944  
H 0 2.933314 1.231917 -1.652830  
H 0 4.585341 0.703067 -1.948403  
H 0 3.767027 2.907981 0.025081  
H 0 5.418552 2.378157 -0.263996  
H 0 3.571135 3.606732 -2.383364  
H 0 5.224353 3.084268 -2.668602  
H 0 4.393669 5.321804 -0.717291  
H 0 5.134567 5.561462 -2.308098  
H 0 6.059352 4.796497 -1.005659

Free Energy (PCM/B3LYP/6-31G\*) = -1757.653306  
Number of imaginary frequencies = 0

### 1-3R-c17

B3LYP/6-31G\* geometry

O 0 2.034499 -1.136730 -0.429357  
C 0 1.905225 -3.513475 -0.617636  
C 0 3.992636 -2.547454 0.257508

C 0 3.370375 -3.773973 -0.460936  
C 0 3.501250 -1.268084 -0.483055  
C 0 1.369270 -2.278196 -0.595102  
C 0 -0.139425 -2.310758 -0.690961  
N 0 -0.381274 -3.764637 -0.598939  
C 0 0.829666 -4.481297 -0.753509  
O 0 -1.445019 -4.229223 -1.399297  
C 0 -2.346952 -5.023751 -0.615848  
C 0 -0.797721 -1.483063 0.424677  
S 0 -2.626799 -1.386890 0.385607  
C 0 -2.884041 -0.325591 -1.100249  
C 0 -4.141749 0.530764 -0.926876  
C 0 -4.024424 1.529489 0.223070  
O 0 -5.270408 -0.290203 -0.709175  
O 0 -4.863844 1.615395 1.098944  
O 0 -2.939597 2.306706 0.136286  
O 0 0.910298 -5.696060 -0.921371  
O 0 3.636357 -4.957334 0.287478  
O 0 5.408976 -2.552714 0.053318  
C 0 3.669416 -2.532806 1.755927  
C 0 4.073940 0.044583 0.034610  
C 0 3.758419 1.245264 -0.868855  
C 0 4.346790 2.558142 -0.337272  
C 0 4.045146 3.766098 -1.233534  
C 0 4.630056 5.076294 -0.695977  
H 0 3.859104 -3.848274 -1.445205  
H 0 3.752314 -1.387041 -1.544893  
H 0 -0.465929 -1.955745 -1.676488  
H 0 -3.141225 -5.309155 -1.310356  
H 0 -2.764544 -4.440209 0.209973  
H 0 -1.844535 -5.919102 -0.238225  
H 0 -0.387188 -0.468919 0.404066  
H 0 -0.551764 -1.926097 1.394311  
H 0 -3.002533 -0.950007 -1.989458  
H 0 -2.012845 0.320456 -1.237092  
H 0 -4.270124 1.121830 -1.848576  
H 0 -5.730396 0.089201 0.064458  
H 0 -2.947675 2.925641 0.892617  
H 0 3.062856 -5.651556 -0.086177  
H 0 5.730396 -3.412022 0.375283  
H 0 2.596160 -2.431878 1.943871  
H 0 4.003255 -3.468037 2.212765  
H 0 4.187925 -1.702468 2.241832  
H 0 3.692067 0.229568 1.046010  
H 0 5.158532 -0.084191 0.119229  
H 0 2.670719 1.348766 -0.974140  
H 0 4.151094 1.051724 -1.877647  
H 0 3.955109 2.749644 0.672741  
H 0 5.436187 2.451167 -0.227041  
H 0 2.956517 3.869615 -1.345925  
H 0 4.439222 3.575503 -2.241832  
H 0 4.228235 5.310484 0.297656  
H 0 4.397559 5.919102 -1.357124  
H 0 5.721694 5.014432 -0.605408

Free Energy (PCM/B3LYP/6-31G\*) = -1757.65329  
Number of imaginary frequencies = 0

### 1-3R-c18

B3LYP/6-31G\* geometry

O 0 0.963785 0.218510 -0.052448  
C 0 -0.391331 2.184204 0.007789  
C 0 1.576836 2.192622 -1.475105  
C 0 0.571185 3.086079 -0.696428  
C 0 2.070538 1.076292 -0.505211  
C 0 -0.150790 0.884274 0.252008  
C 0 -1.308151 0.214874 0.951058  
N 0 -2.167923 1.390289 1.188127  
C 0 -1.740843 2.505836 0.464849  
O 0 -3.536494 1.180551 1.339035  
C 0 -3.938446 1.439344 2.695685  
C 0 -1.966980 -0.943127 0.176378  
S 0 -2.483445 -0.580569 -1.554023  
C 0 -4.300495 -0.363068 -1.412960  
C 0 -5.088803 -1.675155 -1.387538  
C 0 -6.595517 -1.378122 -1.520078  
O 0 -4.862508 -2.379939 -0.159796  
O 0 -7.067532 -0.762997 -2.452619

O 0	-7.343097	-1.850278	-0.515657
O 0	-2.376044	3.545891	0.287425
O 0	-0.086919	3.985965	-1.585891
O 0	2.756244	2.952488	-1.763252
C 0	0.970683	1.639189	-2.768566
C 0	3.136951	0.147750	-1.071763
C 0	3.745071	-0.794087	-0.022886
C 0	4.825233	-1.713464	-0.607259
C 0	5.432058	-2.671204	0.425942
C 0	6.511124	-3.586628	-0.161987
H 0	1.161561	3.665479	0.031763
H 0	2.453563	1.572448	0.396190
H 0	-0.974506	-0.200655	1.911874
H 0	-5.009491	1.227014	2.716261
H 0	-3.757365	2.485990	2.957403
H 0	-3.412463	0.779807	3.393509
H 0	-2.836398	-1.310401	0.721636
H 0	-1.237091	-1.755757	0.123944
H 0	-4.599295	0.206286	-2.296725
H 0	-4.517656	0.235759	-0.525242
H 0	-4.804068	-2.291625	-2.246335
H 0	-4.570988	-3.282946	-0.360303
H 0	-6.714529	-2.293202	0.101149
H 0	-0.908850	4.260506	-1.135073
H 0	2.469733	3.722553	-2.282766
H 0	1.723519	1.073609	-3.323573
H 0	0.112869	0.988127	-2.574962
H 0	0.625628	2.467036	-3.393509
H 0	2.703944	-0.440303	-1.890064
H 0	3.919780	0.777474	-1.508356
H 0	2.950132	-1.404101	0.424974
H 0	4.176440	-0.197455	0.794023
H 0	4.396462	-2.298235	-1.434549
H 0	5.625539	-1.101295	-1.048892
H 0	4.631252	-3.283393	0.864545
H 0	5.858135	-2.087213	1.254047
H 0	6.106363	-4.205282	-0.972616
H 0	6.922078	-4.260506	0.598629
H 0	7.343097	-3.002886	-0.575144

Free Energy (PCM/B3LYP/6-31G\*) = -1757.653145  
Number of imaginary frequencies = 0

**1-3R-c19**

B3LYP/6-31G\* geometry

O 0	-0.750725	-1.083447	-0.905551
C 0	-3.037791	-1.558049	-0.404991
C 0	-1.314260	-2.731651	0.906038
C 0	-2.781394	-2.790934	0.403979
C 0	-0.407347	-2.390542	-0.313844
C 0	-2.057732	-0.834636	-0.979069
C 0	-2.603751	0.352663	-1.733683
N 0	-4.003219	0.336820	-1.269807
C 0	-4.312822	-0.910275	-0.677475
O 0	-4.923212	0.802752	-2.228035
C 0	-5.754109	1.827752	-1.663302
C 0	-1.899885	1.699324	-1.534185
S 0	-1.802059	2.275383	0.213525
C 0	-0.052533	1.915842	0.644750
C 0	0.949963	2.889185	-0.001222
C 0	2.345065	2.598105	0.565372
O 0	0.651902	4.249858	0.272417
O 0	2.948471	1.572189	0.333753
O 0	2.831582	3.551561	1.369801
O 0	-5.445706	-1.305447	-0.416146
O 0	-3.665055	-2.910371	1.515340
O 0	-0.895150	-4.043500	1.294288
C 0	-1.152092	-1.752221	2.073631
C 0	1.088654	-2.355002	-0.029560
C 0	1.944986	-2.266896	-1.301071
C 0	3.443974	-2.145343	-0.999595
C 0	4.314211	-2.107994	-2.262414
C 0	5.810469	-1.975297	-1.960117
H 0	-2.866551	-3.689362	-0.227673
H 0	-0.617903	-3.132805	-1.094005
H 0	-2.588801	0.133855	-2.811924
H 0	-6.403863	2.143707	-2.482944
H 0	-5.155762	2.675546	-1.313120

H 0	-6.357379	1.429980	-0.842090
H 0	-2.448610	2.461129	-2.092952
H 0	-0.892724	1.650510	-1.956432
H 0	0.198413	0.889370	0.374804
H 0	-0.012977	2.011681	1.734443
H 0	0.997436	2.711824	-1.083571
H 0	-0.319285	4.348456	0.272475
H 0	2.164392	4.274668	1.385560
H 0	-4.562759	-2.752222	1.170103
H 0	-1.528854	-4.348456	1.965651
H 0	-0.118535	-1.755533	2.428708
H 0	-1.426500	-0.730765	1.792587
H 0	-1.803860	-2.055169	2.897242
H 0	1.312049	-1.505547	0.627572
H 0	1.337962	-3.264455	0.527825
H 0	1.625607	-1.403547	-1.898913
H 0	1.764055	-3.157902	-1.919623
H 0	3.618513	-1.233084	-0.411318
H 0	3.759662	-2.987762	-0.366136
H 0	3.993730	-1.269583	-2.897242
H 0	4.138503	-3.020263	-2.850011
H 0	6.020722	-1.055074	-1.401058
H 0	6.403863	-1.948928	-2.881419
H 0	6.168735	-2.818438	-1.356388

Free Energy (PCM/B3LYP/6-31G\*) = -1757.653139  
Number of imaginary frequencies = 0

**1-3R-c20**

B3LYP/6-31G\* geometry

O 0	1.175152	-0.991402	-0.108126
C 0	0.494299	-3.202895	-0.695980
C 0	2.871532	-2.839051	-0.178429
C 0	1.868421	-3.740205	-0.945738
C 0	2.537943	-1.358875	-0.530880
C 0	0.256583	-1.931934	-0.317624
C 0	-1.211480	-1.681737	-0.059290
N 0	-1.739035	-3.056549	-0.167570
C 0	-0.770247	-3.915403	-0.740985
O 0	-3.018387	-3.135119	-0.761053
C 0	-3.885185	-3.957200	0.034556
C 0	-1.439883	-0.993411	1.292179
S 0	-3.185249	-0.708149	1.792045
C 0	-3.957348	0.137211	0.360075
C 0	-3.417227	1.545388	0.058001
C 0	-4.273412	2.221658	-1.012607
O 0	-2.077329	1.509043	-0.392587
O 0	-3.826586	2.542582	-2.097524
O 0	-5.540915	2.408099	-0.630473
O 0	-0.991634	-5.056476	-1.142058
O 0	2.009629	-5.093064	-0.520192
O 0	4.185701	-3.042493	-0.707065
C 0	2.854911	-3.113073	1.329827
C 0	3.474691	-0.319279	0.069738
C 0	3.254139	1.094782	-0.486348
C 0	4.218739	2.124420	0.115357
C 0	4.014676	3.542397	-0.433253
C 0	4.980514	4.566931	0.171014
H 0	2.126623	-3.666215	-2.014032
H 0	2.545027	-1.273166	-1.624927
H 0	-1.631820	-1.063773	-0.861111
H 0	-3.983785	-3.551310	1.045354
H 0	-4.849269	-3.924327	-0.479384
H 0	-3.516566	-4.986467	0.066563
H 0	-0.905112	-0.042538	1.281421
H 0	-1.035014	-1.614373	2.097524
H 0	-5.013887	0.200789	0.636933
H 0	-3.879628	-0.498274	-0.526993
H 0	-3.480087	2.153005	0.970560
H 0	-2.097675	1.816204	-1.320018
H 0	-6.023843	2.830351	-1.368021
H 0	1.229066	-5.568442	-0.859989
H 0	4.368341	-3.994385	-0.630074
H 0	3.627282	-2.519721	1.825632
H 0	1.887114	-2.872417	1.780186
H 0	3.056585	-4.171602	1.513139
H 0	3.354104	-0.312792	1.159882
H 0	4.499189	-0.646895	-0.138375



H O 2.219643 1.407191 -0.294111  
H O 3.375384 1.076615 -1.579264  
H O 4.099845 2.138806 1.208958  
H O 5.254924 1.807372 -0.074891  
H O 2.979156 3.858125 -0.242360  
H O 4.132823 3.527746 -1.526065  
H O 4.861270 4.628918 1.259903  
H O 4.810069 5.568442 -0.240621  
H O 6.023843 4.295434 -0.032628  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.65312  
Number of imaginary frequencies = 0

### 1-3R-c21

B3LYP/6-31G\* geometry

O O -0.502745 0.376571 -0.734576  
C O 0.702406 2.435057 -0.598326  
C O -1.249111 2.152490 0.875602  
C O -0.338985 3.190001 0.165288  
C O -1.668664 1.087271 -0.181778  
C O 0.553808 1.150030 -0.973404  
C O 1.771136 0.633542 -1.703239  
N O 2.708646 1.745622 -1.461241  
C O 2.024507 2.891076 -1.006119  
O O 3.661162 1.940799 -2.473092  
C O 4.988740 1.863437 -1.928777  
C O 2.294158 -0.740241 -1.281216  
S O 2.795502 -0.777854 0.492366  
C O 3.312183 -2.531769 0.662161  
C O 4.727697 -2.843294 0.154976  
C O 5.783812 -1.935650 0.779284  
O O 4.804424 -2.736840 -1.251342  
O O 6.567632 -1.289679 0.109055  
O O 5.767424 -1.953087 2.115702  
O O 2.502525 4.021081 -0.930620  
O O 0.224933 4.077727 1.127649  
O O -2.478434 2.785230 1.246707  
C O -0.572484 1.537052 2.105120  
C O -2.629947 0.018142 0.320408  
C O -3.210079 -0.857021 -0.800037  
C O -4.171303 -1.929780 -0.273480  
C O -4.771703 -2.806119 -1.380449  
C O -5.726458 -3.879329 -0.847454  
H O -0.984271 3.761224 -0.520842  
H O -2.120105 1.623911 -1.026008  
H O 1.553442 0.581946 -2.779989  
H O 5.650315 1.993097 2.788704  
H O 5.170593 0.891836 -1.458024  
H O 5.157199 2.667229 -1.205707  
H O 3.150594 -1.012964 -1.898336  
H O 1.502862 -1.478995 -1.443087  
H O 2.597625 -3.174868 0.140340  
H O 3.250414 -2.757982 1.729792  
H O 4.965172 -3.873719 0.468877  
H O 5.589112 -2.185600 -1.436668  
H O 6.472755 -1.357955 2.437733  
H O 0.941106 4.556214 0.670752  
H O -2.239578 3.544190 1.805511  
H O 0.313071 0.952875 1.837224  
H O -0.259495 2.330508 2.788704  
H O -1.275691 0.883835 2.628107  
H O -2.113304 -0.612164 1.054298  
H O -3.439958 0.530878 0.850646  
H O -2.391602 -1.338185 -1.351033  
H O -3.737138 -0.217279 -1.522734  
H O -3.641788 -2.569562 0.447960  
H O -4.984697 -1.445852 0.287497  
H O -3.958190 -3.286285 -1.942642  
H O -5.303287 -2.166527 -2.099309  
H O -5.212668 -4.556214 -0.153620  
H O -6.140072 -4.486440 -1.660991  
H O -6.567632 -3.427516 -0.306998  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.653085  
Number of imaginary frequencies = 0

### 1-3R-c22

B3LYP/6-31G\* geometry

O O 1.813694 -0.775620 -0.595641

C O 2.549928 -3.047960 -0.568585  
C O 3.997452 -1.364132 0.492317  
C O 3.968001 -2.759710 -0.185823  
C O 3.223084 -0.375837 -0.429712  
C O 1.624542 -2.084805 -0.739435  
C O 0.263296 -2.658564 -1.060132  
N O 0.519770 -4.093018 -0.827457  
C O 1.911600 -4.341629 -0.753413  
O O -0.203358 -4.949166 -1.683700  
C O -0.834974 -5.992311 -0.924539  
C O -0.843832 -2.063116 -0.184688  
S O -2.498726 -2.686259 -0.698090  
C O -3.592716 -1.661685 0.357534  
C O -3.685257 -0.192268 -0.099655  
C O -4.773515 0.508286 0.722268  
O O -4.036024 -0.067637 -1.469912  
O O -4.657263 0.737489 1.906777  
O O -5.881687 0.813399 0.034842  
O O 2.430023 -5.454531 -0.788859  
O O 4.503087 -3.736614 0.702613  
O O 5.340127 -0.870440 0.491121  
C O 3.445065 -1.408405 1.921595  
C O 3.211626 1.074677 0.033340  
C O 2.667387 2.046798 -1.023157  
C O 2.672944 3.504697 -0.546783  
C O 2.143734 4.489069 -1.597719  
C O 2.148793 5.943935 -1.117193  
H O 4.605438 -2.692814 -1.081526  
H O 3.671192 -0.441785 -1.429256  
H O 0.028732 -2.503284 -2.121906  
H O -1.388580 -6.576951 -1.663274  
H O -1.524460 -5.574330 -0.184767  
H O -0.085044 -6.621492 -0.437343  
H O -0.817582 -0.975326 -0.291257  
H O -0.668535 -2.322502 0.863304  
H O -3.273436 -1.709993 1.401517  
H O -4.575471 -2.137173 0.276525  
H O -2.740071 0.324946 0.109066  
H O -3.621771 -0.808952 -1.952665  
H O -5.718366 0.539887 -0.896372  
H O 4.288543 -4.605671 0.316952  
H O 5.881687 -1.544273 0.936198  
H O 3.543492 -0.427055 2.392512  
H O 2.391593 -1.703390 1.945677  
H O 4.009400 -2.135779 2.510908  
H O 2.619128 1.153729 0.952911  
H O 4.242198 1.341896 0.291202  
H O 1.645156 1.755863 -1.297591  
H O 3.271097 1.960435 -1.938240  
H O 2.068065 3.591262 0.367992  
H O 3.696735 3.791413 -0.264061  
H O 1.121657 4.200230 -1.881130  
H O 2.749533 4.402759 -2.510908  
H O 1.522650 6.067969 -0.224881  
H O 1.766873 6.621492 -1.889560  
H O 3.163269 6.271393 -0.857789  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.653044  
Number of imaginary frequencies = 0

### 1-3R-c23

B3LYP/6-31G\* geometry

O O -0.285112 -0.438591 0.060624  
C O 1.184801 -2.282550 -0.316937  
C O -0.580880 -1.860962 -1.984141  
C O 0.381591 -2.931668 -1.398721  
C O -1.266345 -1.134516 -0.787603  
C O 0.826341 -1.137897 0.290618  
C O 1.844601 -0.696642 1.312563  
N O 2.742493 -1.867532 1.287662  
C O 2.490106 -2.695613 0.193681  
O O 4.058743 -1.692854 1.707824  
C O 4.284252 -2.389396 2.946078  
C O 2.527660 0.655407 1.022046  
S O 3.185002 0.927071 -0.669099  
C O 4.878381 0.198168 -0.582490  
C O 5.815304 0.961120 -1.521379  
C O 6.021707 2.415914 -1.105146

O	0	5.324289	0.926182	-2.846053
O	0	5.871996	3.343299	-1.877801
O	0	6.418777	2.548269	0.165366
O	0	3.221867	-3.594621	-0.224399
O	0	1.205148	-3.476376	-2.427833
O	0	-1.659137	-2.518286	-2.660193
C	0	0.138227	-0.898661	-2.934489
C	0	-2.321664	-0.103888	-1.167027
C	0	-3.123231	0.414567	0.035335
C	0	-4.198517	1.434380	-0.359854
C	0	-5.007320	1.956794	0.834270
C	0	-6.083672	2.972377	0.437270
H	0	-0.252228	-3.731420	-0.982706
H	0	-1.718106	-1.907329	-0.151629
H	0	1.375171	-0.609651	2.301830
H	0	5.324737	-2.177181	3.201438
H	0	4.142159	-3.466030	2.813461
H	0	3.621931	-2.016099	3.733942
H	0	3.319229	0.824137	1.755744
H	0	1.774147	1.436001	1.162366
H	0	4.851434	-0.852349	-0.880202
H	0	5.243356	0.254653	0.443844
H	0	6.803643	0.474910	-1.466623
H	0	5.379110	1.843746	-3.176003
H	0	6.549177	3.500075	0.344642
H	0	1.989270	-3.849367	-1.980519
H	0	-1.257582	-3.056472	-3.363014
H	0	0.911179	-0.318347	-2.421880
H	0	0.621167	-1.466797	-3.733942
H	0	-0.580958	-0.208413	-3.383351
H	0	-1.838028	0.735645	-1.681351
H	0	-2.995110	-0.578010	-1.889281
H	0	-2.438611	0.869428	0.762852
H	0	-3.598395	-0.435677	0.546294
H	0	-3.724675	2.283020	-0.875262
H	0	-4.882915	0.977442	-1.090124
H	0	-4.322335	2.415342	1.561637
H	0	-5.477443	1.108101	1.351192
H	0	-5.640135	3.849367	-0.050496
H	0	-6.642807	3.324740	1.311786
H	0	-6.803643	2.532562	-0.264120

Free Energy (PCM/B3LYP/6-31G\*) = -1757.653042  
Number of imaginary frequencies = 0

### 1-3R-c24

B3LYP/6-31G\* geometry

O	0	1.407494	-0.717396	-0.687697
C	0	0.658676	-2.983397	-0.780715
C	0	2.744118	-2.517656	0.440797
C	0	1.941524	-3.603431	-0.323776
C	0	2.765440	-1.235050	-0.442911
C	0	0.493609	-1.654944	-0.926824
C	0	-0.915044	-1.302101	-1.346106
N	0	-1.570079	-2.617217	-1.198001
C	0	-0.603192	-3.642577	-1.077052
O	0	-2.592289	-2.861271	-2.137449
C	0	-3.778802	-3.319383	-1.470552
C	0	-1.526547	-0.189109	-0.490114
S	0	-3.167907	0.325573	-1.141307
C	0	-3.475810	1.756559	-0.023685
C	0	-4.979332	2.022438	0.089706
C	0	-5.736004	0.867617	0.744169
O	0	-5.534622	2.271607	-1.184984
O	0	-6.708655	0.351017	0.227993
O	0	-5.242707	0.524921	1.938867
O	0	-0.838617	-4.845731	-1.160188
O	0	1.731492	-4.731809	0.520894
O	0	4.116108	-2.916390	0.518623
C	0	2.180905	-2.267403	1.844663
C	0	3.580238	-0.075188	0.113484
C	0	3.782742	1.066203	-0.893380
C	0	4.635298	2.210017	-0.330286
C	0	4.855549	3.352301	-1.330417
C	0	5.715051	4.489034	-0.768032
H	0	2.555584	-3.904223	-1.187303
H	0	3.157083	-1.522394	-1.426970
H	0	-0.929885	-1.012345	-2.405685

H	0	-3.595483	-4.275931	-0.972919
H	0	-4.513550	-3.450084	-2.268832
H	0	-4.134601	-2.573976	-0.752883
H	0	-0.853715	0.673470	-0.514207
H	0	-1.625350	-0.531794	0.544386
H	0	-2.983066	2.648934	-0.419396
H	0	-3.063820	1.537733	0.964789
H	0	-5.112057	2.899869	0.743479
H	0	-6.327670	1.704699	-1.246536
H	0	-5.788860	-0.202773	2.295734
H	0	1.066272	-5.287412	0.074684
H	0	4.124278	-3.791729	0.941769
H	0	1.159582	-1.875418	1.814112
H	0	2.163092	-3.205320	2.405685
H	0	2.812741	-1.553236	2.378779
H	0	3.091435	0.307947	1.017568
H	0	4.551442	-0.478789	0.420059
H	0	2.806121	1.457568	-1.206285
H	0	4.262153	0.667450	-1.799254
H	0	4.157320	2.609441	0.576586
H	0	5.610963	1.813768	-0.011878
H	0	3.880317	3.750516	-1.644670
H	0	5.328031	2.950974	-2.238276
H	0	5.251226	4.934136	0.121107
H	0	5.854768	5.287412	-1.506021
H	0	6.708655	4.126486	-0.476543

Free Energy (PCM/B3LYP/6-31G\*) = -1757.653021  
Number of imaginary frequencies = 0

### 1-3R-c25

B3LYP/6-31G\* geometry

O	0	-0.756794	-1.169630	-0.917268
C	0	-3.040775	-1.680445	-0.439260
C	0	-1.313257	-2.811316	0.900774
C	0	-2.773289	-2.900982	0.384136
C	0	-0.402152	-2.468245	-0.315457
C	0	-2.067199	-0.941979	-1.005631
C	0	-2.625563	0.234287	-1.768175
N	0	-4.031047	0.190648	-1.322603
C	0	-4.324243	-1.057239	-0.727484
O	0	-4.949939	0.640080	-2.289016
C	0	-5.791117	1.663888	-1.737527
C	0	-1.953192	1.594430	-1.551553
S	0	-1.887597	2.161853	0.200090
C	0	-0.113300	1.908581	0.598956
C	0	0.813489	3.033382	0.089900
C	0	2.259276	2.682003	0.436253
O	0	0.497268	4.288148	0.648295
O	0	2.889323	3.270145	1.293490
O	0	2.733264	1.649828	-0.275004
O	0	-5.452449	-1.472392	-0.473897
O	0	-3.668121	-3.023983	1.486416
O	0	-0.877232	-4.111811	1.309231
C	0	-1.177475	-1.814789	2.057136
C	0	1.090901	-2.419821	-0.019738
C	0	1.958567	-2.306254	-1.281126
C	0	3.459217	-2.265623	-0.966720
C	0	4.339786	-2.173605	-2.219323
C	0	5.838192	-2.131380	-1.902073
H	0	-2.836122	-3.807478	-0.238685
H	0	-0.599212	-3.218069	-1.092157
H	0	-2.593215	0.016433	-2.846274
H	0	-6.438581	1.968838	-2.563174
H	0	-5.200487	2.518530	-1.390942
H	0	-6.396235	1.268929	-0.916205
H	0	-2.507062	2.344245	-2.121853
H	0	-0.937941	1.566016	-1.956553
H	0	0.201336	0.937696	0.209874
H	0	-0.063024	1.873510	1.691934
H	0	0.732188	3.107540	-1.000909
H	0	1.123734	4.419651	1.384975
H	0	3.646322	1.469977	0.024135
H	0	-4.563141	-2.874936	1.129875
H	0	-1.515021	-4.419651	1.975392
H	0	-1.449341	-0.798494	1.755921
H	0	-1.842659	-2.109511	2.873006
H	0	-0.150312	-1.809403	2.430464

H O 1.342670 -3.335980 0.525641  
H O 1.300908 -1.578848 0.652441  
H O 1.679512 -1.402973 -1.838623  
H O 1.747055 -3.158495 -1.943061  
H O 3.668984 -1.406852 -0.311709  
H O 3.736501 -3.162113 -0.392500  
H O 4.061355 -1.277426 -2.791923  
H O 4.127710 -3.031444 -2.873006  
H O 6.085610 -1.266393 -1.274031  
H O 6.438581 -2.061847 -2.816489  
H O 6.154395 -3.032953 -1.362823  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.652893  
Number of imaginary frequencies = 0

### 1-3R-c26

B3LYP/6-31G\* geometry  
O O 0.925223 -0.675489 -0.128909  
C O -0.065193 -2.796359 -0.599968  
C O 2.336600 -2.749345 -0.066762  
C O 1.217585 -3.541417 -0.793111  
C O 2.222765 -1.260203 -0.509100  
C O -0.119465 -1.484129 -0.300417  
C O -1.535636 -1.006612 -0.081133  
N O -2.259457 -2.294450 -0.136202  
C O -1.420918 -3.318271 -0.634734  
O O -3.530833 -2.226936 -0.742232  
C O -4.518134 -2.826789 0.106881  
C O -1.686129 -0.259228 1.251335  
S O -3.350000 0.445565 1.592918  
C O -3.197735 2.190974 1.037898  
C O -3.363780 2.454897 -0.461281  
C O -4.641024 1.860892 -1.048892  
O O -2.250844 1.964263 -1.180986  
O O -4.644155 1.208697 -2.074822  
O O -5.736777 2.177495 -0.349390  
O O -1.801679 -4.436251 -0.977141  
O O 1.157510 -4.871014 -0.282469  
O O 3.609751 -3.171053 -0.566573  
C O 2.275851 -2.926388 1.454596  
C O 3.295851 -0.331906 0.044329  
C O 3.303465 1.053436 -0.617637  
C O 4.394055 1.973447 -0.055036  
C O 4.423252 3.356911 -0.717198  
C O 5.513650 4.273030 -0.152143  
H O 1.491761 -3.573806 -1.859544  
H O 2.249874 -1.242440 -1.606142  
H O -1.863713 -0.361392 -0.902483  
H O -4.306945 -3.889780 0.255915  
H O -5.460636 -2.707827 -0.433605  
H O -4.574920 -2.311845 1.071161  
H O -0.956272 0.553552 1.294421  
H O -1.474824 -0.947445 2.074822  
H O -2.230492 2.586962 1.361030  
H O -3.977117 2.729883 1.582793  
H O -3.445149 3.548940 -0.584793  
H O -2.602208 1.640626 -2.032369  
H O -6.510014 1.786894 -0.802022  
H O 0.323725 -5.252543 -0.613992  
H O 3.648785 -4.134561 -0.442335  
H O 3.121575 -2.416809 1.923315  
H O 2.326898 -3.989375 1.704343  
H O 1.349484 -2.526659 1.878411  
H O 3.155777 -0.225824 1.126960  
H O 4.263046 -0.823374 -0.107979  
H O 2.322108 1.527807 -0.487516  
H O 3.449897 0.935062 -1.701100  
H O 4.246221 2.093421 1.028492  
H O 5.375668 1.491911 -0.177620  
H O 3.441821 3.836849 -0.595011  
H O 4.571042 3.236329 -1.799790  
H O 5.373419 4.438783 0.923295  
H O 5.507235 5.252543 -0.644128  
H O 6.510014 3.835661 -0.292451  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.652891  
Number of imaginary frequencies = 0

### 1-3R-c27

B3LYP/6-31G\* geometry  
O O -0.638643 -0.799052 -0.878377  
C O -2.870083 -1.495021 -0.391017  
C O -1.043684 -2.471079 0.948416  
C O -2.500967 -2.672119 0.457347  
C O -0.182357 -2.079337 -0.288227  
C O -1.973161 -0.683488 -0.976686  
C O -2.637688 0.406525 -1.785282  
N O -4.033435 0.240760 -1.333537  
C O -4.210790 -1.008193 -0.703556  
O O -4.995944 0.597472 -2.291378  
C O -5.908493 1.561995 -1.742994  
C O -2.111719 1.833831 -1.626349  
S O -2.200770 2.433596 0.119190  
C O -0.592472 3.302655 0.300786  
C O 0.597359 2.372403 0.555262  
C O 1.847770 3.184172 0.934103  
O O 0.935509 1.583103 -0.584056  
O O 1.833174 4.080446 1.750648  
O O 2.967309 2.804809 0.305630  
O O -5.292384 -1.524468 -0.440437  
O O -3.366257 -2.832165 1.576944  
O O -0.507640 -3.731028 1.361175  
C O -0.957918 -1.452189 2.089805  
C O 1.311502 -1.941150 -0.029528  
C O 2.149314 -1.812799 -1.310513  
C O 3.648107 -1.660651 -1.022130  
C O 4.503372 -1.562579 -2.291767  
C O 5.998522 -1.399860 -1.999031  
H O -2.509699 -3.592897 -0.146976  
H O -0.354846 -2.833704 -1.065258  
H O -2.580547 0.147356 -2.852996  
H O -6.581651 1.809885 -2.566918  
H O -5.378677 2.459701 -1.407756  
H O -6.476475 1.129629 -0.914129  
H O -2.703652 2.494247 -2.265207  
H O -1.073862 1.879497 -1.960538  
H O -0.714714 3.964092 1.161982  
H O -0.409218 3.924673 -0.580336  
H O 0.372025 1.729491 1.415963  
H O 0.433642 0.744945 -0.568619  
H O 2.706419 2.081970 -0.309656  
H O -4.275808 -2.796469 1.228575  
H O -1.111648 -4.080446 2.038288  
H O 0.074264 -1.365289 2.438951  
H O -1.313185 -0.462992 1.784856  
H O -1.579802 -1.785698 2.924477  
H O 1.491897 -1.079156 0.624777  
H O 1.622272 -2.829734 0.529997  
H O 1.805558 -0.951514 -1.898246  
H O 1.984402 -2.700232 -1.937853  
H O 3.809568 -0.763834 -0.405694  
H O 3.991373 -2.512929 -0.417282  
H O 4.154626 -0.714690 -2.898337  
H O 4.345043 -2.461568 -2.903960  
H O 6.190269 -0.491667 -1.414159  
H O 6.581651 -1.330007 -2.924477  
H O 6.384320 -2.251154 -1.424514  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.652866  
Number of imaginary frequencies = 0

### 1-3R-c28

B3LYP/6-31G\* geometry  
O O 0.976163 -0.587410 -0.211606  
C O -0.074203 -2.699321 -0.588000  
C O 2.322552 -2.697103 -0.027757  
C O 1.188675 -3.490397 -0.729674  
C O 2.262757 -1.228400 -0.542996  
C O -0.087651 -1.372526 -0.352180  
C O -1.491413 -0.838398 -0.180555  
N O -2.250058 -2.105779 -0.144275  
C O -1.444613 -3.179460 -0.609788  
O O -3.531483 -2.033016 -0.743472  
C O -4.515333 -2.658667 0.105095  
C O -1.648483 0.020161 1.080639  
S O -3.335132 0.664957 1.414102  
C O -3.528810 1.976029 0.130288

C 0	-4.517834	1.626622	-0.982971
C 0	-5.953669	1.451924	-0.451181
O 0	-4.155356	0.520204	-1.799478
O 0	-6.410985	2.068012	0.487303
O 0	-6.687812	0.577850	-1.156853
O 0	-1.868975	-4.291643	-0.907209
O 0	1.089288	-4.789597	-0.153421
O 0	3.586723	-3.182833	-0.488501
C 0	2.236310	-2.797776	1.499613
C 0	3.354780	-0.308755	-0.013757
C 0	3.408043	1.050923	-0.724924
C 0	4.520202	1.957311	-0.182700
C 0	4.591405	3.319694	-0.884232
C 0	5.703324	4.221151	-0.337796
H 0	1.471541	-3.581630	-1.789997
H 0	2.305180	-1.262460	-1.638900
H 0	-1.781919	-0.265161	-1.070535
H 0	-5.465892	-2.506194	-0.410810
H 0	-4.535583	-2.179740	1.087261
H 0	-4.300968	-3.725412	0.195358
H 0	-0.947321	0.858527	1.036917
H 0	-1.402127	-0.579279	1.961918
H 0	-2.549215	2.198586	-0.299986
H 0	-3.887317	2.872561	0.640178
H 0	-4.553187	2.487206	-1.664671
H 0	-3.980018	-0.270271	-1.240729
H 0	-6.091618	0.206416	-1.844829
H 0	0.270508	-5.185408	-0.502998
H 0	3.594313	-4.139231	-0.313170
H 0	1.321190	-2.343079	1.891150
H 0	2.244025	-3.848726	1.799760
H 0	3.095410	-2.298521	1.954593
H 0	3.208031	-0.159033	1.062768
H 0	4.308835	-0.832739	-0.137956
H 0	2.439971	1.557694	-0.620513
H 0	3.560433	0.890348	-1.802084
H 0	4.369181	2.113097	0.895821
H 0	5.488806	1.445732	-0.284504
H 0	3.622912	3.829614	-0.782135
H 0	4.742363	3.164197	-1.961918
H 0	5.560127	4.422632	0.731128
H 0	5.728161	5.185408	-0.858448
H 0	6.687812	3.751898	-0.457146

Free Energy (PCM/B3LYP/6-31G\*) = -1757.65286  
Number of imaginary frequencies = 0

**1-3R-c29**

B3LYP/6-31G\* geometry

O 0	-0.757199	-1.168994	-0.917270
C 0	-3.041322	-1.679255	-0.439343
C 0	-1.314190	-2.810890	0.900464
C 0	-2.774181	-2.900145	0.383619
C 0	-0.402859	-2.467761	-0.315587
C 0	-2.067532	-0.940949	-1.005548
C 0	-2.625589	0.235700	-1.767753
N 0	-4.031043	0.192363	-1.322070
C 0	-4.324593	-1.055500	-0.727236
O 0	-4.949929	0.642600	-2.288082
C 0	-5.790584	1.666529	-1.735977
C 0	-1.952785	1.595573	-1.550838
S 0	-1.886750	2.162491	0.200961
C 0	-0.112428	1.908705	0.599392
C 0	0.814532	3.033402	0.090412
C 0	2.260314	2.681628	0.436374
O 0	0.498706	4.288111	0.649163
O 0	2.890727	3.269469	1.293539
O 0	2.733879	1.649488	-0.275236
O 0	-5.452905	-1.470285	-0.473401
O 0	-3.669249	-3.023478	1.485665
O 0	-0.878498	-4.111577	1.308690
C 0	-1.178336	-1.814644	2.057055
C 0	1.090150	-2.419579	-0.019621
C 0	1.958047	-2.305691	-1.280819
C 0	3.458640	-2.265203	-0.966112
C 0	4.339469	-2.172693	-2.218492
C 0	5.837818	-2.130737	-1.900919
H 0	-2.837011	-3.806395	-0.239568

H 0	-0.599896	-3.217436	-1.092433
H 0	-2.593408	0.018103	-2.845908
H 0	-6.438402	1.971751	-2.561244
H 0	-5.199565	2.520977	-1.389573
H 0	-6.395361	1.271564	-0.914415
H 0	-2.506499	2.345713	-2.120861
H 0	-0.937592	1.566961	-1.955966
H 0	0.201892	0.937836	0.210019
H 0	-0.061934	1.873385	1.692350
H 0	0.733056	3.107822	-1.000369
H 0	1.125503	4.419399	1.385601
H 0	3.646968	1.469342	0.023630
H 0	-4.564073	-2.872996	1.129209
H 0	-1.516382	-4.419399	1.974766
H 0	-1.449535	-0.798142	1.755930
H 0	-1.843976	-2.109176	2.872619
H 0	-0.151298	-1.809868	2.430735
H 0	1.341732	-3.335935	0.525517
H 0	1.300129	-1.578841	0.652861
H 0	1.679135	-1.402235	-1.838101
H 0	1.746623	-3.157728	-1.943046
H 0	3.668275	-1.406680	-0.310731
H 0	3.735804	-3.161908	-0.392171
H 0	4.061230	-1.276225	-2.790735
H 0	4.127453	-3.030209	-2.872619
H 0	6.085180	-1.266061	-1.272427
H 0	6.438402	-2.060831	-2.815177
H 0	6.153835	-3.032584	-1.362020

Free Energy (PCM/B3LYP/6-31G\*) = -1757.652849  
Number of imaginary frequencies = 0

**1-3R-c30**

B3LYP/6-31G\* geometry

O 0	-0.844393	0.192390	-0.443441
C 0	0.574820	2.111112	-0.377010
C 0	-1.354882	2.066176	1.152011
C 0	-0.361556	2.986650	0.394432
C 0	-1.912675	1.029196	0.131985
C 0	0.280020	0.843555	-0.726659
C 0	1.414618	0.184189	-1.469729
N 0	2.477010	1.198752	-1.300647
C 0	1.916859	2.418987	-0.837565
O 0	3.297756	1.336139	-2.442160
C 0	4.680621	1.173729	-2.097393
C 0	1.788915	-1.229010	-1.004991
S 0	2.021358	-1.466465	0.805414
C 0	3.769002	-0.992716	1.111886
C 0	4.798538	-2.051260	0.689823
C 0	6.207901	-1.651800	1.126687
O 0	4.798715	-2.239419	-0.713321
O 0	7.129508	-1.552040	0.338690
O 0	6.313235	-1.446529	2.443474
O 0	2.508083	3.495508	-0.810716
O 0	0.317728	3.832295	1.319171
O 0	-2.502276	2.831839	1.536348
C 0	-0.713293	1.412190	2.380649
C 0	-2.959894	0.072389	0.686863
C 0	-3.671290	-0.748796	-0.397752
C 0	-4.711079	-1.717835	0.179210
C 0	-5.447362	-2.529340	-0.894225
C 0	-6.475292	-3.505359	-0.312340
H 0	-0.962249	3.606164	-0.290381
H 0	-2.334813	1.593319	-0.709274
H 0	1.167364	0.123521	-2.539763
H 0	4.993274	1.932788	-1.373652
H 0	5.219244	1.318100	-3.037546
H 0	4.876307	0.170503	-1.706587
H 0	2.686440	-1.568811	-1.522644
H 0	0.969457	-1.903278	-1.271904
H 0	3.824861	-0.847378	2.194139
H 0	3.975461	-0.037461	0.625418
H 0	4.559170	-2.998305	1.196109
H 0	5.730405	-2.158017	-0.996274
H 0	7.239770	-1.206668	2.642257
H 0	1.058726	4.232397	0.827997
H 0	-2.171037	3.569588	2.076005
H 0	0.102838	0.736259	2.107445

H O -0.306854 2.185804 3.037546  
H O -1.465878 0.845305 2.934921  
H O -2.481938 -0.600041 1.409622  
H O -3.690626 0.672400 1.240154  
H O -2.929046 -1.313051 -0.977018  
H O -4.162660 -0.064432 -1.104569  
H O -4.215728 -2.407474 0.878692  
H O -5.444749 -1.154055 0.774362  
H O -4.713018 -3.085234 -1.494418  
H O -5.948941 -1.839622 -1.587921  
H O -5.996680 -4.232397 0.355447  
H O -6.986996 -4.065699 -1.103374  
H O -7.239770 -2.975071 0.269022  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.652816  
Number of imaginary frequencies = 0

### 1-3R-c31

B3LYP/6-31G\* geometry  
O O -0.757349 -1.169115 -0.917961  
C O -3.041493 -1.679096 -0.439777  
C O -1.314420 -2.810745 0.900052  
C O -2.774437 -2.899938 0.383248  
C O -0.403022 -2.467815 -0.315973  
C O -2.067675 -0.940953 -1.006117  
C O -2.625667 0.235753 -1.768318  
N O -4.031092 0.192439 -1.322686  
C O -4.324754 -1.055341 -0.727816  
O O -4.949960 0.642956 -2.288550  
C O -5.790371 1.666963 -1.736228  
C O -1.952872 1.595586 -1.551175  
S O -1.886839 2.162069 0.200785  
C O -0.112491 1.908424 0.599019  
C O 0.814438 3.033188 0.090144  
C O 2.260252 2.681334 0.435880  
O O 0.498676 4.287764 0.649275  
O O 2.890793 3.269046 1.293045  
O O 2.733726 1.649336 -0.275981  
O O -5.453072 -1.470107 -0.474021  
O O -3.669472 -3.023068 1.485344  
O O -0.878799 -4.111431 1.308371  
C O -1.178559 -1.814423 2.056582  
C O 1.089972 -2.419389 -0.019915  
C O 1.957912 -2.305841 -1.281116  
C O 3.458475 -2.264720 -0.966376  
C O 4.339272 -2.172938 -2.218846  
C O 5.837605 -2.130117 -1.901350  
H O -2.837406 -3.806240 -0.239847  
H O -0.599941 -3.217618 -1.092717  
H O -2.593404 0.018155 -2.846479  
H O -6.438128 1.972545 -2.561410  
H O -5.199122 2.521174 -1.389634  
H O -6.395236 1.271964 -0.914746  
H O -2.506637 2.345836 -2.121003  
H O -0.937683 1.567118 -1.956318  
H O 0.201833 0.937557 0.209650  
H O -0.061934 1.873071 1.691981  
H O 0.732869 3.107876 -1.000615  
H O 1.125733 4.418938 1.385517  
H O 3.646868 1.469169 0.022705  
H O -4.564315 -2.872825 1.128838  
H O -1.516382 -4.418938 1.974881  
H O -1.449898 -0.797971 1.755397  
H O -1.844131 -2.108964 2.872204  
H O -0.151524 -1.809507 2.430260  
H O 1.341661 -3.335504 0.525577  
H O 1.299796 -1.578358 0.652241  
H O 1.678771 -1.402724 -1.838825  
H O 1.746766 -3.158252 -1.942947  
H O 3.667854 -1.405634 -0.311655  
H O 3.735881 -3.160910 -0.391756  
H O 4.060670 -1.277076 -2.791857  
H O 4.127575 -3.031115 -2.872204  
H O 6.084675 -1.264716 -1.273746  
H O 6.438128 -2.060919 -2.815703  
H O 6.153968 -3.031305 -1.361554  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.6528  
Number of imaginary frequencies = 0

