

## Supporting Information

# D-A Diads and A-D-A Triads based on Ferrocene: Push-pull Dyes of Unusual Behaviours in Solution

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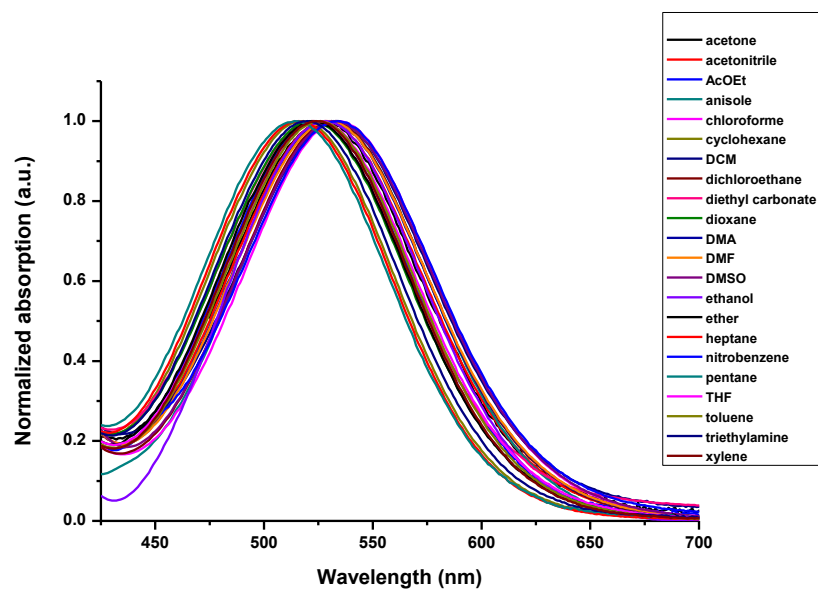
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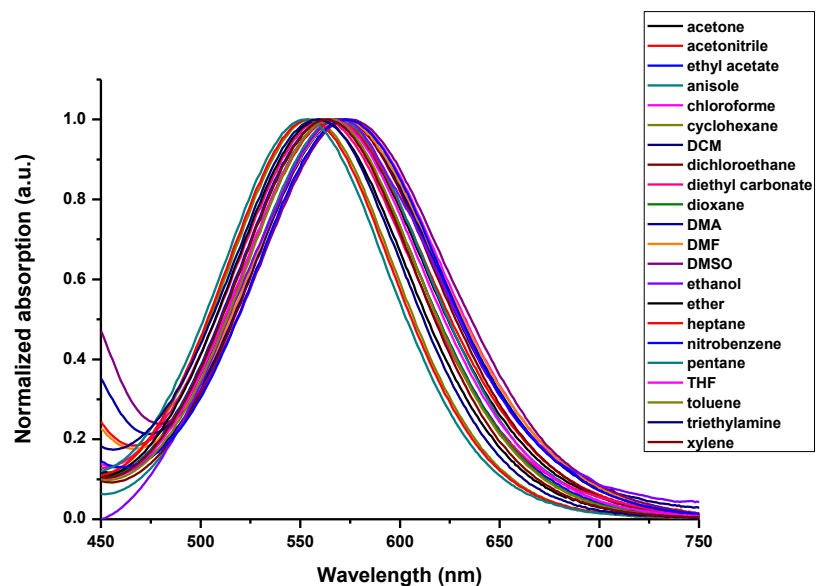
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## UV-visible absorption spectra of the different dyes recorded in solvents of different polarities.

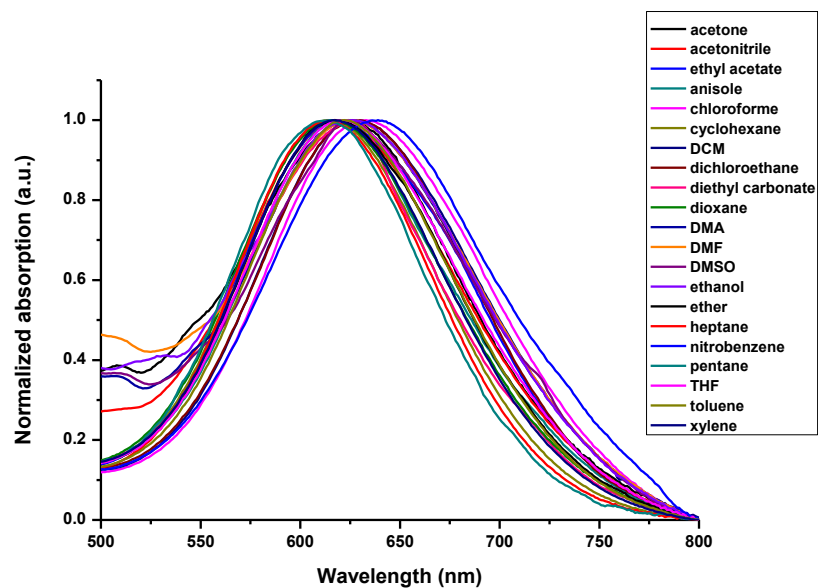
Solvatochromism of **D-A0** in solvents of different polarities.



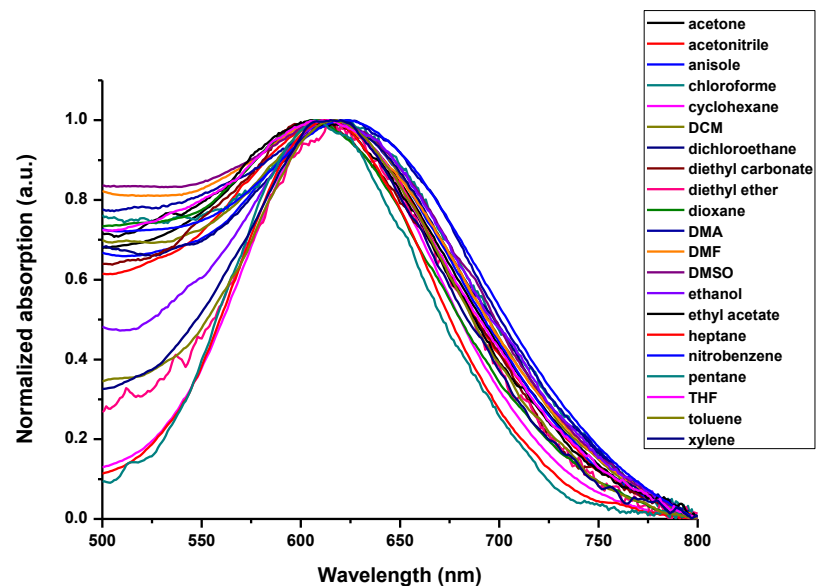
Solvatochromism of **D-A1** in solvents of different polarities.