### 1-3R-c32

B3LYP/6-31G\* geometry  
O O -0.745672 -1.170394 -0.830779  
C O -2.995375 -1.929951 -0.608175  
C O -1.260865 -3.090114 0.698567  
C O -2.672471 -3.222998 0.072030  
C O -0.318261 -2.512526 -0.397912  
C O -2.062808 -1.035520 -0.991866  
C O -2.686762 0.194178 -1.614729  
N O -4.111547 -0.062907 -1.315855  
C O -4.313985 -1.399015 -0.917878  
O O -5.003211 0.447276 -2.275258  
C O -6.002722 1.261359 -1.642729  
C O -2.263793 1.567908 -1.066767  
S O -0.642512 2.186501 -1.684642  
C O 0.512691 1.795783 -0.303231  
C O 0.889488 3.017895 0.548331  
C O -0.315558 3.672275 1.214316  
O O 1.570836 3.979125 -0.227510  
O O -0.600867 4.842509 1.051761  
O O -1.005653 2.829214 1.995211  
O O -5.407182 -1.951518 -0.813001  
O O -3.620992 -3.557883 1.081850  
O O -0.740100 -4.396338 0.964538  
C O -1.272779 -2.251185 1.981471  
C O 1.148168 -2.401506 -0.002982  
C O 2.079336 -2.102597 -1.186575  
C O 3.552052 -2.001070 -0.770550  
C O 4.499202 -1.724677 -1.945167  
C O 5.968632 -1.622662 -1.523423  
H O -2.619005 -4.042331 -0.662162  
H O -0.413773 -3.155421 -1.282227  
H O -2.542120 0.176608 -2.703023  
H O -6.618799 0.661963 -0.966268  
H O -6.613985 1.642876 -2.463996  
H O -5.547480 2.094195 -1.096551  
H O -2.273269 1.576519 0.025522  
H O -3.002995 2.295514 -1.411255  
H O 1.429601 1.415774 -0.760740  
H O 0.090872 0.997058 0.308095  
H O 1.548126 2.659289 1.355521  
H O 1.048204 4.800651 -0.160012  
H O -1.751527 3.322571 2.390252  
H O -4.500609 -3.446092 0.676261  
H O -1.392577 -4.842509 1.530731  
H O -1.593799 -1.221025 1.798514  
H O -1.964529 -2.693583 2.703023  
H O -0.273506 -2.232172 2.423912  
H O 1.256733 -1.625060 0.764225  
H O 1.431892 -3.352125 0.461522  
H O 1.770541 -1.167619 -1.671873  
H O 1.968117 -2.894573 -1.941403  
H O 3.664058 -1.204935 -0.019558  
H O 3.854550 -2.934571 -0.273044  
H O 4.195406 -0.793146 -2.443500  
H O 4.388136 -2.521643 -2.694166  
H O 6.118200 -0.809865 -0.801871  
H O 6.618799 -1.428232 -2.384219  
H O 6.309922 -2.552050 -1.050637  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.652773  
Number of imaginary frequencies = 0

### 1-3R-c33

B3LYP/6-31G\* geometry  
O O 1.288527 -0.730715 -1.467377  
C O 2.223101 -2.515817 -0.165808  
C O 3.755183 -1.083358 -1.461136  
C O 3.658479 -2.109447 -0.297687  
C O 2.600215 -0.044417 -1.417652  
C O 1.200907 -1.842520 -0.740575  
C O -0.135160 -2.498392 -0.470101  
N O 0.270699 -3.504799 0.528791  
C O 1.673640 -3.679438 0.530427  
C O -0.492559 -4.686219 0.483857  
O O -1.011695 -4.991202 1.785970  
C O -1.233934 -1.573862 0.078086

S 0	-2.060889	-0.542833	-1.203667
C 0	-3.421186	-1.652616	-1.750528
C 0	-4.667148	-1.651287	-0.850666
C 0	-5.239021	-0.250127	-0.656169
O 0	-4.397943	-2.217169	0.415579
O 0	-5.424175	0.232432	0.444659
O 0	-5.522349	0.363967	-1.809771
O 0	2.259090	-4.618567	1.054334
O 0	4.177126	-1.526083	0.903890
O 0	3.660075	-1.805521	-2.698514
C 0	5.118577	-0.398218	-1.504289
C 0	2.587637	0.948187	-0.253555
C 0	1.504811	2.028076	-0.389943
C 0	1.522540	3.036838	0.765595
C 0	0.450703	4.126611	0.635379
C 0	0.464650	5.128785	1.794256
H 0	4.272066	-2.975276	-0.582985
H 0	2.621265	0.493660	-2.369034
H 0	-0.495504	-3.016483	-1.368702
H 0	-1.612523	-5.892908	1.644601
H 0	-0.199283	-5.192435	2.490576
H 0	-1.641719	-4.178146	2.162033
H 0	-0.819391	-0.888786	0.822614
H 0	-2.008007	-2.172103	0.559325
H 0	-3.045428	-2.676288	-1.833595
H 0	-3.695728	-1.317136	-2.753933
H 0	-5.439104	-2.245715	-1.365811
H 0	-4.662758	-1.544055	1.072207
H 0	-5.884742	1.248065	-1.604174
H 0	4.072354	-2.186946	1.608070
H 0	2.790251	-2.235931	-2.741541
H 0	5.884742	-1.151811	-1.712396
H 0	5.357811	0.084008	-0.556315
H 0	5.143652	0.346195	-2.306946
H 0	2.476573	0.404069	0.690768
H 0	3.570886	1.431550	-0.215123
H 0	1.644348	2.561700	-1.341562
H 0	0.515856	1.555510	-0.443768
H 0	1.382570	2.502625	1.717067
H 0	2.514462	3.509233	0.823849
H 0	-0.539438	3.653283	0.572221
H 0	0.593793	4.662349	-0.313815
H 0	0.289760	4.626665	2.753933
H 0	-0.311664	5.892908	1.671547
H 0	1.431385	5.643282	1.861412

Free Energy (PCM/B3LYP/6-31G\*) = -1757.652769  
Number of imaginary frequencies = 0

**1-3R-c34**

B3LYP/6-31G\* geometry

O 0	0.726315	-0.852542	-0.849016
C 0	0.055004	-3.120989	-0.517610
C 0	1.867883	-2.246938	0.899661
C 0	1.244482	-3.532106	0.291813
C 0	2.024311	-1.206879	-0.249336
C 0	-0.109009	-1.875825	-1.004898
C 0	-1.411346	-1.730832	-1.754232
N 0	-2.065035	-3.002038	-1.388229
C 0	-1.121226	-3.909397	-0.851346
O 0	-2.917167	-3.517491	-2.380642
C 0	-4.229486	-3.736860	-1.841695
C 0	-2.237948	-0.483651	-1.432684
S 0	-2.794205	-0.464601	0.323980
C 0	-2.931214	1.340035	0.607158
C 0	-4.146963	2.005819	-0.077954
C 0	-4.122430	3.504694	0.215637
O 0	-5.375279	1.471003	0.357504
O 0	-4.916181	4.037959	0.966591
O 0	-3.124670	4.143265	-0.408531
O 0	-1.320178	-5.107965	-0.669777
O 0	0.908259	-4.444589	1.333501
O 0	3.211623	-2.525138	1.307046
C 0	1.048479	-1.715831	2.081277
C 0	2.691438	0.103408	0.147209
C 0	3.052269	0.991927	-1.052132
C 0	3.731611	2.302215	-0.635318
C 0	4.107678	3.197333	-1.823247

C 0	4.784006	4.505690	-1.401118
H 0	2.014348	-3.984247	-0.353437
H 0	2.601551	-1.688000	-1.049306
H 0	-1.213504	-1.732882	-2.835815
H 0	-4.204474	-4.500580	-1.058600
H 0	-4.824303	-4.090447	-2.687295
H 0	-4.653954	-2.808227	-1.446206
H 0	-3.100435	-0.445975	-2.103166
H 0	-1.619365	0.399803	-1.618868
H 0	-2.002414	1.827671	0.296057
H 0	-3.028330	1.452135	1.691958
H 0	-4.072421	1.868920	-1.162889
H 0	-5.708819	2.085733	1.038194
H 0	-3.152032	5.083739	-0.143225
H 0	0.334110	-5.121436	0.930193
H 0	3.161593	-3.267586	1.932769
H 0	0.044456	-1.403271	1.777504
H 0	0.942556	-2.499824	2.835815
H 0	1.557762	-0.862387	2.536493
H 0	2.030343	0.650860	0.830013
H 0	3.596777	-0.149339	0.709847
H 0	2.145276	1.217721	-1.627861
H 0	3.717986	0.434583	-1.727132
H 0	3.065395	2.858620	0.040601
H 0	4.636396	2.074034	-0.052462
H 0	3.203401	3.423574	-2.405890
H 0	4.774291	2.641391	-2.497688
H 0	4.126902	5.100099	-0.754095
H 0	5.041815	5.121436	-2.270532
H 0	5.708819	4.310923	-0.843831

Free Energy (PCM/B3LYP/6-31G\*) = -1757.652768  
Number of imaginary frequencies = 0

**1-3R-c35**

B3LYP/6-31G\* geometry

O 0	1.800549	-0.699741	-0.593667
C 0	2.650774	-2.931062	-0.538808
C 0	3.999895	-1.167213	0.521151
C 0	4.048610	-2.567820	-0.145866
C 0	3.185554	-0.227424	-0.417104
C 0	1.678662	-2.018234	-0.726316
C 0	0.349946	-2.663273	-1.047410
N 0	0.678309	-4.079889	-0.792711
C 0	2.078995	-4.257599	-0.707343
O 0	0.001963	-4.987411	-1.633231
C 0	-0.586986	-6.039930	-0.853395
C 0	-0.793491	-2.111330	-0.190895
S 0	-2.415626	-2.812651	-0.704046
C 0	-3.536258	-1.775858	0.310757
C 0	-3.829647	-0.385213	-0.294251
C 0	-4.718246	0.401498	0.667161
O 0	-4.467935	-0.470463	-1.547766
O 0	-5.886489	0.641916	0.430958
O 0	-4.084214	0.758497	1.791012
O 0	2.653456	-5.343846	-0.721133
O 0	4.623912	-3.510379	0.754686
O 0	5.315493	-0.604798	0.528852
C 0	3.435921	-1.228320	1.945189
C 0	3.094392	1.224649	0.032513
C 0	2.509614	2.157115	-1.038043
C 0	2.431386	3.617288	-0.575240
C 0	1.857103	4.561339	-1.639406
C 0	1.777700	6.018624	-1.173030
H 0	4.690843	-2.474632	-1.035822
H 0	3.647461	-0.278420	-1.411238
H 0	0.116113	-2.536015	-2.113089
H 0	-1.299366	-5.635648	-0.127948
H 0	0.187418	-6.622954	-0.347173
H 0	-1.108894	-6.666333	-1.580947
H 0	-0.817255	-1.024927	-0.318286
H 0	-0.608550	-2.338289	0.863519
H 0	-3.120917	-1.680836	1.318421
H 0	-4.472823	-2.337681	0.381171
H 0	-2.890082	0.166354	-0.416904
H 0	-5.416970	-0.320905	-1.375514
H 0	-4.723316	1.222913	2.366743
H 0	4.442596	-4.392482	0.381271

H O 5.886489 -1.245605 0.985725  
H O 2.399945 -1.580157 1.961334  
H O 4.032857 -1.918229 2.547277  
H O 3.475869 -0.238740 2.407331  
H O 2.489714 1.280823 0.945886  
H O 4.106934 1.548304 0.297173  
H O 1.507464 1.809039 -1.319837  
H O 3.126408 2.095422 -1.946385  
H O 1.815136 3.678673 0.334019  
H O 3.435458 3.962694 -0.287371  
H O 0.854895 4.213628 -1.927632  
H O 2.473894 4.500326 -2.547277  
H O 1.139863 6.115880 -0.285665  
H O 1.363342 6.666333 -1.954233  
H O 2.770517 6.405053 -0.910968  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.652749  
Number of imaginary frequencies = 0

### 1-3R-c36

B3LYP/6-31G\* geometry  
O O -0.757560 -1.168003 -0.917514  
C O -3.041824 -1.677697 -0.439700  
C O -1.315033 -2.810003 0.899987  
C O -2.775053 -2.898786 0.383087  
C O -0.403546 -2.466908 -0.315945  
C O -2.067814 -0.939559 -1.005742  
C O -2.625495 0.237426 -1.767697  
N O -4.030944 0.194453 -1.321959  
C O -4.324893 -1.053448 -0.727405  
O O -4.949692 0.645212 -2.287874  
C O -5.790123 1.669129 -1.735432  
C O -1.952265 1.597041 -1.550533  
S O -1.885711 2.163435 0.201409  
C O -0.111395 1.908858 0.599369  
C O 0.815808 3.033571 0.090856  
C O 2.261592 2.680982 0.435981  
O O 0.500660 4.287995 0.650640  
O O 2.892504 3.267765 1.293503  
O O 2.734587 1.649410 -0.276829  
O O -5.453334 -1.467915 -0.473626  
O O -3.670224 -3.021971 1.485070  
O O -0.879652 -4.110880 1.307971  
C O -1.178940 -1.813983 2.056744  
C O 1.089450 -2.418989 -0.019831  
C O 1.957442 -2.305133 -1.280961  
C O 3.457982 -2.264248 -0.966076  
C O 4.338931 -2.171866 -2.218377  
C O 5.837219 -2.129390 -1.900610  
H O -2.838127 -3.804943 -0.240203  
H O -0.600660 -3.216457 -1.092895  
H O -2.593427 0.020023 -2.845895  
H O -6.394958 1.274028 -0.913978  
H O -6.437900 1.974734 -2.560590  
H O -5.198924 2.523351 -1.388777  
H O -2.505879 2.347496 -2.120241  
H O -0.937159 1.568265 -1.955870  
H O 0.202523 0.938113 0.209369  
H O -0.060693 1.872901 1.692295  
H O 0.733897 3.108858 -0.999830  
H O 1.127522 4.418357 1.387185  
H O 3.647727 1.468673 0.021518  
H O -4.564982 -2.871132 1.128595  
H O -1.517094 -4.418357 1.974627  
H O -1.449896 -0.797377 1.755754  
H O -1.844662 -2.108452 2.872264  
H O -0.151900 -1.809498 2.430424  
H O 1.299469 -1.578295 0.652694  
H O 1.340873 -3.335397 0.525286  
H O 1.678397 -1.401824 -1.838417  
H O 1.746262 -3.157328 -1.943058  
H O 3.667327 -1.405505 -0.310888  
H O 3.735273 -3.160743 -0.391871  
H O 4.060512 -1.275652 -2.790928  
H O 4.127244 -3.029645 -2.872264  
H O 6.084235 -1.264482 -1.272301  
H O 6.437900 -2.059537 -2.814807  
H O 6.153426 -3.031008 -1.361439

Free Energy (PCM/B3LYP/6-31G\*) = -1757.65274  
Number of imaginary frequencies = 0

### 1-3R-c37

B3LYP/6-31G\* geometry  
O O 1.929907 -1.224010 -0.263255  
C O 1.851114 -3.602937 -0.423354  
C O 3.913292 -2.578906 0.454066  
C O 3.313853 -3.841226 -0.223072  
C O 3.396589 -1.335122 -0.328906  
C O 1.285349 -2.381562 -0.405948  
C O -0.215054 -2.453232 -0.576693  
N O -0.355838 -3.893976 -0.907970  
C O 0.808692 -4.607138 -0.598766  
O O -1.577990 -4.503858 -0.618510  
C O -2.262297 -4.845533 -1.835928  
C O -1.016048 -2.076823 0.687103  
S O -1.106165 -0.270335 0.997705  
C O -2.502916 0.235127 -0.081603  
C O -3.879153 -0.194670 0.461800  
C O -4.969028 0.436785 -0.412346  
O O -4.098913 0.235159 1.796492  
O O -5.157190 0.110386 -1.564344  
O O -5.673408 1.406437 0.185355  
O O 0.910960 -5.831484 -0.522983  
O O 3.565759 -4.995980 0.575060  
O O 5.329993 -2.563064 0.249363  
C O 3.590839 -2.519572 1.951159  
C O 3.953640 0.004475 0.134346  
C O 3.607028 1.166099 -0.807894  
C O 4.171107 2.508749 -0.326535  
C O 3.842756 3.677663 -1.264216  
C O 4.401637 5.017958 -0.775228  
H O 3.823851 -3.953271 -1.193269  
H O 3.638890 -1.490170 -1.388495  
H O -0.543619 -1.841752 -1.424502  
H O -3.202737 -5.296345 -1.511362  
H O -1.679989 -5.567921 -2.415777  
H O -2.463756 -3.954125 -2.438993  
H O -0.553593 -2.518705 1.573905  
H O -2.023955 -2.486932 0.603627  
H O -2.368060 -0.142914 -1.097757  
H O -2.440849 1.327413 -0.113826  
H O -3.990666 -1.283598 0.378705  
H O -3.251944 0.164406 2.276989  
H O -5.340667 1.469405 1.109140  
H O 2.925731 -5.673082 0.282260  
H O 5.673408 -3.392109 0.623263  
H O 4.089997 -1.661065 2.407691  
H O 2.515701 -2.437594 2.137123  
H O 3.945747 -3.431051 2.438993  
H O 3.579288 0.219084 1.142715  
H O 5.041026 -0.102846 0.211481  
H O 2.516677 1.242890 -0.908378  
H O 3.997059 0.945512 -1.812195  
H O 3.778916 2.728535 0.677474  
H O 5.262809 2.427523 -0.216877  
H O 2.752043 3.754895 -1.377127  
H O 4.238611 3.459531 -2.266241  
H O 3.996165 5.279781 0.209977  
H O 4.151370 5.831484 -1.465928  
H O 5.494419 4.981535 -0.684403  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.652698  
Number of imaginary frequencies = 0

### 1-3R-c38

B3LYP/6-31G\* geometry  
O O -1.290649 -0.503718 0.010951  
C O -3.609974 -0.861394 -0.427166  
C O -2.259233 -2.800835 0.262529  
C O -3.551210 -2.354415 -0.471778  
C O -1.084251 -1.937897 -0.287230  
C O -2.550008 -0.076263 -0.170900  
C O -2.920291 1.388466 -0.151100  
N O -4.304876 1.292694 -0.684540  
C O -4.787365 -0.018457 -0.619783  
O O -5.192070 2.317935 -0.350202

C 0	-5.513548	3.093449	-1.517262
C 0	-2.919050	2.051557	1.243756
S 0	-1.318110	2.134917	2.132443
C 0	-0.339912	3.347156	1.152370
C 0	0.746490	2.674396	0.304486
C 0	1.636943	3.729007	-0.370864
O 0	0.218272	1.849809	-0.728761
O 0	2.089769	4.686582	0.218817
O 0	1.897774	3.497961	-1.664084
O 0	-5.960161	-0.370328	-0.739430
O 0	-4.693039	-2.955245	0.134050
O 0	-1.930319	-4.135139	-0.135784
C 0	-2.399700	-2.718725	1.786226
C 0	0.293058	-2.309992	0.247061
C 0	1.459432	-1.735181	-0.570029
C 0	2.827495	-2.155056	-0.017642
C 0	4.006840	-1.606129	-0.830478
C 0	5.369922	-2.032560	-0.275859
H 0	-3.463892	-2.705478	-1.512410
H 0	-1.098184	-2.019045	-1.381280
H 0	-2.286442	1.958207	-0.837496
H 0	-6.190951	3.871518	-1.158559
H 0	-6.016227	2.473799	-2.265955
H 0	-4.615925	3.549161	-1.948130
H 0	-3.570487	1.483081	1.914734
H 0	-3.334216	3.057147	1.152750
H 0	0.135560	4.030344	1.859332
H 0	-1.018151	3.929018	0.521317
H 0	1.404435	2.091331	0.963049
H 0	-0.055341	0.986190	-0.362797
H 0	1.412735	2.678535	-1.908983
H 0	-5.464162	-2.437000	-0.166095
H 0	-2.701970	-4.686582	0.077805
H 0	-2.578810	-1.695323	2.129142
H 0	-3.245038	-3.332034	2.108651
H 0	-1.492266	-3.094321	2.265955
H 0	0.369316	-1.986423	1.292291
H 0	0.353372	-3.403513	0.244924
H 0	1.404340	-0.638952	-0.596742
H 0	1.368161	-2.071761	-1.612686
H 0	2.917878	-1.818276	1.025650
H 0	2.884890	-3.253235	0.009646
H 0	3.948876	-0.508675	-0.856417
H 0	3.914487	-1.941628	-1.873173
H 0	5.505529	-1.681563	0.754728
H 0	6.190951	-1.625780	-0.877374
H 0	5.470187	-3.125040	-0.269354

Free Energy (PCM/B3LYP/6-31G\*) = -1757.652691  
Number of imaginary frequencies = 0

**1-3R-c39**

B3LYP/6-31G\* geometry

O 0	1.083747	-0.046731	-0.444680
C 0	2.837258	-1.647438	-0.680870
C 0	3.439056	0.593086	0.140471
C 0	3.968559	-0.673109	-0.581787
C 0	2.106851	1.008514	-0.551933
C 0	1.541107	-1.285793	-0.606911
C 0	0.618188	-2.480767	-0.679470
N 0	1.604529	-3.573997	-0.564971
C 0	2.914251	-3.095812	-0.786165
O 0	1.246064	-4.745877	-1.254148
C 0	1.301612	-5.876899	-0.371425
C 0	-0.454728	-2.596900	0.412304
S 0	-1.825694	-1.395140	0.151577
C 0	-3.111869	-2.182988	1.210583
C 0	-4.510325	-1.781565	0.733765
C 0	-4.832559	-2.302638	-0.665814
O 0	-4.653408	-0.376608	0.746412
O 0	-5.240046	-1.577558	-1.553088
O 0	-4.659514	-3.623099	-0.787855
O 0	3.903647	-3.801674	-0.968807
O 0	5.083017	-1.204513	0.130372
O 0	4.326402	1.686088	-0.116303
C 0	3.285302	0.374170	1.649755
C 0	1.469307	2.286380	-0.022772
C 0	0.322347	2.805873	-0.901282

C 0	-0.304880	4.095040	-0.356333
C 0	-1.438090	4.638908	-1.235790
C 0	-2.066335	5.922869	-0.684219
H 0	4.295258	-0.354669	-1.584336
H 0	2.314812	1.115325	-1.624179
H 0	0.142926	-2.530322	-1.668617
H 0	2.324367	-6.045669	-0.022057
H 0	0.971241	-6.722848	-0.978851
H 0	0.630032	-5.744700	0.483422
H 0	-0.004573	-2.460052	1.399690
H 0	-0.872436	-3.605940	0.355936
H 0	-2.984265	-1.862441	2.247918
H 0	-3.004702	-3.269715	1.163617
H 0	-5.237323	-2.248032	1.419045
H 0	-5.050616	-0.140189	-0.113995
H 0	-4.903844	-3.878818	-1.698906
H 0	5.240046	-2.095538	-0.233235
H 0	5.207812	1.400686	0.178650
H 0	2.550736	-0.403662	1.879732
H 0	4.243668	0.066374	2.075996
H 0	2.971760	1.303508	2.131965
H 0	1.106597	2.110037	0.997143
H 0	2.260301	3.041503	0.042919
H 0	-0.451947	2.032860	-0.989648
H 0	0.700029	2.985897	-1.918338
H 0	-0.689655	3.911893	0.657853
H 0	0.475099	4.864132	-0.252822
H 0	-2.214499	3.868086	-1.342919
H 0	-1.051954	4.825744	-2.247918
H 0	-2.492664	5.758050	0.313167
H 0	-2.870520	6.285927	-1.334652
H 0	-1.320519	6.722848	-0.597352

Free Energy (PCM/B3LYP/6-31G\*) = -1757.652662  
Number of imaginary frequencies = 0

**1-3R-c40**

B3LYP/6-31G\* geometry

O 0	2.064271	-1.150059	-0.551449
C 0	1.843583	-3.520832	-0.746011
C 0	3.929620	-2.643148	0.219630
C 0	3.289256	-3.841539	-0.529922
C 0	3.526149	-1.341684	-0.535287
C 0	1.361725	-2.263486	-0.744495
C 0	-0.138892	-2.232915	-0.924598
N 0	-0.447548	-3.670722	-0.802490
C 0	0.732304	-4.442973	-0.921001
O 0	-1.532267	-4.093139	-1.597742
C 0	-2.446024	-4.877842	-0.814462
C 0	-0.835109	-1.345425	0.110837
S 0	-2.642355	-1.227031	-0.222048
C 0	-3.097424	0.138675	0.936224
C 0	-4.052368	1.127052	0.260457
C 0	-5.448960	0.516903	0.023143
O 0	-3.540524	1.676695	-0.949763
O 0	-6.036511	-0.149715	0.848124
O 0	-5.980250	0.822524	-1.167202
O 0	0.763450	-5.659958	-1.084383
O 0	3.476962	-5.035288	0.225033
O 0	5.351767	-2.707804	0.078022
C 0	3.541065	-2.618507	1.702423
C 0	4.125645	-0.056391	0.019409
C 0	3.923656	1.157563	-0.898639
C 0	4.532516	2.442377	-0.323160
C 0	4.358199	3.661261	-1.238207
C 0	4.959729	4.943731	-0.654075
H 0	3.814443	-3.932803	-1.493666
H 0	3.822818	-1.465965	-1.584522
H 0	-0.391027	-1.895932	-1.939230
H 0	-3.260198	-5.122999	-1.500734
H 0	-2.830825	-4.300451	0.031654
H 0	-1.963567	-5.794959	-0.465373
H 0	-0.405724	-0.341287	0.055905
H 0	-0.672878	-1.750397	1.113299
H 0	-2.182604	0.662000	1.224203
H 0	-3.571917	-0.269633	1.830142
H 0	-4.201584	1.969684	0.946576
H 0	-3.029484	0.964862	-1.386809



H O -5.297989 1.351718 -1.641162  
H O 2.897946 -5.708737 -0.176622  
H O 5.621999 -3.578587 0.415834  
H O 4.067472 -1.808123 2.212869  
H O 2.464887 -2.478707 1.842495  
H O 3.819982 -3.565714 2.171212  
H O 3.690470 0.145887 1.005692  
H O 5.195664 -0.235493 0.171039  
H O 2.851148 1.309436 -1.076479  
H O 4.374640 0.947614 -1.879366  
H O 4.075505 2.655007 0.654655  
H O 5.603983 2.283070 -0.131155  
H O 3.287716 3.815404 -1.435162  
H O 4.820658 3.450534 -2.212869  
H O 4.491475 5.199069 0.304656  
H O 4.820595 5.794959 -1.330492  
H O 6.036511 4.830698 -0.476847  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.652641  
Number of imaginary frequencies = 0

### 1-3R-c41

B3LYP/6-31G\* geometry  
O O 1.706462 -1.047605 -0.862040  
C O 1.386307 -3.401211 -0.610291  
C O 3.210034 -2.353064 0.666030  
C O 2.703610 -3.680540 0.042094  
C O 3.099773 -1.245481 -0.423852  
C O 1.003781 -2.169562 -0.998244  
C O -0.393590 -2.165405 -1.573876  
N O -0.815943 -3.542068 -1.245029  
C O 0.299519 -4.329725 -0.876951  
O O -1.678631 -4.122260 -2.197284  
C O -2.818136 -4.703568 -1.544466  
C O -1.278751 -1.071759 -0.970484  
S O -2.911430 -1.008878 -1.820286  
C O -3.593839 0.562191 -1.168572  
C O -4.242728 0.454919 0.214533  
C O -4.989244 1.765003 0.536700  
O O -3.248895 0.220488 1.219024  
O O -5.884038 2.201965 -0.155414  
O O -4.559251 2.388946 1.639509  
O O 0.291324 -5.553418 -0.763780  
O O 2.611053 -4.682620 1.051209  
O O 4.614198 -2.460000 0.919827  
C O 2.460411 -2.000992 1.955898  
C O 3.623894 0.123953 -0.013163  
C O 3.733085 1.113538 -1.182018  
C O 4.254020 2.488475 -0.745516  
C O 4.376646 3.488710 -1.902179  
C O 4.889593 4.862889 -1.459371  
H O 3.450764 -3.986132 -0.707285  
H O 3.643735 -1.600824 -1.308164  
H O -0.349938 -2.056295 -2.666263  
H O -3.372311 -3.947215 -0.980310  
H O -2.509535 -5.522482 -0.888670  
H O -3.436886 -5.091075 -2.357563  
H O -0.782820 -0.106320 -1.110100  
H O -1.417376 -1.244152 0.098055  
H O -4.356663 0.875704 -1.885788  
H O -2.806638 1.323447 -1.158493  
H O -4.985621 -0.348845 0.204989  
H O -3.537942 -0.513703 1.783684  
H O -3.830509 1.829625 1.996997  
H O 2.103227 -5.417747 0.661214  
H O 4.733016 -3.242177 1.485039  
H O 2.891879 -1.103400 2.406023  
H O 1.395126 -1.824826 1.777912  
H O 2.548854 -2.825786 2.667673  
H O 2.971168 0.538753 0.764562  
H O 4.608940 -0.027687 0.441668  
H O 2.750640 1.229570 -1.657626  
H O 4.402018 0.696036 -1.948496  
H O 3.584431 2.903632 0.022313  
H O 5.235293 2.369449 -0.262539  
H O 3.396390 3.602661 -2.386632  
H O 5.049005 3.076002 -2.667673  
H O 4.218926 5.315633 -0.718495

H O 4.964628 5.553418 -2.307326  
H O 5.884038 4.786084 -1.002451  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.65257  
Number of imaginary frequencies = 0

### 1-3R-c42

B3LYP/6-31G\* geometry  
O O 1.242223 -0.565173 -0.210935  
C O 0.158805 -2.659073 -0.591704  
C O 2.555096 -2.695623 -0.031320  
C O 1.408756 -3.469981 -0.733848  
C O 2.517224 -1.225704 -0.545610  
C O 0.164995 -1.332482 -0.354545  
C O -1.229286 -0.776128 -0.183906  
N O -2.010743 -2.031756 -0.159905  
C O -1.218562 -3.117593 -0.617243  
O O -3.283447 -1.942920 -0.774106  
C O -4.291200 -2.529269 0.071577  
C O -1.367188 0.075499 1.084792  
S O -3.032730 0.761295 1.437454  
C O -3.221116 2.087284 0.168753  
C O -4.121297 1.710676 -1.022181  
C O -5.554592 1.460663 -0.536345  
O O -3.604836 0.688676 -1.840354  
O O -6.136817 2.195712 0.235264  
O O -6.103829 0.351650 -1.062895  
O O -1.656656 -4.225343 -0.914504  
O O 1.287126 -4.768569 -0.159971  
C O 3.811766 -3.200654 -0.492341  
C O 2.467373 -2.795959 1.495935  
C O 3.625019 -0.323543 -0.018903  
C O 3.693537 1.037538 -0.726181  
C O 4.819882 1.927701 -0.186413  
C O 4.903512 3.292323 -0.882265  
C O 6.029338 4.177967 -0.338434  
H O 1.690648 -3.564670 -1.794243  
H O 2.556971 -1.260124 -1.641677  
H O -1.512860 -0.186699 -1.064251  
H O -4.104785 -3.599442 0.185004  
H O -5.230094 -2.360414 -0.459395  
H O -4.313194 -2.032069 1.044692  
H O -0.647025 0.897979 1.043156  
H O -1.130426 -0.534746 1.961523  
H O -2.230892 2.368203 -0.198947  
H O -3.653641 2.949248 0.681671  
H O -4.182118 2.603495 -1.659615  
H O -3.677684 -0.172968 -1.379473  
H O -7.007415 0.275897 -0.697877  
H O 0.455842 -5.144196 -0.502784  
H O 3.803238 -4.157633 -0.320287  
H O 1.560052 -2.326110 1.887718  
H O 2.457403 -3.847124 1.795371  
H O 3.334798 -2.311684 1.951369  
H O 3.485728 -0.174838 1.058774  
H O 4.570940 -0.860635 -0.149328  
H O 2.732720 1.556628 -0.615795  
H O 3.838755 0.878294 -1.804546  
H O 4.676945 2.080586 0.893642  
H O 5.781575 1.404819 -0.296019  
H O 3.941819 3.813327 -0.772140  
H O 5.046187 3.139931 -1.961523  
H O 5.894810 4.376392 0.732198  
H O 6.062709 5.144196 -0.854948  
H O 7.007415 3.697511 -0.465621  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.652562  
Number of imaginary frequencies = 0

### 1-3S-c1

B3LYP/6-31G\* geometry  
O O -1.049943 -0.626611 -0.619236  
C O -1.436958 1.540175 0.331852  
C O -0.709530 -0.287949 1.823904  
C O -0.881986 1.252515 1.688314  
C O -0.173175 -0.941140 0.525824  
C O -1.484827 0.631062 -0.661738  
C O -2.138693 1.180615 -1.904497  
N O -2.624757 2.476224 -1.397685

C 0	-2.007654	2.790934	-0.164126
O 0	-2.625014	3.499842	-2.362633
C 0	-3.923785	4.104195	-2.442560
C 0	-3.236001	0.311599	-2.526045
S 0	-4.656800	0.023547	-1.383092
C 0	-4.850966	-1.798048	-1.503354
C 0	-3.815947	-2.593946	-0.697776
C 0	-3.974606	-4.099391	-0.981372
O 0	-3.969945	-2.389850	0.700834
O 0	-4.005262	-4.570894	-2.099458
O 0	-4.065992	-4.850673	0.121936
O 0	-1.994252	3.902891	0.349553
O 0	0.373461	1.899062	1.920684
O 0	-2.029952	-0.855637	1.969895
C 0	0.138982	-0.665671	3.038140
C 0	1.271449	-0.606253	0.148268
C 0	1.756320	-1.338982	-1.110871
C 0	3.217946	-1.019982	-1.449324
C 0	3.720647	-1.736483	-2.709231
C 0	5.178713	-1.409215	-3.047537
H 0	-1.599685	1.569703	2.461037
H 0	-0.292919	-2.022372	0.632181
H 0	-1.373696	1.364883	-2.672770
H 0	-4.688579	3.365461	-2.705396
H 0	-3.838014	4.850673	-3.235901
H 0	-4.183975	4.592399	-1.498618
H 0	-2.808497	-0.652385	-2.815816
H 0	-3.601469	0.798882	-3.433438
H 0	-4.832969	-2.107944	-2.550814
H 0	-5.849843	-2.003221	-1.105834
H 0	-2.804982	-2.320179	-1.021341
H 0	-3.226511	-1.847821	1.044474
H 0	-4.023991	-4.207305	0.871569
H 0	0.235696	2.843056	1.733209
H 0	-2.406708	-0.558708	2.814715
H 0	-0.356771	-0.315401	3.951110
H 0	1.126710	-0.204030	3.002052
H 0	0.247327	-1.752970	3.101776
H 0	1.376608	0.477324	0.027635
H 0	1.910368	-0.886130	0.993850
H 0	1.642078	-2.423509	-0.968152
H 0	1.118230	-1.070161	-1.961871
H 0	3.330847	0.066349	-1.581094
H 0	3.858760	-1.292210	-0.597554
H 0	3.077986	-1.466350	-3.559166
H 0	3.610465	-2.822117	-2.576311
H 0	5.313234	-0.334135	-3.220078
H 0	5.506910	-1.935782	-3.951110
H 0	5.849843	-1.699640	-2.229665

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657679  
Number of imaginary frequencies = 0

### 1-3S-c2

B3LYP/6-31G\* geometry

O 0	1.178640	-0.378593	-0.899897
C 0	2.067533	-2.394292	0.065506
C 0	1.090149	-0.722298	1.558077
C 0	1.458421	-2.225759	1.425137
C 0	0.341790	-0.193885	0.304420
C 0	1.905830	-1.489775	-0.926780
C 0	2.797126	-1.773573	-2.108133
N 0	3.589145	-2.896883	-1.581245
C 0	3.019391	-3.410324	-0.394032
O 0	3.968561	-3.841967	-2.549121
C 0	5.391544	-4.030812	-2.528342
C 0	3.645164	-0.569198	-2.536053
S 0	4.719308	0.051690	-1.162794
C 0	4.513905	1.870170	-1.346997
C 0	3.260814	2.439719	-0.667662
C 0	3.051589	3.905605	-1.092156
O 0	3.364302	2.407961	0.750590
O 0	3.058184	4.273184	-2.248579
O 0	2.844293	4.743128	-0.070171
O 0	3.319383	-4.478733	0.119930
O 0	0.292485	-3.019436	1.646630
O 0	2.338725	0.007447	1.662684
C 0	0.319012	-0.423071	2.838922

C 0	-1.052875	-0.755226	0.021215
C 0	-1.744805	-0.079958	-1.171693
C 0	-3.159933	-0.620740	-1.413443
C 0	-3.866928	0.036976	-2.605446
C 0	-5.279577	-0.507090	-2.842254
H 0	2.209469	-2.448082	2.196937
H 0	0.289078	0.894615	0.396012
H 0	2.212163	-2.116161	-2.972503
H 0	5.712939	-4.450202	-1.570436
H 0	5.918313	-3.090425	-2.722136
H 0	5.591353	-4.743128	-3.332335
H 0	2.979563	0.236484	-2.856886
H 0	4.273667	-0.850696	-3.384217
H 0	4.521431	2.129897	-2.407817
H 0	5.401083	2.310769	-0.882484
H 0	2.374411	1.890366	-1.007802
H 0	2.827740	1.666676	1.110877
H 0	2.906082	4.183480	0.741439
H 0	0.545413	-3.944479	1.491773
H 0	3.000223	-0.401776	1.070656
H 0	0.945148	-0.678816	3.698859
H 0	-0.600540	-1.007084	2.893526
H 0	0.071474	0.641996	2.897243
H 0	-0.987181	-1.837047	-0.131621
H 0	-1.661664	-0.607240	0.921030
H 0	-1.793293	1.005072	-0.998379
H 0	-1.140871	-0.222546	-2.076610
H 0	-3.110868	-1.707593	-1.576440
H 0	-3.765836	-0.475193	-0.506864
H 0	-3.261023	-0.109843	-3.510803
H 0	-3.915096	1.123115	-2.443154
H 0	-5.260040	-1.585801	-3.041528
H 0	-5.758037	-0.018411	-3.698859
H 0	-5.918313	-0.344111	-1.965278

Free Energy (PCM/B3LYP/6-31G\*) = -1757.656761  
Number of imaginary frequencies = 0

### 1-3S-c3

B3LYP/6-31G\* geometry

O 0	-0.494947	-0.690280	-0.171493
C 0	-0.778462	1.515191	0.726961
C 0	-0.112200	-0.301218	2.258190
C 0	-0.210542	1.241057	2.080928
C 0	0.378505	-1.014609	0.973657
C 0	-0.880466	0.582165	-0.240308
C 0	-1.540534	1.122584	-1.484060
N 0	-1.972798	2.445777	-1.000733
C 0	-1.318867	2.771203	0.210845
O 0	-1.961364	3.444137	-1.991761
C 0	-3.242334	4.086611	-2.061069
C 0	-2.678773	0.276754	-2.062290
S 0	-4.079949	0.051136	-0.881363
C 0	-4.329635	-1.765832	-0.964107
C 0	-3.308569	-2.576310	-0.155494
C 0	-3.513967	-4.081510	-0.407296
O 0	-3.438799	-2.341623	1.240651
O 0	-3.574983	-4.573169	-1.515391
O 0	-3.609153	-4.809214	0.711487
O 0	-1.260002	3.894601	0.695492
O 0	1.079909	1.829484	2.271676
O 0	-1.458128	-0.797193	2.430817
C 0	0.728189	-0.687456	3.475254
C 0	1.832708	-0.760337	0.571150
C 0	2.268935	-1.565477	-0.661400
C 0	3.738680	-1.315797	-1.027590
C 0	4.244928	-2.138810	-2.223948
C 0	3.581594	-1.789325	-3.561868
H 0	-0.896171	1.615514	2.856972
H 0	0.208968	-2.085613	1.111694
H 0	-0.786010	1.262049	-2.271950
H 0	-4.034866	3.365513	-2.288296
H 0	-3.150719	4.809214	-2.875583
H 0	-3.467072	4.607037	-1.125273
H 0	-2.287758	-0.704584	-2.345181
H 0	-3.051519	0.759519	-2.969195
H 0	-4.333223	-2.094891	-2.005831
H 0	-5.329084	-1.934381	-0.551196

H O -2.294358 -2.338230 -0.496461  
H O -2.682731 -1.803307 1.562062  
H O -3.537850 -4.153738 1.448165  
H O 0.985987 2.773999 2.061690  
H O -1.813709 -0.454967 3.267736  
H O 0.257173 -0.290027 4.381936  
H O 1.736391 -0.274536 3.420191  
H O 0.785412 -1.776625 3.567232  
H O 1.983696 0.311661 0.404754  
H O 2.468177 -1.033024 1.421621  
H O 2.119519 -2.637862 -0.466570  
H O 1.621676 -1.311032 -1.508046  
H O 3.882408 -0.245703 -1.239257  
H O 4.365413 -1.540917 -0.152961  
H O 4.102061 -3.208236 -2.012483  
H O 5.329084 -1.989088 -2.315276  
H O 2.506585 -2.001673 -3.554050  
H O 4.024172 -2.366516 -4.381936  
H O 3.708198 -0.724897 -3.797178  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.656596  
Number of imaginary frequencies = 0

### 1-3S-c4

B3LYP/6-31G\* geometry  
O O 0.503900 -0.644862 -0.150492  
C O -0.424008 -2.831488 -0.380129  
C O 1.812691 -2.631281 0.633373  
C O 0.837714 -3.588558 -0.107722  
C O 1.834464 -1.280993 -0.144359  
C O -0.505802 -1.486868 -0.345172  
C O -1.915132 -0.994021 -0.582406  
N O -2.584421 -2.269207 -0.928108  
C O -1.758913 -3.365768 -0.575536  
O O -3.919448 -2.381550 -0.467338  
C O -4.776554 -2.837328 -1.532313  
C O -1.983953 0.079212 -1.676433  
S O -3.651311 0.707094 -2.116636  
C O -4.139613 1.712086 -0.653373  
C O -5.105948 0.995184 0.298943  
C O -5.666679 1.986409 1.333803  
O O -4.501465 -0.067105 1.025941  
O O -6.097381 3.080970 1.038658  
O O -5.663968 1.534408 2.593953  
O O -2.140560 -4.529787 -0.473536  
O O 0.606962 -4.757009 0.675464  
O O 3.147259 -3.132140 0.509248  
C O 1.441597 -2.461221 2.110684  
C O 2.810354 -0.239559 0.386081  
C O 2.968885 0.978505 -0.535235  
C O 3.948854 2.017450 0.023809  
C O 4.125749 3.239797 -0.886166  
C O 5.099568 4.277679 -0.318837  
H O 1.329598 -3.874077 -1.051176  
H O 2.062936 -1.506413 -1.193958  
H O -2.338081 -0.605088 0.350943  
H O -5.774802 -2.873945 -1.090460  
H O -4.471142 -3.835779 -1.852604  
H O -4.754476 -2.133303 -2.367691  
H O -1.591341 -0.326938 -2.613563  
H O -1.351177 0.922764 -1.384926  
H O -4.633072 2.605922 -1.041821  
H O -3.238964 2.028238 -0.117986  
H O -5.968527 0.629993 -0.274652  
H O -4.501881 -0.891186 0.493512  
H O -5.256891 0.638360 2.564741  
H O -0.236500 -5.137139 0.363537  
H O 3.145182 -4.025586 0.892372  
H O 1.418590 -3.439493 2.597512  
H O 0.457039 -2.000973 2.237736  
H O 2.185162 -1.837812 2.613563  
H O 2.480204 0.087648 1.379525  
H O 3.777466 -0.736901 0.517440  
H O 3.316138 0.643167 -1.523281  
H O 1.989768 1.448870 -0.693599  
H O 3.600304 2.349877 1.012913  
H O 4.927823 1.543362 0.188861  
H O 3.146294 3.709872 -1.054008

H O 4.478062 2.908029 -1.873199  
H O 5.203850 5.137139 -0.991107  
H O 6.097381 3.845818 -0.172029  
H O 4.755395 4.653623 0.652699  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.655574  
Number of imaginary frequencies = 0

### 1-3S-c5

B3LYP/6-31G\* geometry  
O O 1.255879 -0.794084 -0.023321  
C O -0.144004 -2.543717 -0.858192  
C O 2.282068 -2.738990 -1.227890  
C O 0.884112 -3.177074 -1.742054  
C O 2.252919 -1.193564 -1.030874  
C O 0.104807 -1.461252 -0.098118  
C O -1.090077 -1.065826 0.735775  
N O -1.946686 -2.241329 0.495001  
C O -1.497971 -3.018498 -0.580009  
O O -3.317606 -2.136046 0.711396  
C O -3.706609 -2.880639 1.885458  
C O -1.704785 0.290912 0.346925  
S O -2.104231 0.414451 -1.452185  
C O -3.638823 1.424034 -1.426167  
C O -4.906063 0.608226 -1.153756  
C O -6.160501 1.475924 -1.347147  
O O -4.956683 0.089437 0.170071  
O O -6.321751 2.208209 -2.300285  
O O -7.081367 1.339826 -0.384628  
O O -2.106942 -3.950024 -1.100543  
O O 0.795474 -4.599415 -1.748609  
O O 3.248103 -2.946664 -2.262697  
C O 2.689728 -3.494401 0.042497  
C O 3.574630 -0.568092 -0.605285  
C O 3.570574 0.966131 -0.663156  
C O 4.905641 1.579383 -0.222687  
C O 4.921101 3.112057 -0.285076  
C O 6.253502 3.720441 0.164611  
H O 0.792088 -2.801451 -2.773364  
H O 1.920028 -0.748129 -1.977223  
H O -0.819855 -1.008931 1.797794  
H O -3.482069 -3.940610 1.745052  
H O -4.784342 -2.729660 1.971724  
H O -3.198143 -2.494487 2.773364  
H O -0.985354 1.069439 0.614742  
H O -2.618602 0.453018 0.919174  
H O -3.710795 1.875650 -2.418471  
H O -3.535058 2.230147 -0.693927  
H O -4.974229 -0.204382 -1.890176  
H O -4.449234 -0.747125 0.216115  
H O -6.703554 0.709366 0.270759  
H O -0.150148 -4.814813 -1.851488  
H O 3.193372 -3.886247 -2.506605  
H O 2.661010 -4.570788 -0.145224  
H O 2.018570 -3.282297 0.880509  
H O 3.706621 -3.217706 0.332058  
H O 3.817140 -0.900670 0.411437  
H O 4.351623 -0.965445 -1.267423  
H O 2.763740 1.354884 -0.028540  
H O 3.341841 1.288777 -1.689264  
H O 5.132477 1.256561 0.804330  
H O 5.714893 1.182064 -0.853253  
H O 4.108237 3.507432 0.340531  
H O 4.699919 3.434553 -1.312428  
H O 6.484127 3.446087 1.201594  
H O 6.233357 4.814813 0.105870  
H O 7.081367 3.367612 -0.462964  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.655562  
Number of imaginary frequencies = 0

### 1-3S-c6

B3LYP/6-31G\* geometry  
O O -1.926596 -0.204306 -0.495809  
C O -3.116607 -2.097737 0.338079  
C O -4.240530 0.092708 0.410395  
C O -4.206796 -1.335526 1.022065  
C O -2.776350 0.624712 0.376711  
C O -2.126082 -1.512551 -0.362810

C O -1.221370 -2.529975 -1.016317  
N O -1.726705 -3.770849 -0.391158  
C O -2.986229 -3.540122 0.204094  
O O -1.644898 -4.900705 -1.224978  
C O -0.925621 -5.952069 -0.563975  
C O 0.281224 -2.304984 -0.846053  
S O 0.773444 -2.315465 0.930429  
C O 2.318785 -1.331877 0.879833  
C O 3.549681 -2.120017 0.386766  
C O 4.785180 -1.224244 0.453014  
O O 3.398945 -2.595756 -0.933440  
O O 5.344605 -0.805231 -0.542061  
O O 5.151989 -0.932219 1.706875  
O O -3.785022 -4.413564 0.538135  
O O -5.478216 -1.964686 0.875314  
O O -4.919187 0.974309 1.310599  
C O -4.913620 0.113723 -0.966467  
C O -2.617136 2.063187 -0.095153  
C O -1.199941 2.621189 0.100623  
C O -1.069586 4.074714 -0.370713  
C O 0.338193 4.654203 -0.180220  
C O 0.460788 6.105919 -0.654340  
H O -3.983156 -1.216439 2.094278  
H O -2.362359 0.517383 1.387654  
H O -1.433501 -2.574338 -2.094278  
H O 0.084358 -5.628790 -0.291259  
H O -0.874782 -6.760782 -1.296911  
H O -1.463720 -6.290646 0.326682  
H O 0.538926 -1.331191 -1.272576  
H O 0.835258 -3.070453 -1.390829  
H O 2.485377 -0.999061 1.908522  
H O 2.162572 -0.444978 0.256142  
H O 3.706005 -2.978497 1.049908  
H O 3.887035 -1.971229 -1.503059  
H O 5.922132 -0.331318 1.666817  
H O -5.319395 -2.924976 0.952761  
H O -5.805188 0.599755 1.451454  
H O -5.922132 -0.299920 -0.887236  
H O -4.364507 -0.482677 -1.701373  
H O -4.984214 1.140826 -1.333415  
H O -2.897282 2.128043 -1.153585  
H O -3.337137 2.669843 0.464663  
H O -0.928206 2.556404 1.164270  
H O -0.480316 1.994829 -0.442304  
H O -1.346437 4.138174 -1.433600  
H O -1.795320 4.699170 0.171235  
H O 1.062593 4.029342 -0.721743  
H O 0.614644 4.591286 0.881840  
H O 0.221640 6.195195 -1.721419  
H O 1.476578 6.490419 -0.506741  
H O -0.227203 6.760782 -0.105276

Free Energy (PCM/B3LYP/6-31G\*) = -1757.655438  
Number of imaginary frequencies = 0

### 2-3R-c1

B3LYP/6-31G\* geometry

O O 1.861966 -1.193168 0.032163  
C O 1.660852 -3.550197 -0.331360  
C O 3.916309 -2.639192 0.135670  
C O 3.120263 -3.822846 -0.482723  
C O 3.280591 -1.300817 -0.353751  
C O 1.161774 -2.314563 -0.101867  
C O -0.339832 -2.326902 0.059632  
N O -0.579747 -3.783014 0.095561  
C O 0.547199 -4.496195 -0.372793  
O O -1.820343 -4.169560 -0.446077  
C O -2.520699 -5.013289 0.477913  
C O -0.884561 -1.644283 1.323652  
S O -0.843282 0.197832 1.296393  
C O -2.584581 0.646333 0.934026  
C O -2.954935 0.632232 -0.562922  
C O -4.396411 1.109107 -0.730198  
O O -2.827465 -0.646321 -1.147089  
O O -5.302366 0.360747 -1.042438  
O O -4.548150 2.411914 -0.462228  
O O 0.538080 -5.677219 -0.698006  
O O 3.527937 -3.898858 -1.864721

O O 5.254629 -2.686658 -0.348790  
C O 3.971154 -2.749196 1.659095  
C O 3.962864 -0.034736 0.144655  
C O 3.475921 1.242208 -0.554763  
C O 4.181442 2.504847 -0.044217  
C O 3.707619 3.789313 -0.736277  
C O 4.411417 5.048147 -0.218880  
H O 3.402482 -4.752257 0.026957  
H O 3.287573 -1.325478 -1.451124  
H O -0.834632 -1.897871 -0.819192  
H O -2.684955 -4.504088 1.433807  
H O -1.974765 -5.947241 0.641251  
H O -3.479730 -5.222690 -0.002449  
H O -0.315429 -1.967308 2.199699  
H O -1.923312 -1.951026 1.464142  
H O -2.706114 1.659437 1.328761  
H O -3.250857 -0.016743 1.495752  
H O -2.292589 1.321869 -1.097509  
H O -3.720583 -1.039737 -1.146205  
H O -5.495912 2.633727 -0.552940  
H O 3.294710 -4.779172 -2.199699  
H O 5.185998 -3.076044 -1.242678  
H O 4.370553 -3.726968 1.945430  
H O 2.982966 -2.628905 2.112427  
H O 4.632630 -1.980678 2.068653  
H O 3.809695 0.054942 1.227442  
H O 5.038803 -0.163322 -0.018886  
H O 3.638986 1.145752 -1.638154  
H O 2.392458 1.346693 -0.412231  
H O 4.020435 2.597792 1.040151  
H O 5.267563 2.397200 -0.183177  
H O 2.621998 3.894129 -0.599009  
H O 3.870679 3.697910 -1.819581  
H O 4.237664 5.185435 0.855687  
H O 4.051433 5.947241 -0.732317  
H O 5.495912 4.987302 -0.373528

Free Energy (PCM/B3LYP/6-31G\*) = -1757.658874  
Number of imaginary frequencies = 0

### 2-3R-c2

B3LYP/6-31G\* geometry

O O 1.297287 -0.924560 -0.057845  
C O 0.255260 -3.064626 -0.335352  
C O 2.677351 -3.016433 0.172773  
C O 1.517712 -3.854893 -0.435981  
C O 2.589468 -1.560503 -0.383873  
C O 0.243097 -1.723706 -0.169694  
C O -1.157697 -1.170982 -0.053072  
N O -1.930692 -2.426649 0.011334  
C O -1.127821 -3.527909 -0.393702  
O O -3.193167 -2.365995 -0.625360  
C O -4.210494 -2.921990 0.226373  
C O -1.325571 -0.255721 1.167064  
S O -2.994257 0.461456 1.439070  
C O -3.138362 1.718335 0.098489  
C O -3.974453 1.281994 -1.124543  
C O -5.415532 0.955403 -0.730476  
O O -3.408777 0.222310 -1.854124  
O O -5.929576 -0.136340 -0.852983  
O O -6.047610 2.027162 -0.217606  
O O -1.570823 -4.629238 -0.689828  
O O 1.894013 -4.121500 -1.802487  
O O 3.915138 -3.569989 -0.261366  
C O 2.655469 -3.071624 1.700079  
C O 3.674313 -0.610687 0.102511  
C O 3.708236 0.724737 -0.654269  
C O 4.810895 1.663760 -0.149606  
C O 4.859685 3.003478 -0.895436  
C O 5.960565 3.938265 -0.383806  
H O 1.434597 -4.803755 0.107317  
H O 2.613759 -1.633303 -1.478550  
H O -1.422170 -0.624442 -0.966492  
H O -4.235575 -2.399450 1.186253  
H O -4.032879 -3.990295 0.370873  
H O -5.144771 -2.757166 -0.312971  
H O -0.598182 0.559065 1.104199  
H O -1.119610 -0.821504 2.080707

H O -2.133141 1.986834 -0.237554  
H O -3.590698 2.605611 0.549357  
H O -4.011534 2.146719 -1.799384  
H O -3.595913 -0.619444 -1.387530  
H O -6.951332 1.749928 0.030107  
H O 1.382931 -4.885281 -2.113707  
H O 3.729426 -3.938998 -1.147310  
H O 2.655397 -4.113872 2.033567  
H O 1.774675 -2.572187 2.113707  
H O 3.547324 -2.586564 2.106308  
H O 3.536720 -0.425174 1.175161  
H O 4.632042 -1.130118 -0.014053  
H O 3.856762 0.529451 -1.726287  
H O 2.734163 1.222608 -0.562101  
H O 4.663735 1.852733 0.924200  
H O 5.786040 1.162498 -0.240211  
H O 3.884301 3.502473 -0.805550  
H O 5.008412 2.815336 -1.968242  
H O 5.818665 4.172463 0.678607  
H O 5.969443 4.885281 -0.935732  
H O 6.951332 3.479614 -0.492079  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.658849  
Number of imaginary frequencies = 0

### 2-3R-c3

B3LYP/6-31G\* geometry  
O O -0.912080 -1.416251 -0.721948  
C O -3.271978 -1.687308 -0.415627  
C O -1.762500 -3.265993 0.752229  
C O -3.204483 -3.037886 0.216720  
C O -0.747216 -2.835520 -0.352169  
C O -2.173685 -1.012186 -0.820239  
C O -2.515439 0.345150 -1.388462  
N O -3.949345 0.410535 -1.054649  
C O -4.448123 -0.867029 -0.704870  
O O -4.713525 1.138711 -1.985050  
C O -5.494759 2.135876 -1.311537  
C O -1.756564 1.543963 -0.801851  
S O 0.000431 1.583615 -1.365403  
C O 0.324754 3.389063 -1.437331  
C O 0.556959 4.066354 -0.078578  
C O 1.680416 3.405053 0.713865  
O O -0.619073 4.069516 0.701720  
O O 1.521298 2.981966 1.842987  
O O 2.838489 3.362704 0.046178  
O O -5.635788 -1.155978 -0.641056  
O O -3.450734 -4.101056 -0.726966  
O O -1.580828 -4.658050 0.989349  
C O -1.541415 -2.537631 2.077492  
C O 0.720697 -3.025274 0.001228  
C O 1.668362 -2.850566 -1.193801  
C O 3.141365 -3.056017 -0.818639  
C O 4.100074 -2.890742 -2.004719  
C O 5.570612 -3.091786 -1.624289  
H O -3.915757 -3.121247 1.047313  
H O -0.994971 -3.406228 -1.256395  
H O -2.398516 0.332570 -2.480713  
H O -6.007082 2.678456 -2.109822  
H O -4.856839 2.820944 -0.743027  
H O -6.229045 1.670098 -0.647522  
H O -1.811810 1.533729 0.288451  
H O -2.237181 2.457396 -1.159636  
H O -0.506950 3.887174 -1.944131  
H O 1.216286 3.501791 -2.060486  
H O 0.872954 5.102594 -0.282095  
H O -0.377078 3.657227 1.553372  
H O 3.503933 2.931160 0.617272  
H O -4.410373 -4.189803 -0.839331  
H O -2.142125 -5.102594 0.323925  
H O -2.316224 -2.826740 2.794165  
H O -1.566095 -1.451109 1.954640  
H O -0.570848 -2.813199 2.499330  
H O 0.993715 -2.321299 0.797198  
H O 0.823367 -4.034838 0.414666  
H O 1.389943 -3.564010 -1.983141  
H O 1.537629 -1.848154 -1.621909  
H O 3.417870 -2.343132 -0.027608

H O 3.270312 -4.058622 -0.384296  
H O 3.967758 -1.889695 -2.439305  
H O 3.824987 -3.604564 -2.794165  
H O 5.883564 -2.370009 -0.859504  
H O 6.229045 -2.965230 -2.491478  
H O 5.741137 -4.097252 -1.219763  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.658434  
Number of imaginary frequencies = 0

### 2-3R-c4

B3LYP/6-31G\* geometry  
O O 0.722647 -0.511680 -0.824456  
C O -0.266992 -2.669196 -0.487484  
C O 1.668056 -2.050088 0.926775  
C O 0.832676 -3.229667 0.351759  
C O 1.963860 -1.038343 -0.224887  
C O -0.237211 -1.413881 -0.985709  
C O -1.480222 -1.085716 -1.775544  
N O -2.311725 -2.257274 -1.452682  
C O -1.522029 -3.297353 -0.902608  
O O -3.190554 -2.633834 -2.483929  
C O -4.538809 -2.673140 -1.994838  
C O -2.141040 0.260371 -1.473690  
S O -2.721663 0.354046 0.273749  
C O -2.876619 2.169256 0.503353  
C O -4.135461 2.798729 -0.111572  
C O -5.416493 2.136296 0.386550  
O O -4.104088 2.739846 -1.521848  
O O -6.246346 1.668836 -0.370023  
O O -5.528749 2.147303 1.719043  
O O -1.886373 -4.460392 -0.792961  
O O 1.754361 -4.035462 -0.411969  
O O 2.916685 -2.558187 1.385946  
C O 0.962320 -1.404422 2.118593  
C O 2.803007 0.168862 0.168800  
C O 3.274390 1.006493 -1.028050  
C O 4.134978 2.206010 -0.611082  
C O 4.606810 3.057713 -1.796281  
C O 5.467375 4.253271 -1.374336  
H O 0.433474 -3.826808 1.180384  
H O 2.462871 -1.599517 -1.025362  
H O -1.240994 -1.103624 -2.849095  
H O -5.146562 -2.930707 -2.865745  
H O -4.844710 -1.698911 -1.599066  
H O -4.649638 -3.441639 -1.223703  
H O -2.980413 0.417353 -2.151964  
H O -1.412470 1.058234 -1.644238  
H O -1.993722 2.665259 0.089745  
H O -2.878776 2.331044 1.584698  
H O -4.167342 3.850033 0.218962  
H O -4.945441 2.323359 -1.791399  
H O -6.371106 1.712722 1.957399  
H O 1.368458 -4.919608 -0.515872  
H O 3.113850 -3.312598 0.796566  
H O 0.724562 -2.168011 2.865745  
H O 0.036110 -0.903795 1.821713  
H O 1.618323 -0.665706 2.587691  
H O 2.227793 0.799437 0.858180  
H O 3.668287 -0.209444 0.724656  
H O 3.848176 0.367098 -1.714646  
H O 2.402050 1.361676 -1.591928  
H O 3.564339 2.838716 0.084924  
H O 5.010929 1.848237 -0.049723  
H O 3.730406 3.415990 -2.354916  
H O 5.174812 2.425028 -2.493120  
H O 4.914988 4.919608 -0.700166  
H O 5.784407 4.844061 -2.241519  
H O 6.371106 3.923796 -0.846725  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.658353  
Number of imaginary frequencies = 0

### 2-3R-c5

B3LYP/6-31G\* geometry  
O O 0.548057 -0.745127 -0.319995  
C O -1.278266 0.772861 0.012483  
C O 0.612030 1.516450 -1.417132  
C O -0.615748 1.975735 -0.570494

C 0	1.394271	0.425631	-0.619331
C 0	-0.680540	-0.437325	0.077785
C 0	-1.599517	-1.489995	0.644835
N 0	-2.660728	-0.614808	1.167225
C 0	-2.639941	0.629557	0.536322
O 0	-3.888201	-1.207069	1.447896
C 0	-4.156177	-1.157720	2.861932
C 0	-2.112054	-2.523980	-0.389664
S 0	-2.694374	-1.831806	-1.996622
C 0	-4.515004	-2.066850	-2.025499
C 0	-5.351211	-1.008189	-1.285708
C 0	-6.844376	-1.284624	-1.523862
O 0	-5.063869	0.316984	-1.722499
O 0	-7.362639	-2.368095	-1.344829
O 0	-7.535354	-0.216770	-1.941805
O 0	-3.597067	1.406645	0.467958
O 0	-0.105049	2.854984	0.456030
O 0	1.481059	2.629596	-1.587843
C 0	0.178900	1.045949	-2.805012
C 0	2.647950	-0.106897	-1.297980
C 0	3.511785	-0.986655	-0.383295
C 0	4.771593	-1.515384	-1.080344
C 0	5.639747	-2.400202	-0.176639
C 0	6.895591	-2.930074	-0.876429
H 0	-1.305904	2.533795	-1.212825
H 0	1.649877	0.861943	0.355503
H 0	-1.117245	-2.041803	1.460150
H 0	-5.113546	-1.668509	2.982186
H 0	-4.236170	-0.121056	3.201005
H 0	-3.376354	-1.681472	3.422974
H 0	-2.913038	-3.111935	0.063600
H 0	-1.285001	-3.200405	-0.620038
H 0	-4.774062	-3.062240	-1.656955
H 0	-4.750579	-2.037389	-3.094582
H 0	-5.179533	-1.099657	-0.209894
H 0	-4.628256	0.796361	-0.984294
H 0	-6.867203	0.507999	-2.011777
H 0	-0.754854	3.558757	0.606979
H 0	1.356606	3.163505	-0.777239
H 0	-0.397962	1.835024	-3.297374
H 0	-0.436811	0.143514	-2.756898
H 0	1.056034	0.834225	-3.422974
H 0	2.360851	-0.672883	-2.192959
H 0	3.223690	0.761531	-1.637147
H 0	3.801884	-0.408275	0.505976
H 0	2.913461	-1.832614	-0.020674
H 0	4.480228	-2.086863	-1.974146
H 0	5.371496	-0.667283	-1.442545
H 0	5.038045	-3.245914	0.185588
H 0	5.931528	-1.828938	0.716107
H 0	6.634835	-3.533672	-1.754722
H 0	7.491947	-3.558757	-0.205107
H 0	7.535354	-2.107107	-1.218647

Free Energy (PCM/B3LYP/6-31G\*) = -1757.658338  
Number of imaginary frequencies = 0

### 2-3R-c6

B3LYP/6-31G\* geometry

O 0	0.942501	-0.266570	-0.000242
C 0	-0.581256	1.583859	-0.098703
C 0	1.438614	1.655372	-1.538086
C 0	0.311185	2.499125	-0.868906
C 0	1.994920	0.644140	-0.487340
C 0	-0.220433	0.328412	0.243931
C 0	-1.318858	-0.407434	0.971533
N 0	-2.236740	0.717609	1.216025
C 0	-1.947343	1.818342	0.384567
O 0	-3.586008	0.407071	1.405111
C 0	-4.014325	0.800733	2.724403
C 0	-1.919194	-1.587573	0.178628
S 0	-2.527436	-1.112377	-1.496395
C 0	-4.182903	-1.899269	-1.575456
C 0	-5.219466	-1.316679	-0.602483
C 0	-6.592860	-1.961139	-0.846983
O 0	-5.370314	0.089755	-0.728982
O 0	-6.758033	-3.156396	-0.972604
O 0	-7.605965	-1.086961	-0.890962

O 0	-2.707022	2.755590	0.182951
O 0	0.968349	3.458579	-0.012016
O 0	2.499389	2.531020	-1.901166
C 0	0.939224	0.975830	-2.812856
C 0	3.142676	-0.231689	-0.967474
C 0	3.814477	-1.033792	0.156209
C 0	4.981807	-1.894179	-0.342923
C 0	5.659501	-2.704951	0.769158
C 0	6.825061	-3.562579	0.265854
H 0	-0.247330	3.032878	-1.645879
H 0	2.308674	1.229408	0.387333
H 0	-0.946896	-0.809150	1.922303
H 0	-5.064466	0.507056	2.779843
H 0	-3.915509	1.882118	2.847007
H 0	-3.432496	0.273691	3.485570
H 0	-2.743187	-2.017108	0.750977
H 0	-1.143664	-2.351625	0.079991
H 0	-4.104340	-2.978894	-1.429530
H 0	-4.502913	-1.720099	-2.606846
H 0	-4.939943	-1.575484	0.426280
H 0	-4.773841	0.504815	-0.072411
H 0	-7.196298	-0.197166	-0.776557
H 0	0.454437	4.280840	-0.024013
H 0	2.476959	3.237560	-1.224776
H 0	0.507313	1.723263	-3.485570
H 0	0.180485	0.216949	-2.601837
H 0	1.771604	0.493851	-3.333392
H 0	2.776167	-0.916425	-1.742607
H 0	3.873986	0.431045	-1.443536
H 0	4.177084	-0.340368	0.929071
H 0	3.069038	-1.676646	0.642308
H 0	4.620304	-2.581275	-1.122499
H 0	5.728796	-1.248422	-0.828130
H 0	4.912031	-3.350181	1.252418
H 0	6.019866	-2.018999	1.548994
H 0	6.489300	-4.280840	-0.492543
H 0	7.285255	-4.130675	1.082571
H 0	7.605965	-2.941109	-0.189774

Free Energy (PCM/B3LYP/6-31G\*) = -1757.658178  
Number of imaginary frequencies = 0

### 2-3R-c7

B3LYP/6-31G\* geometry

O 0	-0.300073	-1.016927	-0.904441
C 0	-2.095154	-2.529870	-0.420324
C 0	-0.038415	-2.698775	0.949589
C 0	-1.314182	-3.444508	0.464241
C 0	0.618651	-1.984858	-0.273842
C 0	-1.554927	-1.442826	-1.012615
C 0	-2.561550	-0.693035	-1.848914
N 0	-3.800216	-1.379087	-1.445186
C 0	-3.504250	-2.608671	-0.807386
O 0	-4.767706	-1.440702	-2.466351
C 0	-6.025505	-0.947200	-1.985744
C 0	-2.609755	0.827812	-1.680810
S 0	-2.926381	1.395182	0.045862
C 0	-1.300675	2.107502	0.526264
C 0	-1.014523	3.516169	-0.018427
C 0	-2.101026	4.515202	0.366383
O 0	-0.866095	3.515579	-1.422876
O 0	-2.720079	5.158525	-0.459469
O 0	-2.282311	4.607229	1.688260
O 0	-4.315416	-3.505670	-0.619344
O 0	-0.850522	-4.618538	-0.234130
O 0	0.893167	-3.657385	1.439456
C 0	-0.369630	-1.743104	2.094951
C 0	1.908760	-1.234826	0.022732
C 0	2.652864	-0.769047	-1.237028
C 0	3.950844	-0.017918	-0.916066
C 0	4.707413	0.452796	-2.164925
C 0	6.000362	1.206807	-1.837719
H 0	-1.904958	-3.753120	1.334995
H 0	0.799387	-2.755980	-1.033796
H 0	-2.372621	-0.903804	-2.912763
H 0	-6.694211	-0.992582	-2.848867
H 0	-5.937551	0.086843	-1.635189
H 0	-6.411168	-1.582545	-1.182821

H O	-3.414045	1.218144	-2.309700
H O	-1.678228	1.281344	-2.021869
H O	-0.504973	1.431569	0.204122
H O	-1.301175	2.133124	1.619388
H O	-0.077782	3.858734	0.449146
H O	-1.550833	4.121925	-1.765823
H O	-2.989258	5.261411	1.854149
H O	-1.576683	-5.261411	-0.258917
H O	0.730402	-4.461678	0.908291
H O	-0.837542	-2.299882	2.912763
H O	-1.054182	-0.951965	1.775992
H O	0.542362	-1.278771	2.480368
H O	1.687762	-0.371263	0.662818
H O	2.545257	-1.910709	0.604839
H O	2.882169	-1.642091	-1.865289
H O	1.995291	-0.122815	-1.832967
H O	3.720058	0.852221	-0.283481
H O	4.607631	-0.665388	-0.316194
H O	4.049081	1.097496	-2.764465
H O	4.940335	-0.416524	-2.796189
H O	5.795574	2.099374	-1.233377
H O	6.515375	1.531961	-2.749068
H O	6.694211	0.574673	-1.269709

Free Energy (PCM/B3LYP/6-31G\*) = -1757.658084  
Number of imaginary frequencies = 0

**2-3R-c8**

B3LYP/6-31G\* geometry

O O	1.387749	-0.968812	-0.881130
C O	1.057663	-3.305410	-0.456252
C O	2.710706	-2.097868	0.935057
C O	2.260447	-3.490370	0.408479
C O	2.720073	-1.092238	-0.258704
C O	0.730834	-2.115182	-1.005570
C O	-0.545939	-2.190103	-1.806534
N O	-1.010348	-3.537247	-1.436098
C O	0.041353	-4.283457	-0.844852
O O	-1.722577	-4.190784	-2.458883
C O	-2.994232	-4.638254	-1.968347
C O	-1.566452	-1.078395	-1.547789
S O	-2.182171	-1.113139	0.188623
C O	-2.681440	0.636578	0.399413
C O	-4.001413	1.015441	-0.310874
C O	-4.287363	2.496317	-0.069029
O O	-5.097686	0.255234	0.142154
O O	-5.183288	2.879756	0.658113
O O	-3.433349	3.305386	-0.708325
O O	0.025152	-5.496787	-0.689055
O O	3.387004	-4.024570	-0.317695
O O	4.045339	-2.204708	1.419622
C O	1.829090	-1.635675	2.094547
C O	3.175158	0.320146	0.078803
C O	3.434973	1.190145	-1.159173
C O	3.897578	2.608945	-0.805394
C O	4.176678	3.481494	-2.035944
C O	4.634697	4.899506	-1.679587
H O	2.037850	-4.143369	1.260889
H O	3.368429	-1.521282	-1.033415
H O	-0.303014	-2.178881	-2.879100
H O	-3.587680	-3.800550	-1.587253
H O	-2.865220	-5.392150	-1.185847
H O	-3.489038	-5.083576	-2.834958
H O	-2.398959	-1.189158	-2.247551
H O	-1.084877	-0.113486	-1.734159
H O	-1.867928	1.289079	0.067969
H O	-2.807527	0.769682	1.478764
H O	-3.890781	0.860492	-1.390459
H O	-5.561026	0.815555	0.793287
H O	-3.656915	4.228335	-0.476240
H O	3.284741	-4.987914	-0.369947
H O	4.460116	-2.893790	0.863998
H O	1.820051	-2.398703	2.879100
H O	0.799512	-1.449803	1.774257
H O	2.228111	-0.713104	2.525851
H O	2.423662	0.798783	0.719134
H O	4.092392	0.228883	0.671310
H O	4.195930	0.704530	-1.787375

H O	2.521777	1.244851	-1.766184
H O	3.133555	3.096112	-0.181456
H O	4.805767	2.552221	-0.187044
H O	3.269381	3.534361	-2.654533
H O	4.941636	2.994965	-2.657638
H O	3.875921	5.422701	-1.084377
H O	4.822777	5.496787	-2.579287
H O	5.561026	4.880589	-1.092083

Free Energy (PCM/B3LYP/6-31G\*) = -1757.658005  
Number of imaginary frequencies = 0

**2-3R-c9**

B3LYP/6-31G\* geometry

O O	0.167686	-0.410313	-0.818964
C O	-0.880170	-2.542960	-0.502639
C O	1.224141	-2.094414	0.723850
C O	0.275846	-3.200004	0.176097
C O	1.441272	-1.021774	-0.389079
C O	-0.842466	-1.263425	-0.932025
C O	-2.152480	-0.830038	-1.548709
N O	-2.997088	-1.989358	-1.216005
C O	-2.196155	-3.093488	-0.824914
O O	-3.979279	-2.270268	-2.188968
C O	-5.254055	-2.471763	-1.560554
C O	-2.657100	0.502287	-0.986296
S O	-4.159141	1.066457	-1.896562
C O	-4.253005	2.834916	-1.409809
C O	-4.768135	3.077130	0.018673
C O	-3.666505	2.871738	1.076440
O O	-5.916314	2.302692	0.347729
O O	-2.559393	3.359117	0.988606
O O	-4.044905	2.124050	2.121030
O O	-2.596092	-4.247764	-0.759234
O O	1.068857	-3.992604	-0.731098
O O	2.489349	-2.681565	1.007880
C O	0.685404	-1.499549	2.024700
C O	2.367184	0.127140	-0.015601
C O	2.770031	1.002679	-1.210350
C O	3.691939	2.162653	-0.813077
C O	4.111654	3.039399	-1.999612
C O	5.023837	4.202639	-1.596093
H O	-0.061045	-3.830716	1.007378
H O	1.827366	-1.547334	-1.271704
H O	-2.045221	-0.760685	-2.640057
H O	-5.947389	-2.648695	-2.386449
H O	-5.559612	-1.582260	-1.000356
H O	-5.225966	-3.345568	-0.903739
H O	-1.878694	1.259631	-1.112455
H O	-2.873957	0.387135	0.078290
H O	-4.954265	3.273455	-2.124506
H O	-3.281117	3.316963	-1.538245
H O	-5.062103	4.131308	0.091212
H O	-5.855510	1.471466	-0.167870
H O	-4.980121	1.868072	1.941727
H O	0.648861	-4.862673	-0.820075
H O	2.582848	-3.404597	0.356493
H O	0.495035	-2.298940	2.747408
H O	-0.243321	-0.943774	1.865840
H O	1.422084	-0.818514	2.459964
H O	1.882071	0.745132	0.750125
H O	3.259451	-0.313373	0.443230
H O	3.272588	0.378099	-1.963131
H O	1.867909	1.402771	-1.691381
H O	3.186259	2.787361	-0.061915
H O	4.591268	1.762262	-0.321830
H O	3.212091	3.433506	-2.493535
H O	4.621917	2.415797	-2.747408
H O	4.526639	4.862673	-0.874465
H O	5.306044	4.809636	-2.464125
H O	5.947389	3.837939	-1.129489

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657819  
Number of imaginary frequencies = 0

**2-3R-c10**

B3LYP/6-31G\* geometry

O O	1.001053	-0.923439	-0.083583
C O	-0.018187	-3.075330	-0.355551

C 0	2.400332	-2.999367	0.168964
C 0	1.253113	-3.853961	-0.442538
C 0	2.301813	-1.549035	-0.399593
C 0	-0.042986	-1.733835	-0.195659
C 0	-1.450417	-1.194562	-0.083656
N 0	-2.210775	-2.455770	-0.014611
C 0	-1.396507	-3.551541	-0.419742
O 0	-3.471577	-2.400276	-0.659636
C 0	-4.484361	-2.996910	0.173734
C 0	-1.637046	-0.281107	1.134614
S 0	-3.327495	0.388950	1.390839
C 0	-3.468372	1.644657	0.046471
C 0	-4.434687	1.259412	-1.074843
C 0	-5.887698	1.142546	-0.574961
O 0	-4.074786	0.105386	-1.823579
O 0	-6.357990	1.822668	0.311586
O 0	-6.619268	0.240968	-1.247549
O 0	-1.831653	-4.654865	-0.715989
O 0	1.639906	-4.125354	-1.804693
O 0	3.645839	-3.543872	-0.252899
C 0	2.368456	-3.043340	1.696491
C 0	3.374696	-0.583674	0.082338
C 0	3.401328	0.741096	-0.693347
C 0	4.491831	1.698471	-0.196951
C 0	4.535654	3.023804	-0.968464
C 0	5.623731	3.978320	-0.466052
H 0	1.175515	-4.799497	0.107009
H 0	2.330369	-1.629966	-1.493559
H 0	-1.711570	-0.658290	-1.005568
H 0	-4.538332	-2.486162	1.138644
H 0	-4.275316	-4.060262	0.306669
H 0	-5.416575	-2.861292	-0.379263
H 0	-0.928883	0.550370	1.075862
H 0	-1.421113	-0.844210	2.047270
H 0	-2.474681	1.831876	-0.367893
H 0	-3.824861	2.569020	0.505480
H 0	-4.433568	2.084928	-1.799538
H 0	-3.912071	-0.655189	-1.220672
H 0	-6.010472	-0.182814	-1.893095
H 0	1.160810	-4.913706	-2.105027
H 0	3.469614	-3.919754	-1.138017
H 0	2.378321	-4.083018	2.037701
H 0	1.479249	-2.551241	2.100826
H 0	3.251814	-2.544809	2.105027
H 0	3.228039	-0.385552	1.151519
H 0	4.337698	-1.096040	-0.021131
H 0	3.558557	0.531036	-1.761329
H 0	2.422067	1.231158	-0.614965
H 0	4.333830	1.906598	0.871729
H 0	5.471839	1.203889	-0.269889
H 0	3.555183	3.515760	-0.897114
H 0	4.695641	2.815750	-2.035969
H 0	5.469747	4.233246	0.589867
H 0	5.629968	4.913706	-1.037504
H 0	6.619268	3.525990	-0.555536

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657762  
Number of imaginary frequencies = 0

**2-3R-c11**

B3LYP/6-31G\* geometry

O 0	1.275954	-0.929235	-0.904540
C 0	0.848018	-3.239632	-0.425648
C 0	2.527705	-2.063268	0.960079
C 0	2.033722	-3.449666	0.457148
C 0	2.592207	-1.084029	-0.253981
C 0	0.577357	-2.052017	-1.009933
C 0	-0.692324	-2.095318	-1.824322
N 0	-1.220243	-3.409071	-1.422137
C 0	-0.206053	-4.183227	-0.797360
O 0	-1.942154	-4.061640	-2.439611
C 0	-3.235060	-4.452300	-1.956651
C 0	-1.667557	-0.935859	-1.603434
S 0	-2.295799	-0.910242	0.131718
C 0	-2.607066	0.881628	0.363300
C 0	-3.819897	1.397540	-0.435697
C 0	-4.099501	2.848089	-0.024935
O 0	-4.998945	0.646296	-0.185317

O 0	-3.351190	3.762912	-0.293945
O 0	-5.218795	3.019684	0.690465
O 0	-0.278532	-5.389045	-0.607395
O 0	3.148221	-4.037956	-0.244658
O 0	3.850390	-2.208336	1.466637
C 0	1.647442	-1.544387	2.096451
C 0	3.087676	0.319316	0.063962
C 0	3.395249	1.156992	-1.185302
C 0	3.902887	2.564618	-0.848836
C 0	4.226112	3.406698	-2.089792
C 0	4.729751	4.813349	-1.750223
H 0	1.777939	-4.076001	1.320090
H 0	3.239278	-1.550224	-1.007915
H 0	-0.440107	-2.121483	-2.894290
H 0	-3.730636	-4.907934	-2.817374
H 0	-3.807160	-3.584423	-1.611641
H 0	-3.142999	-5.185004	-1.149372
H 0	-2.501016	-1.027530	-2.303647
H 0	-1.147740	0.005890	-1.802606
H 0	-1.717172	1.461801	0.106982
H 0	-2.794863	0.992823	1.436074
H 0	-3.581339	1.402522	-1.506882
H 0	-4.735982	-0.283032	-0.039754
H 0	-5.647767	2.136300	0.755467
H 0	3.012946	-4.998005	-0.279478
H 0	4.248458	-2.921923	0.930099
H 0	1.594325	-2.291733	2.894290
H 0	0.631471	-1.322827	1.756121
H 0	2.076482	-0.631062	2.518336
H 0	2.342160	0.834180	0.682820
H 0	3.991847	0.209761	0.673180
H 0	4.147177	0.634086	-1.794099
H 0	2.492922	1.233069	-1.806005
H 0	3.149217	3.088050	-0.241973
H 0	4.801452	2.486630	-0.218917
H 0	3.328091	3.481164	-2.719486
H 0	4.980445	2.883767	-2.694735
H 0	3.982979	5.372378	-1.172722
H 0	4.949542	5.389045	-2.656770
H 0	5.647767	4.771201	-1.150986

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657666  
Number of imaginary frequencies = 0

**2-3R-c12**

B3LYP/6-31G\* geometry

O 0	1.512985	-1.104441	-0.474312
C 0	1.541224	-3.497518	-0.537134
C 0	3.523997	-2.341791	0.392158
C 0	2.997118	-3.656328	-0.249342
C 0	2.987048	-1.133857	-0.436912
C 0	0.937004	-2.291320	-0.627701
C 0	-0.549747	-2.417705	-0.869719
N 0	-0.716959	-3.872013	-0.689445
C 0	0.531570	-4.535754	-0.737083
O 0	-1.737135	-4.425205	-1.486084
C 0	-2.642021	-5.186543	-0.674277
C 0	-1.457558	-1.623651	0.083944
S 0	-1.622579	0.160818	-0.336780
C 0	-3.022799	0.130247	-1.528679
C 0	-4.421546	0.078686	-0.894149
C 0	-4.654063	1.221359	0.089933
O 0	-4.651266	-1.149675	-0.234803
O 0	-5.000864	1.032156	1.240086
O 0	-4.454439	2.427523	-0.451904
O 0	0.671630	-5.743458	-0.880643
O 0	3.777996	-3.857007	-1.445975
O 0	4.945142	-2.329175	0.304886
C 0	3.149376	-2.261301	1.871675
C 0	3.435485	0.238325	0.045144
C 0	3.127965	1.367471	-0.948538
C 0	3.586011	2.742331	-0.446214
C 0	3.304101	3.878358	-1.437826
C 0	3.760003	5.249749	-0.928694
H 0	3.173738	-4.491152	0.439472
H 0	3.305823	-1.291414	-1.475337
H 0	-0.783785	-2.160118	-1.911471
H 0	-2.130380	-6.038812	-0.217343



H O -3.409836 -5.541463 -1.366119  
H O -3.098504 -4.563159 0.101941  
H O -1.075871 -1.676206 1.107187  
H O -2.460878 -2.049700 0.071702  
H O -2.908749 -0.722982 -2.203144  
H O -2.927437 1.040605 -2.126062  
H O -5.151491 0.203817 -1.710520  
H O -4.912941 -0.919772 0.677899  
H O -4.627090 3.102303 0.233820  
H O 3.719226 -4.793916 -1.691141  
H O 5.151491 -2.823564 -0.512744  
H O 3.498621 -3.158525 2.391910  
H O 2.068486 -2.173274 2.013796  
H O 3.628167 -1.393977 2.334844  
H O 2.961175 0.453468 1.010915  
H O 4.515348 0.180406 0.221910  
H O 3.619413 1.147076 -1.907437  
H O 2.049357 1.392851 -1.151893  
H O 3.088858 2.964370 0.509737  
H O 4.664137 2.710121 -0.229109  
H O 2.227281 3.908231 -1.656746  
H O 3.803443 3.657384 -2.391910  
H O 3.250435 5.514004 0.006279  
H O 3.546883 6.038812 -1.659115  
H O 4.839262 5.259923 -0.731643  
Free Energy (PCM/B3LYP/6-31G\*) ==-1757.657642  
Number of imaginary frequencies = 0

### 2-3R-c13

B3LYP/6-31G\* geometry  
O O 1.990636 -1.126372 -0.396419  
C O 1.920398 -3.517306 -0.549085  
C O 4.005495 -2.471394 0.280618  
C O 3.385662 -3.740344 -0.371461  
C O 3.462616 -1.210103 -0.462139  
C O 1.364605 -2.286510 -0.554322  
C O -0.137692 -2.338009 -0.708848  
N O -0.364064 -3.789353 -0.588015  
C O 0.853832 -4.499273 -0.739174  
O O -1.435729 -4.262237 -1.374645  
C O -2.289630 -5.107201 -0.589564  
C O -0.865114 -1.484359 0.331893  
S O -2.684174 -1.459519 0.030782  
C O -3.183192 -0.068366 1.122582  
C O -3.037703 1.331858 0.505262  
C O -3.818277 1.471809 -0.798518  
O O -1.685904 1.665410 0.268293  
O O -3.294819 1.822788 -1.838613  
O O -5.117560 1.184628 -0.664563  
O O 0.930949 -5.702050 -0.952698  
O O 4.072208 -3.918912 -1.627605  
O O 5.416543 -2.507351 0.094372  
C O 3.736808 -2.436904 1.784820  
C O 3.996444 0.122552 0.042691  
C O 3.645558 1.309113 -0.866084  
C O 4.192540 2.641820 -0.339592  
C O 3.851531 3.837896 -1.237582  
C O 4.395384 5.166925 -0.703048  
H O 3.578672 -4.607509 0.271343  
H O 3.703731 -1.334581 -1.525649  
H O -0.418273 -2.013806 -1.720643  
H O -3.101548 -5.388799 -1.264770  
H O -2.691235 -4.564549 0.271989  
H O -1.751024 -6.000956 -0.262082  
H O -0.504253 -0.456680 0.266017  
H O -0.666751 -1.874803 1.334769  
H O -2.599723 -0.113015 2.046489  
H O -4.230720 -0.244664 1.380391  
H O -3.474625 2.046960 1.220874  
H O -1.625601 1.877375 -0.683441  
H O -5.546533 1.298391 -1.535393  
H O 3.968420 -4.844357 -1.899795  
H O 5.546533 -2.974994 -0.754186  
H O 4.078362 -3.369653 2.244064  
H O 2.673637 -2.307047 2.006432  
H O 4.286696 -1.611981 2.246249  
H O 3.612842 0.304870 1.054269

H O 5.084644 0.022209 0.123939  
H O 4.044165 1.123179 -1.874020  
H O 2.555054 1.378536 -0.972117  
H O 3.796486 2.823335 0.670605  
H O 5.284988 2.569773 -0.230578  
H O 2.760020 3.906784 -1.348273  
H O 4.249810 3.658214 -2.246249  
H O 3.987739 5.389740 0.290856  
H O 4.135252 6.000956 -1.365043  
H O 5.488588 5.139930 -0.613913  
Free Energy (PCM/B3LYP/6-31G\*) ==-1757.657470  
Number of imaginary frequencies = 0