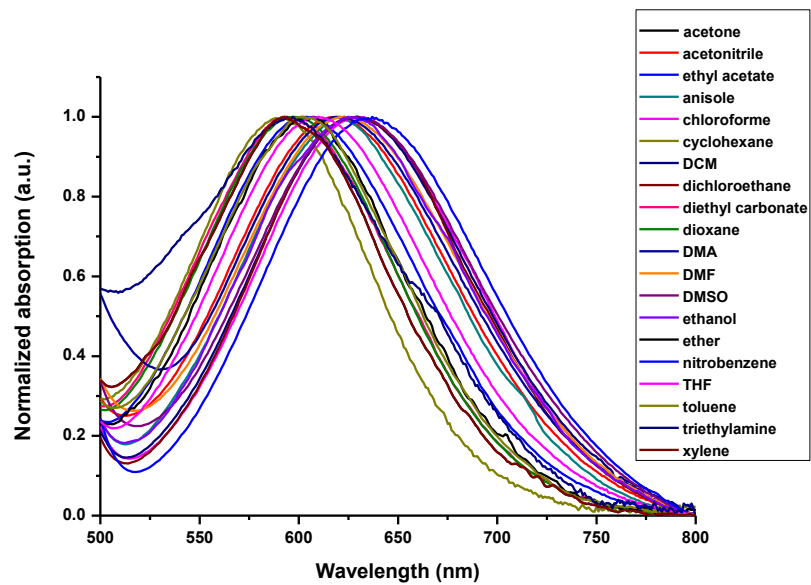
Solvatochromism of **D-A2** in solvents of different polarities.



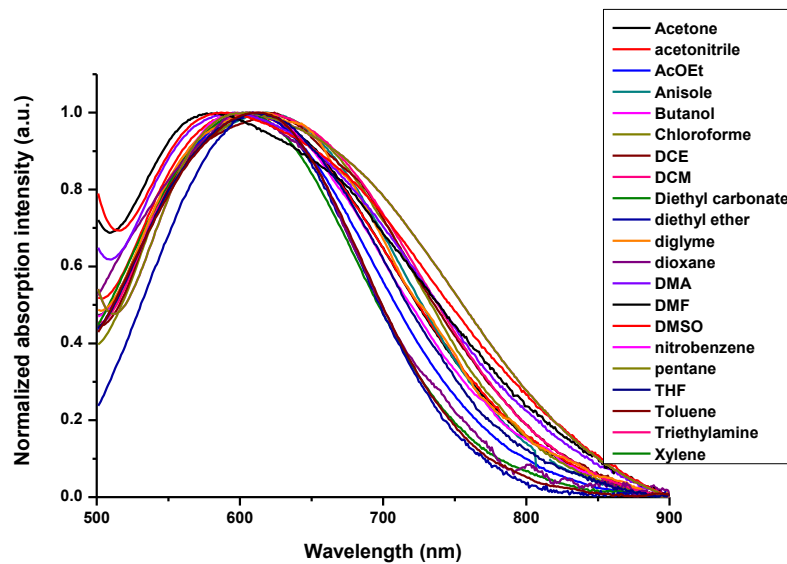
Solvatochromism of **D-A3** in solvents of different polarities.



Solvatochromism of **D-A4** in solvents of different polarities.

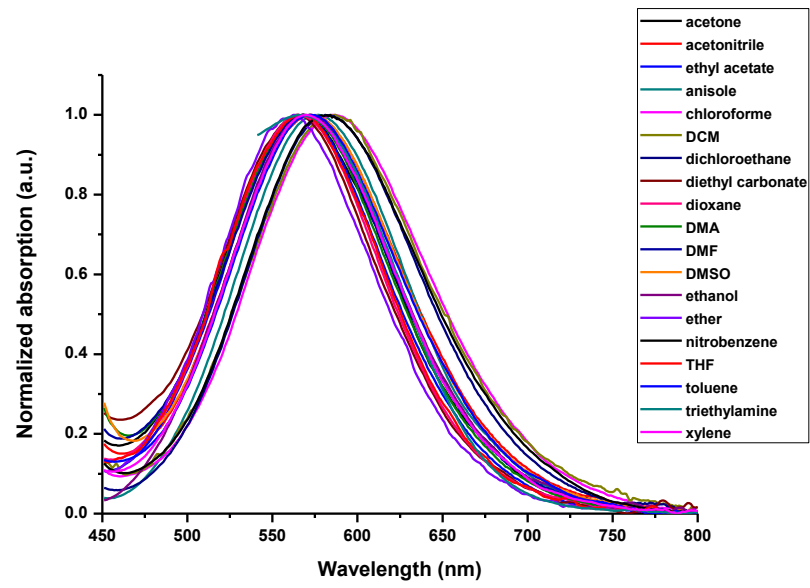


Solvatochromism of **D-A5** in solvents of different polarities.

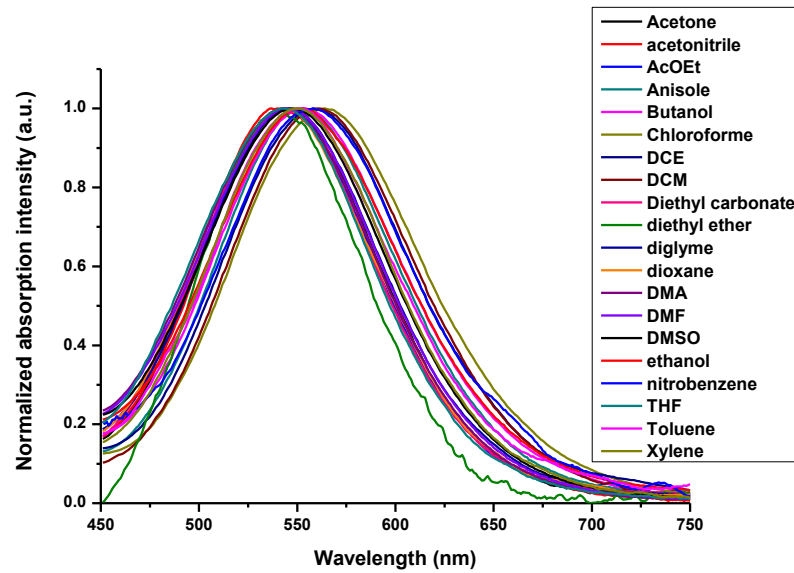




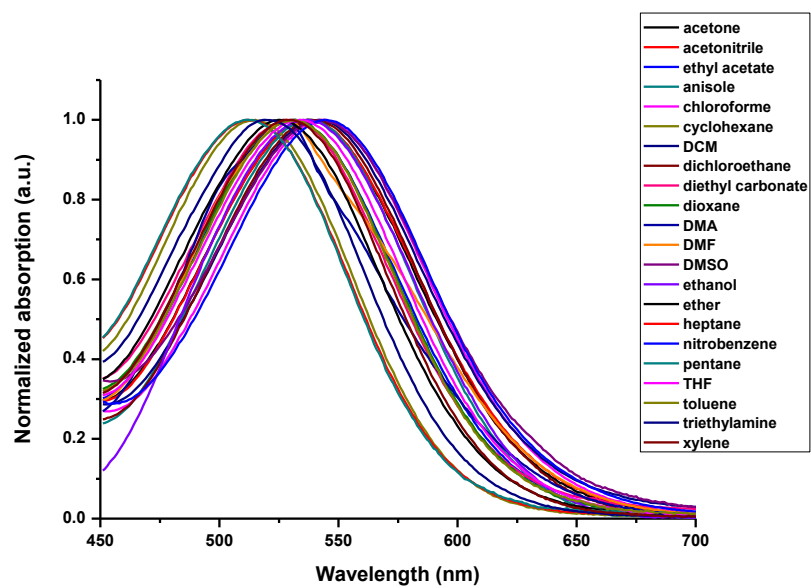
Solvatochromism of **D-A6** in solvents of different polarities.