### 2-3R-c14

B3LYP/6-31G\* geometry  
O O -1.445548 -0.278784 1.429674  
C O -1.961056 -1.910872 -0.243118  
C O -3.701622 -0.282244 0.339532  
C O -3.219670 -1.284730 -0.746707  
C O -2.522836 0.569178 0.878427  
C O -1.235295 -1.413826 0.779586  
C O -0.101658 -2.337653 1.160073  
N O -0.188290 -3.332903 0.070434  
C O -1.430419 -3.217984 -0.589102  
O O 0.177179 -4.634099 0.459131  
C O 1.224220 -5.126341 -0.390114  
C O 1.278219 -1.696206 1.314054  
S O 1.875792 -0.999331 -0.284735  
C O 3.081740 0.259553 0.291079  
C O 4.437353 -0.296021 0.751057  
C O 5.104979 -1.156617 -0.317445  
O O 4.305647 -1.050980 1.936203  
O O 5.467708 -2.297709 -0.103596  
O O 5.262564 -0.518333 -1.482013  
O O -1.939403 -4.080381 -1.305283  
O O -4.252710 -2.265692 -0.912000  
O O -4.161681 -1.040474 1.460474  
C O -4.843805 0.599598 -0.181617  
C O -1.897162 1.562634 -0.103161  
C O -0.850473 2.483844 0.540772  
C O -0.281670 3.510775 -0.446013  
C O 0.768522 4.437824 0.180115  
C O 1.327824 5.467972 -0.806444  
H O -3.062144 -0.758342 -1.699013  
H O -2.890927 1.095508 1.763351  
H O -0.347502 -2.838752 2.107314  
H O 0.876188 -5.217421 -1.423731  
H O 1.467240 -6.114317 0.008201  
H O 2.105164 -4.477215 -0.347799  
H O 1.987627 -2.436583 1.686443  
H O 1.213993 -0.888865 2.049003  
H O 2.641926 0.839896 1.107683  
H O 3.231266 0.931976 -0.558018  
H O 5.099631 0.567674 0.927561  
H O 4.729061 -1.912136 1.754384  
H O 5.700090 -1.128877 -2.107314  
H O -3.809645 -3.080152 -1.223507  
H O -4.588492 -1.825152 1.065182  
H O -5.700090 -0.039597 -0.417707  
H O -4.571527 1.147442 -1.088599  
H O -5.153426 1.316891 0.585568  
H O -1.445557 1.015878 -0.941547  
H O -2.700421 2.177608 -0.524174  
H O -1.307945 3.009837 1.391299  
H O -0.032928 1.879404 0.952319  
H O 0.164389 2.984479 -1.302788  
H O -1.103601 4.117405 -0.854209  
H O 1.592094 3.831048 0.582636  
H O 0.324223 4.958480 1.040318  
H O 1.809661 4.977151 -1.661165  
H O 2.073386 6.114317 -0.329127  
H O 0.531093 6.111271 -1.200108  
Free Energy (PCM/B3LYP/6-31G\*) ==-1757.657400  
Number of imaginary frequencies = 0

### 2-3R-c15

B3LYP/6-31G\* geometry

O 0	-0.611374	-0.719865	-0.816148
C 0	-2.840023	-1.365055	-0.219922
C 0	-0.964097	-2.335130	1.080915
C 0	-2.458586	-2.493876	0.680623
C 0	-0.141332	-1.985598	-0.198035
C 0	-1.944414	-0.601798	-0.876232
C 0	-2.609227	0.449883	-1.733403
N 0	-3.999376	0.322872	-1.261582
C 0	-4.185123	-0.896941	-0.570903
O 0	-4.959169	0.626031	-2.242993
C 0	-5.885986	1.602146	-1.744559
C 0	-2.065604	1.877376	-1.656463
S 0	-2.099917	2.560327	0.061118
C 0	-0.481130	3.424267	0.151774
C 0	0.712057	2.499272	0.412121
C 0	1.979557	3.321848	0.699731
O 0	1.003809	1.648222	-0.694600
O 0	2.000906	4.258104	1.469973
O 0	3.071701	2.906022	0.046507
O 0	-5.271305	-1.396875	-0.316702
O 0	-2.565740	-3.769852	-0.019246
O 0	-0.487323	-3.583925	1.566985
C 0	-0.801538	-1.305929	2.198582
C 0	1.360025	-1.848730	0.005631
C 0	2.163110	-1.795608	-1.302480
C 0	3.670624	-1.645878	-1.062995
C 0	4.492888	-1.620914	-2.357733
C 0	5.997051	-1.462017	-2.113213
H 0	-3.075844	-2.501479	1.586423
H 0	-0.352522	-2.762149	-0.943011
H 0	-2.562897	0.132716	-2.786227
H 0	-5.369241	2.519857	-1.444408
H 0	-6.456293	1.200151	-0.902010
H 0	-6.555660	1.806931	-2.583219
H 0	-2.669561	2.512926	-2.309160
H 0	-1.036979	1.897857	-2.019774
H 0	-0.571778	4.127229	0.983424
H 0	-0.322911	4.001722	-0.763890
H 0	0.516583	1.905184	1.314587
H 0	0.491235	0.819457	-0.621581
H 0	2.784767	2.154313	-0.520728
H 0	-3.486380	-4.069271	-0.084132
H 0	-1.002219	-4.258104	1.080617
H 0	-1.415695	-1.596937	3.056187
H 0	-1.104704	-0.304727	1.877998
H 0	0.240348	-1.264360	2.528530
H 0	1.569062	-0.956019	0.608710
H 0	1.677069	-2.711719	0.601110
H 0	1.971852	-2.711934	-1.878793
H 0	1.811329	-0.961456	-1.924050
H 0	3.857320	-0.721300	-0.496637
H 0	4.021655	-2.470613	-0.425285
H 0	4.137048	-0.800157	-2.996645
H 0	4.308995	-2.547287	-2.920099
H 0	6.215437	-0.526218	-1.583928
H 0	6.555660	-1.450027	-3.056187
H 0	6.388205	-2.286164	-1.503789

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657345  
Number of imaginary frequencies = 0

**2-3R-c16**

B3LYP/6-31G\* geometry

O 0	2.076304	-1.002989	-0.780908
C 0	1.859745	-3.363553	-0.427978
C 0	3.657351	-2.170098	0.787906
C 0	3.168609	-3.551294	0.265171
C 0	3.482591	-1.114014	-0.348218
C 0	1.437771	-2.163201	-0.880108
C 0	0.062510	-2.237254	-1.501784
N 0	-0.305569	-3.622787	-1.160282
O 0	0.833743	-4.356116	-0.745015
O 0	-1.105221	-4.255091	-2.134799
C 0	-2.237499	-4.881443	-1.513725
C 0	-0.888259	-1.171173	-0.951299
S 0	-2.489639	-1.177404	-1.861985
C 0	-3.242324	0.381162	-1.259023
C 0	-3.899478	0.271368	0.132262

C 0	-4.565580	1.600656	0.484261
O 0	-2.977188	-0.060016	1.148521
O 0	-4.141041	2.335053	1.355555
O 0	-5.627341	1.872792	-0.284144
O 0	0.878278	-5.576422	-0.659331
O 0	4.199296	-4.029296	-0.623159
O 0	5.047077	-2.261177	1.083367
C 0	2.933461	-1.781612	2.076781
C 0	3.943040	0.295416	-0.005763
C 0	3.995726	1.235144	-1.218775
C 0	4.457843	2.651486	-0.854607
C 0	4.513858	3.602218	-2.057247
C 0	4.970971	5.016903	-1.686843
H 0	3.072111	-4.242449	1.111037
H 0	4.031524	-1.488516	-1.221785
H 0	0.142710	-2.145380	-2.594080
H 0	-2.850786	-4.144434	-0.985904
H 0	-1.913607	-5.670879	-0.829635
H 0	-2.804844	-5.315873	-2.340667
H 0	-0.425366	-0.188761	-1.086724
H 0	-1.068504	-1.332045	0.112377
H 0	-4.000691	0.643791	-2.002389
H 0	-2.481861	1.169622	-1.255664
H 0	-4.671224	-0.506044	0.096273
H 0	-2.761165	0.778128	1.599835
H 0	-5.975654	2.748409	-0.023977
H 0	4.092557	-4.988764	-0.720719
H 0	5.397865	-2.916687	0.448762
H 0	3.039090	-2.581096	2.816577
H 0	1.867912	-1.601457	1.907699
H 0	3.372789	-0.872415	2.496746
H 0	3.278778	0.715839	0.759581
H 0	4.938386	0.208671	0.444256
H 0	4.673954	0.812681	-1.974429
H 0	3.003516	1.284091	-1.686156
H 0	3.782110	3.070074	-0.093969
H 0	5.451678	2.601459	-0.385253
H 0	3.521006	3.649402	-2.526865
H 0	5.190859	3.185675	-2.816577
H 0	4.293320	5.472654	-0.954166
H 0	5.000078	5.670879	-2.566074
H 0	5.975654	5.005672	-1.246126

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657327  
Number of imaginary frequencies = 0

**2-3R-c17**

B3LYP/6-31G\* geometry

O 0	1.334487	-0.605585	-1.279289
C 0	2.282210	-2.318075	0.091708
C 0	3.820715	-0.909028	-1.203517
C 0	3.703596	-1.868164	0.013096
C 0	2.636725	0.090924	-1.241862
C 0	1.264229	-1.716165	-0.559311
C 0	-0.040602	-2.457212	-0.359181
N 0	0.383139	-3.483860	0.619502
C 0	1.788405	-3.547993	0.683421
O 0	-0.278899	-4.716306	0.463888
C 0	-0.859515	-5.128374	1.709429
C 0	-1.209494	-1.619331	0.183386
S 0	-2.049065	-0.579253	-1.082467
C 0	-3.330531	-1.734541	-1.719018
C 0	-4.594944	-1.852519	-0.853110
C 0	-5.252709	-0.499390	-0.599078
O 0	-4.324020	-2.471394	0.387985
O 0	-5.487730	-0.087830	0.520897
O 0	-5.549557	0.157458	-1.725337
O 0	2.440816	-4.482068	1.151929
O 0	4.582350	-2.975715	-0.228461
O 0	3.690900	-1.693053	-2.391732
C 0	5.173153	-0.184876	-1.215863
C 0	2.587880	1.135007	-0.122545
C 0	1.477564	2.178464	-0.311464
C 0	1.456722	3.235033	0.800770
C 0	0.353266	4.284201	0.615514
C 0	0.323766	5.332355	1.732777
H 0	4.016944	-1.348930	0.930228
H 0	2.671616	0.586297	-2.216045

H 0	-0.337042	-2.964144	-1.286198
H 0	-0.084341	-5.300809	2.462225
H 0	-1.371506	-6.066663	1.482795
H 0	-1.579772	-4.389044	2.075286
H 0	-0.860133	-0.946253	0.971078
H 0	-1.965222	-2.278883	0.610241
H 0	-2.894528	-2.729482	-1.845988
H 0	-3.601299	-1.361704	-2.710224
H 0	-5.318436	-2.460761	-1.419867
H 0	-4.641353	-1.850831	1.072599
H 0	-5.968706	1.006409	-1.482613
H 0	4.208162	-3.733839	0.263744
H 0	4.135922	-2.535761	-2.177034
H 0	5.968706	-0.929699	-1.315636
H 0	5.354091	0.382135	-0.297733
H 0	5.233397	0.497256	-2.070296
H 0	2.465677	0.631180	0.845631
H 0	3.556027	1.647124	-0.089409
H 0	1.612973	2.674288	-1.283634
H 0	0.503380	1.675899	-0.353284
H 0	1.324204	2.737901	1.773178
H 0	2.433273	3.739623	0.846079
H 0	-0.620848	3.777668	0.562536
H 0	0.489950	4.784940	-0.353441
H 0	0.153254	4.864122	2.710224
H 0	-0.473857	6.066663	1.571252
H 0	1.273652	5.878590	1.788855

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657325  
Number of imaginary frequencies = 0

**2-3R-c18**

B3LYP/6-31G\* geometry

O 0	1.716055	-1.011851	-1.386254
C 0	1.160724	-2.684850	0.231116
C 0	3.154570	-3.046804	-1.155827
C 0	2.438347	-3.455954	0.162569
C 0	3.106887	-1.511743	-1.364249
C 0	0.889483	-1.613960	-0.543864
C 0	-0.525647	-1.117997	-0.346878
N 0	-0.957994	-1.980693	0.776566
C 0	-0.053667	-3.057872	0.929916
O 0	-2.317985	-2.368558	0.722833
C 0	-2.941772	-2.170131	2.003939
C 0	-0.588819	0.386388	-0.056179
S 0	-2.254122	1.105930	0.225291
C 0	-3.005950	1.102624	-1.458089
C 0	-3.991214	-0.054241	-1.735254
C 0	-5.177673	-0.022399	-0.771315
O 0	-3.391419	-1.325463	-1.735877
O 0	-5.435695	-0.900006	0.025349
O 0	-5.898475	1.106045	-0.902239
O 0	-0.291799	-4.099612	1.540906
O 0	2.186690	-4.865711	0.091374
O 0	2.412854	-3.598375	-2.245607
C 0	4.593640	-3.577346	-1.197434
C 0	3.907124	-0.667524	-0.369242
C 0	3.912649	0.832357	-0.698540
C 0	4.742953	1.650839	0.298336
C 0	4.755274	3.153420	-0.010527
C 0	5.578852	3.967248	0.992973
H 0	3.088287	-3.245372	1.023746
H 0	3.447601	-1.316687	-2.384572
H 0	-1.130938	-1.353739	-1.230373
H 0	-2.493245	-2.836571	2.744895
H 0	-3.990685	-2.424699	1.844105
H 0	-2.852545	-1.126074	2.315066
H 0	-0.106434	0.927058	-0.875950
H 0	-0.036659	0.606306	0.862448
H 0	-2.203341	1.069957	-2.200008
H 0	-3.526989	2.057361	-1.568611
H 0	-4.388699	0.110374	-2.744895
H 0	-3.283846	-1.623602	-0.808340
H 0	-6.624886	1.073204	-0.249395
H 0	1.405790	-5.034878	0.655103
H 0	2.101601	-4.463722	-1.916173
H 0	4.564820	-4.671123	-1.178190
H 0	5.190289	-3.239852	-0.344707

H 0	5.089488	-3.263958	-2.122006
H 0	3.515449	-0.822915	0.644892
H 0	4.939427	-1.035217	-0.365414
H 0	4.310739	0.977459	-1.713295
H 0	2.882848	1.209960	-0.712233
H 0	4.349650	1.493710	1.313718
H 0	5.776546	1.274309	0.309705
H 0	3.721762	3.527506	-0.025373
H 0	5.151678	3.311379	-1.023569
H 0	5.183546	3.857550	2.010517
H 0	5.569694	5.034878	0.744959
H 0	6.624886	3.636716	1.006831

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657308  
Number of imaginary frequencies = 0

**2-3R-c19**

B3LYP/6-31G\* geometry

O 0	1.267522	-0.932281	-0.912224
C 0	0.832168	-3.191500	-0.238381
C 0	2.290725	-1.810987	1.211269
C 0	1.888202	-3.260624	0.814621
C 0	2.492739	-0.973647	-0.091156
C 0	0.615392	-2.085953	-0.983545
C 0	-0.522769	-2.270185	-1.957247
N 0	-1.063812	-3.556085	-1.487649
C 0	-0.129160	-4.215336	-0.648828
O 0	-1.627022	-4.341584	-2.510028
C 0	-2.968666	-4.713706	-2.164217
C 0	-1.544747	-1.132790	-2.013606
S 0	-2.428165	-0.926820	-0.411428
C 0	-3.044267	0.787873	-0.667658
C 0	-4.158102	1.095007	0.349895
C 0	-4.616132	2.541700	0.172386
O 0	-3.745341	0.899872	1.685052
O 0	-4.370050	3.410578	0.985590
O 0	-5.277432	2.741779	-0.974338
O 0	-0.189319	-5.398015	-0.341524
O 0	3.095261	-3.895663	0.343589
O 0	3.539995	-1.856794	1.892937
C 0	1.263799	-1.195886	2.161523
C 0	2.922666	0.470275	0.123277
C 0	3.343832	1.184443	-1.168628
C 0	3.788773	2.632692	-0.928986
C 0	4.204936	3.361811	-2.212708
C 0	4.646219	4.808690	-1.968735
H 0	1.526003	-3.790013	1.703955
H 0	3.237389	-1.502115	-0.700321
H 0	-0.114471	-2.403369	-2.969797
H 0	-3.336344	-5.274854	-3.026824
H 0	-3.592862	-3.829550	-1.997573
H 0	-2.977421	-5.350893	-1.274652
H 0	-2.265386	-1.329168	-2.812342
H 0	-1.014739	-0.204761	-2.248668
H 0	-3.443067	0.876694	-1.682345
H 0	-2.218380	1.497368	-0.547916
H 0	-5.008527	0.431007	0.157794
H 0	-3.458719	1.773385	2.011894
H 0	-5.506165	3.690475	-1.032085
H 0	2.976606	-4.856374	0.408845
H 0	4.011510	-2.618723	1.502007
H 0	1.123116	-1.851028	3.026824
H 0	0.295785	-1.046229	1.674385
H 0	1.619564	-0.227963	2.525862
H 0	2.105190	1.023449	0.602408
H 0	3.758578	0.453925	0.831572
H 0	4.163785	0.624293	-1.641403
H 0	2.509210	1.172224	-1.881655
H 0	2.971751	3.188876	-0.445616
H 0	4.627529	2.643213	-0.217139
H 0	3.365855	3.349611	-2.922838
H 0	5.021386	2.806392	-2.695865
H 0	3.838205	5.398015	-1.517540
H 0	4.936182	5.301420	-2.903979
H 0	5.506165	4.851280	-1.288759

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657282  
Number of imaginary frequencies = 0

**2-3R-c20**

B3LYP/6-31G\* geometry

O	0	2.041114	-1.130560	-0.365064
C	0	1.925290	-3.522177	-0.457626
C	0	4.019483	-2.495013	0.375024
C	0	3.382311	-3.769998	-0.247933
C	0	3.511646	-1.246594	-0.412204
C	0	1.393011	-2.281973	-0.503149
C	0	-0.110209	-2.308502	-0.661855
N	0	-0.365930	-3.755741	-0.553616
C	0	0.845789	-4.487120	-0.654778
O	0	-1.398398	-4.220192	-1.394964
C	0	-2.334599	-5.004893	-0.644432
C	0	-0.810553	-1.452563	0.406292
S	0	-2.634903	-1.337771	0.279420
C	0	-2.811939	-0.287727	-1.226104
C	0	-4.051436	0.603450	-1.107495
C	0	-3.951974	1.606480	0.040186
O	0	-5.208742	-0.186600	-0.929150
O	0	-4.824068	1.724702	0.879540
O	0	-2.841511	2.350504	-0.006439
O	0	0.908156	-5.694171	-0.847592
O	0	4.085299	-4.003043	-1.485723
O	0	5.431842	-2.565089	0.209778
C	0	3.731282	-2.408888	1.873555
C	0	4.067336	0.090750	0.055684
C	0	3.768935	1.247729	-0.908405
C	0	4.328591	2.589636	-0.420132
C	0	4.055509	3.749986	-1.385792
C	0	4.607587	5.090348	-0.889383
H	0	3.545479	-4.620541	0.424744
H	0	3.761294	-1.409750	-1.468530
H	0	-0.387614	-1.968301	-1.667807
H	0	-1.851211	-5.897196	-0.235754
H	0	-3.098785	-5.296829	-1.369489
H	0	-2.787344	-4.412675	0.156644
H	0	-0.388691	-0.443100	0.387999
H	0	-0.616611	-1.881112	1.394054
H	0	-2.915612	-0.919239	-2.112138
H	0	-1.919430	0.333279	-1.339182
H	0	-4.128040	1.191541	-2.036935
H	0	-5.694555	0.216239	-0.183699
H	0	-2.862674	2.975691	0.744464
H	0	3.954929	-4.931195	-1.736545
H	0	5.564074	-3.063935	-0.620424
H	0	4.049416	-3.332688	2.366416
H	0	2.667765	-2.253059	2.075773
H	0	4.289848	-1.579705	2.316650
H	0	3.663447	0.320690	1.049588
H	0	5.150443	-0.031866	0.168073
H	0	4.193323	1.012726	-1.895350
H	0	2.683792	1.334942	-1.050831
H	0	3.896869	2.827336	0.563393
H	0	5.413513	2.496646	-0.262824
H	0	2.971807	3.837712	-1.548149
H	0	4.492809	3.514412	-2.366416
H	0	4.160794	5.370281	0.072701
H	0	4.398902	5.897196	-1.601416
H	0	5.694555	5.042678	-0.748188

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657230  
Number of imaginary frequencies = 0

**2-3R-c21**

B3LYP/6-31G\* geometry

O	0	-0.871272	-1.482272	-0.939029
C	0	-3.189188	-1.681852	-0.363695
C	0	-1.546239	-2.947301	0.989524
C	0	-3.034234	-2.856541	0.544190
C	0	-0.635521	-2.772534	-0.266791
C	0	-2.143579	-1.114031	-1.003853
C	0	-2.561573	0.073261	-1.836618
N	0	-3.955234	0.229481	-1.386591
C	0	-4.398843	-0.936983	-0.713431
O	0	-4.818468	0.727308	-2.379966
C	0	-5.507038	1.889973	-1.898835
C	0	-1.702359	1.330790	-1.699518

S	0	-1.746227	2.008706	0.015777
C	0	-0.276464	3.107424	-0.009446
C	0	1.070995	2.389649	0.211915
C	0	2.188842	3.425837	0.323100
O	0	1.391913	1.487960	-0.827978
O	0	3.051421	3.550312	-0.525224
O	0	2.094571	4.181890	1.423048
O	0	-5.571164	-1.193598	-0.473905
O	0	-3.329514	-4.106804	-0.113513
O	0	-1.309020	-4.247702	1.518754
C	0	-1.238700	-1.932232	2.089905
C	0	0.861422	-2.855794	-0.003316
C	0	1.710100	-2.880105	-1.282278
C	0	3.211505	-3.010692	-0.996506
C	0	4.072611	-3.028331	-2.265880
C	0	5.571779	-3.156998	-1.976561
H	0	-3.670509	-2.757325	1.431718
H	0	-0.933877	-3.541871	-0.990699
H	0	-2.561775	-0.213644	-2.898625
H	0	-6.158330	1.634939	-1.057246
H	0	-6.109448	2.230678	-2.744578
H	0	-4.800731	2.672512	-1.602088
H	0	-2.063866	2.090681	-2.398361
H	0	-0.666634	1.087093	-1.941256
H	0	-0.442981	3.824731	0.799180
H	0	-0.257524	3.661499	-0.953744
H	0	1.021009	1.832776	1.154896
H	0	2.059226	1.940894	-1.378571
H	0	2.821941	4.834756	1.407394
H	0	-4.290943	-4.235776	-0.101078
H	0	-1.912072	-4.834756	1.021482
H	0	-1.955491	-2.044357	2.909352
H	0	-1.286639	-0.904058	1.719104
H	0	-0.236758	-2.106796	2.491987
H	0	1.166240	-2.008273	0.623050
H	0	1.034120	-3.767070	0.580274
H	0	1.385854	-3.716519	-1.918601
H	0	1.527338	-1.962838	-1.856539
H	0	3.532560	-2.178125	-0.353002
H	0	3.394444	-3.930031	-0.420570
H	0	3.887755	-2.109345	-2.840023
H	0	3.751557	-3.859857	-2.909352
H	0	5.929922	-2.320479	-1.363642
H	0	6.158330	-3.167078	-2.902524
H	0	5.791589	-4.083866	-1.432235

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657198  
Number of imaginary frequencies = 0

**2-3R-c22**

B3LYP/6-31G\* geometry

O	0	1.866272	-0.799462	-0.564301
C	0	2.513117	-3.102815	-0.419973
C	0	4.024534	-1.412559	0.576477
C	0	3.922206	-2.856420	0.006704
C	0	3.287342	-0.435906	-0.393451
C	0	1.640211	-2.103298	-0.668597
C	0	0.273523	-2.622269	-1.052110
N	0	0.451232	-4.060113	-0.788283
C	0	1.829091	-4.373767	-0.652048
O	0	-0.264702	-4.888071	-1.679250
C	0	-0.979586	-5.897507	-0.950927
C	0	-0.852676	-1.961421	-0.250749
S	0	-2.501623	-2.527544	-0.843851
C	0	-3.608813	-1.478752	0.173085
C	0	-3.635248	-0.002090	-0.269665
C	0	-4.742627	0.720698	0.506196
O	0	-3.913134	0.148804	-1.654024
O	0	-4.679308	0.932831	1.697897
O	0	-5.806012	1.065488	-0.231533
O	0	2.286954	-5.507267	-0.698638
O	0	4.848167	-2.916232	-1.097355
O	0	5.396223	-1.033515	0.609108
C	0	3.490957	-1.344863	2.007212
C	0	3.313528	1.029688	0.014972
C	0	2.812680	1.983247	-1.079009
C	0	2.843870	3.453405	-0.642750
C	0	2.350784	4.421386	-1.725897

C	O	2.376479	5.887164	-1.280280
H	O	4.232513	-3.571788	0.777675
H	O	3.743826	-0.561223	-1.383600
H	O	0.107316	-2.470629	-2.127647
H	O	-1.691727	-5.445981	-0.253150
H	O	-0.284851	-6.553313	-0.418890
H	O	-1.515422	-6.465555	-1.715480
H	O	-0.773630	-0.878158	-0.376272
H	O	-0.748788	-2.206490	0.810216
H	O	-3.337503	-1.547766	1.229422
H	O	-4.601366	-1.921753	0.043518
H	O	-2.686815	0.483976	-0.007891
H	O	-3.499728	-0.600678	-2.124847
H	O	-5.603196	0.798346	-1.156864
H	O	5.057286	-3.848476	-1.266732
H	O	5.806012	-1.505184	-0.142691
H	O	3.995090	-2.092686	2.626930
H	O	2.412856	-1.524490	2.050451
H	O	3.691842	-0.359492	2.436638
H	O	2.713094	1.160943	0.923791
H	O	4.349890	1.271391	0.275998
H	O	3.429851	1.856142	-1.980284
H	O	1.788439	1.708961	-1.363510
H	O	2.228140	3.577068	0.260554
H	O	3.869518	3.725409	-0.352217
H	O	1.327765	4.145376	-2.018614
H	O	2.968911	4.301336	-2.626930
H	O	1.738182	6.044546	-0.401920
H	O	2.020754	6.553313	-2.074768
H	O	3.392718	6.201163	-1.011285

Free Energy (PCM/B3LYP/6-31G\*) = -1757.657014  
Number of imaginary frequencies = 0

**2-3R-c23**

B3LYP/6-31G\* geometry

O	O	1.470598	-0.486424	-0.138960
C	O	1.676220	-2.865117	-0.317470
C	O	3.538832	-1.617677	0.733994
C	O	3.129888	-2.933669	0.014494
C	O	2.941401	-0.413158	-0.058171
C	O	0.987987	-1.702293	-0.369253
C	O	-0.477587	-1.922933	-0.666044
N	O	-0.542471	-3.392945	-0.567952
C	O	0.752744	-3.961306	-0.606153
O	O	-1.494229	-3.972950	-1.427798
C	O	-2.363641	-4.842872	-0.689858
C	O	-1.467032	-1.249280	0.299078
S	O	-1.732801	0.543936	-0.022353
C	O	-3.100707	0.498722	-1.250716
C	O	-4.507644	0.333315	-0.653836
C	O	-4.826256	1.411568	0.377681
O	O	-4.678867	-0.936553	-0.058857
O	O	-5.168043	1.147794	1.514524
O	O	-4.702241	2.651715	-0.107109
O	O	0.986859	-5.145971	-0.808122
O	O	3.962172	-3.019673	-1.160876
O	O	4.957617	-1.500977	0.698382
C	O	3.112114	-1.634960	2.201466
C	O	3.278879	0.963302	0.495805
C	O	2.887266	2.117308	-0.438278
C	O	3.264899	3.488986	0.138374
C	O	2.827182	4.686490	-0.721012
C	O	3.521222	4.777111	-2.085627
H	O	3.344386	-3.785928	0.670659
H	O	3.298155	-0.501274	-1.092483
H	O	-0.700807	-1.626168	-1.699566
H	O	-3.079272	-5.216080	-1.426570
H	O	-2.891569	-4.298853	0.100707
H	O	-1.802865	-5.677942	-0.259697
H	O	-1.115071	-1.340759	1.330297
H	O	-2.439246	-1.737588	0.226329
H	O	-2.921780	-0.309503	-1.965415
H	O	-3.044913	1.443757	-1.797132
H	O	-5.226051	0.453893	-1.480616
H	O	-4.942179	-0.766212	0.866352
H	O	-4.922546	3.281805	0.606827
H	O	3.960288	-3.941032	-1.465162

H	O	5.226051	-1.939890	-0.132660
H	O	3.505968	-2.530604	2.691689
H	O	2.023776	-1.627376	2.309453
H	O	3.514846	-0.760889	-2.720669
H	O	2.788327	1.092663	1.468729
H	O	4.359616	0.979231	0.676351
H	O	3.375425	1.969581	-1.411116
H	O	1.805595	2.086411	-0.625009
H	O	2.813525	3.588118	1.135937
H	O	4.353842	3.531117	0.290906
H	O	3.025437	5.609458	-0.159593
H	O	1.738078	4.646578	-0.866226
H	O	4.611801	4.819216	-1.970117
H	O	3.208688	5.677942	-2.626418
H	O	3.287937	3.915065	-2.720669

Free Energy (PCM/B3LYP/6-31G\*) = -1757.656991  
Number of imaginary frequencies = 0

**2-3R-c24**

B3LYP/6-31G\* geometry

O	O	0.372795	-0.380886	-0.708074
C	O	-0.853848	-2.359359	-0.137654
C	O	0.972138	-1.654783	1.380182
C	O	0.091818	-2.847680	0.908809
C	O	1.484583	-0.880243	0.124720
C	O	-0.644950	-1.221923	-0.836123
C	O	-1.757664	-0.942055	-1.814593
N	O	-2.731534	-1.976790	-1.425212
C	O	-2.100999	-2.956942	-0.605959
O	O	-3.423987	-2.509379	-2.538613
C	O	-4.828890	-2.583073	-2.271030
C	O	-2.290998	0.496333	-1.802210
S	O	-2.770374	1.167485	-0.161297
C	O	-4.531713	0.643559	-0.019512
C	O	-5.294827	1.617490	0.883203
C	O	-5.361675	3.031494	0.309422
O	O	-4.705835	1.668649	2.166221
O	O	-5.026381	4.010679	0.948211
O	O	-5.859098	3.072321	-0.931346
O	O	-2.578148	-4.057041	-0.363490
O	O	1.006361	-3.842057	0.401199
O	O	2.111540	-2.172321	2.059684
C	O	0.212322	-0.761592	2.360012
C	O	2.376361	0.317088	0.420133
C	O	3.068099	0.892641	-0.823662
C	O	3.961587	2.096863	-0.500102
C	O	4.659715	2.686443	-1.732197
C	O	5.544482	3.893377	-1.402877
H	O	-0.447597	-3.259866	1.769697
H	O	2.019721	-1.604229	-0.503093
H	O	-1.409063	-1.158105	-2.835517
H	O	-5.250597	-1.592092	-2.073266
H	O	-5.031165	-3.251585	-1.429428
H	O	-5.265590	-2.994741	-3.184476
H	O	-3.130904	0.585275	-2.496691
H	O	-1.496573	1.156100	-2.163810
H	O	-4.591052	-0.360677	0.404621
H	O	-4.984605	0.633295	-1.013983
H	O	-6.333873	1.255596	0.953310
H	O	-4.608438	2.617057	2.378224
H	O	-5.889182	4.006680	-1.216334
H	O	0.560406	-4.703323	0.424404
H	O	2.294803	-3.029187	1.626233
H	O	-0.621092	-0.242959	1.877025
H	O	0.886195	-0.011192	2.783141
H	O	-0.179722	-1.365341	3.184476
H	O	1.779364	1.099088	0.905624
H	O	3.126953	-0.012827	1.147109
H	O	3.672656	0.106576	-1.299214
H	O	2.309828	1.188758	-1.560194
H	O	3.355858	2.878904	-0.018502
H	O	4.719807	1.799618	0.239513
H	O	3.900833	2.978979	-2.471753
H	O	5.268018	1.906226	-2.211427
H	O	4.956747	4.703323	-0.953066
H	O	6.028708	4.291964	-2.301868
H	O	6.333873	3.622584	-0.690715

Free Energy (PCM/B3LYP/6-31G\*) = -1757.656890  
Number of imaginary frequencies = 0

### 2-3R-c25

B3LYP/6-31G\* geometry

O 0	1.265153	-1.637313	-1.193946
C 0	-0.469904	-2.236077	0.345366
C 0	1.785692	-3.099071	0.775696
C 0	0.412428	-2.772121	1.425088
C 0	2.259527	-1.946819	-0.146286
C 0	-0.003170	-1.751932	-0.823733
C 0	-1.121642	-1.359771	-1.757421
N 0	-2.258216	-1.973282	-1.049334
C 0	-1.922680	-2.285357	0.282756
O 0	-3.511845	-1.390456	-1.268551
C 0	-4.426666	-2.346847	-1.844315
C 0	-1.258523	0.158465	-1.997190
S 0	-1.472906	1.173117	-0.475224
C 0	-3.176523	1.876269	-0.651606
C 0	-4.077979	1.611853	0.560786
C 0	-3.416025	2.115988	1.858613
O 0	-4.467345	0.260480	0.754120
O 0	-3.041103	3.260013	2.012927
O 0	-3.293483	1.177715	2.802331
O 0	-2.726721	-2.609719	1.154853
O 0	-0.101111	-3.996895	1.962176
O 0	1.603834	-4.220979	-0.092429
C 0	2.838832	-3.440492	1.837991
C 0	2.646903	-0.636507	0.544237
C 0	3.222001	0.413070	-0.418340
C 0	3.626432	1.710561	0.292648
C 0	4.204413	2.766425	-0.658704
C 0	4.596980	4.066363	0.050893
H 0	0.546519	-2.043838	2.237497
H 0	3.104877	-2.331848	-0.723037
H 0	-0.986553	-1.832371	-2.738370
H 0	-4.583529	-3.180459	-1.155954
H 0	-4.041346	-2.705582	-2.802331
H 0	-5.355673	-1.792848	-1.991009
H 0	-2.101105	0.344647	-2.665519
H 0	-0.350453	0.498145	-2.501952
H 0	-3.640583	1.467921	-1.552295
H 0	-3.081871	2.957137	-0.773315
H 0	-4.982787	2.219757	0.419974
H 0	-4.060662	-0.327355	0.080508
H 0	-3.671234	0.357251	2.398714
H 0	-1.062561	-3.873096	2.070239
H 0	0.970837	-4.798331	0.375095
H 0	2.519990	-4.340661	2.371988
H 0	2.968751	-2.640118	2.572627
H 0	3.804722	-3.646621	1.365200
H 0	1.774126	-0.222442	1.066485
H 0	3.394030	-0.863424	1.312831
H 0	2.484288	0.639230	-1.197929
H 0	4.097221	-0.011019	-0.931697
H 0	2.750666	2.129786	0.809704
H 0	4.365010	1.484373	1.075912
H 0	3.467726	2.985704	-1.444465
H 0	5.082638	2.348823	-1.171211
H 0	3.730365	4.525914	0.542259
H 0	5.007939	4.798331	-0.653965
H 0	5.355673	3.882791	0.821840

Free Energy (PCM/B3LYP/6-31G\*) = -1757.656880  
Number of imaginary frequencies = 0

### 2-3R-c26

B3LYP/6-31G\* geometry

O 0	0.909081	-0.941527	-0.438004
C 0	3.208658	-1.404570	0.033226
C 0	1.736241	-3.310381	-0.549476
C 0	3.065081	-2.886896	0.138785
C 0	0.608284	-2.340536	-0.081327
C 0	2.171238	-0.580606	-0.238151
C 0	2.606324	0.863819	-0.341034
N 0	4.069782	0.700201	-0.264049
C 0	4.415102	-0.593924	0.188595
O 0	4.725855	1.773384	0.367283

C 0	5.800531	2.249748	-0.455180
C 0	2.207242	1.606808	-1.629151
S 0	0.456414	2.150872	-1.721051
C 0	0.505866	3.657213	-0.654964
C 0	-0.779951	3.772427	0.166962
C 0	-0.970591	2.604601	1.131795
O 0	-1.900342	3.850286	-0.689940
O 0	-1.997082	1.953827	1.174643
O 0	0.083071	2.406337	1.933771
O 0	5.526119	-0.917773	0.588900
O 0	2.966503	-3.335498	1.506343
O 0	1.393095	-4.621172	-0.111993
C 0	1.888358	-3.353863	-2.069435
C 0	-0.782260	-2.633440	-0.626386
C 0	-1.895073	-1.874556	0.111299
C 0	-3.283817	-2.113809	-0.493875
C 0	-4.405152	-1.374580	0.247728
C 0	-5.787737	-1.596929	-0.374152
H 0	3.904231	-3.398858	-0.348012
H 0	0.596774	-2.370602	1.015898
H 0	2.260019	1.420198	0.539866
H 0	5.435242	2.573343	-1.435750
H 0	6.566355	1.478215	-0.577254
H 0	6.214749	3.102186	0.088759
H 0	2.372508	0.966003	-2.499734
H 0	2.851017	2.483249	-1.739652
H 0	0.602461	4.545435	-1.284663
H 0	1.372129	3.608129	0.008640
H 0	-0.704704	4.684742	0.781423
H 0	-2.541980	3.195243	-0.353975
H 0	-0.122390	1.657334	2.527278
H 0	3.861823	-3.363949	1.879253
H 0	1.745785	-4.684742	0.797366
H 0	2.720811	-4.010752	-2.339774
H 0	2.076333	-2.361325	-2.488767
H 0	0.979039	-3.753486	-2.527278
H 0	-0.807055	-2.386301	-1.695232
H 0	-0.945869	-3.713444	-0.540768
H 0	-1.899359	-2.182439	1.167280
H 0	-1.675950	-0.799122	0.104970
H 0	-3.278796	-1.799305	-1.548135
H 0	-3.500559	-3.192546	-0.498389
H 0	-4.178409	-0.299287	0.264956
H 0	-4.419360	-1.699763	1.297790
H 0	-5.813921	-1.249130	-1.414391
H 0	-6.566355	-1.057498	0.177579
H 0	-6.055350	-2.660980	-0.374327

Free Energy (PCM/B3LYP/6-31G\*) = -1757.656832  
Number of imaginary frequencies = 0

### 2-3R-c27

B3LYP/6-31G\* geometry

O 0	0.453823	-0.018969	-0.450314
C 0	2.258658	1.469581	0.061526
C 0	0.430256	1.264413	1.718984
C 0	1.579109	2.172218	1.192235
C 0	-0.390550	0.738218	0.499433
C 0	1.663259	0.478806	-0.643179
C 0	2.556344	-0.076117	-1.723361
N 0	3.847991	0.555837	-1.370907
C 0	3.591044	1.673477	-0.479727
O 0	4.538528	0.955388	-2.548667
C 0	5.931968	0.629391	-2.475906
C 0	2.585196	-1.603266	-1.845184
S 0	2.801020	-2.541584	-0.275654
C 0	4.573537	-3.056819	-0.281363
C 0	5.460009	-2.289796	0.702012
C 0	4.923826	-2.414676	2.142498
O 0	5.673595	-0.920399	0.386274
O 0	4.591037	-3.468887	2.642540
O 0	4.881976	-1.254198	2.806928
O 0	4.410997	2.547500	-0.259300
O 0	0.956654	3.403991	0.776555
O 0	-0.446601	2.056300	2.512051
C 0	0.976880	0.145566	2.604587
C 0	-1.568249	-0.161089	0.843947
C 0	-2.493276	-0.449477	-0.347031

C	O	-3.682271	-1.342044	0.030786
C	O	-4.614232	-1.646177	-1.149206
C	O	-5.800317	-2.536932	-0.764949
H	O	2.281079	2.376395	2.008909
H	O	-0.736475	1.616937	-0.058886
H	O	2.239679	0.326385	-2.696101
H	O	6.413804	1.146216	-1.641663
H	O	6.344604	0.987427	-3.422059
H	O	6.087481	-0.450662	-2.388463
H	O	3.357190	-1.903478	-2.558296
H	O	1.623363	-1.927089	-2.251752
H	O	4.970681	-2.975855	-1.296260
H	O	4.584153	-4.110744	0.003941
H	O	6.446072	-2.773618	0.699894
H	O	4.937757	-0.572649	-0.169190
H	O	5.198966	-0.574906	2.164708
H	O	1.619924	4.110744	0.816581
H	O	-0.414530	2.946887	2.109952
H	O	1.562118	0.578038	3.422059
H	O	1.615511	-0.543980	2.045076
H	O	0.153734	-0.425166	3.043263
H	O	-1.192784	-1.104927	1.258128
H	O	-2.129272	0.340145	1.640748
H	O	-2.865460	0.501231	-0.755544
H	O	-1.918289	-0.928428	-1.150139
H	O	-3.308139	-2.288062	0.449493
H	O	-4.258563	-0.859435	0.834010
H	O	-4.036886	-2.129570	-1.950081
H	O	-4.986838	-0.701066	-1.569146
H	O	-5.458782	-3.502563	-0.371750
H	O	-6.446072	-2.737544	-1.627656
H	O	-6.415726	-2.063081	0.009836

Free Energy (PCM/B3LYP/6-31G\*) = -1757.656733  
Number of imaginary frequencies = 0

**2-3R-c28**

B3LYP/6-31G\* geometry

O	O	-0.788834	0.075022	-0.609152
C	O	0.185747	2.259194	-0.434970
C	O	-1.686048	1.700092	1.085817
C	O	-0.886743	2.854101	0.415458
C	O	-2.013926	0.623627	0.003448
C	O	0.152550	0.977091	-0.858723
C	O	1.370984	0.616216	-1.673196
N	O	2.194134	1.816090	-1.455552
C	O	1.415081	2.877137	-0.938432
O	O	3.045857	2.133147	-2.526603
C	O	4.406881	2.202024	-2.074686
C	O	2.061145	-0.700822	-1.314626
S	O	2.684630	-0.692607	0.420065
C	O	3.287156	-2.419045	0.579076
C	O	4.667393	-2.685358	-0.041820
C	O	5.727827	-1.713800	0.468448
O	O	4.621074	-2.615748	-1.451696
O	O	6.404999	-1.033958	-0.279829
O	O	5.839753	-1.712384	1.800478
O	O	1.765542	4.049601	-0.912768
O	O	-1.846339	3.609040	-0.353673
O	O	-2.921087	2.222112	1.565316
C	O	-0.928002	1.125683	2.282248
C	O	-2.827425	-0.567187	0.489755
C	O	-3.337966	-1.464966	-0.646516
C	O	-4.165866	-2.650375	-0.130784
C	O	-4.648184	-3.616322	-1.225785
C	O	-5.655004	-3.008009	-2.209877
H	O	-0.463092	3.498508	1.195071
H	O	-2.545406	1.136548	-0.808680
H	O	1.092041	0.561902	-2.735868
H	O	4.532070	3.008357	-1.345482
H	O	4.989208	2.421178	-2.973072
H	O	4.731810	1.250621	-1.640195
H	O	2.893269	-0.879341	-1.995959
H	O	1.341280	-1.517235	-1.430094
H	O	2.559122	-3.103289	0.133755
H	O	3.326492	-2.621233	1.652721
H	O	4.976728	-3.695437	0.274124
H	O	5.339628	-2.008468	-1.714336

H	O	6.535961	-1.072424	2.047560
H	O	-1.475225	4.490216	-0.518630
H	O	-3.148766	2.941342	0.943806
H	O	-0.659074	1.930882	2.973072
H	O	-0.014881	0.606947	1.975958
H	O	-1.561566	0.416296	2.822215
H	O	-2.221435	-1.159628	-1.186599
H	O	-3.673588	-0.166780	1.059384
H	O	-3.937877	-0.857623	-1.337676
H	O	-2.484622	-1.842530	-1.225334
H	O	-3.561496	-3.213132	0.594930
H	O	-5.035681	-2.270411	0.425779
H	O	-5.106292	-4.490216	-0.743329
H	O	-3.777884	-3.995844	-1.780270
H	O	-6.535961	-2.621478	-1.681807
H	O	-6.001078	-3.757155	-2.931387
H	O	-5.219756	-2.179310	-2.779536

Free Energy (PCM/B3LYP/6-31G\*) = -1757.656681  
Number of imaginary frequencies = 0