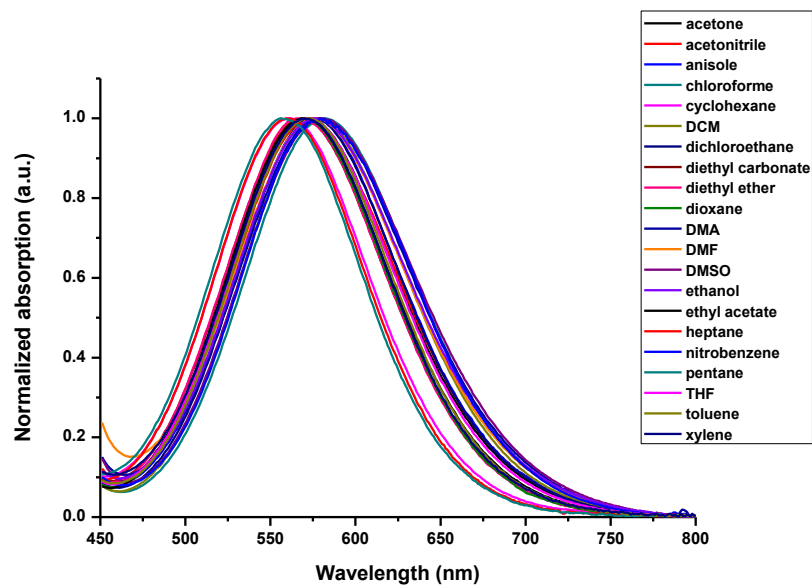
Solvatochromism of **D-A7** in solvents of different polarities.



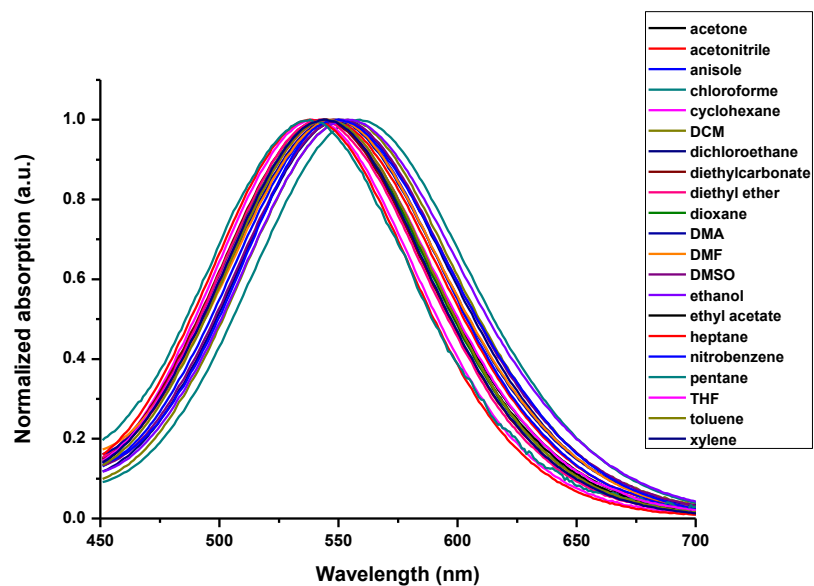
Solvatochromism of **D-A8** in solvents of different polarities.



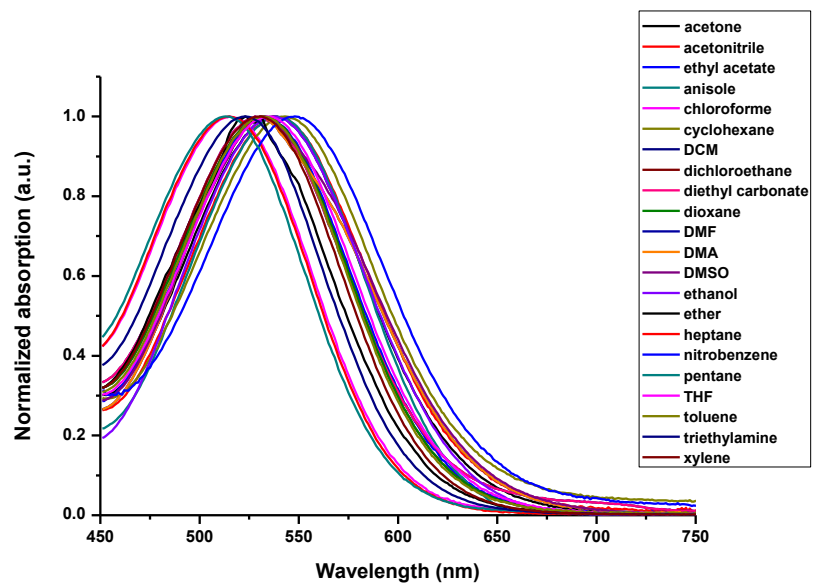
Solvatochromism of **D-A9** in solvents of different polarities.



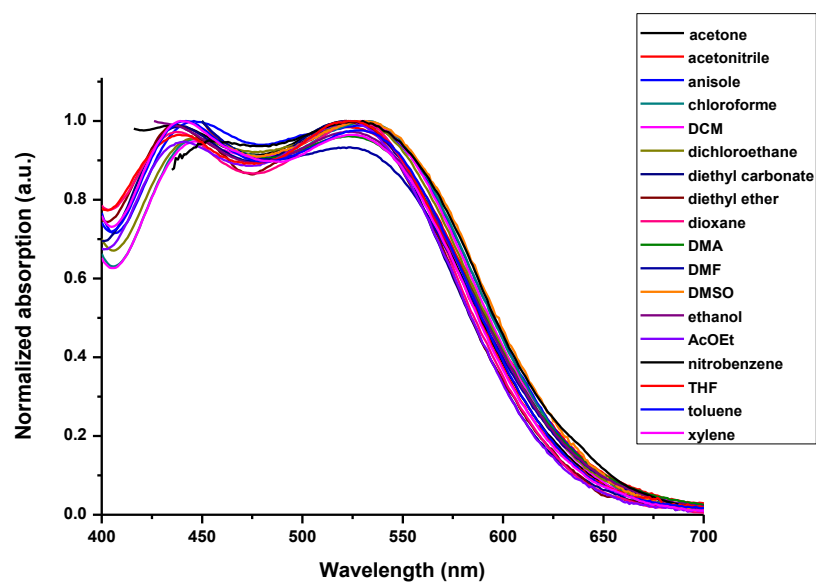
Solvatochromism of D-A10 in solvents of different polarities.



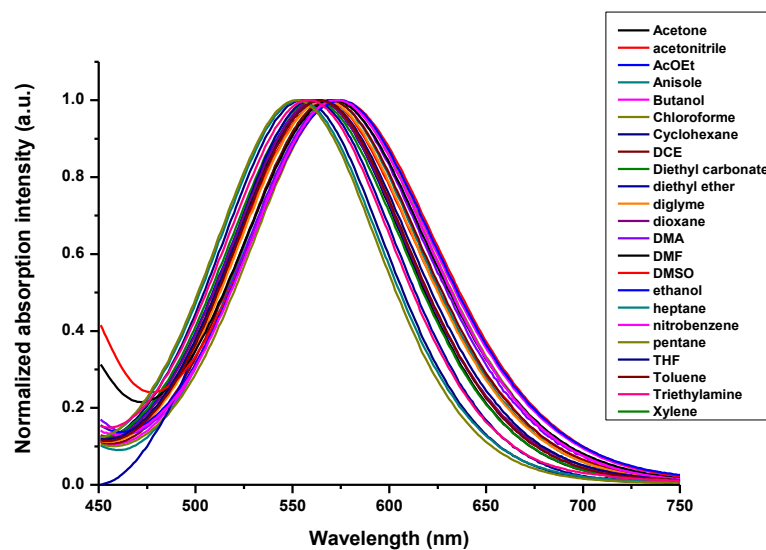
Solvatochromism of D-A11 in solvents of different polarities.