**2-3R-c29**

B3LYP/6-31G\* geometry

O	O	1.242168	-0.873372	-0.082882
C	O	0.173918	-3.001588	-0.350953
C	O	2.593542	-2.980873	0.171062
C	O	1.426589	-3.809289	-0.437862
C	O	2.527470	-1.528766	-0.398394
C	O	0.178693	-1.659409	-0.194443
C	O	-1.215274	-1.087544	-0.084945
N	O	-2.005540	-2.332285	-0.017982
C	O	-1.214426	-3.446948	-0.413901
O	O	-3.260778	-2.257709	-0.669993
C	O	-4.295226	-2.801373	0.170261
C	O	-1.375558	-0.168554	1.133445
S	O	-3.043347	0.546999	1.411150
C	O	-3.193712	1.804010	0.069980
C	O	-4.070263	1.370843	-1.119145
C	O	-5.512105	1.140094	-0.649622
O	O	-3.537009	0.313942	-1.880291
O	O	-6.105985	1.902054	0.086258
O	O	-6.055750	0.015662	-1.148641
O	O	-1.671801	-4.543062	-0.705917
O	O	1.806997	-4.091639	-1.799821
O	O	3.826369	-3.553905	-0.251256
C	O	2.562207	-3.023095	1.698676
C	O	3.622975	-0.589098	0.083352
C	O	3.680127	0.736371	-0.689524
C	O	4.795229	1.664706	-0.192709
C	O	4.868647	2.992678	-0.957476
C	O	5.982360	3.917000	-0.454746
H	O	1.327588	-4.752360	0.112764
H	O	2.554572	-1.611417	-1.492285
H	O	-1.467572	-0.540485	-1.001797
H	O	-4.118271	-3.866344	0.335998
H	O	-5.217892	-2.652423	-0.394151
H	O	-4.342789	-2.261726	1.119715
H	O	-0.647701	0.645307	1.065411
H	O	-1.164917	-0.733252	2.046647
H	O	-2.193548	2.058583	-0.289777
H	O	-3.630614	2.694703	0.527101
H	O	-4.120285	2.233487	-1.797923
H	O	-3.619903	-0.526764	-1.383606
H	O	-6.965889	-0.044821	-0.797345
H	O	1.292430	-4.855005	-2.106177
H	O	3.641102	-3.927539	-1.135370
H	O	2.548908	-4.062542	2.040517
H	O	1.684587	-2.510859	2.103352
H	O	3.456956	-2.544458	2.106177
H	O	3.482217	-0.388998	1.152957
H	O	4.573551	-1.123817	-0.021853
H	O	3.829595	0.525246	-1.758411
H	O	2.713365	1.249990	-0.607357
H	O	4.646265	1.871262	0.877589
H	O	5.762638	1.146825	-0.271774
H	O	3.901036	3.508421	-0.879030
H	O	5.018774	2.786490	-2.026770
H	O	5.839253	4.170043	0.603165

H O 6.009578 4.855005 -1.021264  
H O 6.965889 3.440432 -0.550907  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.656673  
Number of imaginary frequencies = 0

### 2-3R-c30

B3LYP/6-31G\* geometry

O O 1.084807 -1.265988 0.171019  
C O 0.382886 -3.496012 -0.353506  
C O 2.781239 -3.121093 0.138479  
C O 1.750444 -4.061841 -0.548694  
C O 2.446667 -1.646882 -0.249391  
C O 0.164671 -2.202696 -0.029732  
C O -1.302906 -1.901001 0.165271  
N O -1.872091 -3.255785 0.058872  
C O -0.913259 -4.158758 -0.471082  
O O -3.126264 -3.289837 -0.592246  
C O -4.054078 -4.083369 0.160519  
C O -1.561152 -1.177264 1.493190  
S O -3.315229 -0.838756 1.925742  
C O -4.017592 -0.011654 0.448335  
C O -3.438706 1.378933 0.135768  
C O -4.243060 2.046682 -0.979184  
O O -2.084311 1.307901 -0.264372  
O O -3.754122 2.329242 -2.056580  
O O -5.517893 2.270775 -0.643996  
O O -1.180587 -5.272007 -0.905076  
O O 2.129795 -4.120966 -1.939460  
O O 4.077997 -3.419182 -0.368648  
C O 2.811727 -3.345080 1.650142  
C O 3.387032 -0.592130 0.315466  
C O 3.179381 0.801923 -0.293518  
C O 4.147410 1.848718 0.271810  
C O 3.955695 3.244557 -0.335227  
C O 4.924294 4.287237 0.232445  
H O 1.829048 -5.064341 -0.111246  
H O 2.441723 -1.597380 -1.345824  
H O -1.665609 -1.282747 -0.664431  
H O -3.724062 -5.125368 0.202227  
H O -4.994241 -4.014279 -0.392857  
H O -4.181333 -3.678969 1.168947  
H O -1.002114 -0.240466 1.482522  
H O -1.201497 -1.791090 2.325044  
H O -5.082146 0.078547 0.684315  
H O -3.919408 -0.669526 -0.420239  
H O -3.522062 2.007716 1.032087  
H O -2.066052 1.584482 -1.201378  
H O -5.967109 2.683633 -1.407669  
H O 1.739139 -4.921025 -2.325044  
H O 3.926476 -3.717951 -1.287008  
H O 2.988655 -4.403392 1.865214  
H O 1.874225 -3.043698 2.126162  
H O 3.625300 -2.768417 2.098956  
H O 3.264201 -0.543239 1.404685  
H O 4.408947 -0.936656 0.121390  
H O 3.304500 0.741406 -1.384511  
H O 2.145811 1.127546 -0.117892  
H O 4.022806 1.908238 1.363262  
H O 5.182493 1.517610 0.100351  
H O 2.921054 3.574019 -0.163781  
H O 4.080125 3.184291 -1.425786  
H O 4.798804 4.394696 1.317087  
H O 4.762818 5.272007 -0.221101  
H O 5.967109 4.001226 0.046816  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.656597  
Number of imaginary frequencies = 0

### 2-3R-c31

B3LYP/6-31G\* geometry

O O 1.022983 -0.918720 -0.904245  
C O 0.552249 -3.223144 -0.436963  
C O 2.270058 -2.092317 0.939317  
C O 1.742605 -3.464234 0.431134  
C O 2.341274 -1.104392 -0.267584  
C O 0.299297 -2.025885 -1.009380  
C O -0.979745 -2.036431 -1.809255  
N O -1.530294 -3.341373 -1.407526

C O -0.527446 -4.141175 -0.800169  
O O -2.286057 -3.971967 -2.413347  
C O -3.591095 -4.301752 -1.917466  
C O -1.925844 -0.856408 -1.571857  
S O -2.543103 -0.815968 0.165148  
C O -2.704295 0.990679 0.422910  
C O -3.907060 1.637449 -0.301559  
C O -3.900425 3.140601 -0.029652  
O O -5.141663 1.099548 0.112003  
O O -4.717011 3.679517 0.692241  
O O -2.890862 3.776815 -0.637091  
O O -0.623294 -5.346597 -0.614930  
O O 2.838230 -4.069654 -0.286349  
O O 3.595340 -2.267754 1.430038  
C O 1.412477 -1.565888 2.089505  
C O 2.866453 0.286505 0.057611  
C O 3.177388 1.129842 -1.187093  
C O 3.714516 2.524497 -0.842662  
C O 4.040634 3.372736 -2.078750  
C O 4.574337 4.766153 -1.730669  
H O 1.483464 -4.092151 1.291992  
H O 2.972938 -1.576401 -1.030976  
H O -0.738757 -2.065191 -2.881999  
H O -4.111250 -4.747447 -2.768895  
H O -4.124020 -3.406319 -1.580269  
H O -3.524584 -5.027072 -1.100923  
H O -2.765026 -0.925359 -2.268685  
H O -1.384592 0.072137 -1.777436  
H O -1.771577 1.482436 0.130908  
H O -2.831316 1.115009 1.503322  
H O -3.804743 1.485288 -1.382258  
H O -5.497231 1.722950 0.773399  
H O -2.931674 4.720988 -0.387165  
H O 2.677980 -5.025254 -0.334866  
H O 3.972307 -2.986040 0.884623  
H O 1.354452 -2.318569 2.881999  
H O 0.396984 -1.323248 1.762263  
H O 1.863134 -0.664169 2.513858  
H O 2.136735 0.809601 0.688336  
H O 3.774345 0.154839 0.656794  
H O 3.913468 0.598822 -1.808109  
H O 2.270675 1.228384 -1.798157  
H O 2.976996 3.055833 -0.222895  
H O 4.617835 2.423767 -0.222886  
H O 3.137725 3.470237 -2.698209  
H O 4.778641 2.841815 -2.696712  
H O 3.844215 5.333504 -1.140108  
H O 4.796102 5.346597 -2.633696  
H O 5.497231 4.700452 -1.141154  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.656527  
Number of imaginary frequencies = 0

### 2-3R-c32

B3LYP/6-31G\* geometry

O O 1.181895 -0.075277 -0.318240  
C O 2.923326 -1.712287 -0.462592  
C O 3.527311 0.554322 0.332502  
C O 4.062331 -0.760968 -0.301195  
C O 2.219898 0.969996 -0.411128  
C O 1.631158 -1.316644 -0.459601  
C O 0.679148 -2.481314 -0.602524  
N O 1.624885 -3.605112 -0.484199  
C O 2.960200 -3.162833 -0.643053  
O O 1.256817 -4.734383 -1.238798  
C O 1.260842 -5.905821 -0.410420  
C O -0.438296 -2.595418 0.444894  
S O -1.755233 -1.333526 0.188511  
C O -3.124539 -2.138628 1.122710  
C O -4.478341 -1.628334 0.620423  
C O -4.758557 -2.020016 -0.829438  
O O -4.556173 -0.223323 0.741020  
O O -5.085098 -1.206288 -1.672329  
O O -4.646228 -3.334237 -1.049952  
O O 3.914369 -3.899623 -0.854087  
O O 4.649464 -0.385655 -1.564185  
O O 4.488486 1.584028 0.125320  
C O 3.329999 0.401566 1.840307



C	0	1.576560	2.263311	0.068642
C	0	0.480982	2.786403	-0.870584
C	0	-0.165313	4.084271	-0.370004
C	0	-1.250240	4.624428	-1.310216
C	0	-1.900793	5.915414	-0.802393
H	0	4.840174	-1.182874	0.346559
H	0	2.468212	1.044399	-1.477685
H	0	0.240541	-2.483132	-1.609906
H	0	0.570839	-5.796470	0.433126
H	0	2.269544	-6.118065	-0.043964
H	0	0.925228	-6.714020	-1.064812
H	0	-0.018619	-2.514411	1.451712
H	0	-0.890418	-3.585070	0.334539
H	0	-3.031380	-1.910407	2.187807
H	0	-3.068194	-3.222135	0.989608
H	0	-5.258157	-2.109595	1.233357
H	0	-4.890286	0.100778	-0.117652
H	0	-4.858987	-3.504917	-1.988451
H	0	5.258157	-1.090902	-1.835368
H	0	4.921644	1.358864	-0.721476
H	0	4.261512	0.061739	2.303249
H	0	2.539357	-0.315840	2.078105
H	0	3.063726	1.365094	2.283852
H	0	1.163001	2.108088	1.072899
H	0	2.376826	3.006205	0.160028
H	0	0.912138	2.954694	-1.868245
H	0	-0.293715	2.018291	-0.993418
H	0	-0.601251	3.912809	0.625402
H	0	0.612520	4.850640	-0.234754
H	0	-2.023185	3.855254	-1.449518
H	0	-0.812938	4.800713	-2.303249
H	0	-2.376553	5.760894	0.174090
H	0	-2.670532	6.274961	-1.495093
H	0	-1.157557	6.714020	-0.685668

Free Energy (PCM/B3LYP/6-31G\*) = -1757.656525  
Number of imaginary frequencies = 0

### 2-3R-c33

B3LYP/6-31G\* geometry

O	0	-1.804661	0.790343	1.349525
C	0	-3.063083	-0.482590	-0.239274
C	0	-3.936269	1.717610	0.411954
C	0	-3.988499	0.605430	-0.673812
C	0	-2.477784	2.008735	0.851002
C	0	-2.124397	-0.327969	0.716777
C	0	-1.433382	-1.633792	1.035941
N	0	-1.997090	-2.505263	-0.015380
C	0	-3.135409	-1.890643	-0.586437
O	0	-2.173126	-3.839588	0.398050
C	0	-1.544521	-4.733098	-0.532208
C	0	0.096680	-1.595228	1.059809
S	0	0.783215	-1.210197	-0.608744
C	0	2.378059	-0.428350	-0.155917
C	0	3.408834	-1.421793	0.415158
C	0	4.750841	-0.697184	0.574700
O	0	3.621915	-2.539387	-0.434878
O	0	4.925603	0.190428	1.381592
O	0	5.705377	-1.096449	-0.275540
O	0	-4.002226	-2.470436	-1.239095
O	0	-5.342114	0.136530	-0.739507
O	0	-4.586005	1.215415	1.581893
C	0	-4.649498	2.991103	-0.059999
C	0	-1.566204	2.663585	-0.189519
C	0	-0.199270	3.078546	0.374164
C	0	0.698778	3.743275	-0.676547
C	0	2.064990	4.171040	-0.124918
C	0	2.961164	4.828285	-1.179651
H	0	-3.699570	1.020656	-1.649742
H	0	-2.536868	2.633397	1.746382
H	0	-1.776247	-1.999012	2.014210
H	0	-1.691730	-5.728744	-0.107073
H	0	-0.474584	-4.519072	-0.624355
H	0	-2.024175	-4.673603	-1.513921
H	0	0.476423	-2.558305	1.408274
H	0	0.418028	-0.819589	1.761447
H	0	2.219461	0.388458	0.552626
H	0	2.752238	-0.004168	-1.093262

H	0	3.093829	-1.748080	1.414651
H	0	2.776168	-2.743073	-0.878842
H	0	5.316454	-1.825769	-0.809974
H	0	-5.298539	-0.786402	-1.059516
H	0	-5.324292	0.675679	1.238808
H	0	-5.705377	2.758333	-0.228466
H	0	-4.237089	3.382506	-0.994892
H	0	-4.588916	3.769996	0.707221
H	0	-1.426758	1.980135	-1.037584
H	0	-2.074876	3.551532	-0.580876
H	0	-0.352320	3.770297	1.215152
H	0	0.309724	2.198148	0.785972
H	0	0.848603	3.050374	-1.517723
H	0	0.184726	4.622290	-1.092904
H	0	2.577515	3.293393	0.294291
H	0	1.915087	4.865870	0.713499
H	0	3.157042	4.143595	-2.014210
H	0	3.928107	5.122143	-0.755337
H	0	2.490642	5.728744	-1.593805

Free Energy (PCM/B3LYP/6-31G\*) = -1757.656513  
Number of imaginary frequencies = 0

### 2-3S-c1

B3LYP/6-31G\* geometry

O	0	1.198683	-0.348900	-0.872552
C	0	2.163978	-2.367055	-0.021612
C	0	1.111775	-0.830533	1.581714
C	0	1.573895	-2.295145	1.349062
C	0	0.365568	-0.274816	0.344086
C	0	1.961035	-1.434237	-0.972150
C	0	2.766816	-1.715170	-2.217116
N	0	3.633215	-2.802535	-1.727497
C	0	3.156044	-3.316731	-0.504735
O	0	4.006579	-3.743871	-2.699885
C	0	5.437781	-3.826879	-2.788160
C	0	3.545101	-0.526998	-2.791066
S	0	4.817729	0.127639	-1.624005
C	0	4.464066	1.928536	-1.676148
C	0	3.269902	2.353512	-0.811990
C	0	2.958962	3.844418	-1.037164
O	0	3.528304	2.164107	0.572050
O	0	2.810353	4.339591	-2.135464
O	0	2.853053	4.551690	0.093649
O	0	3.572446	-4.332546	0.048588
O	0	2.554603	-2.587370	2.351232
O	0	2.298845	-0.027861	1.719863
C	0	0.277787	-0.695404	2.859451
C	0	-0.991683	-0.914183	0.038302
C	0	-1.731252	-0.249583	-1.132089
C	0	-3.102616	-0.883719	-1.396558
C	0	-3.860260	-0.228272	-2.558417
C	0	-5.226042	-0.869642	-2.823974
H	0	0.717608	-2.974101	1.463595
H	0	0.246396	0.801800	0.493411
H	0	2.109541	-2.108235	-3.006022
H	0	5.627573	-4.551690	-3.583294
H	0	5.863640	-4.185123	-1.846446
H	0	5.874310	-2.858079	-3.053197
H	0	2.843441	0.272752	-3.043107
H	0	4.036905	-0.839966	-3.715484
H	0	4.319579	2.250664	-2.709922
H	0	5.370961	2.408021	-1.294729
H	0	2.376549	1.798802	-1.122112
H	0	3.036010	1.378761	0.902560
H	0	3.031338	3.902525	0.817811
H	0	3.068721	-3.349556	2.023366
H	0	2.955667	-0.606829	2.155325
H	0	0.897024	-0.978640	3.715484
H	0	-0.602679	-1.344016	2.849407
H	0	-0.047371	0.340755	2.997043
H	0	-0.857569	-1.984327	-0.167176
H	0	-1.611587	-0.843042	0.938866
H	0	-1.858452	0.821071	-0.916338
H	0	-1.117769	-0.313313	-2.039099
H	0	-2.973223	-1.955555	-1.607769
H	0	-3.714946	-0.823771	-0.484653
H	0	-3.245800	-0.284553	-3.468144

H O -3.992998 0.841872 -2.345304  
H O -5.122084 -1.932459 -3.075546  
H O -5.742707 -0.378878 -3.656820  
H O -5.874310 -0.800248 -1.941595  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.662634  
Number of imaginary frequencies = 0

### 2-3S-c2

B3LYP/6-31G\* geometry

O O 0.325045 0.096705 0.260099  
C O 2.336799 1.201139 -0.430145  
C O 0.187990 2.081173 -1.285382  
C O 1.730712 2.036126 -1.506092  
C O -0.323589 0.646021 -0.948381  
C O 1.627125 0.337129 0.329942  
C O 2.495727 -0.382535 1.332443  
N O 3.775532 0.286001 1.067807  
C O 3.742138 1.116840 -0.033623  
O O 4.956541 -0.315316 1.468905  
C O 5.521151 0.370527 2.605627  
C O 2.516184 -1.920661 1.201439  
S O 2.625635 -2.632629 -0.491221  
C O 4.422798 -3.010023 -0.715346  
C O 4.888020 -2.618398 -2.136917  
C O 4.900250 -1.101309 -2.266768  
O O 4.060060 -3.183599 -3.131589  
O O 4.057336 -0.510366 -2.930432  
O O 5.852933 -0.534057 -1.544589  
O O 4.727534 1.662357 -0.554800  
O O 1.961952 1.514046 -2.823518  
O O -0.428412 2.473243 -2.508473  
C O -0.189285 3.112869 -0.224779  
C O -1.823738 0.524322 -0.726755  
C O -2.324751 -0.925327 -0.657890  
C O -3.837113 -1.016082 -0.419762  
C O -4.358469 -2.456659 -0.340598  
C O -5.868063 -2.537624 -0.091359  
H O 2.122571 3.061513 -1.470686  
H O -0.004207 -0.005754 -1.771984  
H O 2.166703 -0.156731 2.356156  
H O 5.769062 1.402429 2.342448  
H O 6.429018 -0.187308 2.842840  
H O 4.833451 0.348574 3.456719  
H O 1.570132 -2.289247 1.606448  
H O 3.318107 -2.321818 1.824839  
H O 4.567432 -4.085517 -0.587975  
H O 5.007643 -2.480398 0.039821  
H O 5.911072 -2.993145 -2.266646  
H O 3.503519 -2.450092 -3.456719  
H O 5.623361 0.420766 -1.359966  
H O 2.685181 0.858395 -2.797979  
H O 0.101709 2.043137 -3.207501  
H O 0.240759 4.085517 -0.483209  
H O 0.173555 2.823891 0.766199  
H O -1.275725 3.226202 -0.173168  
H O -2.094075 1.051992 0.196598  
H O -2.314102 1.051101 -1.552925  
H O -2.069201 -1.442610 -1.594114  
H O -1.796821 -1.457498 0.144182  
H O -4.089264 -0.489025 0.512554  
H O -4.365304 -0.482359 -1.223856  
H O -3.826128 -2.989839 0.459935  
H O -4.112367 -2.983026 -1.273747  
H O -6.139542 -2.049377 0.852942  
H O -6.209647 -3.577873 -0.039256  
H O -6.429018 -2.041865 -0.893376

Free Energy (PCM/B3LYP/6-31G\*) = -1757.662085  
Number of imaginary frequencies = 0

### 2-3S-c3

B3LYP/6-31G\* geometry

O O 1.118580 0.502449 -0.829275  
C O 1.854070 -1.537985 0.181228  
C O 1.006327 0.232730 1.663095  
C O 1.316579 -1.286578 1.549939  
C O 0.319029 0.771175 0.382374  
C O 1.745972 -0.671221 -0.841797

C O 2.416965 -1.189256 -2.091021  
N O 2.873089 -2.515875 -1.611356  
C O 2.724570 -2.634275 -0.226875  
O O 4.047614 -3.023746 -2.171220  
C O 3.758748 -4.177114 -2.979192  
C O 3.527082 -0.311005 -2.684831  
S O 4.910540 0.082633 -1.531035  
C O 4.985869 1.909969 -1.701580  
C O 3.876899 2.665653 -0.958595  
C O 3.923466 4.160819 -1.328637  
O O 4.021161 2.554796 0.449342  
O O 3.933463 4.568782 -2.471842  
O O 3.940746 4.977571 -0.269560  
O O 3.236244 -3.495262 0.490212  
O O 2.293538 -1.596536 2.552603  
O O 2.272709 0.910220 1.762248  
C O 0.188619 0.548151 2.919944  
C O -1.108147 0.274293 0.133452  
C O -1.770215 0.911147 -1.097226  
C O -3.213218 0.432858 -1.302448  
C O -3.889401 1.056315 -2.530301  
C O -5.329035 0.573251 -2.734183  
H O 0.402175 -1.865379 1.740957  
H O 0.330327 1.862764 0.443858  
H O 1.664152 -1.323922 -2.879781  
H O 4.726613 -4.488441 -3.378244  
H O 3.079912 -3.923853 -3.800260  
H O 3.328928 -4.977571 -2.369531  
H O 3.071458 0.625549 -3.016424  
H O 3.935536 -0.814254 -3.563013  
H O 4.983626 2.180227 -2.760149  
H O 5.955251 2.194787 -1.280690  
H O 2.893982 2.299375 -1.280002  
H O 3.314491 1.974969 0.815204  
H O 3.937682 4.375409 0.515125  
H O 2.787157 -2.374914 2.222581  
H O 2.852599 0.281217 2.239686  
H O 0.773119 0.264851 3.800260  
H O -0.754898 -0.004000 2.947553  
H O -0.025757 1.619989 2.979024  
H O -1.105544 -0.818905 0.030134  
H O -1.708789 0.504322 1.020343  
H O -1.759330 2.005086 -0.986435  
H O -1.179021 0.683795 -1.992568  
H O -3.222932 -0.662762 -1.401456  
H O -3.806097 0.663826 -0.405114  
H O -3.295011 0.826055 -3.425864  
H O -3.880633 2.151012 -2.431134  
H O -5.365859 -0.514654 -2.871309  
H O -5.784732 1.036166 -3.617069  
H O -5.955251 0.819010 -1.867542

Free Energy (PCM/B3LYP/6-31G\*) = -1757.661660  
Number of imaginary frequencies = 0

### 2-3S-c4

B3LYP/6-31G\* geometry

O O 0.247798 -0.310493 0.393299  
C O -1.734247 -1.296145 -0.524740  
C O 0.454365 -2.125249 -1.337054  
C O -1.075996 -2.043021 -1.634173  
C O 0.952931 -0.736232 -0.832758  
C O -1.059901 -0.528883 0.361044  
C O -1.977356 0.105309 1.378130  
N O -3.252712 -0.483142 0.952164  
C O -3.162501 -1.205640 -0.218344  
O O -4.444697 0.101550 1.342677  
C O -5.102987 -0.695219 2.349796  
C O -1.944913 1.647196 1.430747  
S O -1.907584 2.559205 -0.166389  
C O -3.675127 3.008187 -0.478165  
C O -4.046801 2.780975 -1.961735  
C O -4.081385 1.287279 -2.254296  
O O -3.139912 3.425396 -2.831503  
O O -3.202444 0.745877 -2.913331  
O O -5.099321 0.675527 -1.670940  
O O -4.122412 -1.663007 -0.858650  
O O -1.241318 -1.415856 -2.915570

O	0	1.131979	-2.400454	-2.559058
C	0	0.768733	-3.260431	-0.365046
C	0	2.440716	-0.644432	-0.528776
C	0	2.933757	0.789033	-0.284160
C	0	4.435973	0.844606	0.027180
C	0	4.970182	2.249538	0.351800
C	0	4.921835	3.236262	-0.821090
H	0	-1.475080	-3.063496	-1.706416
H	0	0.673011	-0.002813	-1.600507
H	0	-1.728376	-0.249195	2.388124
H	0	-6.009466	-0.138358	2.594369
H	0	-4.473648	-0.798777	3.239036
H	0	-5.360255	-1.678971	1.947897
H	0	-1.020914	1.930202	1.941629
H	0	-2.778072	2.002353	2.040969
H	0	-3.804540	4.068688	-0.249066
H	0	-4.325022	2.422090	0.175491
H	0	-5.050418	3.195529	-2.119343
H	0	-2.577794	2.715830	-3.197481
H	0	-4.911243	-0.301659	-1.580090
H	0	-1.912278	-0.708928	-2.855241
H	0	0.632242	-1.907158	-3.239036
H	0	0.352732	-4.199209	-0.743531
H	0	0.350736	-3.069542	0.628021
H	0	1.850268	-3.386599	-0.263534
H	0	2.667336	-1.268043	0.345218
H	0	2.971021	-1.082299	-1.381795
H	0	2.707920	1.399778	-1.168590
H	0	2.373970	1.231434	0.550635
H	0	4.642631	0.183488	0.880880
H	0	4.998678	0.429952	-0.822667
H	0	6.009466	2.156540	0.694688
H	0	4.405556	2.662091	1.200270
H	0	5.479623	2.849914	-1.836367
H	0	5.365371	4.199209	-0.542381
H	0	3.894921	3.431018	-1.150102

Free Energy (PCM/B3LYP/6-31G\*) = -1757.660988  
Number of imaginary frequencies = 0

### 2-3S-c5

B3LYP/6-31G\* geometry

O	0	1.181067	-0.274276	-0.017552
C	0	2.233989	-2.397972	0.273156
C	0	0.939240	-1.498833	2.161619
C	0	1.544569	-2.786485	1.537775
C	0	0.263950	-0.608826	1.088147
C	0	2.041424	-1.225059	-0.361272
C	0	2.964047	-1.073447	-1.552398
N	0	3.557399	-2.437700	-1.578244
C	0	3.314474	-3.120016	-0.383838
O	0	4.818601	-2.586609	-2.155114
C	0	4.718011	-3.329431	-3.382044
C	0	4.043727	0.014148	-1.377711
S	0	3.402240	1.686694	-1.829638
C	0	4.364914	2.755664	-0.671581
C	0	3.514819	3.382842	0.439018
C	0	2.709474	2.355245	1.235257
O	0	2.627745	4.337061	-0.106556
O	0	1.518557	2.517884	1.451416
O	0	3.429893	1.325022	1.656838
O	0	3.898679	-4.129897	0.013138
O	0	2.477388	-3.319412	2.488402
O	0	2.041587	-0.733601	2.698894
C	0	-0.015074	-1.825315	3.314419
C	0	-1.028742	-1.165914	0.484803
C	0	-1.707545	-0.199151	-0.496796
C	0	-3.018824	-0.758913	-1.062104
C	0	-3.719161	0.200316	-2.033303
C	0	-5.025213	-0.364944	-2.600703
H	0	0.745779	-3.520037	1.360750
H	0	0.082042	0.366984	1.544502
H	0	2.396504	-0.901168	-2.474500
H	0	4.335717	-4.337061	-3.192798
H	0	5.740663	-3.381709	-3.761997
H	0	4.077006	-2.813786	-4.104631
H	0	4.886643	-0.234158	-2.023903
H	0	4.383693	0.035746	-0.340626

H	0	4.798379	3.566201	-1.262671
H	0	5.185916	2.171516	-0.250984
H	0	4.208856	3.870207	1.145441
H	0	1.755831	4.130200	0.283492
H	0	2.836571	0.634035	2.074636
H	0	3.124861	-3.840864	1.971787
H	0	2.692089	-1.407622	2.988026
H	0	0.546897	-2.331769	4.104631
H	0	-0.827801	-2.485945	3.000443
H	0	-0.443677	-0.907868	3.730168
H	0	-0.822127	-2.121229	-0.016010
H	0	-1.722274	-1.384656	1.304203
H	0	-1.907048	0.752499	0.016571
H	0	-1.021307	0.031048	-1.320744
H	0	-2.817019	-1.710782	-1.575434
H	0	-3.701869	-0.997706	-0.233389
H	0	-3.035080	0.442405	-2.858976
H	0	-3.923864	1.149633	-1.518354
H	0	-4.846497	-1.295107	-3.154344
H	0	-5.503214	0.344458	-3.286054
H	0	-5.740663	-0.588887	-1.799628

Free Energy (PCM/B3LYP/6-31G\*) = -1757.660970  
Number of imaginary frequencies = 0

### 2-3S-c6

B3LYP/6-31G\* geometry

O	0	0.265163	-0.385859	-0.988773
C	0	2.297544	-1.252001	-0.066003
C	0	0.150399	-2.252814	0.681971
C	0	1.671238	-2.090073	0.991031
C	0	-0.424311	-0.878020	0.217134
C	0	1.582886	-0.519667	-0.950663
C	0	2.469798	0.179675	-1.952003
N	0	3.796972	-0.077047	-1.359690
C	0	3.715924	-1.124208	-0.403060
O	0	4.802181	-0.250496	-2.335720
C	0	5.937290	0.571832	-2.036117
C	0	2.162826	1.660566	-2.223992
S	0	1.693608	2.728741	-0.805332
C	0	3.282380	3.009584	0.095393
C	0	2.993438	3.205303	1.591599
C	0	2.377342	1.946771	2.203350
O	0	2.119426	4.296838	1.801353
O	0	1.260851	1.955029	2.697736
O	0	3.170644	0.886911	2.121385
O	0	4.677302	-1.749045	0.019148
O	0	1.814994	-1.457078	2.301404
O	0	-0.527368	-2.629898	1.873722
C	0	-0.072954	-3.368011	-0.338913
C	0	-1.913983	-0.867266	-0.095490
C	0	-2.487509	0.541711	-0.300328
C	0	-3.991116	0.533163	-0.603925
C	0	-4.577173	1.935908	-0.808280
C	0	-6.078993	1.924144	-1.111923
H	0	2.143546	-3.075539	1.043455
H	0	-0.198315	-0.144423	1.003581
H	0	2.421432	-0.345924	-2.917488
H	0	5.667389	1.633314	-2.024152
H	0	6.644623	0.378651	-2.846390
H	0	6.383039	0.286371	-1.078777
H	0	1.289170	1.713135	-2.880571
H	0	3.001470	2.100361	-2.771240
H	0	3.770101	3.907287	-0.294328
H	0	3.936691	2.149782	-0.050938
H	0	3.953885	3.393919	2.094336
H	0	1.337844	3.917465	2.249918
H	0	2.661344	0.059704	2.349895
H	0	2.203246	-2.099811	2.917488
H	0	-0.137150	-2.085349	2.582959
H	0	0.378055	-4.296838	0.023259
H	0	0.366606	-3.121560	-1.309498
H	0	-1.142791	-3.543967	-0.479389
H	0	-2.098472	-1.476617	-0.988971
H	0	-2.421903	-1.360716	0.740577
H	0	-2.300472	1.142993	0.601035
H	0	-1.953002	1.038632	-1.120275
H	0	-4.177615	-0.071784	-1.503713

H O -4.525710 0.032154 0.216822  
H O -4.041615 2.435193 -1.628234  
H O -4.389933 2.540090 0.090738  
H O -6.293959 1.355878 -2.025500  
H O -6.466422 2.939870 -1.252352  
H O -6.644623 1.461311 -0.293650  
Free Energy (PCM/B3LYP/6-31G\*) = -1757.660723  
Number of imaginary frequencies = 0

### 3-SR-c1

B3LYP/6-31G\* geometry

O O 1.503449 -0.786739 0.096849  
C O 2.220347 -3.017280 -0.364334  
C O 3.943537 -1.344137 0.190406  
C O 3.677667 -2.708780 -0.505612  
C O 2.854070 -0.342229 -0.297079  
C O 1.294415 -2.090265 -0.053816  
C O -0.079991 -2.700482 0.098025  
N O 0.181602 -4.077951 -0.361120  
C O 1.575326 -4.319891 -0.397069  
O O -0.587187 -5.049723 0.315118  
C O -1.157117 -5.973895 -0.626237  
C O -1.147203 -1.966482 -0.716189  
C O -3.834024 -1.353551 -1.169764  
C O -3.885253 0.020674 -0.458211  
C O -4.979535 0.095036 0.628427  
O O -4.143525 1.012063 -1.423714  
O O -5.863722 0.930976 0.528032  
O O -4.911053 -0.742847 1.644563  
O O 2.098240 -5.430394 -0.453382  
O O 4.501144 -3.720754 0.067768  
O O 5.170919 -0.798335 -0.301685  
C O 3.991155 -1.475653 1.716782  
C O 3.007957 1.085172 0.209276  
C O 2.052878 2.081404 -0.463560  
C O 2.243287 3.516432 0.043570  
C O 1.296388 4.526272 -0.617338  
C O 1.494289 5.958508 -0.110288  
S O -2.819132 -2.649316 -0.338418  
O O -3.010102 -2.447404 1.184356  
H O 3.943795 -2.580827 -1.566874  
H O 2.862392 -0.351088 -1.394497  
H O -0.374795 -2.719766 1.155649  
H O -0.371386 -6.529048 -1.145506  
H O -1.797164 -5.455481 -1.347279  
H O -1.755826 -6.655213 -0.017459  
H O -1.133855 -0.902719 -0.464497  
H O -0.983115 -2.097871 -1.789642  
H O -4.830852 -1.786594 -1.290617  
H O -3.402087 -1.219508 -2.165583  
H O -2.923777 0.224644 0.034533  
H O -4.977326 1.434281 -1.126881  
H O -4.133856 -1.387343 1.547030  
H O 4.078384 -4.575078 -0.142848  
H O 5.863722 -1.452334 -0.108157  
H O 4.741050 -2.219637 1.996810  
H O 3.030994 -1.794995 2.133443  
H O 4.264236 -0.517361 2.165583  
H O 2.855162 1.099549 1.295265  
H O 4.046379 1.382725 0.027375  
H O 1.014749 1.768625 -0.292126  
H O 2.209934 2.055517 -1.551690  
H O 2.094276 3.540082 1.133302  
H O 3.284136 3.828157 -0.128982  
H O 0.256701 4.215568 -0.441696  
H O 1.442937 4.500256 -1.706500  
H O 1.320729 6.023494 0.971095  
H O 0.804940 6.655213 -0.601070  
H O 2.516066 6.308490 -0.303041

Free Energy (PCM/B3LYP/6-31G\*) = -1832.836375  
Number of imaginary frequencies = 0

### 3-SR-c2

B3LYP/6-31G\* geometry

O O 2.005412 -0.539628 0.546624  
C O 2.626364 -2.644921 -0.396050  
C O 4.147240 -0.736368 -0.736504

C O 3.715439 -2.126589 -1.281768  
C O 2.854545 0.094504 -0.479798  
C O 1.913838 -1.861480 0.435422  
C O 0.944642 -2.664375 1.271256  
N O 1.069229 -3.986307 0.628464  
C O 2.229811 -4.028854 -0.178264  
O O 0.891015 -5.064681 1.511764  
C O -0.104673 -5.968574 0.998755  
C O -0.484498 -2.121342 1.323174  
C O -2.545407 -0.851573 0.013474  
C O -3.731164 -0.991425 -0.952750  
C O -4.665168 0.215544 -0.770348  
O O -4.489114 -2.163037 -0.705515  
O O -4.318480 1.356451 -0.987207  
O O -5.890487 -0.099269 -0.338125  
O O 2.761770 -5.051891 -0.601143  
O O 4.837391 -3.004478 -1.327927  
O O 4.828724 -0.018265 -1.769152  
C O 5.034625 -0.856533 0.507431  
C O 3.080344 1.531308 -0.029372  
C O 1.798493 2.376245 -0.013218  
C O 2.047458 3.817290 0.449870  
C O 0.778400 4.678792 0.467732  
C O 1.032461 6.113742 0.941243  
S O -1.323057 -2.193835 -0.322597  
O O -2.164234 -3.485180 -0.357829  
H O 3.337978 -1.964083 -2.303743  
H O 2.263948 0.082362 -1.404932  
H O 1.314126 -2.734093 2.303743  
H O -0.248412 -6.703362 1.794516  
H O 0.258811 -6.467002 0.094608  
H O -1.037162 -5.438446 0.787385  
H O -1.108950 -2.708605 2.003009  
H O -0.470754 -1.078909 1.654208  
H O -2.033228 0.103941 -0.127767  
H O -2.893739 -0.944244 1.046943  
H O -3.370711 -0.958938 -1.991524  
H O -3.844135 -2.896093 -0.550170  
H O -5.905566 -1.078463 -0.229362  
H O 4.478399 -3.911762 -1.353895  
H O 5.582282 -0.569020 -2.041210  
H O 5.905566 -1.475593 0.277986  
H O 4.506687 -1.320426 1.346177  
H O 5.379911 0.133015 0.817314  
H O 3.534360 1.527694 0.968952  
H O 3.811908 1.975297 -0.713077  
H O 1.358557 2.386767 -1.020980  
H O 1.056572 1.905673 0.644987  
H O 2.489733 3.803498 1.457081  
H O 2.795929 4.286515 -0.205775  
H O 0.029477 4.205434 1.118471  
H O 0.339414 4.697476 -0.539773  
H O 1.441821 6.127414 1.959108  
H O 0.108480 6.703362 0.945266  
H O 1.751630 6.624172 0.288603

Free Energy (PCM/B3LYP/6-31G\*) = -1832.835382  
Number of imaginary frequencies = 0

### 3-SR-c3

B3LYP/6-31G\* geometry

O O 1.885236 -1.335576 0.453907  
C O 1.698004 -3.580354 -0.341354  
C O 3.895282 -2.477831 -0.510282  
C O 3.002563 -3.618692 -1.073316  
C O 3.032306 -1.181456 -0.462080  
C O 1.274904 -2.513480 0.362655  
C O -0.031946 -2.790848 1.068875  
N O -0.390736 -4.088102 0.467345  
C O 0.740124 -4.661672 -0.161217  
O O -1.110456 -4.930746 1.332502  
C O -2.301548 -5.408604 0.681807  
C O -1.110503 -1.715028 0.921794  
C O -2.104530 0.242739 -0.825659  
C O -3.252737 0.656752 0.124459  
C O -4.661964 0.467277 -0.481357  
O O -3.082917 2.018431 0.441126  
O O -5.419645 1.424751 -0.523437

O	0	-5.015657	-0.728856	-0.905520
O	0	0.846845	-5.840659	-0.486397
O	0	3.664583	-4.872696	-0.930262
O	0	4.927452	-2.179938	-1.455003
C	0	4.503219	-2.839999	0.849380
C	0	3.769454	0.078645	-0.031280
C	0	2.956021	1.364303	-0.237657
C	0	3.729893	2.624676	0.169195
C	0	2.938093	3.921013	-0.044064
C	0	3.721126	5.176899	0.352782
S	0	-1.650152	-1.539478	-0.841143
O	0	-2.981186	-2.318769	-0.971469
H	0	2.851197	-3.405738	-2.143421
H	0	2.598599	-1.035787	-1.459754
H	0	0.149023	-2.932130	2.143421
H	0	-2.841953	-5.955407	1.458087
H	0	-2.045251	-6.084973	-0.139432
H	0	-2.901426	-4.573861	0.309108
H	0	-2.000738	-1.985193	1.495657
H	0	-0.723423	-0.756227	1.277133
H	0	-2.325744	0.497639	-1.866358
H	0	-1.196679	0.779446	-0.535606
H	0	-3.214140	0.053178	1.043821
H	0	-3.942823	2.432479	0.214729
H	0	-4.252180	-1.400556	-0.861278
H	0	2.975001	-5.559669	-1.000340
H	0	5.419645	-3.005901	-1.598846
H	0	5.075446	-3.766698	0.759263
H	0	3.737371	-2.994241	1.615621
H	0	5.174971	-2.044682	1.182072
H	0	4.057553	-0.015023	1.022729
H	0	4.695699	0.125641	-0.614106
H	0	2.022841	1.306127	0.337874
H	0	2.664958	1.442025	-1.295283
H	0	4.021605	2.547689	1.227079
H	0	4.667957	2.674384	-0.403374
H	0	2.003761	3.873822	0.533157
H	0	2.641138	3.993433	-1.099987
H	0	4.005216	5.148124	1.412107
H	0	3.128991	6.084973	0.190790
H	0	4.642862	5.270003	-0.234846

Free Energy (PCM/B3LYP/6-31G\*) = -1832.834971  
Number of imaginary frequencies = 0

### 3-SR-c4

B3LYP/6-31G\* geometry

O	0	1.862691	-0.981295	0.053452
C	0	2.320607	-3.252893	-0.523665
C	0	4.236393	-1.766494	-0.083736
C	0	3.783168	-3.076475	-0.787478
C	0	3.209790	-0.653073	-0.450638
C	0	1.518229	-2.254460	-0.107383
C	0	0.113056	-2.740439	0.160546
N	0	0.198294	-4.118273	-0.359906
C	0	1.553817	-4.488290	-0.527955
O	0	-0.599326	-5.035941	0.357706
C	0	-1.337119	-5.867075	-0.552930
C	0	-0.957865	-1.882467	-0.514557
C	0	-3.573878	-1.019447	-0.730642
C	0	-4.935678	-0.892735	-0.029405
C	0	-5.768461	0.176567	-0.754866
O	0	-4.809115	-0.493717	1.324303
O	0	-6.104922	0.074889	-1.914704
O	0	-6.079702	1.235379	-0.000603
O	0	1.960601	-5.640455	-0.658716
O	0	4.553019	-4.178394	-0.313892
O	0	5.464736	-1.320717	-0.665944
C	0	4.397871	-1.952151	1.429024
C	0	3.542603	0.739465	0.066866
C	0	2.635735	1.837565	-0.506941
C	0	3.005918	3.236453	0.001777
C	0	2.113867	4.346189	-0.569269
C	0	2.487700	5.742040	-0.060012
S	0	-2.638368	-2.419354	0.021707
O	0	-2.700937	-2.175035	1.541866
H	0	3.968060	-2.939094	-1.864733
H	0	3.121600	-0.630888	-1.544410

H	0	-0.076206	-2.774165	1.242112
H	0	-1.942824	-6.511456	0.088338
H	0	-0.657588	-6.473723	-1.157399
H	0	-1.984997	-5.264091	-1.197077
H	0	-0.836317	-0.836802	-0.216352
H	0	-0.912396	-1.970429	-1.604230
H	0	-3.700764	-1.234810	-1.794805
H	0	-2.998195	-0.098705	-0.596554
H	0	-5.490179	-1.838649	-0.118261
H	0	-4.060313	-1.008684	1.712162
H	0	-5.678000	1.076172	0.884904
H	0	4.035379	-4.982755	-0.508844
H	0	6.104922	-2.043624	-0.553074
H	0	5.109919	-2.757614	1.625382
H	0	3.453545	-2.216013	1.914704
H	0	4.777284	-1.032010	1.880436
H	0	3.482916	0.741596	1.162023
H	0	4.586092	0.941692	-0.197944
H	0	2.697926	1.820995	-1.604799
H	0	1.590166	1.621369	-0.252064
H	0	2.945982	3.252292	1.100123
H	0	4.055550	3.449136	-0.249852
H	0	1.065412	4.132676	-0.317057
H	0	2.173350	4.328582	-1.666831
H	0	2.404509	5.800231	1.032397
H	0	1.833274	6.511456	-0.485729
H	0	3.520698	5.997357	-0.327296

Free Energy (PCM/B3LYP/6-31G\*) = -1832.834744  
Number of imaginary frequencies = 0

### 3-SR-c5

B3LYP/6-31G\* geometry

O	0	1.190808	-1.139298	0.165012
C	0	1.450322	-3.466119	-0.320057
C	0	3.472195	-2.176181	0.236387
C	0	2.936680	-3.438533	-0.491550
C	0	2.603410	-0.965097	-0.217987
C	0	0.726274	-2.374702	-0.011652
C	0	-0.736891	-2.701718	0.168941
N	0	-0.674806	-4.173607	0.124330
C	0	0.566436	-4.627246	-0.351740
O	0	-1.817535	-4.844250	-0.320560
C	0	-2.424474	-5.570784	0.766036
C	0	-1.592013	-2.057499	-0.928794
C	0	-4.015925	-0.688484	-1.243441
C	0	-3.677959	0.540842	-0.365827
C	0	-4.724731	0.791100	0.740466
O	0	-3.615962	1.679119	-1.192140
O	0	-5.320575	1.856353	0.769076
O	0	-4.928244	-0.158046	1.633435
O	0	0.835670	-5.785725	-0.658907
O	0	3.567915	-4.603101	0.032914
O	0	4.783351	-1.875584	-0.250688
C	0	3.495665	-2.355225	1.758650
C	0	3.038454	0.389678	0.324131
C	0	2.307627	1.571393	-0.329139
C	0	2.777601	2.928614	0.209087
C	0	2.061993	4.120330	-0.439608
C	0	2.536956	5.473907	0.098755
S	0	-3.407867	-2.312622	-0.615206
O	0	-3.581468	-2.260227	0.924833
H	0	3.200723	-3.328364	-1.555268
H	0	2.616276	-0.945007	-1.315200
H	0	-1.103890	-2.364912	1.145169
H	0	-1.722368	-6.304118	1.171929
H	0	-3.280736	-6.078259	0.316470
H	0	-2.763405	-4.884289	1.546966
H	0	-1.377408	-0.986366	-0.952658
H	0	-1.390463	-2.489177	-1.912860
H	0	-5.094208	-0.806167	-1.383920
H	0	-3.561146	-0.557107	-2.229875
H	0	-2.709280	0.391525	0.133989
H	0	-4.287174	2.290492	-0.821764
H	0	-4.368076	-0.980702	1.437565
H	0	3.052694	-5.364351	-0.292493
H	0	5.320575	-2.673053	-0.106749
H	0	4.087241	-3.237522	2.016209

H O 2.491907 -2.491960 2.172485  
H O 3.950706 -1.480377 2.229875  
H O 2.883944 0.411217 1.409754  
H O 4.116719 0.476618 0.151400  
H O 1.226611 1.469166 -0.168290  
H O 2.464571 1.536959 -1.417106  
H O 2.623153 2.962098 1.297811  
H O 3.862014 3.026635 0.051406  
H O 0.978811 4.022115 -0.280012  
H O 2.214643 4.084735 -1.527675  
H O 2.364671 5.552428 1.179446  
H O 2.008866 6.304118 -0.384317  
H O 3.610909 5.614274 -0.076198  
Free Energy (PCM/B3LYP/6-31G\*) = -1832.834363  
Number of imaginary frequencies = 0

### 3-SR-c6

B3LYP/6-31G\* geometry  
O O -1.435624 -0.731309 1.184046  
C O -2.203971 -2.770291 0.174947  
C O -3.632105 -1.691516 1.872170  
C O -3.599238 -2.734237 0.717488  
C O -2.840765 -0.399902 1.526717  
C O -1.287728 -1.810483 0.420687  
C O 0.035873 -2.108544 -0.243370  
N O -0.207471 -3.475036 -0.731049  
C O -1.596436 -3.762479 -0.711142  
C O 0.456628 -3.762715 -1.942148  
O O 1.116492 -5.035664 -1.854310  
C O 1.225035 -1.982654 0.711111  
C O 3.956185 -1.547941 1.100932  
C O 3.889660 -0.039722 1.443717  
C O 4.777476 0.829375 0.527244  
O O 4.315501 0.130991 2.774588  
O O 5.661051 1.509717 1.024610  
O O 4.535633 0.822025 -0.768944  
O O -2.124994 -4.682616 -1.319940  
O O -4.561151 -2.389805 -0.285872  
O O -3.021085 -2.293230 3.023628  
C O -5.061277 -1.367610 2.299662  
C O -3.407137 0.499353 0.426493  
C O -2.608002 1.795366 0.227950  
C O -3.222611 2.710409 -0.838827  
C O -2.433699 4.008710 -1.051686  
C O -3.049265 4.920195 -2.118420  
S O 2.810550 -2.124674 -0.222946  
O O 2.763946 -0.998786 -1.284391  
H O -3.859361 -3.704493 1.162593  
H O -2.729974 0.165381 2.455530  
H O 0.184709 -1.433450 -1.097392  
H O 1.851427 -5.041830 -1.042837  
H O 1.621116 -5.154067 -2.815964  
H O 0.388177 -5.838679 -1.713054  
H O 1.193062 -1.009268 1.207098  
H O 1.220674 -2.782147 1.457438  
H O 3.700150 -2.124034 1.994829  
H O 4.957884 -1.849110 0.781040  
H O 2.858404 0.325526 1.333577  
H O 5.076724 0.746159 2.712880  
H O 3.792587 0.173910 -1.009353  
H O -4.454765 -3.033818 -1.006160  
H O -2.080828 -2.446015 2.833345  
H O -5.524999 -2.276657 2.695496  
H O -5.661051 -1.010965 1.461836  
H O -5.057727 -0.611692 3.091693  
H O -3.470356 -0.062416 -0.511991  
H O -4.437259 0.752437 0.703925  
H O -1.575312 1.552196 -0.051850  
H O -2.550672 2.337098 1.183489  
H O -3.287483 2.164780 -1.791896  
H O -4.257136 2.956837 -0.557188  
H O -1.400202 3.761455 -1.332806  
H O -2.368757 4.552741 -0.098613  
H O -3.094153 4.415849 -3.091693  
H O -2.464645 5.838679 -2.245202  
H O -4.072359 5.210259 -1.848492  
Free Energy (PCM/B3LYP/6-31G\*) = -1832.834272

Number of imaginary frequencies = 0

### 3-SR-c7

B3LYP/6-31G\* geometry  
O O -1.436954 -0.717340 0.823404  
C O -2.182012 -2.777407 -0.157265  
C O -3.601955 -1.723644 1.557116  
C O -3.567153 -2.763225 0.405965  
C O -2.832511 -0.418875 1.200840  
C O -1.277301 -1.806415 0.084823  
C O 0.051187 -2.097193 -0.572782  
N O -0.172353 -3.473536 -1.042113  
C O -1.561160 -3.775545 -1.021489  
O O 0.489493 -3.760294 -2.256580  
C O 1.171432 -5.020166 -2.161121  
C O 1.233835 -1.944691 0.385949  
C O 3.960967 -1.492976 0.790346  
C O 3.885643 0.017017 1.123529  
C O 4.774075 0.884614 0.206178  
O O 4.304195 0.198275 2.455450  
O O 5.651956 1.572166 0.703936  
O O 4.539066 0.868025 -1.091073  
O O -2.072927 -4.715202 -1.616201  
O O -4.558541 -2.429574 -0.571127  
O O -2.883376 -2.385630 2.609360  
C O -5.033046 -1.421213 2.007226  
C O -3.442842 0.480422 0.121556  
C O -2.666573 1.787831 -0.090844  
C O -3.313941 2.695756 -1.144357  
C O -2.546275 4.004338 -1.371115  
C O -3.193027 4.907604 -2.426368  
S O 2.825392 -2.082967 -0.536365  
O O 2.780089 -0.962863 -1.604606  
H O -3.801727 -3.738803 0.853893  
H O -2.711792 0.154410 2.125882  
H O 0.196110 -1.432947 -1.435724  
H O 1.914918 -5.004819 -1.357435  
H O 1.668425 -5.141868 -3.126482  
H O 0.458825 -5.834074 -2.002757  
H O 1.189198 -0.964893 0.868148  
H O 1.232606 -2.733555 1.143465  
H O 3.702466 -2.064562 1.686385  
H O 4.965913 -1.791229 0.477977  
H O 2.853215 0.376670 1.006372  
H O 5.063391 0.815899 2.393204  
H O 3.800456 0.214120 -1.331349  
H O -4.446936 -3.057531 -1.304198  
H O -2.926437 -1.821071 3.398907  
H O -5.483569 -2.341851 2.391096  
H O -5.651956 -1.049642 1.188955  
H O -5.033100 -0.676577 2.812435  
H O -3.520696 -0.078659 -0.817448  
H O -4.469024 0.718066 0.425542  
H O -1.636436 1.559077 -0.391060  
H O -2.597946 2.329425 0.864161  
H O -3.389894 2.150067 -2.096583  
H O -4.346058 2.928306 -0.842741  
H O -1.514920 3.770663 -1.671108  
H O -2.471087 4.549233 -0.419293  
H O -3.248232 4.402845 -3.398907  
H O -2.623446 5.834074 -2.563181  
H O -4.215096 5.183520 -2.138300  
Free Energy (PCM/B3LYP/6-31G\*) = -1832.834108  
Number of imaginary frequencies = 0

### 3-SR-c8

B3LYP/6-31G\* geometry  
O O -1.437410 -0.714126 1.017257  
C O -2.177245 -2.779710 0.045745  
C O -3.599493 -1.717756 1.757101  
C O -3.563009 -2.763760 0.605738  
C O -2.832746 -0.418097 1.403107  
C O -1.275485 -1.804427 0.282319  
C O 0.053666 -2.094680 -0.374352  
N O -0.166278 -3.473559 -0.838188  
C O -1.554216 -3.779548 -0.814535  
O O 0.494214 -3.762407 -2.053010

C 0	1.180923	-5.019407	-1.954477
C 0	1.235238	-1.935488	0.584707
C 0	3.962492	-1.487089	0.992623
C 0	3.887695	0.022739	1.326376
C 0	4.775035	0.891192	0.408731
O 0	4.308001	0.202808	2.657915
O 0	5.652145	1.579813	0.906403
O 0	4.539849	0.874643	-0.888472
O 0	-2.064034	-4.723488	-1.404312
O 0	-4.553757	-2.441219	-0.377034
O 0	-2.845003	-2.255935	2.853629
C 0	-5.031258	-1.413154	2.204455
C 0	-3.449407	0.478839	0.327218
C 0	-2.674094	1.786546	0.113339
C 0	-3.325262	2.695361	-0.937012
C 0	-2.558474	4.004255	-1.164871
C 0	-3.208622	4.908532	-2.217166
S 0	2.827953	-2.077479	-0.334645
O 0	2.786031	-0.959787	-1.405461
H 0	-3.799160	-3.744240	1.047795
H 0	-2.709739	0.141096	2.334104
H 0	0.197151	-1.433651	-1.239938
H 0	1.926719	-4.998198	-1.153067
H 0	1.675581	-5.143152	-2.920779
H 0	0.471734	-5.835267	-1.790893
H 0	1.188870	-0.953102	1.061415
H 0	1.233770	-2.719986	1.346740
H 0	3.703335	-2.058825	1.888387
H 0	4.967572	-1.785521	0.680818
H 0	2.855136	0.382559	1.210752
H 0	5.065402	0.822613	2.595460
H 0	3.802488	0.219463	-1.129269
H 0	-4.434544	-3.068910	-1.109406
H 0	-3.325080	-3.030719	3.190096
H 0	-5.491233	-2.329809	2.592656
H 0	-5.652145	-1.054381	1.381984
H 0	-5.025899	-0.668022	3.006611
H 0	-3.530881	-0.079030	-0.612257
H 0	-4.474092	0.716582	0.635724
H 0	-1.644982	1.558415	-0.190713
H 0	-2.602293	2.326908	1.068725
H 0	-3.404320	2.150701	-1.889588
H 0	-4.356390	2.927474	-0.631691
H 0	-1.528037	3.771008	-1.468339
H 0	-2.480350	4.548170	-0.212735
H 0	-3.266688	4.404838	-3.190096
H 0	-2.639645	5.835267	-2.354700
H 0	-4.229862	5.183938	-1.925686

Free Energy (PCM/B3LYP/6-31G\*) = -1832.834093  
Number of imaginary frequencies = 0

**3-SS-c1**

B3LYP/6-31G\* geometry

O 0	-1.408477	-1.347469	0.648285
C 0	-3.503740	-0.889860	-0.398795
C 0	-2.500629	-3.119493	-0.732123
C 0	-3.516876	-2.087047	-1.295740
C 0	-1.183886	-2.353132	-0.404362
C 0	-2.511416	-0.630048	0.474035
C 0	-2.780106	0.625606	1.270732
N 0	-3.973591	1.141254	0.574391
C 0	-4.530452	0.126426	-0.247403
O 0	-4.885165	1.790146	1.430405
C 0	-5.224443	3.083552	0.908849
C 0	-1.612354	1.615110	1.344748
C 0	0.315102	3.259365	0.236277
C 0	1.314230	3.435002	-0.931726
C 0	2.336346	2.277918	-1.008789
O 0	2.016798	4.641144	-0.748263
O 0	3.529012	2.533951	-0.952587
O 0	1.884627	1.044921	-1.136491
O 0	-5.662383	0.150958	-0.722402
O 0	-4.811386	-2.676525	-1.394593
O 0	-2.133769	-4.033101	-1.770295
C 0	-3.063901	-3.879018	0.474396
C 0	-0.017171	-3.216618	0.053848
C 0	1.300271	-2.439039	0.188003

C 0	2.478200	-3.334098	0.592467
C 0	3.798487	-2.567816	0.744869
C 0	4.975937	-3.466957	1.135377
S 0	-1.197541	2.335806	-0.299605
O 0	-0.698811	1.173062	-1.192788
H 0	-3.163875	-1.812972	-2.302678
H 0	-0.896852	-1.781941	-1.296042
H 0	-3.052682	0.365623	2.302678
H 0	-4.335912	3.715108	0.804701
H 0	-5.735138	2.992717	-0.054172
H 0	-5.902323	3.513326	1.650004
H 0	-0.724719	1.111777	1.739555
H 0	-1.865283	2.461361	1.991488
H 0	0.772175	2.762360	1.096060
H 0	-0.035456	4.248617	0.541888
H 0	0.767987	3.461609	-1.887099
H 0	2.961058	4.377535	-0.738665
H 0	0.868665	1.014936	-1.170437
H 0	-5.445425	-1.938154	-1.462997
H 0	-2.957448	-4.444075	-2.082925
H 0	-3.998602	-4.371219	0.193920
H 0	-3.276215	-3.212412	1.315849
H 0	-2.352889	-4.641144	0.803512
H 0	-0.268081	-3.688819	1.011541
H 0	0.096007	-4.021875	-0.680047
H 0	1.178820	-1.638553	0.928985
H 0	1.530154	-1.942123	-0.765259
H 0	2.242715	-3.841621	1.539822
H 0	2.604576	-4.129974	-0.156530
H 0	3.672980	-1.779402	1.500557
H 0	4.027861	-2.051427	-0.197981
H 0	5.148791	-4.243129	0.379474
H 0	4.788462	-3.971987	2.091214
H 0	5.902323	-2.890254	1.239004

Free Energy (PCM/B3LYP/6-31G\*) = -1832.836103  
Number of imaginary frequencies = 0

**3-SS-c2**

B3LYP/6-31G\* geometry

O 0	-0.079311	-1.491702	-0.732081
C 0	-0.481655	0.570268	0.433425
C 0	0.128055	-1.416360	1.752608
C 0	0.053238	0.139083	1.762376
C 0	0.719301	-1.963263	0.423430
C 0	-0.514852	-0.242578	-0.644751
C 0	-1.221382	0.400988	-1.814240
N 0	-1.695972	1.649881	-1.199418
C 0	-1.065106	1.855696	0.055723
O 0	-1.686211	2.749502	-2.078987
C 0	-2.957460	3.415327	-2.057904
C 0	-2.342925	-0.450374	-2.422083
C 0	-4.762399	-1.783838	-2.347875
C 0	-5.365111	-2.991610	-1.623062
C 0	-6.186512	-2.601278	-0.379177
O 0	-4.405313	-3.987310	-1.293867
O 0	-6.825633	-1.574498	-0.287992
O 0	-6.172649	-3.531219	0.582440
O 0	-1.059584	2.918294	0.661696
O 0	1.341393	0.699469	2.047156
O 0	-1.198451	-1.925259	1.907059
C 0	0.908793	-1.944758	2.955490
C 0	2.194323	-1.675728	0.134434
C 0	2.705129	-2.335565	-1.154403
C 0	4.194122	-2.064191	-1.404742
C 0	4.722416	-2.706997	-2.693498
C 0	6.208574	-2.427778	-2.940933
S 0	-3.673025	-0.816908	-1.199985
O 0	-3.110801	-1.878879	-0.218701
H 0	-0.653212	0.413558	2.557990
H 0	0.536413	-3.041093	0.413467
H 0	-0.506761	0.634889	-2.614467
H 0	-3.765631	2.737655	-2.353142
H 0	-3.160285	3.831857	-1.067117
H 0	-2.862086	4.222089	-2.788518
H 0	-1.946598	-1.404303	-2.782776
H 0	-2.819901	0.083432	-3.250201
H 0	-4.177461	-2.134834	-3.200506

H O -5.543080 -1.100220 -2.688560  
H O -6.074165 -3.458862 -2.318102  
H O -3.681993 -3.497866 -0.832575  
H O -5.536773 -4.222089 -0.286069  
H O 1.249132 1.663392 1.965162  
H O -1.742382 -1.747437 1.110648  
H O 0.363701 -1.682868 3.868003  
H O 1.908541 -1.513125 3.014665  
H O 0.986950 -3.036051 2.907107  
H O 2.355818 -0.592881 0.101228  
H O 2.778938 -2.048344 0.983853  
H O 2.120570 -1.973763 -2.009632  
H O 2.535840 -3.421065 -1.100291  
H O 4.362608 -0.977810 -1.446642  
H O 4.781270 -2.430833 -0.549642  
H O 4.134011 -2.341466 -3.547086  
H O 4.556277 -3.792799 -2.650931  
H O 6.825633 -2.813267 -2.119763  
H O 6.400783 -1.350595 -3.021539  
H O 6.555223 -2.898809 -3.868003

Free Energy (PCM/B3LYP/6-31G\*) = -1832.835624  
Number of imaginary frequencies = 0

### 3-SS-c3

B3LYP/6-31G\* geometry

O O 0.890915 -1.363066 -0.686792  
C O 3.023119 -1.408668 0.385225  
C O 1.438429 -3.234984 0.872321  
C O 2.697675 -2.478555 1.378998  
C O 0.389773 -2.166384 0.442240  
C O 2.149430 -0.966313 -0.539557  
C O 2.767085 0.077116 -1.440564  
N O 4.047923 0.310180 -0.747818  
C O 4.293595 -0.734066 0.180317  
O O 5.113010 0.608107 -1.619622  
C O 5.777534 1.808638 -1.198210  
C O 1.925977 1.337272 -1.661828  
C O 0.508483 3.564090 -0.831497  
C O -0.722605 3.685155 0.071127  
C O -0.376057 4.174165 1.490094  
O O -1.500596 2.496448 0.131038  
O O 0.535784 4.933620 1.740888  
O O -1.220169 3.728349 2.428874  
O O 5.383252 -0.978316 0.691385  
O O 3.777147 -3.391895 1.564083  
O O 0.826297 -3.916950 1.971351  
C O 1.772165 -4.222864 -0.251041  
C O -0.968201 -2.710851 0.021582  
C O -2.032900 -1.618574 -0.154851  
C O -3.384993 -2.179304 -0.613771  
C O -4.462079 -1.101636 -0.791586  
C O -5.805890 -1.666606 -1.263817  
S O 1.701349 2.319390 -0.119178  
O O 0.863180 1.458834 0.851063  
H O 2.429717 -2.030869 2.349215  
H O 0.268923 -1.459366 1.272603  
H O 2.970527 -0.357939 -2.428874  
H O 6.233858 1.674524 -0.213095  
H O 6.554159 1.976081 -1.948124  
H O 5.086345 2.657961 -1.179481  
H O 0.938201 1.058709 -2.042193  
H O 2.415118 2.003737 -2.379948  
H O 0.198089 3.252299 -1.830459  
H O 1.041401 4.515387 -0.889924  
H O -1.367441 4.458927 -0.364701  
H O -0.854719 1.798159 0.404856  
H O -1.818415 3.090444 1.977360  
H O 4.589567 -2.852625 1.598004  
H O 1.503326 -4.507109 2.343449  
H O 2.526608 -4.933620 0.095966  
H O 2.169932 -3.718172 -1.136686  
H O 0.875950 -4.778137 -0.539722  
H O -0.856769 -3.273635 -0.913288  
H O -1.287658 -3.424090 0.789004  
H O -1.680386 -0.876132 -0.882621  
H O -2.162857 -1.082650 0.796642  
H O -3.250653 -2.716999 -1.564105

H O -3.735520 -2.927054 0.113014  
H O -4.106402 -0.351218 -1.511827  
H O -4.601869 -0.569389 0.159852  
H O -6.202521 -2.396029 -0.546694  
H O -5.702782 -2.175729 -2.230241  
H O -6.554159 -0.874414 -1.382158  
Free Energy (PCM/B3LYP/6-31G\*) = -1832.835265  
Number of imaginary frequencies = 0

### 3-SS-c4

B3LYP/6-31G\* geometry

O O -2.054372 -1.209845 -0.340612  
C O -1.977450 -3.502235 0.322889  
C O -4.185167 -2.413617 0.187627  
C O -3.387015 -3.590120 0.817679  
C O -3.342148 -1.115924 0.373289  
C O -1.454403 -2.389938 -0.224841  
C O -0.035972 -2.611198 -0.701859  
N O 0.221992 -3.963275 -0.172015  
C O -0.998194 -4.571238 0.209164  
O O 1.045437 -4.738799 -1.017088  
C O 2.029321 -5.446027 -0.240155  
C O 0.911222 -1.521146 -0.193409  
C O 3.085725 0.132013 -0.525485  
C O 4.623042 0.287259 -0.474178  
C O 5.191970 0.037156 0.940818  
O O 4.957899 1.597609 -0.866341  
O O 5.867961 0.904576 1.471576  
O O 4.930287 -1.112831 1.531989  
O O -1.158109 -5.774107 0.403591  
O O -3.999460 -4.832908 0.484188  
O O -5.366797 -2.180783 0.959521  
C O -4.548115 -2.684141 -1.276600  
C O -4.008089 0.169598 -0.097410  
C O -3.238137 1.437673 0.298386  
C O -3.924847 2.721441 -0.184422  
C O -3.167242 3.998228 0.201906  
C O -3.851985 5.277433 -0.290311  
S O 2.585473 -1.593009 -0.962165  
O O 3.472115 -2.513051 -0.091638  
H O -3.421815 -3.448196 1.909551  
H O -3.087778 -1.035426 1.437960  
H O -0.011065 -2.649722 -1.799325  
H O 2.638013 -5.969002 -0.981974  
H O 2.646223 -4.745136 0.326138  
H O 1.545523 -6.170633 0.420300  
H O 1.047652 -1.575890 0.890872  
H O 0.499470 -0.542813 -0.461689  
H O 2.611279 0.422265 0.416531  
H O 2.698702 0.764811 -1.328537  
H O 5.094386 -0.439432 -1.154357  
H O 5.492510 1.948667 -0.123334  
H O 4.358348 -1.717102 0.949380  
H O -3.312534 -5.518439 0.590315  
H O -5.867961 -3.013849 0.959507  
H O -5.114403 -3.616230 -1.346837  
H O -3.661031 -2.784044 -1.909551  
H O -5.164462 -1.870038 -1.666073  
H O -4.129460 0.134188 -1.186866  
H O -5.013497 0.191579 0.336683  
H O -2.221139 1.392389 -0.112136  
H O -3.130660 1.470099 1.392281  
H O -4.037115 2.684286 -1.278186  
H O -4.944629 2.765951 0.225777  
H O -2.146904 3.949469 -0.204379  
H O -3.058857 4.037827 1.295088  
H O -4.862439 5.371296 0.126619  
H O -3.943479 5.281520 -1.383607  
H O -3.287054 6.170633 0.000431

Free Energy (PCM/B3LYP/6-31G\*) = -1832.834698  
Number of imaginary frequencies = 0

### 3-SS-c5

B3LYP/6-31G\* geometry

O O 0.339294 -1.164636 0.336781  
C O -0.998223 -2.823147 -0.747047  
C O 1.395327 -2.708849 -1.324500



C 0 -0.003392 -3.176760 -1.807916  
C 0 1.251695 -1.243051 -0.816605  
C 0 -0.766942 -1.889605 0.195209  
C 0 -1.925467 -1.760253 1.154067  
N 0 -2.744417 -2.913680 0.726973  
C 0 -2.304838 -3.428279 -0.507043  
O 0 -4.124455 -2.813421 0.920593  
C 0 -4.561137 -3.759353 1.912490  
C 0 -2.660158 -0.413078 1.095810  
C 0 -4.255232 1.469755 -0.142685  
C 0 -4.366085 2.498306 -1.292445  
C 0 -3.287238 3.601233 -1.199443  
O 0 -5.634453 3.106319 -1.234021  
O 0 -3.636379 4.770445 -1.148817  
O 0 -2.018102 3.242734 -1.181307  
O 0 -2.898381 -4.263124 -1.183534  
O 0 0.024531 -4.573872 -2.087567  
O 0 2.272462 -2.614596 -2.450667  
C 0 1.982886 -3.650112 -0.266613  
C 0 2.549746 -0.568276 -0.395314  
C 0 2.392725 0.933042 -0.114661  
C 0 3.716012 1.606112 0.270622  
C 0 3.573800 3.106808 0.554852  
C 0 4.898597 3.777711 0.931825  
S 0 -3.175869 0.045173 -0.613113  
O 0 -1.934509 0.658524 -1.306702  
H 0 -0.220951 -2.623092 -2.734800  
H 0 0.769580 -0.660167 -1.611306  
H 0 -1.590088 -1.896363 2.189845  
H 0 -5.636151 -3.590400 2.005439  
H 0 -4.368616 -4.782591 1.577439  
H 0 -4.068977 -3.577940 2.873498  
H 0 -2.007891 0.385806 1.460515  
H 0 -3.567842 -0.459098 1.703046  
H 0 -3.888349 1.924038 0.782170  
H 0 -5.245256 1.042942 0.038142  
H 0 -4.238639 1.989361 -2.260419  
H 0 -5.445119 4.066453 -1.174271  
H 0 -1.907321 2.232984 -1.231879  
H 0 -0.903301 -4.847406 -2.208081  
H 0 2.273219 -3.490109 -2.873498  
H 0 2.034313 -4.666111 -0.666337  
H 0 1.374180 -3.677805 0.642456  
H 0 2.992946 -3.328501 -0.000158  
H 0 2.948142 -1.072996 0.493376  
H 0 3.273188 -0.723319 -1.203176  
H 0 1.659627 1.081542 0.688640  
H 0 1.979319 1.426409 -1.006279  
H 0 4.134204 1.107536 1.157784  
H 0 4.448460 1.457300 -0.536697  
H 0 2.845164 3.253532 1.364772  
H 0 3.150644 3.603581 -0.329785  
H 0 5.636151 3.677976 0.125744  
H 0 5.330105 3.324366 1.833018  
H 0 4.763050 4.847406 1.129058

Free Energy (PCM/B3LYP/6-31G\*) = -1832.834616  
Number of imaginary frequencies = 0

### 3-SS-c6

B3LYP/6-31G\* geometry

O 0 1.723712 -1.178342 -0.147909  
C 0 1.560323 -3.541196 -0.455609  
C 0 3.722066 -2.622033 0.293016  
C 0 3.028550 -3.827726 -0.401687  
C 0 3.177419 -1.318135 -0.363390  
C 0 1.042592 -2.308301 -0.295413  
C 0 -0.469184 -2.331925 -0.307318  
N 0 -0.715653 -3.725439 -0.720659  
C 0 0.464334 -4.492396 -0.549395  
O 0 -1.887421 -4.261452 -0.138324  
C 0 -2.624537 -5.018783 -1.114165  
C 0 -1.076647 -1.290146 -1.248803  
C 0 -3.332809 -0.936027 0.384440  
C 0 -4.711036 -0.240191 0.485172  
C 0 -4.597296 1.297933 0.385709  
O 0 -5.293868 -0.567536 1.723942  
O 0 -5.037056 1.985782 1.293934

O 0 -4.027356 1.820698 -0.682701  
O 0 0.508044 -5.718766 -0.508185  
O 0 3.317888 -5.030605 0.305359  
O 0 5.113843 -2.627590 -0.036946  
C 0 3.531866 -2.647251 1.813711  
C 0 3.814696 -0.024872 0.125193  
C 0 3.422596 1.203187 -0.708815  
C 0 4.068783 2.496151 -0.195774  
C 0 3.693002 3.733300 -1.021272  
C 0 4.333324 5.023235 -0.498110  
S 0 -2.915151 -1.365571 -1.365014  
O 0 -3.304506 -0.134462 -2.216623  
H 0 3.446790 -3.892356 -1.418625  
H 0 3.309537 -1.412365 -1.448822  
H 0 -0.842336 -2.194532 0.715733  
H 0 -2.047475 -5.887935 -1.439262  
H 0 -3.526159 -5.342299 -0.589403  
H 0 -2.892355 -4.394257 -1.971824  
H 0 -0.731061 -1.447356 -2.274289  
H 0 -0.818003 -0.274652 -0.933535  
H 0 -2.536507 -0.326287 0.821196  
H 0 -3.388346 -1.889348 0.915945  
H 0 -5.360970 -0.580863 -0.335381  
H 0 -5.467956 0.297485 2.151366  
H 0 -3.720981 1.105890 -1.338288  
H 0 2.634087 -5.677067 0.047004  
H 0 5.467956 -3.482824 0.260272  
H 0 3.901202 -3.594914 2.213500  
H 0 2.479722 -2.551841 2.099246  
H 0 4.093333 -1.830570 2.274289  
H 0 3.540955 0.136153 1.174949  
H 0 4.900424 -0.166144 0.094935  
H 0 2.330653 1.315660 -0.706215  
H 0 3.715803 1.038376 -1.755771  
H 0 3.775573 2.657622 0.852195  
H 0 5.162822 2.380503 -0.192346  
H 0 2.599359 3.844058 -1.028675  
H 0 3.990797 3.574386 -2.067394  
H 0 5.428249 4.954811 -0.510517  
H 0 4.026054 5.226227 0.535363  
H 0 4.046235 5.887935 -1.107484

Free Energy (PCM/B3LYP/6-31G\*) = -1832.834481  
Number of imaginary frequencies = 0

### 3-SS-c7

B3LYP/6-31G\* geometry

O 0 -0.161245 -1.591339 -0.753021  
C 0 -0.797516 -0.015306 0.947310  
C 0 -0.130496 -2.283030 1.647832  
C 0 -0.322342 -0.812255 2.122049  
C 0 0.585923 -2.361171 0.268826  
C 0 -0.697451 -0.455843 -0.325324  
C 0 -1.327679 0.503873 -1.307381  
N 0 -1.588127 1.651415 -0.418810  
C 0 -1.479872 1.283263 0.940592  
O 0 -2.671016 2.468356 -0.761710  
C 0 -2.210061 3.781167 -1.121599  
C 0 -2.576154 -0.044348 -2.013717  
C 0 -5.149727 -1.060697 -2.077606  
C 0 -5.809084 -2.419578 -1.821401  
C 0 -6.411160 -2.540971 -0.408238  
O 0 -4.953658 -3.521613 -2.094685  
O 0 -6.890964 -1.609479 0.202487  
O 0 -6.403973 -3.790749 0.068896  
O 0 -1.859669 1.965191 1.882232  
O 0 0.905260 -0.309496 2.666194  
O 0 -1.418012 -2.888926 1.533461  
C 0 0.612484 -3.113763 2.694214  
C 0 2.054511 -1.935457 0.207548  
C 0 2.692876 -2.146815 -1.172982  
C 0 4.176544 -1.758164 -1.203777  
C 0 4.830227 -1.962302 -2.576530  
C 0 6.310635 -1.568150 -2.603373  
S 0 -3.806242 -0.748125 -0.837865  
O 0 -3.292916 -2.164019 -0.461391  
H 0 -1.094565 -0.829482 2.903141  
H 0 0.478378 -3.390213 -0.084557

H O -0.611962 0.781429 -2.090927  
H O -1.717738 4.261987 -0.271221  
H O -1.527895 3.739152 -1.977143  
H O -3.114129 4.331527 -1.391644  
H O -2.295620 -0.846388 -2.702968  
H O -3.077559 0.758711 -2.559826  
H O -4.725133 -1.053215 -3.083530  
H O -5.869521 -0.246504 -1.970565  
H O -6.653370 -2.499554 -2.517876  
H O -4.126302 -3.329678 -1.590670  
H O -5.907245 -4.331527 -0.586890  
H O 0.742472 0.610289 2.932559  
H O -1.950684 -2.473293 0.821364  
H O -0.005404 -3.171702 3.596031  
H O 1.573074 -2.672672 2.961302  
H O 0.770832 -4.132378 2.324336  
H O 2.146091 -0.889056 0.518336  
H O 2.604988 -2.526187 0.949173  
H O 2.147894 -1.562031 -1.924645  
H O 2.586242 -3.202055 -1.464691  
H O 4.282658 -0.704542 -0.905363  
H O 4.723872 -2.344789 -0.450981  
H O 4.281598 -1.377506 -3.328519  
H O 4.726055 -3.015522 -2.873505  
H O 6.890964 -2.161133 -1.885524  
H O 6.443122 -0.510726 -2.342327  
H O 6.748595 -1.724113 -3.596031  
Free Energy (PCM/B3LYP/6-31G\*) = -1832.834198  
Number of imaginary frequencies = 0

#### 4-3E-c1

B3LYP/6-31G\* geometry  
O O 2.074472 -1.399076 -0.195201  
C O 2.909888 -3.611922 -0.603416  
C O 4.523813 -1.873430 0.039872  
C O 4.353168 -3.240938 -0.676520  
C O 3.424753 -0.913306 -0.510442  
C O 1.919921 -2.719620 -0.363188  
C O 0.631473 -3.408976 -0.290178  
N O 0.954151 -4.766122 -0.515643  
C O 2.323181 -4.946336 -0.657441  
S O -1.020443 -1.245922 0.201606  
C O -2.808864 -1.361153 0.596414  
C O -3.720943 -1.604262 -0.621647  
C O -5.184761 -1.491785 -0.194671  
O O -3.511262 -2.872351 -1.204131  
O O -5.940022 -2.444385 -0.202481  
O O -5.520630 -0.258167 0.196627  
O O 2.909969 -6.030178 -0.778854  
O O 5.195263 -4.225897 -0.078147  
O O 5.759364 -1.278055 -0.372706  
C O 3.504645 0.519927 -0.000774  
C O 2.568617 1.487841 -0.738405  
C O 2.686531 2.929113 -0.226608  
C O 1.766147 3.913528 -0.959437  
C O 1.890723 5.351638 -0.445512  
C O -0.613191 -2.935608 -0.070737  
C O 4.483690 -2.012462 1.565543  
H O 4.667822 -3.088509 -1.722020  
H O 3.503900 -0.920697 -1.605833  
H O 0.306768 -5.532300 -0.392877  
H O -3.044813 -0.395271 1.051077  
H O -2.961617 -2.140872 1.348126  
H O -3.524097 -0.829229 -1.372416  
H O -4.284242 -3.414466 -0.952810  
H O -6.457672 -0.268658 0.475048  
H O 4.805229 -5.090271 -0.313824  
H O 6.457672 -1.922464 -0.167146  
H O 3.280044 0.531505 1.072931  
H O 4.543302 0.848541 -0.115166  
H O 1.530363 1.147200 -0.635028  
H O 2.798112 1.463688 -1.813779  
H O 2.458457 2.952892 0.849436  
H O 3.729246 3.266045 -0.324827  
H O 0.724313 3.577471 -0.859640  
H O 1.993166 3.888524 -2.034766  
H O 1.223481 6.030178 -0.989502

H O 2.915353 5.725878 -0.562684  
H O 1.635147 5.415183 0.619593  
H O -1.458937 -3.614112 -0.084439  
H O 3.511549 -2.368991 1.919072  
H O 4.693188 -1.047784 2.034766  
H O 5.241970 -2.730576 1.888213  
Free Energy (PCM/B3LYP/6-31G\*) = -1642.022747  
Number of imaginary frequencies = 0

#### 4-3E-c2

B3LYP/6-31G\* geometry  
O O 1.257502 -1.417736 -0.483605  
C O 2.414817 -3.511639 -0.673993  
C O 3.582438 -1.647146 0.422680  
C O 3.770770 -2.990682 -0.333439  
C O 2.578737 -0.780739 -0.398929  
C O 1.304452 -2.737379 -0.710950  
C O 0.132639 -3.557364 -1.020374  
N O 0.652578 -4.863934 -1.153659  
C O 2.018419 -4.895805 -0.907996  
S O -1.816214 -1.595917 -0.988724  
C O -3.567050 -1.858108 -1.480528  
C O -4.457296 -2.519975 -0.417442  
C O -4.433620 -1.770052 0.911925  
O O -4.087540 -3.863132 -0.198943  
O O -4.140690 -2.312253 1.959832  
O O -4.776330 -0.483664 0.791006  
O O 2.732292 -5.907087 -0.873021  
O O 4.519518 -3.909892 0.461185  
O O 4.809365 -0.909401 0.381662  
C O 2.352709 0.626739 0.138339  
C O 1.557708 1.531196 -0.814006  
C O 1.358164 2.945576 -0.254653  
C O 0.562229 3.864731 -1.189947  
C O 0.365119 5.274935 -0.624128  
C O -1.166014 -3.221601 -1.169030  
C O 3.137396 -1.859132 1.873730  
H O 4.342953 -2.758244 -1.246701  
H O 2.959113 -0.727649 -1.427851  
H O 0.086060 -5.696356 -1.237432  
H O -3.596073 -2.453741 -2.396051  
H O -3.946412 -0.859967 -1.713168  
H O -5.490455 -2.474636 -0.796885  
H O -3.903406 -3.941857 0.757216  
H O -4.739058 -0.071711 1.676606  
H O 4.306281 -4.798460 0.115039  
H O 5.490455 -1.486490 0.766652  
H O 1.837031 0.562188 1.104337  
H O 3.338615 1.064024 0.329982  
H O 0.578871 1.079596 -1.020106  
H O 2.081623 1.591427 -1.779150  
H O 0.842886 2.883165 0.715462  
H O 2.339810 3.398208 -0.049799  
H O -0.418288 3.411371 -1.393639  
H O 1.076527 3.927577 -2.159503  
H O -0.205588 5.907087 -1.314214  
H O 1.329022 5.765957 -0.441079  
H O -0.177678 5.246423 0.328962  
H O -1.900252 -3.988675 -1.390319  
H O 2.154229 -2.335316 1.935465  
H O 3.094015 -0.899932 2.396051  
H O 3.855521 -2.504437 2.386353  
Free Energy (PCM/B3LYP/6-31G\*) = -1642.022506  
Number of imaginary frequencies = 0

#### 4-3E-c3

B3LYP/6-31G\* geometry  
O O 2.165395 -1.399427 -0.588288  
C O 2.909529 -3.669873 -0.814719  
C O 4.411981 -2.071196 0.293690  
C O 4.341695 -3.416607 -0.479624  
C O 3.584085 -1.023689 -0.511226  
C O 1.962647 -2.701820 -0.826437  
C O 0.654848 -3.284742 -1.130242  
N O 0.923036 -4.658558 -1.315454  
C O 2.260234 -4.950451 -1.072123  
S O -0.900272 -0.995402 -1.033661

C 0	-2.733239	-1.017745	-1.076256
C 0	-3.381552	-1.499118	0.240404
C 0	-4.901822	-1.482351	0.084203
O 0	-3.019762	-0.697142	1.338993
O 0	-5.609431	-0.689272	0.673834
O 0	-5.346866	-2.401130	-0.780700
O 0	2.769997	-6.077925	-1.060050
O 0	4.908758	-4.468041	0.301126
O 0	5.754831	-1.575591	0.252516
C 0	3.631270	0.397914	0.034326
C 0	3.049667	1.441971	-0.929480
C 0	3.112904	2.868069	-0.368227
C 0	2.551803	3.924944	-1.328209
C 0	2.612957	5.347297	-0.761717
C 0	-0.561726	-2.708872	-1.236261
C 0	3.941358	-2.214903	1.744801
H 0	4.942496	-3.284996	-1.394433
H 0	3.959269	-1.035149	-1.543363
H 0	0.208648	-5.371855	-1.366193
H 0	-3.067292	-1.622435	-1.923527
H 0	-3.018208	0.022016	-1.262829
H 0	-3.069539	-2.531316	0.439689
H 0	-3.775133	-0.098995	1.495991
H 0	-6.317619	-2.309643	-0.851781
H 0	4.543493	-5.298608	-0.060786
H 0	6.317619	-2.274823	0.626031
H 0	3.093983	0.432419	0.990042
H 0	4.679986	0.632012	0.246650
H 0	2.007768	1.187668	-1.163195
H 0	3.600172	1.400845	-1.880700
H 0	2.558915	2.910349	0.581251
H 0	4.156350	3.117453	-0.124166
H 0	1.510448	3.673137	-1.574381
H 0	3.107756	3.884059	-2.275669
H 0	2.206216	6.077925	-1.470459
H 0	3.646310	5.639678	-0.537148
H 0	2.036687	5.427771	0.168382
H 0	-1.416429	-3.331729	-1.487196
H 0	2.890059	-2.511411	1.806739
H 0	4.068956	-1.267912	2.275669
H 0	4.535759	-2.981486	2.248694

Free Energy (PCM/B3LYP/6-31G\*) = -1642.021980  
Number of imaginary frequencies = 0

**4-3E-c4**

B3LYP/6-31G\* geometry

O 0	1.134086	-1.356592	0.133047
C 0	2.268761	-3.395332	-0.425344
C 0	3.626307	-1.368898	-0.111357
C 0	3.580672	-2.774018	-0.771821
C 0	2.284465	-0.648800	-0.445646
C 0	1.194074	-2.687633	-0.003703
C 0	0.086426	-3.595406	0.302235
N 0	0.605349	-4.878535	0.024746
C 0	1.936122	-4.814691	-0.368923
S 0	-1.796317	-1.759441	1.168360
C 0	-3.584652	-2.134666	1.359259
C 0	-4.421023	-1.922743	0.082095
C 0	-4.007109	-2.855943	-1.050633
O 0	-4.347014	-0.587838	-0.359826
O 0	-3.581076	-2.446537	-2.112490
O 0	-4.157945	-4.149916	-0.740971
O 0	2.677166	-5.779414	-0.595879
O 0	4.685471	-3.564729	-0.335123
O 0	4.628552	-0.577249	-0.759018
C 0	2.191013	0.797306	0.023654
C 0	0.976391	1.546415	-0.542997
C 0	0.900975	3.002852	-0.068194
C 0	-0.302928	3.765228	-0.636526
C 0	-0.378695	5.218659	-0.157709
C 0	-1.165070	-3.345787	0.742670
C 0	3.901048	-1.448626	1.394237
H 0	3.662748	-2.611912	-1.859084
H 0	2.153313	-0.692358	-1.535214
H 0	0.146533	-5.743305	0.275406
H 0	-3.943371	-1.429134	2.112490
H 0	-3.709982	-3.145682	1.755130

H 0	-5.461825	-2.164312	0.343767
H 0	-3.895952	-0.613278	-1.225106
H 0	-3.866955	-4.683868	-1.506502
H 0	4.432902	-4.493567	-0.501716
H 0	5.461825	-1.072627	-0.685588
H 0	2.163592	0.817325	1.120168
H 0	3.114484	1.300045	-0.283436
H 0	0.055314	1.021865	-0.258461
H 0	1.019443	1.523622	-1.641793
H 0	0.857897	3.025637	1.030903
H 0	1.827018	3.526814	-0.348215
H 0	-1.227286	3.239269	-0.358469
H 0	-0.258375	3.743602	-1.734743
H 0	-1.247887	5.734404	-0.582086
H 0	0.517730	5.779414	-0.450521
H 0	-0.459953	5.271894	0.935131
H 0	-1.847214	-4.178637	0.889597
H 0	3.101119	-1.968839	1.929643
H 0	4.003383	-0.443183	1.810657
H 0	4.831484	-1.995144	1.568898

Free Energy (PCM/B3LYP/6-31G\*) = -1642.021946  
Number of imaginary frequencies = 0