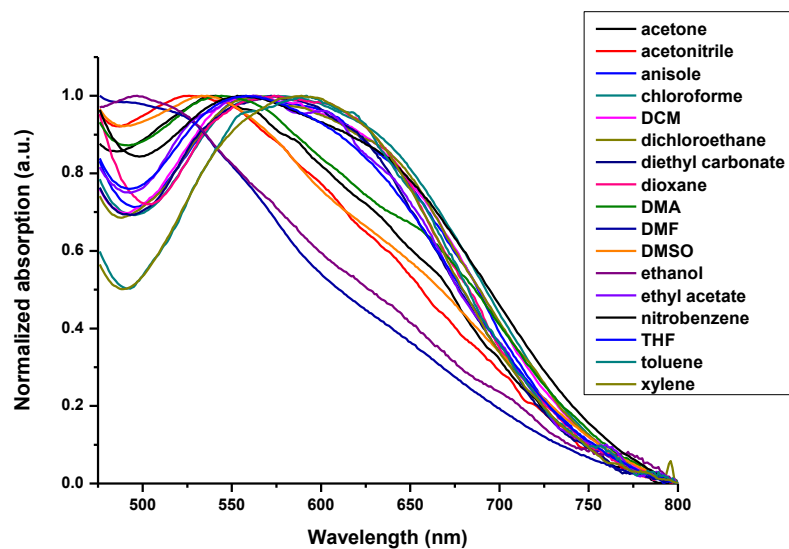
Solvatochromism of A-D-A0 in solvents of different polarities.



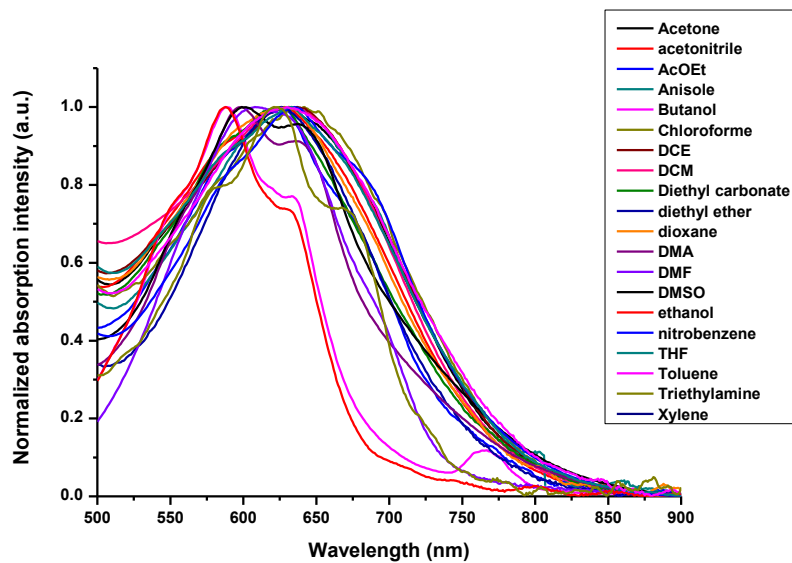
Solvatochromism of A-D-A1 in solvents of different polarities.



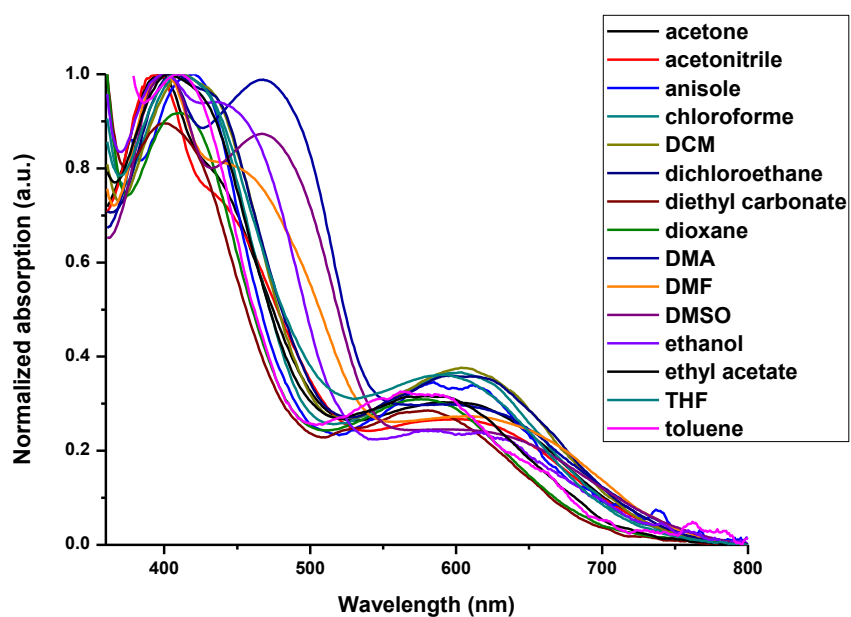
Solvatochromism of A-D-A2 in solvents of different polarities.



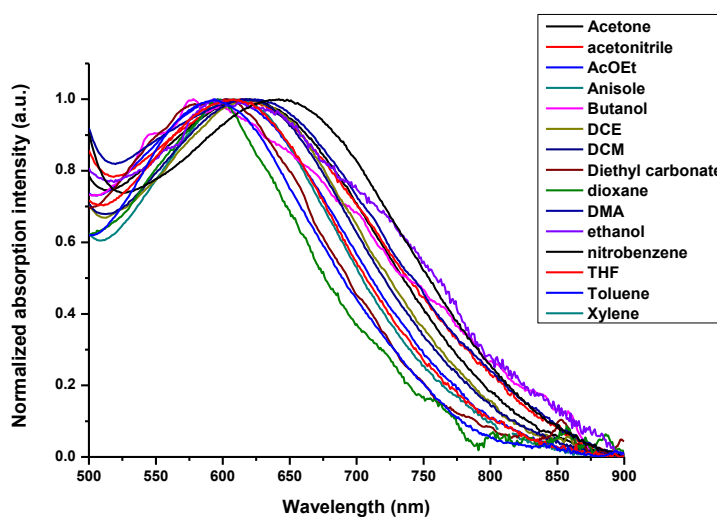
Solvatochromism of A-D-A3 in solvents of different polarities.



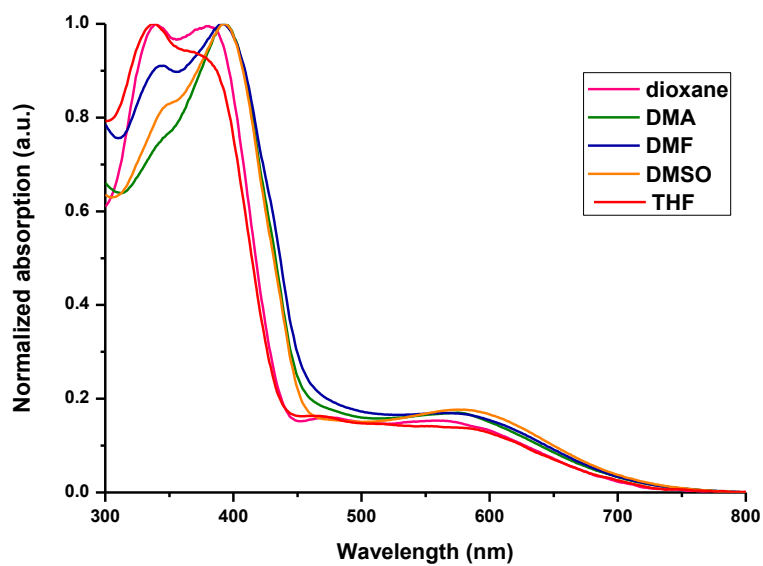
Solvatochromism of **A-D-A4** in solvents of different polarities.



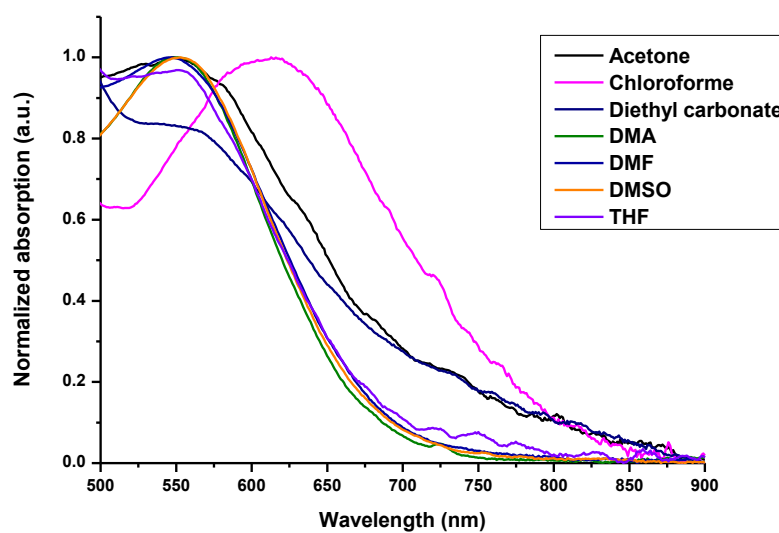
Solvatochromism of **A-D-A5** in solvents of different polarities.



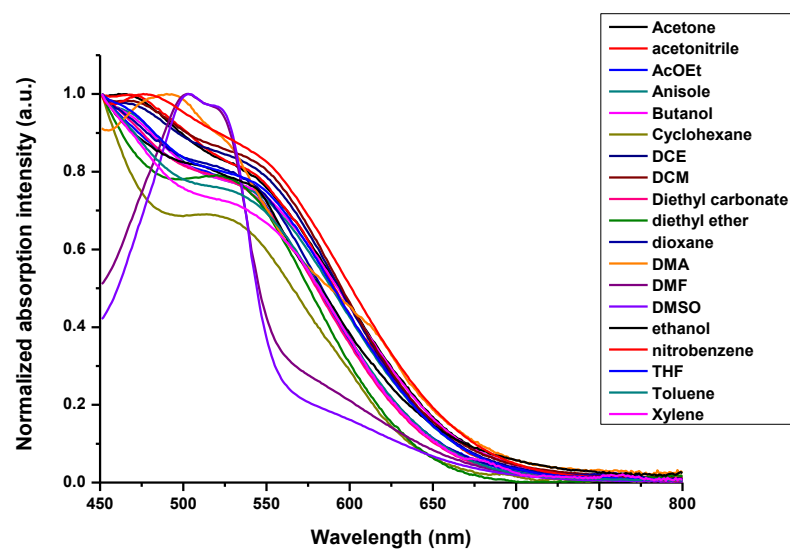
Solvatochromism of **A-D-A6** in solvents of different polarities.



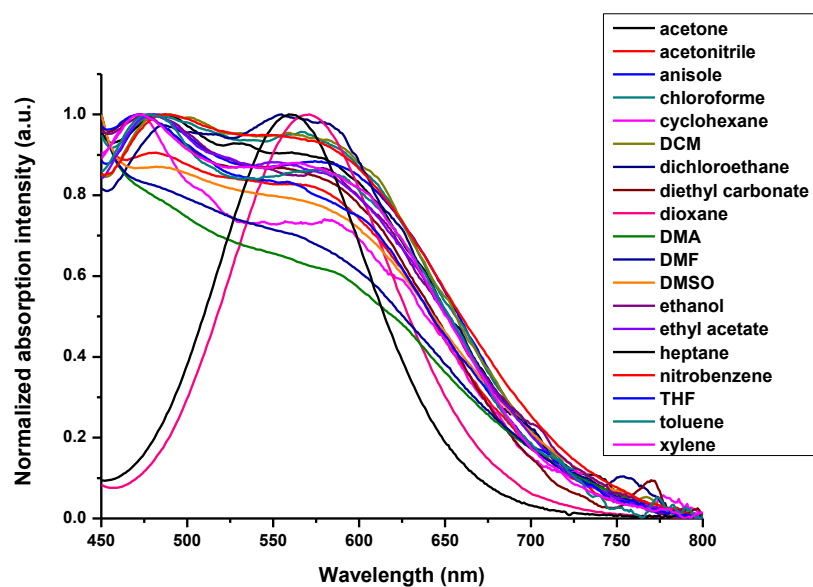
Solvatochromism of A-D-A7 in solvents of different polarities.



Solvatochromism of A-D-A8 in solvents of different polarities.

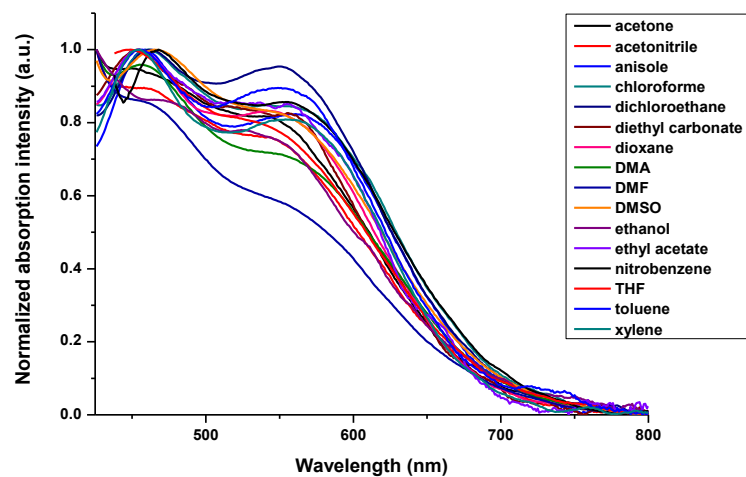


Solvatochromism of **A-D-A9** in solvents of different polarities.