**4-3E-c5**

B3LYP/6-31G\* geometry

O 0	1.970702	-1.255216	-0.361541
C 0	3.553972	-3.022966	-0.719610
C 0	4.402177	-0.865811	0.100993
C 0	4.780055	-2.175767	-0.643507
C 0	3.089507	-0.320018	-0.539913
C 0	2.298874	-2.537599	-0.568437
C 0	1.327642	-3.629877	-0.642824
N 0	2.119438	-4.781746	-0.839759
C 0	3.473255	-4.473753	-0.851571
S 0	-1.007817	-2.190378	-0.282954
C 0	-2.682942	-2.926191	-0.501946
C 0	-3.714637	-2.028793	0.204546
C 0	-5.118437	-2.571473	-0.061413
O 0	-3.642326	-0.687773	-0.226110
O 0	-5.915907	-1.996308	-0.774705
O 0	-5.344393	-3.742643	0.544640
O 0	4.406406	-5.283292	-0.932090
O 0	5.853299	-2.836575	0.026076
O 0	5.383417	0.137209	-0.185736
C 0	2.624236	1.028292	-0.005570
C 0	1.472229	1.645946	-0.810935
C 0	1.040955	3.014564	-0.268972
C 0	-0.111234	3.647031	-1.060017
C 0	-0.538924	5.013100	-0.513588
C 0	-0.019982	-3.618011	-0.557933
C 0	4.284336	-1.078031	1.614229
H 0	5.114703	-1.878690	-1.651075
H 0	3.259501	-0.249392	-1.622583
H 0	1.767015	-5.728350	-0.815982
H 0	-2.694582	-3.926819	-0.062903
H 0	-2.908398	-2.996418	-1.570101
H 0	-3.527694	-2.050086	1.284023
H 0	-4.317764	-0.586940	-0.923293
H 0	-6.242654	-4.043815	0.303432
H 0	5.816365	-3.768666	-0.264356
H 0	6.242654	-0.235727	0.074547
H 0	2.323499	0.914585	1.043153
H 0	3.489670	1.699703	-0.019971
H 0	0.612479	0.963823	-0.805352
H 0	1.779642	1.750401	-1.861757
H 0	0.742051	2.910510	0.784688
H 0	1.903407	3.697697	-0.275371
H 0	-0.972029	2.963454	-1.052656
H 0	0.187101	3.750769	-2.113001
H 0	-1.363112	5.437604	-1.098433
H 0	0.292609	5.728350	-0.540780
H 0	-0.874256	4.935055	0.528124
H 0	-0.560747	-4.555909	-0.651222
H 0	3.479583	-1.774344	1.868685
H 0	4.092013	-0.124694	2.113001
H 0	5.219789	-1.491707	1.999831

Free Energy (PCM/B3LYP/6-31G\*) = -1642.021600

Number of imaginary frequencies = 0

#### 4-3E-c6

B3LYP/6-31G\* geometry

O 0 1.150904 -1.400207 0.232985  
C 0 1.509724 -3.709554 -0.309862  
C 0 3.485251 -2.290316 0.049151  
C 0 2.964411 -3.590466 -0.622397  
C 0 2.492174 -1.143256 -0.311506  
C 0 0.744679 -2.668139 0.090882  
C 0 -0.617575 -3.128694 0.378329  
N 0 -0.576359 -4.512376 0.113907  
C 0 0.696373 -4.921798 -0.264560  
S 0 -1.729728 -0.729934 1.190261  
C 0 -3.526145 -0.442730 1.456496  
C 0 -4.346319 -0.287579 0.167892  
C 0 -4.651827 -1.637728 -0.510870  
O 0 -3.779552 0.620206 -0.770519  
O 0 -5.008173 -2.625552 0.097974  
O 0 -4.533105 -1.617294 -1.841932  
O 0 1.051897 -6.084421 -0.487960  
O 0 3.710574 -4.716703 -0.163495  
O 0 4.717578 -1.903444 -0.568718  
C 0 2.903082 0.243026 0.167321  
C 0 2.046750 1.374070 -0.419732  
C 0 2.495554 2.762427 0.053576  
C 0 1.654920 3.905631 -0.529349  
C 0 2.110437 5.290194 -0.056826  
C 0 -1.704640 -2.451343 0.800522  
C 0 3.676698 -2.458893 1.560189  
H 0 3.123741 -3.470546 -1.706445  
H 0 2.381395 -1.138335 -1.404057  
H 0 -1.326133 -5.156763 0.322674  
H 0 -3.562556 0.491350 2.021888  
H 0 -3.946495 -1.238311 2.074850  
H 0 -5.320600 0.130033 0.450882  
H 0 -2.807569 0.523565 -0.722286  
H 0 -4.225023 -0.710963 -2.074850  
H 0 3.158612 -5.500379 -0.350350  
H 0 5.320600 -2.660943 -0.480566  
H 0 2.858836 0.272681 1.262982  
H 0 3.951464 0.386215 -0.115765  
H 0 0.994627 1.218209 -0.148942  
H 0 2.094768 1.330962 -1.517660  
H 0 2.451791 2.804378 1.152063  
H 0 3.551268 2.914904 -0.215800  
H 0 0.600650 3.754227 -0.257401  
H 0 1.696393 3.861459 -1.627010  
H 0 1.491567 6.084421 -0.490121  
H 0 3.151327 5.483544 -0.344572  
H 0 2.047512 5.376169 1.035120  
H 0 -2.641278 -2.979153 0.951371  
H 0 2.733885 -2.676384 2.070937  
H 0 4.103525 -1.547890 1.987503  
H 0 4.361050 -3.289190 1.752814

Free Energy (PCM/B3LYP/6-31G\*) = -1642.021418

Number of imaginary frequencies = 0

#### 4-3E-c7

B3LYP/6-31G\* geometry

O 0 0.681002 -0.660443 0.285080  
C 0 2.770650 -1.726937 -0.214438  
C 0 2.803556 0.656826 0.401287  
C 0 3.578552 -0.476756 -0.327322  
C 0 1.324988 0.605128 -0.090167  
C 0 1.450719 -1.737625 0.086804  
C 0 0.965828 -3.114948 0.174623  
N 0 2.103167 -3.900066 -0.112748  
C 0 3.232166 -3.108566 -0.295744  
S 0 -1.648091 -2.594446 0.892001  
C 0 -2.984134 -3.864795 0.848240  
C 0 -4.342334 -3.161079 0.767826  
C 0 -4.518560 -2.352481 -0.517974  
O 0 -4.516656 -2.306103 1.877092  
O 0 -4.836511 -1.178523 -0.507804  
O 0 -4.323719 -3.077292 -1.623254  
O 0 4.387823 -3.516123 -0.467202

O 0 4.883478 -0.624806 0.231854  
O 0 3.288478 1.925094 -0.053428  
C 0 0.419443 1.716637 0.425101  
C 0 -0.950240 1.744691 -0.269225  
C 0 -1.889234 2.817688 0.294907  
C 0 -3.264414 2.832921 -0.385672  
C 0 -4.211362 3.890801 0.190164  
C 0 -0.267621 -3.589481 0.451982  
C 0 2.926904 0.554381 1.925035  
H 0 3.672752 -0.164468 -1.380307  
H 0 1.345037 0.625153 -1.188215  
H 0 2.153318 -4.899138 0.031209  
H 0 -2.946594 -4.466805 1.759407  
H 0 -2.843748 -4.511400 -0.020171  
H 0 -5.115571 -3.946054 0.759430  
H 0 -4.823242 -1.452611 1.513962  
H 0 -4.468949 -2.499822 -2.398433  
H 0 5.183665 -1.518874 -0.021960  
H 0 4.245331 1.932370 0.118240  
H 0 0.284470 1.595080 1.506903  
H 0 0.940320 2.667745 0.270504  
H 0 -1.427502 0.761381 -0.172672  
H 0 -0.805704 1.914905 -1.346139  
H 0 -2.022259 2.652432 1.374452  
H 0 -1.420687 3.807914 0.192873  
H 0 -3.723939 1.838459 -0.292583  
H 0 -3.132391 3.007563 -1.463032  
H 0 -5.183665 3.875194 -0.315816  
H 0 -3.793445 4.899138 0.078775  
H 0 -4.389127 3.722675 1.259691  
H 0 -0.435842 -4.662994 0.453978  
H 0 2.482785 -0.368310 2.310220  
H 0 2.429586 1.405015 2.398433  
H 0 3.982318 0.563337 2.209767

Free Energy (PCM/B3LYP/6-31G\*) = -1642.021069

Number of imaginary frequencies = 0

#### 4-3E-c8

B3LYP/6-31G\* geometry

O 0 2.297250 -1.395515 -0.144715  
C 0 3.171567 -3.590544 -0.567258  
C 0 4.762709 -1.811473 0.020507  
C 0 4.603144 -3.186701 -0.683434  
C 0 3.626028 -0.880177 -0.502067  
C 0 2.168304 -2.719884 -0.303773  
C 0 0.897831 -3.437185 -0.197426  
N 0 1.244655 -4.787878 -0.427373  
C 0 2.614046 -4.937898 -0.600722  
S 0 -0.784508 -1.307628 0.332408  
C 0 -2.574309 -1.449095 0.704557  
C 0 -3.470790 -1.679077 -0.511973  
C 0 -4.931537 -1.380300 -0.141486  
O 0 -3.275619 -3.001798 -0.971614  
O 0 -5.283806 -0.444591 0.545497  
O 0 -5.780920 -2.247386 -0.719871  
O 0 3.221978 -6.009002 -0.730933  
O 0 5.484758 -4.148726 -0.104988  
O 0 5.971557 -1.190340 -0.431493  
C 0 3.687989 0.557385 -0.002185  
C 0 2.706289 1.499197 -0.713711  
C 0 2.811529 2.946891 -0.217376  
C 0 1.842166 3.904813 -0.921623  
C 0 1.955862 5.349957 -0.425154  
C 0 -0.351543 -2.988538 0.046540  
C 0 4.770867 -1.942218 1.547436  
H 0 4.883935 -3.033177 -1.738383  
H 0 3.672852 -0.891953 -1.599275  
H 0 0.621347 -5.568092 -0.272242  
H 0 -2.837141 -0.494743 1.164823  
H 0 -2.730210 -2.240168 1.443477  
H 0 -3.209737 -0.944483 -1.290710  
H 0 -3.857057 -3.148636 -1.735182  
H 0 -6.690203 -1.970249 -0.493160  
H 0 5.107657 -5.022987 -0.324672  
H 0 6.690203 -1.817465 -0.243325  
H 0 3.497915 0.569881 1.078123  
H 0 4.714468 0.909383 -0.151516

H 0 1.679897 1.137710 -0.570939  
H 0 2.898046 1.471035 -1.796365  
H 0 2.624249 2.974502 0.866412  
H 0 3.842012 3.305642 -0.358007  
H 0 0.812559 3.547699 -0.777933  
H 0 2.027239 3.874696 -2.004836  
H 0 1.252859 6.009002 -0.947655  
H 0 2.966631 5.744906 -0.586471  
H 0 1.741646 5.417871 0.648759  
H 0 -1.181832 -3.686219 0.055399  
H 0 3.816825 -2.314950 1.932248  
H 0 4.975799 -0.970900 2.004836  
H 0 5.552307 -2.643651 1.850954  
Free Energy (PCM/B3LYP/6-31G\*) = -1642.020932  
Number of imaginary frequencies = 0

#### 4-3E-c9

B3LYP/6-31G\* geometry  
O 0 0.944322 -1.334901 -1.263126  
C 0 2.444983 -2.264352 0.378955  
C 0 3.285747 -0.525296 -1.158676  
C 0 3.574797 -1.314587 0.152250  
C 0 1.789357 -0.123724 -1.282399  
C 0 1.272439 -2.213386 -0.302711  
C 0 0.385188 -3.293580 0.129012  
N 0 1.133277 -3.979189 1.105880  
C 0 2.371744 -3.384712 1.324560  
S 0 -1.772241 -2.801816 -1.534177  
C 0 -3.447314 -3.506813 -1.277513  
C 0 -4.212123 -2.941392 -0.067728  
C 0 -4.294542 -1.417693 -0.103665  
O 0 -3.629150 -3.348321 1.148945  
O 0 -3.861407 -0.722077 0.795495  
O 0 -4.884543 -0.953042 -1.208395  
O 0 3.206498 -3.748585 2.155070  
O 0 3.750658 -0.404180 1.248337  
O 0 3.603048 -1.384297 -2.265502  
C 0 1.255005 0.886302 -0.264580  
C 0 -0.211896 1.275889 -0.496349  
C 0 -0.697699 2.350400 0.485235  
C 0 -2.169346 2.736889 0.286646  
C 0 -2.643647 3.817854 1.263776  
C 0 -0.866215 -3.614647 -0.263305  
C 0 4.206484 0.682279 -1.308172  
H 0 4.511114 -1.865477 -0.015991  
H 0 1.640331 0.253061 -2.297859  
H 0 0.778947 -4.738374 1.670489  
H 0 -3.372352 -4.592696 -1.176140  
H 0 -3.990784 -3.287025 -2.199930  
H 0 -5.240526 -3.328858 -0.132299  
H 0 -3.365186 -2.529992 1.611939  
H 0 -4.892311 0.023501 -1.165404  
H 0 3.831188 -0.951895 2.047232  
H 0 2.935421 -2.089105 -2.303799  
H 0 1.392533 0.496354 0.749626  
H 0 1.880634 1.784583 -0.334648  
H 0 -0.848498 0.386917 -0.406494  
H 0 -0.333934 1.641303 -1.526799  
H 0 -0.554436 1.992228 1.515663  
H 0 -0.069293 3.248016 0.384756  
H 0 -2.795762 1.841143 0.398004  
H 0 -2.314410 3.088195 -0.745177  
H 0 -3.697193 4.072187 1.099008  
H 0 -2.056986 4.738374 1.152386  
H 0 -2.540278 3.483847 2.303799  
H 0 -1.375661 -4.448712 0.207568  
H 0 4.135858 1.352698 -0.450919  
H 0 3.962445 1.234470 -2.221847  
H 0 5.240526 0.331218 -1.386647  
Free Energy (PCM/B3LYP/6-31G\*) = -1642.020830  
Number of imaginary frequencies = 0

#### 4-3E-c10

B3LYP/6-31G\* geometry  
O 0 1.245483 -1.417012 -0.491338  
C 0 2.446991 -3.485722 -0.682340  
C 0 3.566672 -1.602090 0.432932

C 0 3.788765 -2.939197 -0.325678  
C 0 2.553033 -0.753471 -0.394872  
C 0 1.321619 -2.733837 -0.725145  
C 0 0.170016 -3.574593 -1.053856  
N 0 0.717846 -4.868481 -1.197493  
C 0 2.081190 -4.875430 -0.932886  
S 0 -1.814876 -1.651129 -1.014388  
C 0 -3.562238 -1.940744 -1.503858  
C 0 -4.446796 -2.550953 -0.414061  
C 0 -4.516852 -1.643201 0.826495  
O 0 -3.987223 -3.839427 -0.001432  
O 0 -4.742350 -0.454079 0.758031  
O 0 -4.331945 -2.277916 1.988262  
O 0 2.813801 -5.872869 -0.896872  
O 0 4.547383 -3.846056 0.473851  
O 0 4.778830 -0.839870 0.405265  
C 0 2.294310 0.648375 0.142283  
C 0 1.489307 1.537325 -0.816354  
C 0 1.255715 2.947089 -0.258621  
C 0 0.447266 3.848456 -1.200563  
C 0 0.214153 5.253986 -0.636856  
C 0 -1.133264 -3.261670 -1.211079  
C 0 3.112676 -1.827140 1.879252  
H 0 4.365555 -2.692497 -1.232285  
H 0 2.940185 -0.690964 -1.420735  
H 0 0.168003 -5.712077 -1.281613  
H 0 -3.586952 -2.559845 -2.403577  
H 0 -3.948873 -0.950861 -1.757219  
H 0 -5.467782 -2.614154 -0.811652  
H 0 -4.587029 -4.519798 -0.345038  
H 0 -4.146596 -3.217995 1.760039  
H 0 4.358779 -4.737106 0.120238  
H 0 5.467782 -1.403903 0.795589  
H 0 1.771892 0.572576 1.103788  
H 0 3.269586 1.105277 0.342395  
H 0 0.521681 1.066083 -1.030930  
H 0 2.020147 1.608617 -1.776973  
H 0 0.734331 2.873842 0.707408  
H 0 2.225871 3.420685 -0.046478  
H 0 -0.521242 3.373314 -1.411784  
H 0 0.967801 3.922454 -2.166016  
H 0 -0.365416 5.872869 -1.331585  
H 0 1.165275 5.766776 -0.446637  
H 0 -0.335223 5.213378 0.311990  
H 0 -1.845788 -4.042663 -1.453655  
H 0 2.138635 -2.322882 1.930782  
H 0 3.045250 -0.870413 2.403577  
H 0 3.838729 -2.459345 2.396985  
Free Energy (PCM/B3LYP/6-31G\*) = -1642.020763  
Number of imaginary frequencies = 0

#### 4-3E-c11

B3LYP/6-31G\* geometry  
O 0 -1.226846 -1.918366 0.442928  
C 0 -2.508120 -3.583280 -0.739982  
C 0 -3.392129 -2.709711 1.387924  
C 0 -3.738138 -3.503651 0.099896  
C 0 -2.472244 -1.487325 1.093687  
C 0 -1.394580 -2.844173 -0.505754  
C 0 -0.334113 -3.214624 -1.444010  
N 0 -0.911965 -4.226958 -2.233801  
C 0 -2.237331 -4.466781 -1.877523  
S 0 1.661157 -1.510305 -0.557902  
C 0 3.299388 -1.342906 -1.390834  
C 0 4.370920 -0.993622 -0.356390  
C 0 4.597704 -2.101376 0.671413  
O 0 4.021816 0.197481 0.316667  
O 0 4.594837 -1.887716 1.868312  
O 0 4.836504 -3.292576 0.113639  
O 0 -2.993699 -5.264767 -2.435014  
O 0 -4.835451 -2.870661 -0.573568  
O 0 -2.638259 -3.656894 2.161135  
C 0 -3.095308 -0.342508 0.288163  
C 0 -2.168111 0.868832 0.117837  
C 0 -2.850183 2.034383 -0.610202  
C 0 -1.934735 3.249902 -0.805067  
C 0 -2.623349 4.414511 -1.524295

C O 0.928649 -2.752665 -1.566637  
 C O -4.647999 -2.294680 2.158971  
 H O -4.042082 -4.509631 0.422972  
 H O -2.119208 -1.100939 2.055872  
 H O -0.484500 -4.621815 -3.059617  
 H O 3.246108 -0.544162 -2.134168  
 H O 3.550018 -2.280133 -1.891546  
 H O 5.322241 -0.867642 -0.899394  
 H O 4.180259 0.026587 1.265224  
 H O 4.993485 -3.939521 0.829329  
 H O -4.941093 -3.338898 -1.418297  
 H O -2.412011 -3.234343 3.006285  
 H O -3.421087 -0.718633 -0.687490  
 H O -4.003705 -0.024742 0.813405  
 H O -1.268352 0.571146 -0.434629  
 H O -1.825802 1.207956 1.106819  
 H O -3.208944 1.690266 -1.591697  
 H O -3.745484 2.341159 -0.049122  
 H O -1.044000 2.944284 -1.372093  
 H O -1.570398 3.589070 0.175154  
 H O -1.943172 5.264767 -1.650770  
 H O -3.496571 4.766400 -0.960993  
 H O -2.971212 4.114215 -2.520544  
 H O 1.568774 -3.175281 -2.335815  
 H O -5.322241 -1.684345 -1.555999  
 H O -4.375592 -1.730676 3.059617  
 H O -5.184744 -3.196313 2.470588  
 Free Energy (PCM/B3LYP/6-31G\*) = -1642.020711  
 Number of imaginary frequencies = 0

#### 4-3Z-c1

B3LYP/6-31G\* geometry  
 O O 1.811819 -1.427858 0.157214  
 C O 2.224287 -3.703792 -0.482361  
 C O 4.165336 -2.240042 -0.116632  
 C O 3.666844 -3.529919 -0.824479  
 C O 3.129703 -1.110921 -0.408674  
 C O 1.440002 -2.699543 -0.027354  
 C O 0.096277 -3.209275 0.265057  
 N O 0.167934 -4.577493 -0.033508  
 C O 1.441036 -4.936017 -0.474858  
 S O -2.500439 -3.202264 1.167409  
 C O -3.607710 -1.755213 0.955526  
 C O -3.932408 -1.435510 -0.519420  
 C O -4.830465 -0.200225 -0.577166  
 O O -4.574523 -2.505885 -1.169924  
 O O -5.995660 -0.256109 -0.918725  
 O O -4.205369 0.917057 -0.188363  
 O O 1.810927 -6.076800 -0.768844  
 O O 4.458559 -4.648327 -0.425403  
 O O 5.370055 -1.792751 -0.748171  
 C O 3.510626 0.268251 0.113453  
 C O 2.590214 1.388966 -0.390667  
 C O 3.012794 2.773808 0.115920  
 C O 2.108721 3.907648 -0.384374  
 C O 2.540525 5.289033 0.118802  
 C O -0.952576 -2.499202 0.727669  
 C O 4.399671 -2.460209 1.381749  
 H O 3.796887 -3.365966 -1.906629  
 H O 2.993092 -1.066819 -1.497524  
 H O -0.586425 -5.239019 0.084427  
 H O -3.157291 -0.892143 1.453407  
 H O -4.526342 -2.021622 1.486347  
 H O -2.999249 -1.206418 -1.048310  
 H O -5.521829 -2.272046 -1.201992  
 H O -4.846706 1.654156 -0.222208  
 H O 3.933242 -5.441708 -0.642999  
 H O 5.995660 -2.535800 -0.707140  
 H O 3.509053 0.251383 1.210198  
 H O 4.541106 0.462338 -0.203048  
 H O 1.557659 1.184724 -0.079378  
 H O 2.588774 1.388864 -1.490508  
 H O 3.018061 2.773099 1.216060  
 H O 4.049410 2.973126 -0.193969  
 H O 1.073828 3.710143 -0.070750  
 H O 2.100279 3.904712 -1.483657  
 H O 1.876648 6.076800 -0.255691

H O 3.560026 5.528023 -0.208559  
 H O 2.525995 5.333391 1.214946  
 H O -0.819925 -1.435183 0.899961  
 H O 3.475869 -2.721599 1.906629  
 H O 4.813915 -1.555127 1.833375  
 H O 5.109653 -3.278803 1.525635  
 Free Energy (PCM/B3LYP/6-31G\*) = -1642.025760  
 Number of imaginary frequencies = 0

#### 4-3Z-c2

B3LYP/6-31G\* geometry  
 O O 0.629381 -0.700540 -0.693239  
 C O -0.148731 -2.955573 -0.953650  
 C O 1.968114 -2.597609 0.245721  
 C O 1.123645 -3.627260 -0.554649  
 C O 1.979795 -1.264480 -0.563567  
 C O -0.308225 -1.611785 -0.974006  
 C O -1.690075 -1.279703 -1.334175  
 N O -2.309933 -2.522109 -1.543051  
 C O -1.435706 -3.572678 -1.258417  
 S O -3.862527 0.260068 -2.003870  
 C O -4.219134 1.886324 -1.224518  
 C O -4.825813 1.801799 0.190047  
 C O -3.881322 1.140739 1.188718  
 O O -6.055135 1.115923 0.182804  
 O O -4.158235 0.106272 1.763410  
 O O -2.735548 1.814383 1.345198  
 O O -1.726330 -4.772695 -1.250091  
 O O 0.896601 -4.796670 0.231118  
 O O 3.335964 -3.020462 0.258684  
 C O 2.859853 -0.163957 0.014200  
 C O 3.036948 1.035553 -0.927737  
 C O 3.946466 2.121328 -0.339575  
 C O 4.143176 3.322582 -1.273296  
 C O 5.056938 4.401791 -0.683731  
 C O -2.223618 -0.046941 -1.447553  
 C O 1.452537 -2.419148 1.677876  
 H O 1.718397 -3.899811 -1.441672  
 H O 2.310418 -1.503969 -1.583161  
 H O -3.310633 -2.650030 -1.613153  
 H O -4.954401 2.359940 -1.879128  
 H O -3.311791 2.495906 -1.230640  
 H O -4.987988 2.837555 0.523101  
 H O -5.909480 0.295534 0.691235  
 H O -2.177325 1.325749 1.981754  
 H O 0.125556 -5.244120 -0.166978  
 H O 3.344674 -3.912358 0.645353  
 H O 2.435101 0.172345 0.968100  
 H O 3.835102 -0.610025 0.237176  
 H O 2.055134 1.467292 -1.161353  
 H O 3.457296 0.686749 -1.882302  
 H O 3.527033 2.469873 0.615979  
 H O 4.927201 1.683836 -0.100440  
 H O 3.163166 3.760960 -1.509718  
 H O 4.559193 2.972854 -2.228899  
 H O 5.178020 5.244120 -1.374637  
 H O 6.055135 4.000649 -0.468422  
 H O 4.649301 4.796400 0.255360  
 H O -1.596371 0.813023 -1.235105  
 H O 0.433536 -2.021486 1.699209  
 H O 2.105692 -1.737536 2.228899  
 H O 1.445529 -3.385885 2.187971  
 Free Energy (PCM/B3LYP/6-31G\*) = -1642.025120  
 Number of imaginary frequencies = 0

#### 4-3Z-c3

B3LYP/6-31G\* geometry  
 O O 2.179261 -1.383300 -0.285317  
 C O 3.203068 -3.522301 -0.653412  
 C O 4.640290 -1.671194 0.087888  
 C O 4.616546 -3.043106 -0.640612  
 C O 3.503386 -0.793400 -0.519861  
 C O 2.137442 -2.707576 -0.472031  
 C O 0.900294 -3.493183 -0.487524  
 N O 1.329311 -4.817512 -0.673314  
 C O 2.718430 -4.894937 -0.753788  
 S O -1.781846 -4.044795 -0.300254

C 0	-3.120554	-2.876084	-0.768581
C 0	-3.570895	-1.943964	0.371683
C 0	-4.778132	-1.125177	-0.086917
O 0	-2.548677	-1.061577	0.781531
O 0	-4.726261	0.079275	-0.242481
O 0	-5.861867	-1.875388	-0.311566
O 0	3.381577	-5.932030	-0.862809
O 0	5.496111	-3.962011	0.007070
O 0	5.847246	-0.979667	-0.251990
C 0	3.440353	0.636592	0.001747
C 0	2.472749	1.531045	-0.786334
C 0	2.423282	2.967652	-0.251456
C 0	1.468780	3.876648	-1.036339
C 0	1.417384	5.308766	-0.494184
C 0	-0.354577	-3.020532	-0.350194
C 0	4.524814	-1.825604	1.608109
H 0	4.979420	-2.861472	-1.665509
H 0	3.646664	-0.782572	-1.608766
H 0	0.729574	-5.630337	-0.668392
H 0	-3.949884	-3.519591	-1.074121
H 0	-2.795853	-2.295049	-1.635831
H 0	-3.876638	-2.555188	1.229451
H 0	-2.784573	-0.187285	0.415119
H 0	-6.580469	-1.290766	-0.624087
H 0	5.207388	-4.852096	-0.271629
H 0	6.580469	-1.569831	-0.008560
H 0	3.151445	0.619749	1.059863
H 0	4.453908	1.049094	-0.047954
H 0	1.465471	1.095854	-0.757340
H 0	2.774244	1.545896	-1.843914
H 0	2.120332	2.951808	0.806045
H 0	3.434917	3.399658	-0.272478
H 0	0.459361	3.441610	-1.018367
H 0	1.774010	3.895501	-2.092236
H 0	0.728094	5.932030	-1.075543
H 0	2.406711	5.781668	-0.531059
H 0	1.081708	5.324753	0.550206
H 0	-0.512189	-1.958448	-0.204122
H 0	3.571200	-2.273998	1.902485
H 0	4.616258	-0.849889	2.092236
H 0	5.326258	-2.473016	1.973174

Free Energy (PCM/B3LYP/6-31G\*) = -1642.024884  
Number of imaginary frequencies = 0

#### 4-3Z-c4

B3LYP/6-31G\* geometry

O 0	1.972108	-1.399061	-0.226598
C 0	2.328784	-3.710484	-0.764089
C 0	4.288908	-2.347913	-0.175106
C 0	3.811324	-3.626729	-0.917167
C 0	3.367796	-1.171899	-0.622753
C 0	1.552499	-2.652952	-0.428441
C 0	0.157630	-3.080254	-0.296824
N 0	0.178735	-4.453593	-0.598335
C 0	1.483200	-4.897284	-0.821150
S 0	-2.555267	-2.885043	0.073007
C 0	-3.378985	-1.604501	1.106114
C 0	-3.699715	-0.289192	0.382033
C 0	-4.541357	-0.501406	-0.873904
O 0	-2.523503	0.409784	0.038049
O 0	-4.198691	-0.086413	-1.963884
O 0	-5.676629	-1.165103	-0.634840
O 0	1.826613	-6.070261	-1.003050
O 0	4.477122	-4.777868	-0.398808
O 0	5.589949	-1.986205	-0.651489
C 0	3.757348	0.198935	-0.084890
C 0	2.975527	1.351996	-0.730243
C 0	3.394961	2.726082	-0.193057
C 0	2.629383	3.890169	-0.834977
C 0	3.054257	5.260464	-0.296986
C 0	-0.896609	-2.304075	0.023121
C 0	4.313133	-2.538476	1.345376
H 0	4.090227	-3.497773	-1.975821
H 0	3.375124	-1.151304	-1.720915
H 0	-0.582111	-5.089401	-0.399908
H 0	-2.752020	-1.396483	1.975821
H 0	-4.302872	-2.072812	1.454202

H 0	-4.304454	0.314867	1.077383
H 0	-2.579519	0.577594	-0.922860
H 0	-6.161181	-1.258840	-1.478561
H 0	3.921259	-5.543161	-0.641479
H 0	6.161181	-2.759374	-0.506621
H 0	3.611468	0.214544	1.002197
H 0	4.829778	0.327818	-0.266726
H 0	1.900753	1.205969	-0.562005
H 0	3.125630	1.325453	-1.819476
H 0	3.246264	2.752161	0.896721
H 0	4.473707	2.867043	-0.357140
H 0	1.551869	3.749477	-0.668959
H 0	2.776451	3.862394	-1.924052
H 0	2.491357	6.070261	-0.775442
H 0	4.120862	5.443054	-0.477827
H 0	2.885397	5.330572	0.784845
H 0	-0.743599	-1.250452	0.224201
H 0	3.314579	-2.727503	1.750724
H 0	4.722629	-1.647042	1.827626
H 0	4.944832	-3.393962	1.598343

Free Energy (PCM/B3LYP/6-31G\*) = -1642.024712  
Number of imaginary frequencies = 0

#### 4-3Z-c5

B3LYP/6-31G\* geometry

O 0	1.193774	-0.469531	-0.181786
C 0	-0.005824	-2.481043	-0.696764
C 0	2.342733	-2.687291	0.001521
C 0	1.182115	-3.382201	-0.763332
C 0	2.419047	-1.212778	-0.501240
C 0	0.072046	-1.162812	-0.406978
C 0	-1.278428	-0.584488	-0.357612
N 0	-2.136717	-1.652535	-0.655280
C 0	-1.417923	-2.837299	-0.800711
S 0	-3.085364	1.582765	-0.048251
C 0	-4.146373	0.847295	-1.372836
C 0	-5.337899	0.020978	-0.862128
C 0	-6.221665	0.804514	0.105853
O 0	-4.933383	-1.176312	-0.226820
O 0	-6.456952	0.409856	1.231098
O 0	-6.688785	1.939299	-0.420170
O 0	-1.903607	-3.963697	-0.956726
O 0	0.917066	-4.668564	-0.204862
O 0	3.587557	-3.268319	-0.402817
C 0	3.581756	-0.397466	0.049822
C 0	3.748031	0.965268	-0.637506
C 0	4.935297	1.766952	-0.089432
C 0	5.111907	3.131194	-0.768309
C 0	6.299941	3.928384	-0.219885
C 0	-1.556457	0.709990	-0.098593
C 0	2.175142	-2.790569	1.521144
H 0	1.522764	-3.506364	-1.804355
H 0	2.480590	-1.245123	-1.597482
H 0	-3.143252	-1.627946	-0.477635
H 0	-3.522729	0.233259	-2.024571
H 0	-4.521036	1.689824	-1.958833
H 0	-5.950286	-0.228370	-1.740549
H 0	-5.252497	-1.122586	0.696478
H 0	-7.240433	2.387206	0.251252
H 0	0.005652	-4.895172	-0.473491
H 0	3.516511	-4.222124	-0.228701
H 0	3.442676	-0.254554	1.128453
H 0	4.490221	-0.995391	-0.080315
H 0	2.826662	1.549820	-0.519029
H 0	3.880717	0.811015	-1.718391
H 0	4.806311	1.915429	0.993037
H 0	5.857787	1.179550	-0.209056
H 0	4.189772	3.717056	-0.846670
H 0	5.238558	2.982744	-1.850147
H 0	6.401194	4.895172	-0.726439
H 0	7.240433	3.380037	-0.355823
H 0	6.183562	4.124523	0.853318
H 0	-0.717264	1.351841	0.151305
H 0	1.273916	-2.277240	1.869509
H 0	3.041864	-2.354439	2.024571
H 0	2.095358	-3.841623	1.810921

Free Energy (PCM/B3LYP/6-31G\*) = -1642.024351

Number of imaginary frequencies = 0

#### 4-3Z-c6

B3LYP/6-31G\* geometry

O 0 1.744873 -1.400019 -0.220197  
C 0 2.126132 -3.708363 -0.755106  
C 0 4.073051 -2.322161 -0.177735  
C 0 3.606648 -3.606822 -0.916863  
C 0 3.136637 -1.156390 -0.620637  
C 0 1.339436 -2.659162 -0.418507  
C 0 -0.049955 -3.102024 -0.279050  
N 0 -0.013907 -4.476173 -0.572901  
C 0 1.293825 -4.905159 -0.804847  
S 0 -2.764413 -2.925539 0.101703  
C 0 -3.592899 -1.637373 1.122436  
C 0 -3.973603 -0.363576 0.364917  
C 0 -4.946430 -0.668678 -0.788186  
O 0 -2.830788 0.306065 -0.174325  
O 0 -5.948259 -1.335167 -0.641094  
O 0 -4.606081 -0.123501 -1.959950  
O 0 1.649428 -6.074147 -0.988028  
O 0 4.289682 -4.749362 -0.402115  
O 0 5.367371 -1.945544 -0.660647  
C 0 3.511925 0.217698 -0.080726  
C 0 2.715011 1.363439 -0.720635  
C 0 3.113188 2.739873 -0.173337  
C 0 2.331352 3.897087 -0.808090  
C 0 2.732982 5.269443 -0.257659  
C 0 -1.110383 -2.334024 0.040159  
C 0 4.107170 -2.512298 1.342651  
H 0 3.877560 -3.474739 -1.977189  
H 0 3.140150 -1.133713 -1.718733  
H 0 -0.769672 -5.119624 -0.380316  
H 0 -2.957344 -1.397233 1.977189  
H 0 -4.503823 -2.114915 1.490654  
H 0 -4.511180 0.289932 1.063618  
H 0 -2.678163 1.129139 0.315628  
H 0 -3.751867 0.342606 -1.807384  
H 0 3.742380 -5.521776 -0.641536  
H 0 5.948259 -2.711974 -0.518318  
H 0 3.368654 0.228642 1.006779  
H 0 4.582313 0.359579 -0.264796  
H 0 1.642088 1.200710 -0.555728  
H 0 2.867613 1.345953 -1.809662  
H 0 2.962536 2.756025 0.916388  
H 0 4.189919 2.898102 -0.334546  
H 0 1.255650 3.738143 -0.646448  
H 0 2.481797 3.880498 -1.896900  
H 0 2.158718 6.074147 -0.731173  
H 0 3.797036 5.470421 -0.433826  
H 0 2.560033 5.328066 0.824219  
H 0 -0.960851 -1.277469 0.226856  
H 0 3.112910 -2.712675 1.753108  
H 0 4.509099 -1.616282 1.822733  
H 0 4.749799 -3.360552 1.592337

Free Energy (PCM/B3LYP/6-31G\*) = -1642.024232

Number of imaginary frequencies = 0

#### 4-3Z-c7

B3LYP/6-31G\* geometry

O 0 2.113924 -1.286310 -0.243899  
C 0 2.152872 -3.665840 -0.553087  
C 0 4.176268 -2.585147 0.332672  
C 0 3.628910 -3.835803 -0.408919  
C 0 3.577074 -1.324562 -0.363075  
C 0 1.526768 -2.470223 -0.453503  
C 0 0.078702 -2.652580 -0.589892  
N 0 -0.085945 -4.035877 -0.757116  
C 0 1.138285 -4.701673 -0.721708  
S 0 -2.588186 -1.999262 -0.624282  
C 0 -3.204915 -0.373392 -1.244403  
C 0 -4.607333 -0.108191 -0.695256  
C 0 -4.634160 0.072079 0.822069  
O 0 -5.471729 -1.166298 -1.050473  
O 0 -5.400936 -0.545349 1.535394  
O 0 -3.767830 0.993194 1.255408  
O 0 1.300406 -5.923959 -0.795600

O 0 3.971795 -5.022606 0.305931  
O 0 5.586085 -2.482808 0.104133  
C 0 4.092684 0.010168 0.159231  
C 0 3.666252 1.208361 -0.700840  
C 0 4.195108 2.543161 -0.161244  
C 0 3.782309 3.750961 -1.012171  
C 0 4.310002 5.081633 -0.465720  
C 0 -0.862369 -1.687616 -0.553999  
C 0 3.881920 -2.632606 1.835780  
H 0 4.120463 -3.855989 -1.395292  
H 0 3.795697 -1.409645 -1.436133  
H 0 -0.973760 -4.510763 -0.838728  
H 0 -3.241362 -0.400464 -2.335610  
H 0 -2.515264 0.412811 -0.930060  
H 0 -4.955758 0.842101 -1.132537  
H 0 -5.975546 -1.384519 -0.242461  
H 0 -3.859540 1.067625 2.225688  
H 0 3.366740 -5.716445 -0.018636  
H 0 5.975546 -3.323333 0.399048  
H 0 3.744478 0.151241 1.189791  
H 0 5.185584 -0.053328 0.195593  
H 0 2.570790 1.246251 -0.759308  
H 0 4.027126 1.062158 -1.729381  
H 0 3.836380 2.686823 0.868844  
H 0 5.292745 2.501562 -0.098850  
H 0 2.685543 3.790309 -1.075570  
H 0 4.142467 3.608699 -2.040952  
H 0 3.998629 5.923959 -1.094253  
H 0 5.406277 5.084762 -0.422417  
H 0 3.938244 5.267354 0.549683  
H 0 -0.540876 -0.659238 -0.422505  
H 0 2.807616 -2.620808 2.043070  
H 0 4.343296 -1.776986 2.335610  
H 0 4.295145 -3.550577 2.261695

Free Energy (PCM/B3LYP/6-31G\*) = -1642.024172

Number of imaginary frequencies = 0

#### 4-3Z-c8

B3LYP/6-31G\* geometry

O 0 2.267619 -1.335270 -0.393308  
C 0 2.580106 -3.694674 -0.699459  
C 0 4.457355 -2.390500 0.208294  
C 0 4.063988 -3.697293 -0.535012  
C 0 3.726862 -1.207944 -0.498231  
C 0 1.820445 -2.578474 -0.601686  
C 0 0.403336 -2.926520 -0.737338  
N 0 0.398516 -4.316460 -0.940792  
C 0 1.689966 -4.839652 -0.859512  
S 0 -2.308725 -2.563386 -0.974586  
C 0 -3.200149 -1.244569 -0.043833  
C 0 -4.599581 -1.052585 -0.653429  
C 0 -5.379689 -0.042859 0.187681  
O 0 -5.321977 -2.261993 -0.721001  
O 0 -6.327673 -0.362410 0.876835  
O 0 -4.884174 1.196744 0.100615  
O 0 1.988256 -6.037799 -0.893888  
O 0 4.527416 -4.836854 0.188593  
O 0 5.849206 -2.129905 -0.004692  
C 0 4.083528 0.178368 0.022186  
C 0 3.530677 1.317720 -0.845858  
C 0 3.917484 2.705245 -0.319013  
C 0 3.379858 3.855262 -1.180262  
C 0 3.769646 5.238850 -0.649952  
C 0 -0.645165 -2.080354 -0.689462  
C 0 4.153351 -2.467166 1.708367  
H 0 4.567901 -3.664868 -1.514789  
H 0 3.963352 -1.271361 -1.569007  
H 0 -0.428245 -4.895209 -0.877257  
H 0 -2.625432 -0.317703 -0.114469  
H 0 -3.276242 -1.541278 1.006162  
H 0 -4.495584 -0.658729 -1.670705  
H 0 -5.897877 -2.281571 0.066828  
H 0 -5.407723 1.777736 0.687278  
H 0 3.991360 -5.590964 -0.123528  
H 0 6.327673 -2.916716 0.306925  
H 0 3.714885 0.282987 1.050088  
H 0 5.176332 0.239285 0.065540



H O 2.437240 1.239376 -0.901507  
H O 3.902876 1.201969 -1.874278  
H O 3.546994 2.820343 0.710525  
H O 5.013537 2.779065 -0.258670  
H O 2.284691 3.780774 -1.239873  
H O 3.749932 3.739898 -2.208933  
H O 3.371224 6.037799 -1.285935  
H O 4.859910 5.355186 -0.611639  
H O 3.384272 5.396851 0.365098  
H O -0.451625 -1.027274 -0.510244  
H O 3.082932 -2.581375 1.903850  
H O 4.505078 -1.561435 2.208933  
H O 4.667170 -3.328496 2.142865  
Free Energy (PCM/B3LYP/6-31G\*) = -1642.023823  
Number of imaginary frequencies = 0

#### 4-3Z-c9

B3LYP/6-31G\* geometry  
O O -1.984530 -1.820143 0.858697  
C O -2.565481 -3.607905 -0.652832  
C O -4.123500 -3.039302 -1.173571  
C O -3.965046 -3.809611 -0.170689  
C O -3.424311 -1.651604 -1.140285  
C O -1.723107 -2.676201 -0.139143  
C O -0.421306 -2.747750 -0.805727  
N O -0.555206 -3.797572 -1.724914  
C O -1.851194 -4.322727 -1.717116  
S O 2.205077 -2.163459 -1.350773  
C O 2.987114 -0.521497 -1.069058  
C O 3.566522 -0.308625 0.336706  
C O 4.581852 -1.382173 0.720594  
O O 2.548779 -0.263293 1.312580  
O O 4.478357 -2.042359 1.736094  
O O 5.580604 -1.493732 -0.160660  
O O -2.266774 -5.200387 -2.472250  
O O -4.941066 -3.351326 -1.118524  
O O -3.498858 -3.822468 2.202989  
C O -4.005482 -0.603127 0.189850  
C O -3.303941 0.759121 0.284074  
C O -3.937816 1.814509 -0.631007  
C O -3.252038 3.184154 -0.546535  
C O -3.886602 4.233898 -1.464653  
C O 0.648956 -1.966765 -0.556683  
C O -5.587022 -2.919464 1.589253  
H O -4.145622 -4.870385 0.053508  
H O -3.423032 -1.268999 2.164624  
H O 0.110827 -4.008660 -2.455355  
H O 2.253073 0.258935 -1.280925  
H O 3.783351 -0.453693 -1.814391  
H O 4.106249 0.651746 0.313800  
H O 2.785808 -0.934003 1.982301  
H O 6.189484 -2.191348 0.152317  
H O -4.742682 -3.803563 -1.955609  
H O -2.537282 -3.789647 2.068360  
H O -3.975751 -0.981503 -0.837590  
H O -5.065950 -0.479287 0.440573  
H O -2.242956 0.644678 0.028470  
H O -3.335153 1.112820 1.325200  
H O -3.908639 1.458337 -1.671555  
H O -5.002425 1.926296 -0.376895  
H O -2.188008 3.071830 -0.798921  
H O -3.282874 3.540179 0.493087  
H O -3.376437 5.200387 -1.379771  
H O -4.943278 4.391346 -1.214895  
H O -3.837968 3.922033 -2.515418  
H O 0.584075 -1.196285 0.202203  
H O -6.189484 -2.448035 0.812261  
H O -5.671771 -2.341406 2.515418  
H O -5.985476 -3.922311 1.773878  
Free Energy (PCM/B3LYP/6-31G\*) = -1642.023746  
Number of imaginary frequencies = 0

#### 4-3Z-c10

B3LYP/6-31G\* geometry  
O O 0.652724 -0.568253 -0.174220  
C O 0.489219 -2.897844 -0.721581  
C O 2.696735 -2.000966 -0.101695