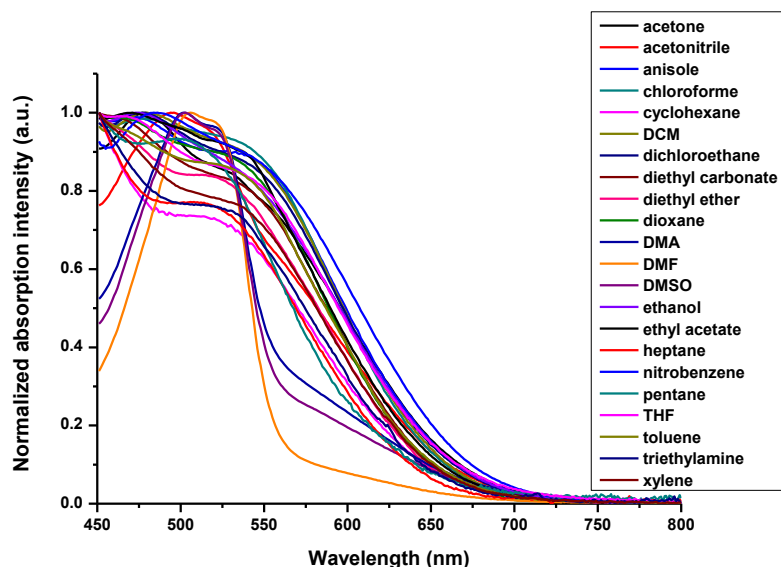


Solvatochromism of **A-D-A10** in solvents of different polarities.





Solvatochromism of A-D-A11 in solvents of different polarities.



## Results of the multiple linear regression analyses

The position of the UV/Vis absorption maxima with regard to the dipolarity/polarizability  $\pi^*$  and the hydrogen bonding capacity ( $\alpha$  and  $\beta$ ) of the solvent can be interpreted using the Kamlet–Taft equation :

$$V_{\max}(\text{cm}^{-1}) = V_{\max,0}(\text{cm}^{-1}) + a\alpha + b\beta + s\pi^*$$

**Table S1.** Solvent-independent correlation coefficients  $a$ ,  $b$  and  $s$  of the Kamlet-Taft parameters  $\alpha$ ,  $\beta$  and  $\pi^*$  respectively, correlation coefficient ( $R$ ), significance ( $F$ ), standard deviation ( $SD$ ), and number of solvents ( $n$ ) calculated for the solvatochromism.

Compounds	$V_{\max,0}$	$a$	$b$	$s$	$n$	$F$	$R^2$	$SD$
<b>D-A0</b>	19397.985	-152.220	14.752	-615.842	22	2.16 <sup>E-8</sup>	0.876	83.76
<b>D-A1</b>	18065.274	-145.299	-54.148	-584.088	22	2.905 <sup>E-11</sup>	0.941	55.10
<b>D-A2</b>	16335.463	-141.341	119.959	-472.699	22	4.746 <sup>E-4</sup>	0.640	117.08
<b>D-A3</b>	16359.532	174.111	141.007	-161.85	22	0.273	0.199	141.48
<b>D-A4</b>	17075.671	-583.742	37.301	-1144.067	22	1.344 <sup>E-6</sup>	0.822	187.01
<b>D-A5</b>	5.10634 <sup>E6</sup>	-451512.60	-329497.42	-112394.43	22	1.93298 <sup>E-4</sup>	0.745	60287.28
<b>D-A6</b>	18271.698	-1558.188	-297.845	-748.356	22	0.00305	0.570	298.39
<b>D-A7</b>	4.37842 <sup>E6</sup>	-269114.210	-229795.710	205991.17	22	9.56595 <sup>E-4</sup>	0.704	37578.50
<b>D-A8</b>	19302.557	-651.297	373.900	-871.147	22	3.929 <sup>E-6</sup>	0.779	170.45
<b>D-A9</b>	17778.037	-258.40	341.029	-602.977	22	0.00606	0.529	169.71
<b>D-A10</b>	18549.04	-610.744	-262.648	-217.354	22	0.07316	0.328	208.07
<b>D-A11</b>	19258.929	-472.581	315.295	-872.447	22	3.555 <sup>E-6</sup>	0.782	163.25

## Results of the linear correlation analyses

The position of the UV/Vis absorption maxima with regard to the dipolarity/polarizability  $\pi^*$  can be interpreted using a simplified version of the Kamlet–Taft equation :

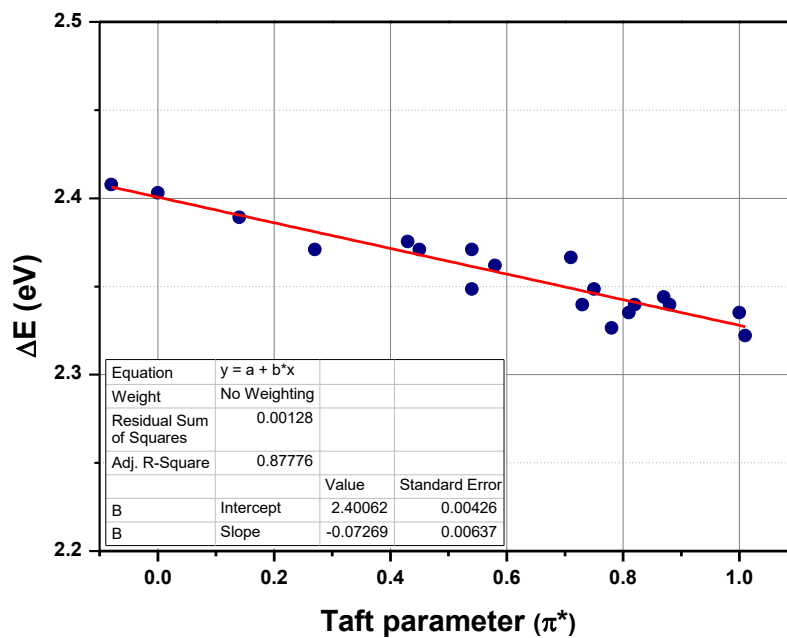
$$V_{\max}(\text{cm}^{-1}) = V_{\max,0}(\text{cm}^{-1}) + s\pi^*$$

**Table S2.** Solvent-independent correlation coefficient  $s$  of the Kamlet-Taft parameters  $\pi^*$ 

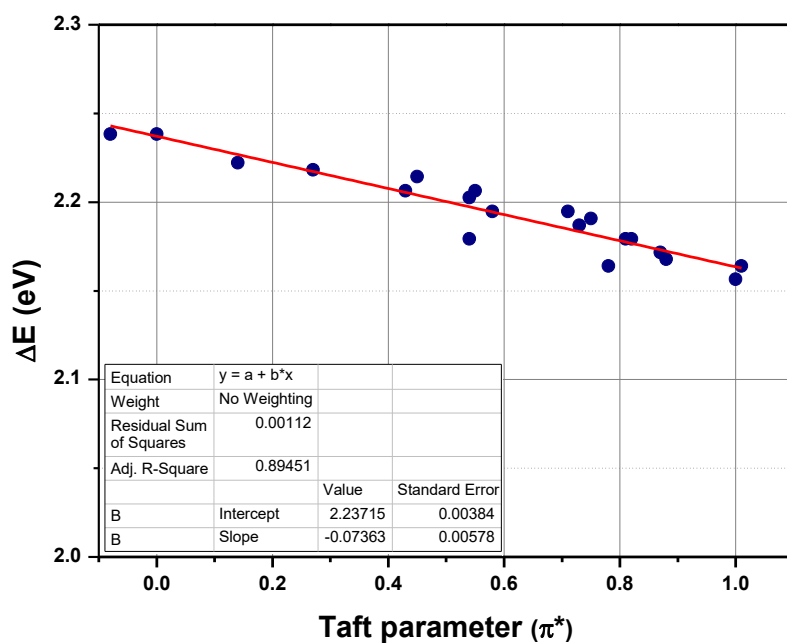
Compounds	$s$	$V_{\max,0}$	$R^2$
<b>D-A0</b>	-0.07269	2.40062	0.878
<b>D-A1</b>	-0.07363	2.23715	0.894
<b>D-A2</b>	-0.05404	2.02674	0.523
<b>D-A3</b>	-0.02134	2.02604	0.073
<b>D-A4</b>	-0.14885	2.11821	0.826
<b>D-A5</b>	0.10006	1.98072	0.278
<b>D-A6</b>	-0.08202	2.22742	0.307
<b>D-A7</b>	-0.06049	2.30174	0.102
<b>D-A8</b>	-0.13460	2.40843	0.926
<b>D-A9</b>	-0.07534	2.21322	0.794
<b>D-A10</b>	-0.04924	2.30534	0.821
<b>D-A11</b>	-0.13447	2.400346	0.950

Position of the absorption maxima of dyes in 22 solvents of different polarities vs. the Kamlet-Taft parameters  $\pi^*$

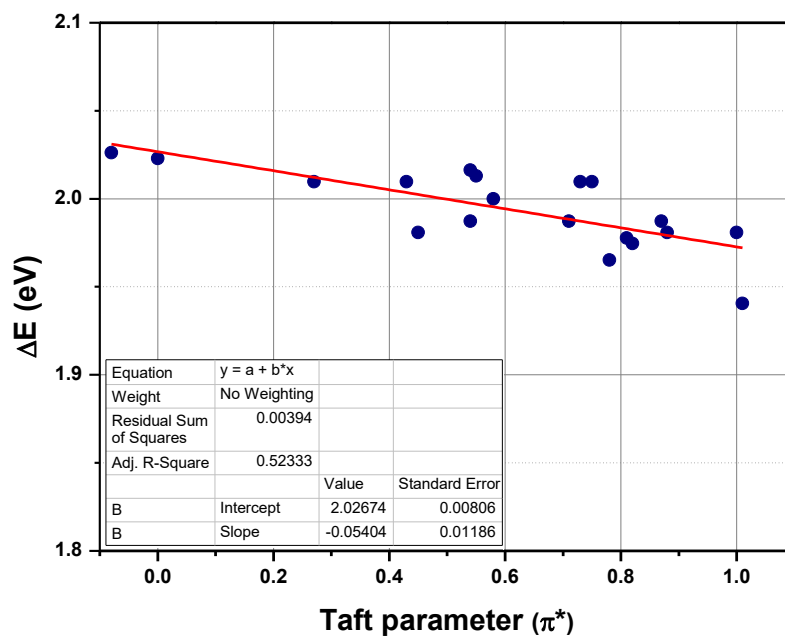
Compound D-A0



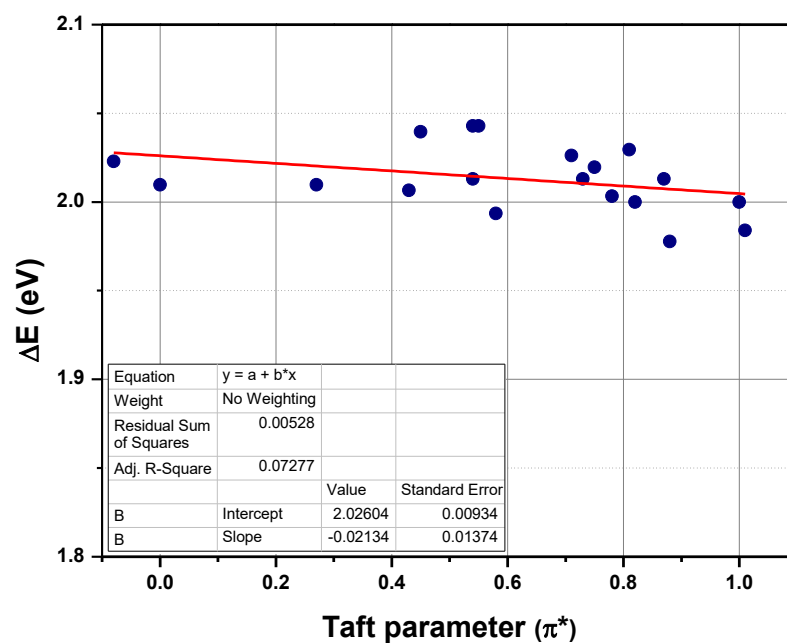
Compound D-A1



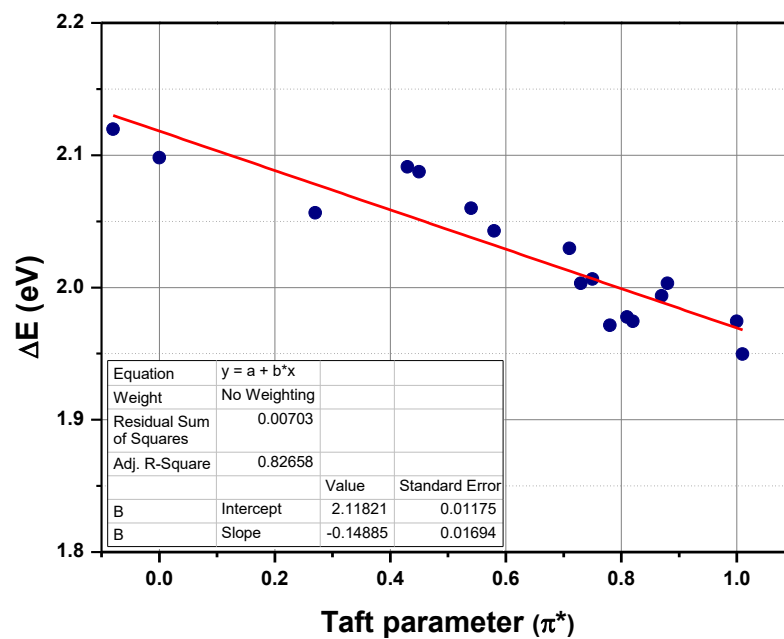
Compound D-A2