C O 1.954297 -3.136743 -0.862008  
C O 2.073979 -0.643022 -0.554912  
C O -0.033859 -1.696095 -0.384332  
C O -1.489046 -1.803354 -0.257432  
N O -1.771819 -3.146810 -0.562386  
C O -0.597321 -3.867904 -0.785491  
S O -4.089037 -0.999881 0.120167  
C O -4.599834 0.461942 1.114207  
C O -4.584407 1.802755 0.366027  
C O -5.418560 1.772458 -0.912186  
O O -3.268384 2.202231 0.050307  
O O -4.959376 2.078822 -1.995296  
O O -6.683654 1.396768 -0.701002  
O O -0.521619 -5.087150 -0.971726  
O O 2.350691 -4.408812 -0.349383  
O O 4.055769 -1.967662 -0.549200  
C O 2.690071 0.642657 -0.000941  
C O 4.007719 1.087125 -0.653764  
C O 4.456297 2.468114 -0.157860  
C O 5.770613 2.944206 -0.789992  
C O 6.213034 4.324224 -0.292534  
C O -2.342449 -0.810943 0.063520  
C O 2.644724 -2.199726 1.417383  
H O 2.266944 -3.063494 -1.916447  
H O 2.097394 -0.615815 -1.652398  
H O -2.656507 -3.599057 -0.374794  
H O -3.958227 0.532150 1.995296  
H O -5.615127 0.233829 1.447777  
H O -5.049106 2.543088 1.036934  
H O -3.258970 2.365060 -0.913087  
H O -7.153292 1.406451 -1.558214  
H O 1.643067 -5.033421 -0.599417  
H O 4.412096 -2.860841 -0.404089  
H O 1.937964 1.425753 -0.163331  
H O 2.814890 0.559399 1.085126  
H O 3.879384 1.118505 -1.745627  
H O 4.790262 0.348455 -0.455168  
H O 3.666361 3.205433 -0.365207  
H O 4.570077 2.443035 0.936271  
H O 5.658512 2.967824 -1.883354  
H O 6.559989 2.208550 -0.580208  
H O 7.153292 4.636159 -0.761739  
H O 6.366363 4.322593 0.793835  
H O 5.457754 5.087150 -0.518928  
H O -1.955761 0.181320 0.262583  
H O 1.623776 -2.138765 1.805345  
H O 3.253427 -1.441725 1.917024  
H O 3.041955 -3.186299 1.669479  
Free Energy (PCM/B3LYP/6-31G\*) = -1642.023580  
Number of imaginary frequencies = 0

#### 4-3Z-c11

B3LYP/6-31G\* geometry  
O O -1.052124 0.089025 -0.569495  
C O 0.400857 1.940119 -1.037926  
C O -1.814443 2.429407 -0.094430  
C O -0.634710 3.008250 -0.922296  
C O -2.171537 1.032402 -0.690936  
C O 0.139382 0.627011 -0.854023  
C O 1.384278 -0.147563 -0.974044  
N O 2.380390 0.809908 -1.190609  
C O 1.838619 2.090968 -1.253866  
S O 2.921375 -2.512580 -0.940717  
C O 4.207753 -1.637404 0.066118  
C O 5.411114 -1.168588 -0.763424  
C O 6.518387 -0.611907 0.133649  
O O 5.048560 -0.165482 -1.697693  
O O 6.980848 0.500814 -0.027824  
O O 6.919704 -1.476214 1.068407  
O O 2.471796 3.137127 -1.431618  
O O -0.130022 4.190202 -0.301864  
O O -2.983312 3.224481 -0.322193  
C O -3.382967 0.355609 -0.063421  
C O -3.856297 -0.889856 -0.826924  
C O -5.076479 -1.551605 -0.175100  
C O -5.576357 -2.790541 -0.929703  
C O -6.792116 -3.448325 -0.269008

C 0 1.486794 -1.488088 -0.864222  
 C 0 -1.492534 2.371881 1.403030  
 H 0 -1.042885 3.268329 -1.912582  
 H 0 -2.341583 1.170813 -1.1767055  
 H 0 3.352195 0.584363 -1.415174  
 H 0 4.546605 -2.360620 0.810515  
 H 0 3.738310 -0.800143 0.586642  
 H 0 5.834785 -2.032313 -1.295640  
 H 0 5.692435 0.561940 -1.574137  
 H 0 7.635667 -1.058635 1.586944  
 H 0 0.763314 4.326990 -0.671000  
 H 0 -2.743539 4.138375 -0.093153  
 H 0 -3.145380 0.086337 0.973093  
 H 0 -4.187736 1.097761 -0.025413  
 H 0 -3.035826 -1.616330 -0.889390  
 H 0 -4.102268 -0.609141 -1.861464  
 H 0 -4.827473 -1.833491 0.858804  
 H 0 -5.892736 -0.817468 -0.102698  
 H 0 -4.759541 -3.522451 -1.004768  
 H 0 -5.828551 -2.507980 -1.961725  
 H 0 -7.126726 -4.326990 -0.832485  
 H 0 -7.635667 -2.749470 -0.208199  
 H 0 -6.558969 -3.775312 0.751967  
 H 0 0.567178 -2.050174 -0.736106  
 H 0 -0.659849 1.694952 1.616414  
 H 0 -2.368920 2.033518 1.961725  
 H 0 -1.215121 3.367750 1.758268  
 Free Energy (PCM/B3LYP/6-31G\*) = -1642.023468  
 Number of imaginary frequencies = 0

### 5-3R-c1

B3LYP/6-31G\* geometry  
 O 0 -1.413341 0.407573 -0.030300  
 C 0 -3.623934 -0.332632 -0.542766  
 C 0 -1.920752 -2.048478 -0.077623  
 C 0 -3.283821 -1.771789 -0.772285  
 C 0 -0.935245 -0.912124 -0.486214  
 C 0 -2.717645 0.592296 -0.190645  
 C 0 -3.373879 1.945296 0.033659  
 O 0 -4.781905 1.636238 -0.226719  
 C 0 -4.928513 0.308011 -0.560285  
 C 0 -2.914150 3.029611 -0.925994  
 O 0 -6.018569 -0.178104 -0.802917  
 O 0 -4.271275 -2.660107 -0.257050  
 O 0 -1.344214 -3.231947 -0.636591  
 C 0 -2.067370 -2.192601 1.441656  
 C 0 0.487375 -1.064191 0.033623  
 C 0 1.471794 -0.057016 -0.577960  
 C 0 2.903948 -0.241073 -0.060634  
 C 0 3.900982 0.757295 -0.662672  
 C 0 5.331328 0.564658 -0.148320  
 O 0 -3.226880 2.428765 1.332066  
 H 0 -3.140480 -1.967314 -1.846357  
 H 0 -0.926652 -0.861870 -1.582496  
 H 0 -1.850781 3.230716 -0.7711002  
 H 0 -3.483658 3.942843 -0.733917  
 H 0 -3.073189 2.714087 -1.959733  
 H 0 -5.133650 -2.327390 -0.564590  
 H 0 -1.996098 -3.942843 -0.514052  
 H 0 -2.787870 -2.982610 1.667862  
 H 0 -2.422685 -1.270581 1.911847  
 H 0 -1.105110 -2.460590 1.884900  
 H 0 0.484160 -0.964187 1.125783  
 H 0 0.808217 -2.086527 -0.194136  
 H 0 1.463641 -0.161857 -1.672614  
 H 0 1.133246 0.964453 -0.361515  
 H 0 2.910762 -0.143582 1.035149  
 H 0 3.240332 -1.265717 -0.278037  
 H 0 3.566326 1.780606 -0.440992  
 H 0 3.890133 0.663198 -1.757867  
 H 0 5.380261 0.686120 0.940991  
 H 0 6.018569 1.291721 -0.596160  
 H 0 5.705351 -0.438856 -0.386529  
 H 0 -3.480764 1.729604 1.959733  
 Free Energy (PCM/B3LYP/6-31G\*) = -997.782624  
 Number of imaginary frequencies = 0

### 5-3R-c2

B3LYP/6-31G\* geometry  
 O 0 -1.410565 0.410419 -0.010353  
 C 0 -3.621299 -0.331946 -0.518274  
 C 0 -1.920053 -2.044109 -0.042733  
 C 0 -3.280435 -1.771539 -0.743850  
 C 0 -0.933077 -0.911969 -0.458894  
 C 0 -2.714871 0.592208 -0.167178  
 C 0 -3.373706 1.939182 0.061684  
 O 0 -4.781779 1.634788 -0.208850  
 C 0 -4.928097 0.303340 -0.521564  
 C 0 -2.927789 3.034122 -0.896860  
 O 0 -6.019222 -0.191041 -0.745472  
 O 0 -4.270950 -2.656981 -0.229739  
 O 0 -1.342970 -3.233660 -0.588156  
 C 0 -2.072514 -2.170616 1.477539  
 C 0 0.489175 -1.062090 0.062438  
 C 0 1.473441 -0.054617 -0.548894  
 C 0 2.905492 -0.238572 -0.031193  
 C 0 3.902060 0.762194 -0.630013  
 C 0 5.332358 0.568980 -0.115710  
 O 0 -3.208981 2.277964 1.402893  
 H 0 -3.133211 -1.971179 -1.816766  
 H 0 -0.923844 -0.868124 -1.555477  
 H 0 -1.868936 3.253735 -0.735138  
 H 0 -3.513638 3.942206 -0.719236  
 H 0 -3.075444 2.723075 -1.934211  
 H 0 -5.133949 -2.306437 -0.515948  
 H 0 -1.996665 -3.942206 -0.461840  
 H 0 -2.796380 -2.955817 1.709757  
 H 0 -2.426873 -1.241485 1.934211  
 H 0 -1.112766 -2.436608 1.927499  
 H 0 0.484949 -0.961153 1.154482  
 H 0 0.811020 -2.084375 -0.164156  
 H 0 1.465613 -0.159025 -1.643610  
 H 0 1.134628 0.966685 -0.332114  
 H 0 2.911531 -0.143745 1.064826  
 H 0 3.242924 -1.262387 -0.250862  
 H 0 3.566654 1.784618 -0.405352  
 H 0 3.891657 0.671389 -1.725495  
 H 0 5.380693 0.686728 0.974038  
 H 0 6.019222 1.298135 -0.560730  
 H 0 5.707304 -0.433407 -0.357182  
 H 0 -3.512534 3.193613 1.528778  
 Free Energy (PCM/B3LYP/6-31G\*) = -997.782218  
 Number of imaginary frequencies = 0

### 5-3R-c3

B3LYP/6-31G\* geometry  
 O 0 1.083878 -0.542907 -0.088959  
 C 0 3.277626 0.390962 -0.208161  
 C 0 1.388998 1.939907 0.095790  
 C 0 2.856145 1.814095 -0.401120  
 C 0 0.569737 0.769662 -0.527333  
 C 0 2.408377 -0.620355 -0.057307  
 C 0 3.133370 -1.935586 0.181618  
 O 0 4.533703 -1.508201 0.157147  
 C 0 4.618429 -0.151141 -0.065756  
 C 0 2.907168 -2.978818 -0.899301  
 O 0 5.688969 0.427959 -0.107825  
 O 0 3.680445 2.735242 0.307068  
 O 0 0.806459 3.118365 -0.467591  
 C 0 1.299035 1.978849 1.625833  
 C 0 -0.920225 0.781986 -0.214870  
 C 0 -1.723364 -0.229441 -1.047669  
 C 0 -3.240109 -0.170283 -0.801698  
 C 0 -3.684791 -0.614940 0.599275  
 C 0 -5.208036 -0.606869 0.767650  
 O 0 2.838801 -2.520814 1.411597  
 H 0 2.853970 2.072739 -1.471450  
 H 0 0.722993 0.800474 -1.613610  
 H 0 1.852157 -3.265048 -0.918138  
 H 0 3.514029 -3.860914 -0.678232  
 H 0 3.188957 -2.580747 -1.876768  
 H 0 4.603136 2.490915 0.112548  
 H 0 1.376950 3.860914 -0.205753  
 H 0 1.919022 2.792164 2.011079

H O 1.645129 1.047140 2.083755  
H O 0.264767 2.152833 1.932860  
H O -1.058697 0.593444 0.855136  
H O -1.283837 1.796543 -0.412887  
H O -1.529466 -0.039662 -2.112514  
H O -1.360364 -1.245202 -0.843073  
H O -3.598712 0.852754 -0.989278  
H O -3.737445 -0.808206 -1.545837  
H O -3.235948 0.036249 1.360952  
H O -3.299120 -1.625821 0.794531  
H O -5.618009 0.397678 0.604604  
H O -5.501534 -0.927509 1.773860  
H O -5.688969 -1.281035 0.047955  
H O 2.952884 -1.855293 2.112514  
Free Energy (PCM/B3LYP/6-31G\*) = -997.782109  
Number of imaginary frequencies = 0

### 5-3R-c4

B3LYP/6-31G\* geometry

O O 1.874163 -0.505798 -1.306912  
C O 3.497691 -0.199114 0.429325  
C O 2.511965 1.803823 -0.612303  
C O 3.307679 1.271840 0.617562  
C O 1.361226 0.851925 -1.031187  
C O 2.814012 -0.921496 -0.475743  
C O 3.246739 -2.377254 -0.459631  
O O 4.262348 -2.374957 0.585308  
C O 4.419662 -1.101985 1.105396  
C O 3.858393 -2.867012 -1.761245  
O O 5.224445 -0.876381 1.986715  
O O 2.605904 1.593637 1.823174  
O O 3.393922 1.772922 -1.743842  
C O 1.997489 3.227088 -0.384151  
C O 0.178475 0.736605 -0.067369  
C O -0.918292 -0.216887 -0.564068  
C O -2.138370 -0.246511 0.364995  
C O -3.238818 -1.204982 -0.108502  
C O -4.457545 -1.229372 0.819685  
O O 2.210473 -3.249938 -0.117627  
H O 4.283930 1.780593 0.619676  
H O 1.016548 1.181098 -2.014596  
H O 3.110853 -2.827205 -2.558059  
H O 4.191707 -3.900535 -1.634078  
H O 4.711418 -2.243034 -2.037930  
H O 3.115651 1.214060 2.558059  
H O 4.100321 2.421396 -1.586647  
H O 2.849599 3.900535 -0.233367  
H O 1.360141 3.298580 0.498534  
H O 1.441574 3.572131 -1.262029  
H O 0.537279 0.426719 0.920225  
H O -0.246091 1.739732 0.058334  
H O -1.235338 0.085677 -1.572889  
H O -0.506830 -1.229465 -0.659973  
H O -1.818543 -0.534431 1.377498  
H O -2.554723 0.767925 0.453620  
H O -2.822783 -2.218871 -0.193888  
H O -3.555639 -0.918978 -1.121542  
H O -4.177677 -1.545304 1.832381  
H O -5.224445 -1.922094 0.454288  
H O -4.915441 -0.235446 0.897763  
H O 1.796101 -2.933918 0.704280  
Free Energy (PCM/B3LYP/6-31G\*) = -997.780978  
Number of imaginary frequencies = 0

### 5-3R-c5

B3LYP/6-31G\* geometry

O O 1.896211 -0.456216 -1.333625  
C O 3.510296 -0.188548 0.420216  
C O 2.550324 1.836171 -0.606667  
C O 3.337980 1.285986 0.620979  
C O 1.381846 0.901406 -1.027370  
C O 2.814834 -0.899591 -0.485290  
C O 3.213842 -2.365300 -0.464612  
O O 4.224316 -2.382151 0.585718  
C O 4.406329 -1.114824 1.107071  
C O 3.819572 -2.874360 -1.761474  
O O 5.206106 -0.904941 1.995310

O O 2.635425 1.593490 1.829562  
O O 3.465324 1.930945 -1.708082  
C O 2.059179 3.261448 -0.367662  
C O 0.206791 0.767291 -0.057597  
C O -0.896295 -0.174014 -0.563989  
C O -2.112961 -0.212536 0.369268  
C O -3.218953 -1.159300 -0.114822  
C O -4.435041 -1.192149 0.816558  
O O 2.155683 -3.210660 -0.124499  
H O 4.314354 1.789208 0.619432  
H O 1.029534 1.245531 -2.002898  
H O 3.077518 -2.817941 -2.562366  
H O 4.124848 -3.915761 -1.629021  
H O 4.690691 -2.274452 -2.035156  
H O 3.156970 1.225893 2.562366  
H O 3.741801 1.035200 -1.962406  
H O 2.926598 3.915761 -0.235036  
H O 1.436798 3.328937 0.524947  
H O 1.491748 3.616248 -1.234210  
H O 0.571435 0.439466 0.921950  
H O -0.212789 1.769906 0.089210  
H O -1.216042 0.144923 -1.566840  
H O -0.489601 -1.186879 -0.676568  
H O -1.790740 -0.516900 1.376160  
H O -2.524661 0.802191 0.474389  
H O -2.807538 -2.173588 -0.216346  
H O -3.537515 -0.857056 -1.122581  
H O -4.153674 -1.524539 1.823550  
H O -5.206106 -1.875853 0.443033  
H O -4.888210 -0.197470 0.910889  
H O 1.752559 -2.890368 0.701408  
Free Energy (PCM/B3LYP/6-31G\*) = -997.780935  
Number of imaginary frequencies = 0

### 5-3R-c6

B3LYP/6-31G\* geometry

O O 1.883216 -0.496674 -1.308189  
C O 3.502886 -0.196219 0.433392  
C O 2.525545 1.810670 -0.603108  
C O 3.317986 1.276009 0.622023  
C O 1.368774 0.856926 -1.022724  
C O 2.821543 -0.915514 -0.475590  
C O 3.251011 -2.372163 -0.460607  
O O 4.263058 -2.373871 0.587478  
C O 4.420897 -1.102195 1.111078  
C O 3.865426 -2.861925 -1.760910  
O O 5.222800 -0.880428 1.995811  
O O 2.610820 1.598815 1.823099  
O O 3.508529 1.801617 -1.649064  
C O 2.016539 3.235326 -0.371454  
C O 0.185401 0.734385 -0.058710  
C O -0.912539 -0.216099 -0.558595  
C O -2.132859 -0.247277 0.370158  
C O -3.234986 -1.201968 -0.107050  
C O -4.454693 -1.226011 0.819868  
O O 2.211403 -3.242881 -0.123084  
H O 4.291680 1.784798 0.615040  
H O 1.007958 1.185648 -2.002731  
H O 3.120440 -2.819399 -2.559994  
H O 4.195623 -3.896475 -1.633923  
H O 4.720962 -2.239891 -2.034175  
H O 3.122905 1.226901 2.559994  
H O 3.096247 2.170568 -2.447757  
H O 2.876098 3.896475 -0.223531  
H O 1.372945 3.305175 0.506843  
H O 1.456991 3.590567 -1.245281  
H O 0.546517 0.419156 0.926314  
H O -0.238266 1.737130 0.073849  
H O -1.229472 0.090276 -1.566381  
H O -0.502110 -1.228795 -0.658073  
H O -1.813770 -0.539371 1.381680  
H O -2.547404 0.767589 0.462321  
H O -2.821204 -2.216571 -0.194827  
H O -3.550173 -0.912428 -1.119607  
H O -4.176546 -1.545133 1.832032  
H O -5.222800 -1.916050 0.451942  
H O -4.910407 -0.231243 0.900014

H 0 1.796577 -2.927852 0.698959  
Free Energy (PCM/B3LYP/6-31G\*) = -997.780848  
Number of imaginary frequencies = 0

### 5-3R-c7

B3LYP/6-31G\* geometry

O 0 1.895521 -0.401078 -1.330476  
C 0 3.514619 -0.118699 0.416046  
C 0 2.543339 1.897642 -0.615852  
C 0 3.335249 1.355445 0.612144  
C 0 1.377790 0.956271 -1.030645  
C 0 2.818378 -0.835475 -0.483273  
C 0 3.228719 -2.294840 -0.458505  
O 0 4.255609 -2.301845 0.577942  
C 0 4.414781 -1.037153 1.107728  
C 0 3.842348 -2.809105 -1.753218  
O 0 5.206128 -0.818368 2.002083  
O 0 2.632622 1.663388 1.820567  
O 0 3.455765 1.992143 -1.719626  
C 0 2.046761 3.321826 -0.381564  
C 0 0.203690 0.823149 -0.059477  
C 0 -0.897763 -0.121463 -0.562927  
C 0 -2.115963 -0.157751 0.368364  
C 0 -3.219257 -1.108393 -0.114389  
C 0 -4.437307 -1.140583 0.814403  
O 0 2.121440 -3.035337 -0.042896  
H 0 4.309040 1.863921 0.608349  
H 0 1.023608 1.294757 -2.007518  
H 0 3.096786 -2.776402 -2.552363  
H 0 4.176506 -3.843313 -1.617904  
H 0 4.704421 -2.201718 -2.040831  
H 0 3.147320 1.284241 2.552363  
H 0 3.747068 1.097438 -1.960777  
H 0 2.911701 3.980129 -0.252548  
H 0 1.425233 3.389971 0.511599  
H 0 1.476585 3.671296 -1.248511  
H 0 0.569704 0.498056 0.920320  
H 0 -0.217354 1.825604 0.084624  
H 0 -1.216618 0.192531 -1.567732  
H 0 -0.489004 -1.133851 -0.669133  
H 0 -1.795013 -0.457885 1.376887  
H 0 -2.529739 0.856653 0.468815  
H 0 -2.805502 -2.122172 -0.211351  
H 0 -3.536363 -0.810502 -1.123951  
H 0 -4.157401 -1.468872 1.823133  
H 0 -5.206128 -1.827246 0.441600  
H 0 -4.892838 -0.146563 0.904285  
H 0 2.326360 -3.980129 -0.149814  
Free Energy (PCM/B3LYP/6-31G\*) = -997.780693  
Number of imaginary frequencies = 0

### 5-3R-c8

B3LYP/6-31G\* geometry

O 0 1.872632 -0.432895 -1.296863  
C 0 3.501400 -0.090796 0.427563  
C 0 2.487697 1.890862 -0.626217  
C 0 3.291276 1.378218 0.606130  
C 0 1.346638 0.922542 -1.034398  
C 0 2.822343 -0.828152 -0.467798  
C 0 3.286843 -2.271129 -0.450278  
O 0 4.319029 -2.245704 0.579629  
C 0 4.440177 -0.973852 1.106402  
C 0 3.912451 -2.752796 -1.752022  
O 0 5.236703 -0.729188 1.990846  
O 0 2.585566 1.699407 1.809780  
O 0 3.367471 1.860578 -1.759732  
C 0 1.958908 3.310693 -0.409316  
C 0 0.165002 0.805390 -0.069620  
C 0 -0.930527 -0.150080 -0.564932  
C 0 -2.151352 -0.178752 0.363193  
C 0 -3.250694 -1.138738 -0.109847  
C 0 -4.470782 -1.162025 0.816582  
O 0 2.212337 -3.059562 -0.034103  
H 0 4.260548 1.900380 0.604606  
H 0 0.998594 1.238538 -2.021020  
H 0 3.160126 -2.748683 -2.545497  
H 0 4.292360 -3.772073 -1.623788

H 0 4.744342 -2.106442 -2.043420  
H 0 3.090220 1.314682 2.545497  
H 0 4.067448 2.517422 -1.608630  
H 0 2.804780 3.994058 -0.268114  
H 0 1.324357 3.383846 0.475235  
H 0 1.396151 3.642086 -1.288085  
H 0 0.525659 0.496712 0.917543  
H 0 -0.261671 1.807688 0.055671  
H 0 -1.247326 0.150387 -1.574544  
H 0 -0.518280 -1.162317 -0.657609  
H 0 -1.832117 -0.464982 1.376310  
H 0 -2.568548 0.835558 0.449798  
H 0 -2.833899 -2.152529 -0.192531  
H 0 -3.566293 -0.854994 -1.123948  
H 0 -4.192113 -1.475593 1.830331  
H 0 -5.236703 -1.856060 0.451564  
H 0 -4.929488 -0.168245 0.891883  
H 0 2.458389 -3.994058 -0.144214  
Free Energy (PCM/B3LYP/6-31G\*) = -997.780553  
Number of imaginary frequencies = 0

### 5-3R-c9

B3LYP/6-31G\* geometry

O 0 1.880693 -0.426505 -1.296906  
C 0 3.506844 -0.087861 0.431415  
C 0 2.498827 1.896009 -0.617923  
C 0 3.300054 1.382323 0.609825  
C 0 1.352289 0.924520 -1.025315  
C 0 2.830189 -0.823296 -0.467066  
C 0 3.293432 -2.266596 -0.450660  
O 0 4.323143 -2.243479 0.581615  
C 0 4.443501 -0.972643 1.111293  
C 0 3.921608 -2.747546 -1.751432  
O 0 5.237609 -0.730405 1.998431  
O 0 2.588382 1.703904 1.808808  
O 0 3.478689 1.888815 -1.667133  
C 0 1.974244 3.316955 -0.398362  
C 0 0.170563 0.799751 -0.059776  
C 0 -0.926318 -0.152423 -0.558476  
C 0 -2.147602 -0.182819 0.369034  
C 0 -3.248875 -1.138165 -0.108901  
C 0 -4.470289 -1.161506 0.815773  
O 0 2.217167 -3.054597 -0.037942  
H 0 4.266051 1.905727 0.599128  
H 0 0.987488 1.239255 -2.008498  
H 0 3.171113 -2.742161 -2.546657  
H 0 4.300298 -3.767299 -1.623341  
H 0 4.754797 -2.101720 -2.040263  
H 0 3.095223 1.326732 2.546657  
H 0 3.060032 2.248215 -2.466876  
H 0 2.826875 3.989190 -0.260535  
H 0 1.333579 3.388184 0.481960  
H 0 1.407071 3.657414 -1.273157  
H 0 0.533986 0.485201 0.924483  
H 0 -0.255116 1.801632 0.073032  
H 0 -1.242857 0.152162 -1.567025  
H 0 -0.515258 -1.164829 -0.654969  
H 0 -1.829535 -0.474170 1.381039  
H 0 -2.562594 0.832031 0.459863  
H 0 -2.834709 -2.152763 -0.194795  
H 0 -3.562367 -0.849822 -1.122370  
H 0 -4.193881 -1.479466 1.828765  
H 0 -5.237609 -1.852109 0.447198  
H 0 -4.926379 -0.166747 0.894015  
H 0 2.462910 -3.989190 -0.147912  
Free Energy (PCM/B3LYP/6-31G\*) = -997.780411  
Number of imaginary frequencies = 0

### 5-3R-c10

B3LYP/6-31G\* geometry

O 0 2.182089 -0.941974 -0.012958  
C 0 3.886489 0.660587 -0.482453  
C 0 1.637434 1.497961 0.083700  
C 0 2.976554 1.836657 -0.633370  
C 0 1.182561 0.083217 -0.391490  
C 0 3.443974 -0.569975 -0.183733  
C 0 4.599633 -1.547794 -0.039861

O 0 5.752453 -0.678472 -0.284758  
C 0 5.337562 0.610582 -0.540712  
C 0 4.595466 -2.674500 -1.059337  
O 0 6.129390 1.509801 -0.758081  
O 0 3.516665 3.032446 -0.078109  
O 0 0.634523 2.398947 -0.391575  
C 0 1.762529 1.600167 1.608648  
C 0 -0.144784 -0.458495 0.138736  
C 0 -1.406940 0.149450 -0.491239  
C 0 -2.683247 -0.567955 -0.032050  
C 0 -3.961597 0.021549 -0.641661  
C 0 -5.235117 -0.696261 -0.182847  
O 0 4.695844 -2.117616 1.228146  
H 0 2.735123 2.003551 -1.694644  
H 0 1.166508 0.087868 -1.488473  
H 0 3.707284 -3.295704 -0.916095  
H 0 5.489032 -3.288234 -0.917636  
H 0 4.591108 -2.269919 -2.074156  
H 0 4.427053 3.111505 -0.415024  
H 0 0.977071 3.295704 -0.234701  
H 0 2.129424 2.593306 1.879328  
H 0 2.458686 0.862257 2.018790  
H 0 0.784969 1.452283 2.074156  
H 0 -0.131389 -1.536012 -0.070569  
H 0 -0.179225 -0.358825 1.229893  
H 0 -1.469514 1.213572 -0.244826  
H 0 -1.330907 0.088779 -1.586612  
H 0 -2.617126 -1.635433 -0.290248  
H 0 -2.752368 -0.523204 1.065136  
H 0 -3.892188 -0.020927 -1.737971  
H 0 -4.027801 1.087452 -0.381400  
H 0 -5.212268 -1.757883 -0.458875  
H 0 -6.129390 -0.253043 -0.636055  
H 0 -5.350415 -0.640153 0.906792  
H 0 4.667429 -1.409969 1.895584  
Free Energy (PCM/B3LYP/6-31G\*) = -997.780297  
Number of imaginary frequencies = 0

### 5-3R-c11

B3LYP/6-31G\* geometry

O 0 1.397583 -0.262215 -0.033131  
C 0 3.631832 0.450269 -0.544922  
C 0 1.916728 2.175046 -0.106605  
C 0 3.292551 1.889980 -0.780139  
C 0 0.925772 1.047048 -0.517649  
C 0 2.702096 -0.456244 -0.192541  
C 0 3.313591 -1.828000 0.024940  
O 0 4.711199 -1.579730 -0.282289  
C 0 4.911600 -0.255240 -0.641968  
C 0 2.773770 -2.907966 -0.898138  
O 0 6.010123 0.133433 -0.972834  
O 0 4.321415 2.732236 -0.281126  
O 0 1.488330 3.400332 -0.713633  
C 0 2.040102 2.330972 1.410527  
C 0 -0.506566 1.208176 -0.027716  
C 0 -1.475097 0.168555 -0.610457  
C 0 -2.916942 0.366235 -0.126432  
C 0 -3.896383 -0.667537 -0.696740  
C 0 -5.335873 -0.463963 -0.213145  
O 0 3.182395 -2.285672 1.338824  
H 0 3.158818 2.078302 -1.856941  
H 0 0.934776 0.981636 -1.613606  
H 0 1.709753 -3.063665 -0.701444  
H 0 3.313354 -3.840396 -0.711606  
H 0 2.907089 -2.616253 -1.942554  
H 0 4.040061 3.640829 -0.484821  
H 0 0.865165 3.840396 -0.113438  
H 0 2.802079 3.077453 1.643952  
H 0 2.322646 1.391228 1.893570  
H 0 1.087671 2.655075 1.843639  
H 0 -0.525683 1.159328 1.067814  
H 0 -0.839707 2.213746 -0.312473  
H 0 -1.447119 0.223652 -1.708252  
H 0 -1.133154 -0.838809 -0.340920  
H 0 -2.941769 0.320529 0.972449  
H 0 -3.257075 1.376678 -0.397869  
H 0 -3.556890 -1.676446 -0.422679

H 0 -3.869228 -0.624126 -1.794789  
H 0 -5.400286 -0.535644 0.879775  
H 0 -6.010123 -1.217059 -0.637002  
H 0 -5.714681 0.524091 -0.502877  
H 0 3.503892 -1.593311 1.942554  
Free Energy (PCM/B3LYP/6-31G\*) = -997.780252  
Number of imaginary frequencies = 0

### 5-3S-c1

B3LYP/6-31G\* geometry

O 0 1.412259 -0.657214 -0.198677  
C 0 3.623585 0.100165 -0.681326  
C 0 1.918711 1.800481 -0.175519  
C 0 3.281570 1.543400 -0.878310  
C 0 0.932580 0.675722 -0.613637  
C 0 2.717526 -0.835168 -0.357306  
C 0 3.375189 -2.192642 -0.166991  
O 0 4.782969 -1.875777 -0.419462  
C 0 4.929934 -0.535612 -0.701581  
C 0 3.237239 -2.766761 1.232943  
O 0 6.022578 -0.035821 -0.901909  
O 0 4.269125 2.419810 -0.343721  
O 0 1.341462 2.998688 -0.701488  
C 0 2.067057 1.901962 1.347017  
C 0 -0.487671 0.811954 -0.082940  
C 0 -1.474857 -0.179567 -0.715223  
C 0 -2.904111 -0.008213 -0.185424  
C 0 -3.904934 -0.992111 -0.804681  
C 0 -5.332260 -0.810300 -0.278020  
O 0 2.934435 -3.156787 -1.071634  
H 0 3.136469 1.764115 -1.947305  
H 0 0.919021 0.657445 -1.710791  
H 0 2.183052 -2.959586 1.449290  
H 0 3.633828 -2.066723 1.971963  
H 0 3.792244 -3.706904 1.290158  
H 0 5.133530 2.079048 -0.637235  
H 0 1.991633 3.706904 -0.556425  
H 0 2.793827 2.679771 1.594270  
H 0 2.415268 0.964306 1.791013  
H 0 1.107077 2.165260 1.797951  
H 0 -0.478449 0.683122 1.006148  
H 0 -0.810616 1.839649 -0.281871  
H 0 -1.472650 -0.046881 -1.806877  
H 0 -1.135305 -1.206166 -0.526545  
H 0 -2.904338 -0.131543 0.907772  
H 0 -3.241673 1.021261 -0.376542  
H 0 -3.569770 -2.020384 -0.608250  
H 0 -3.900249 -0.872999 -1.897479  
H 0 -5.375132 -0.956192 0.808543  
H 0 -6.022578 -1.526667 -0.738192  
H 0 -5.706806 0.198564 -0.491492  
H 0 2.977377 -2.789422 -1.971963  
Free Energy (PCM/B3LYP/6-31G\*) = -997.783130  
Number of imaginary frequencies = 0

### 5-3S-c2

B3LYP/6-31G\* geometry

O 0 1.412699 -0.539537 -0.209900  
C 0 3.623103 0.218019 -0.695124  
C 0 1.918536 1.917786 -0.186131  
C 0 3.280387 1.661115 -0.890519  
C 0 0.932781 0.792919 -0.624626  
C 0 2.717075 -0.716533 -0.372421  
C 0 3.375564 -2.070430 -0.187441  
O 0 4.786274 -1.753774 -0.429298  
C 0 4.929066 -0.418376 -0.727290  
C 0 3.252665 -2.654631 1.212838  
O 0 6.019262 0.081993 -0.941556  
O 0 4.268766 2.537860 -0.357190  
O 0 1.340528 3.116546 -0.710377  
C 0 2.068086 2.018420 1.336347  
C 0 -0.487949 0.928561 -0.095117  
C 0 -1.473308 -0.064792 -0.727398  
C 0 -2.903867 0.106250 -0.201111  
C 0 -3.902115 -0.880138 -0.820600  
C 0 -5.331019 -0.698763 -0.298108  
O 0 2.898498 -2.921026 -1.182399

H O 3.134080 1.882410 -1.959202  
H O 0.920099 0.774793 -1.721764  
H O 2.202597 -2.867358 1.431336  
H O 3.640807 -1.956878 1.959202  
H O 3.827123 -3.585150 1.274446  
H O 5.132000 2.198863 -0.656209  
H O 1.993965 3.823116 -0.572089  
H O 2.794322 2.796810 1.583351  
H O 2.417631 1.080783 1.779297  
H O 1.108182 2.280462 1.788214  
H O -0.479700 0.801142 0.994177  
H O -0.811699 1.955689 -0.295676  
H O -1.468848 0.065764 -1.819287  
H O -1.133256 -1.090763 -0.536272  
H O -2.906560 -0.014658 0.892376  
H O -3.242134 1.134932 -0.395265  
H O -3.566298 -1.907599 -0.620999  
H O -3.894697 -0.763571 -1.913653  
H O -5.376605 -0.842089 0.788698  
H O -6.019262 -1.417058 -0.758390  
H O -5.706208 0.309137 0.514989  
H O 3.206601 -3.823116 -0.988929  
Free Energy (PCM/B3LYP/6-31G\*) = -997.782655  
Number of imaginary frequencies = 0

### 5-3S-c3

B3LYP/6-31G\* geometry  
O O 1.083389 -0.709659 -0.200383  
C O 3.279305 0.221492 -0.294870  
C O 1.398787 1.765198 0.065232  
C O 2.862264 1.650955 -0.446302  
C O 0.571459 0.618954 -0.590835  
C O 2.407441 -0.791244 -0.171278  
C O 3.128472 -2.113461 0.034256  
O O 4.530970 -1.690311 0.015025  
C O 4.617846 -0.326327 -0.156148  
C O 2.831430 -2.790648 1.361594  
O O 5.687933 0.255746 -0.155746  
O O 3.695874 2.546805 0.282740  
O O 0.815072 2.962881 -0.454620  
C O 1.322027 1.753440 1.596283  
C O -0.916541 0.624602 -0.269035  
C O -1.726663 -0.354421 -1.133273  
C O -3.241742 -0.302901 -0.875624  
C O -3.678088 -0.801062 0.509779  
C O -5.200087 -0.796334 0.689284  
O O 2.895847 -3.038377 -0.981630  
H O 2.852929 1.941185 -1.508517  
H O 0.717670 0.685931 -1.676443  
H O 1.773655 -3.063268 1.406814  
H O 3.065933 -2.120072 2.191585  
H O 3.438615 -3.695959 1.444779  
H O 4.616204 2.282780 0.101609  
H O 1.385656 3.695959 -0.167623  
H O 1.940947 2.557705 2.001833  
H O 1.679493 0.809737 2.019610  
H O 0.289794 1.910687 1.918871  
H O -1.049276 0.398065 0.794352  
H O -1.278221 1.646592 -0.428303  
H O -1.539353 -0.125547 -2.191585  
H O -1.363586 -1.377345 -0.968715  
H O -3.599959 0.727113 -1.021304  
H O -3.744696 -0.910924 -1.640711  
H O -3.222080 -0.181540 1.293316  
H O -3.293829 -1.819853 0.662441  
H O -5.608755 0.215057 0.571888  
H O -5.487072 -1.158608 1.683169  
H O -5.687933 -1.438483 -0.054636  
H O 3.034235 -2.604053 -1.841490  
Free Energy (PCM/B3LYP/6-31G\*) = -997.781846  
Number of imaginary frequencies = 0

### 5-3S-c4

B3LYP/6-31G\* geometry  
O O 1.883754 -0.260338 -1.596562  
C O 3.527348 0.040458 0.124731  
C O 2.503666 2.047241 -0.871951

C O 3.316614 1.507315 0.342203  
C O 1.350004 1.090354 -1.284937  
C O 2.833921 -0.683788 -0.772490  
C O 3.292174 -2.134050 -0.784253  
O O 4.330162 -2.124649 0.239379  
C O 4.468127 -0.861638 0.782986  
C O 2.210917 -3.128734 -0.395330  
O O 5.264872 -0.637941 1.670718  
O O 2.613442 1.781529 1.558260  
O O 3.402736 2.169516 -1.983837  
C O 1.986884 3.461202 -0.618428  
C O 0.181880 0.936336 -0.310240  
C O -0.947779 0.046429 -0.848836  
C O -2.144961 -0.032316 0.106849  
C O -3.277249 -0.927827 -0.412511  
C O -4.474163 -1.000979 0.541059  
O O 3.825950 -2.542333 -2.006890  
H O 4.278544 2.037599 0.339267  
H O 0.987131 1.430392 -2.258140  
H O 1.408005 -3.108570 -1.137005  
H O 1.800636 -2.881226 0.586451  
H O 2.644057 -4.132077 -0.363779  
H O 3.143587 1.410117 2.282910  
H O 3.699115 1.282349 -2.244848  
H O 2.843815 4.132077 -0.501349  
H O 1.382052 3.513633 0.287085  
H O 1.394981 3.807562 -1.471908  
H O 0.550593 0.556126 0.648822  
H O -0.216096 1.938498 -0.111319  
H O -1.283243 0.434716 -1.821696  
H O -0.564094 -0.964339 -1.035670  
H O -1.806957 -0.406296 1.084689  
H O -2.536167 0.980178 0.286012  
H O -2.885867 -1.940032 -0.587582  
H O -3.611276 -0.556526 -1.391817  
H O -4.178070 -1.402648 1.518157  
H O -5.264872 -1.646181 0.141038  
H O -4.907462 -0.007190 0.709303  
H O 4.507855 -1.905378 -2.282910  
Free Energy (PCM/B3LYP/6-31G\*) = -997.781566  
Number of imaginary frequencies = 0

### 5-3S-c5

B3LYP/6-31G\* geometry  
O O 1.856347 -0.291778 -1.551218  
C O 3.504225 0.062646 0.153879  
C O 2.457197 2.036284 -0.876884  
C O 3.270022 1.525896 0.349418  
C O 1.321690 1.060552 -1.282963  
C O 2.827770 -0.678460 -0.741997  
C O 3.340372 -2.109336 -0.769895  
O O 4.383592 -2.072189 0.247203  
C O 4.484823 -0.804670 0.792751  
C O 2.306086 -3.155384 -0.389080  
O O 5.289840 -0.557564 1.668136  
O O 2.557968 1.822710 1.555159  
O O 3.331729 2.015763 -2.014747  
C O 1.920038 3.451861 -0.652976  
C O 0.142324 0.932842 -0.317217  
C O -0.975487 0.019878 -0.841505  
C O -2.181260 -0.039884 0.104687  
C O -3.302640 -0.958019 -0.398583  
C O -4.507222 -1.012587 0.546567  
O O 3.883397 -2.475243 -2.003120  
H O 4.230724 2.063428 0.352766  
H O 0.969803 1.377324 -2.268053  
H O 1.494689 -3.156322 -1.121763  
H O 1.896605 -2.942406 0.601207  
H O 2.780287 -4.140575 -0.379367  
H O 3.070173 1.443851 2.288614  
H O 4.027096 2.677995 -1.865810  
H O 2.762791 4.140575 -0.519253  
H O 1.294336 3.519475 0.238261  
H O 1.346181 3.781212 -1.525287  
H O 0.502158 0.582455 0.656422  
H O -0.264811 1.937366 -0.152717  
H O -1.303985 0.377692 -1.828360

H 0 -0.582620 -0.992868 -0.995333  
H 0 -1.849918 -0.383085 1.096005  
H 0 -2.581212 0.974501 0.251014  
H 0 -2.902705 -1.971969 -0.541235  
H 0 -3.630717 -0.617217 -1.390889  
H 0 -4.216664 -1.383820 1.537267  
H 0 -5.289840 -1.674855 0.158705  
H 0 -4.949068 -0.017615 0.682504  
H 0 4.507523 -1.785245 -2.288614  
Free Energy (PCM/B3LYP/6-31G\*) = -997.781261  
Number of imaginary frequencies = 0

### 5-3S-c6

B3LYP/6-31G\* geometry  
O 0 1.864969 -0.286126 -1.335835  
C 0 3.509705 0.067101 0.373410  
C 0 2.467703 2.041307 -0.654858  
C 0 3.277675 1.531521 0.567860  
C 0 1.327075 1.061721 -1.059486  
C 0 2.836702 -0.672843 -0.525784  
C 0 3.350702 -2.103039 -0.555404  
O 0 4.390376 -2.067392 0.465071  
C 0 4.489019 -0.800873 1.013801  
C 0 2.316151 -3.151105 -0.180955  
O 0 5.290946 -0.555544 1.892357  
O 0 2.558502 1.829263 1.768088  
O 0 3.442714 2.042833 -1.708660  
C 0 1.934792 3.458392 -0.430221  
C 0 0.147407 0.926459 -0.093318  
C 0 -0.971325 0.016177 -0.620368  
C 0 -2.177927 -0.044639 0.324763  
C 0 -3.300819 -0.958647 -0.182664  
C 0 -4.507287 -1.012192 0.760153  
O 0 3.898395 -2.465219 -1.787884  
H 0 4.234795 2.070885 0.562462  
H 0 0.958603 1.376144 -2.041452  
H 0 1.507265 -3.150927 -0.916413  
H 0 1.902981 -2.941040 0.808430  
H 0 2.791235 -4.135877 -0.172090  
H 0 3.071459 1.457480 2.504345  
H 0 3.019345 2.405728 -2.504345  
H 0 2.784456 4.135877 -0.299903  
H 0 1.302242 3.525060 0.456258  
H 0 1.357315 3.795985 -1.299322  
H 0 0.509900 0.571131 0.877498  
H 0 -0.259131 1.930225 0.077922  
H 0 -1.299266 0.377072 -1.606378  
H 0 -0.579448 -0.996578 -0.776926  
H 0 -1.848123 -0.391822 1.315182  
H 0 -2.575893 0.970087 0.474113  
H 0 -2.903341 -1.973306 -0.327071  
H 0 -3.626214 -0.614544 -1.174727  
H 0 -4.219551 -1.386406 1.750547  
H 0 -5.290946 -1.671489 0.369344  
H 0 -4.946724 -0.016345 0.897493  
H 0 4.525239 -1.775256 -2.067501  
Free Energy (PCM/B3LYP/6-31G\*) = -997.781227  
Number of imaginary frequencies = 0