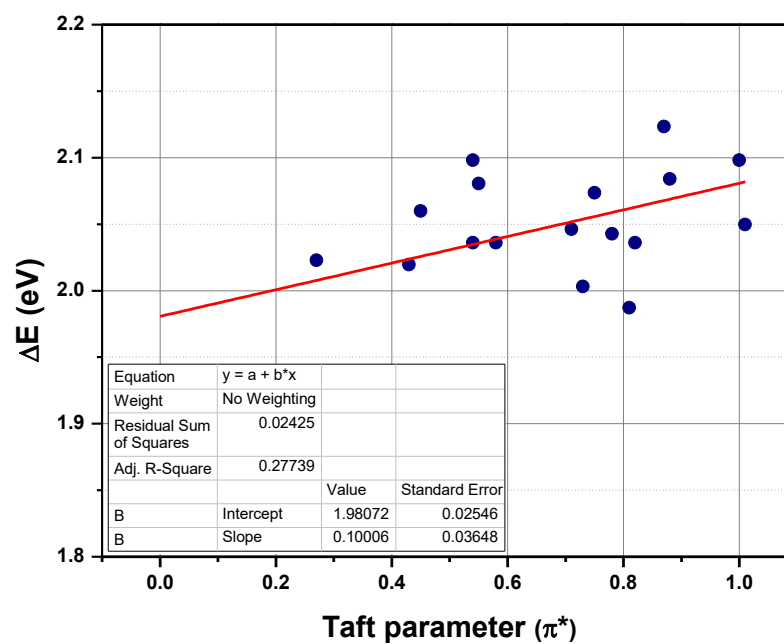
Compound D-A3



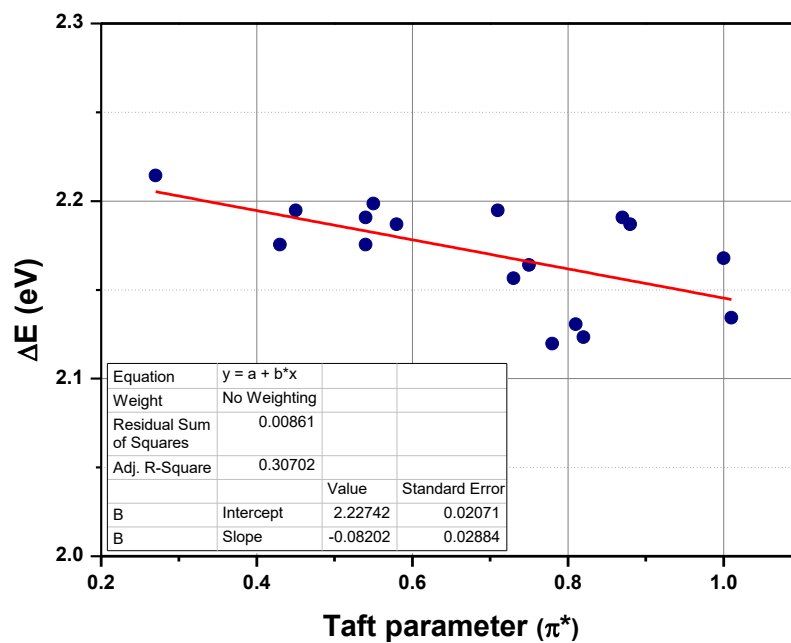
### Compound D-A4



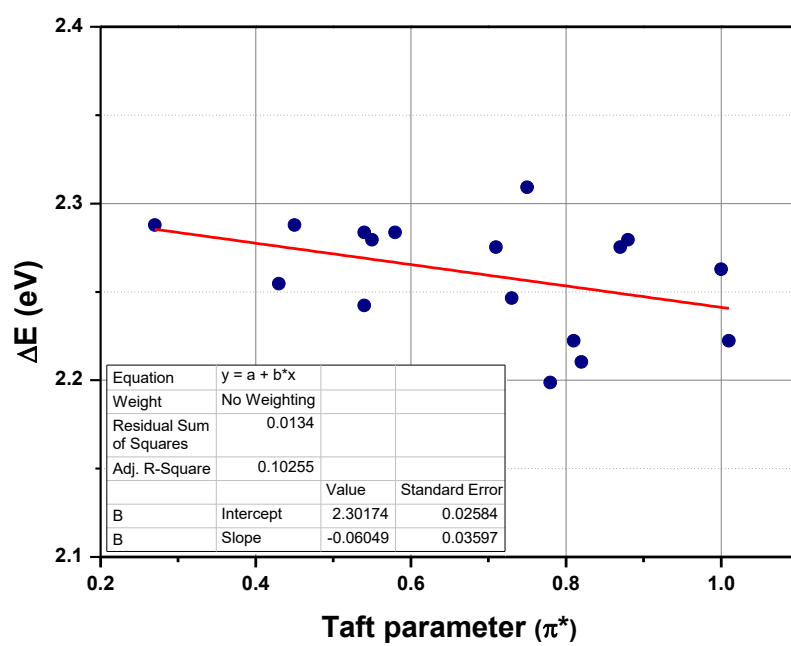
### Compound D-A5



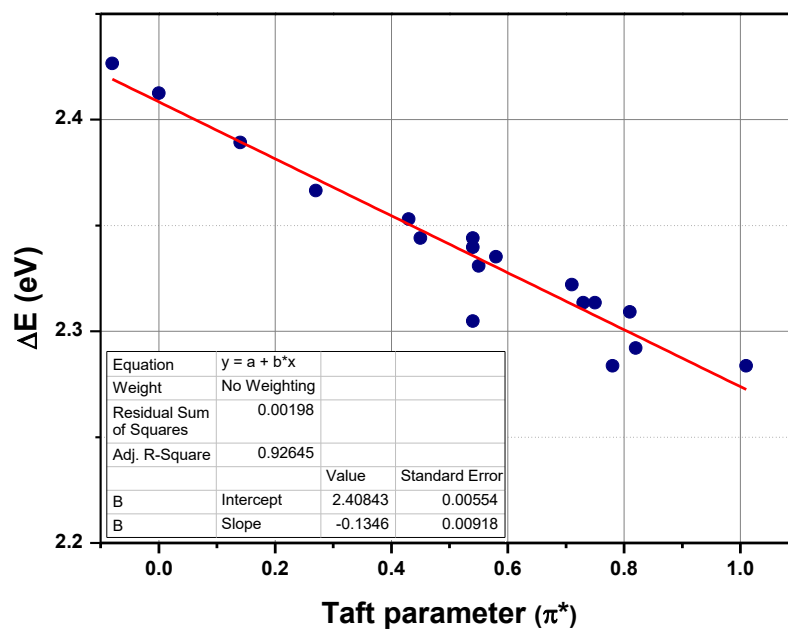
Compound D-A6



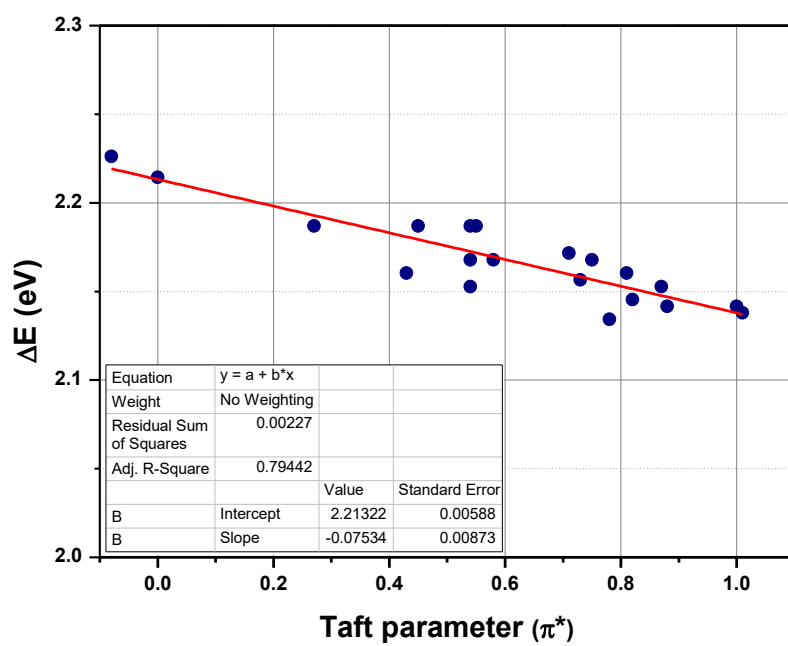
Compound D-A7



Compound D-A8

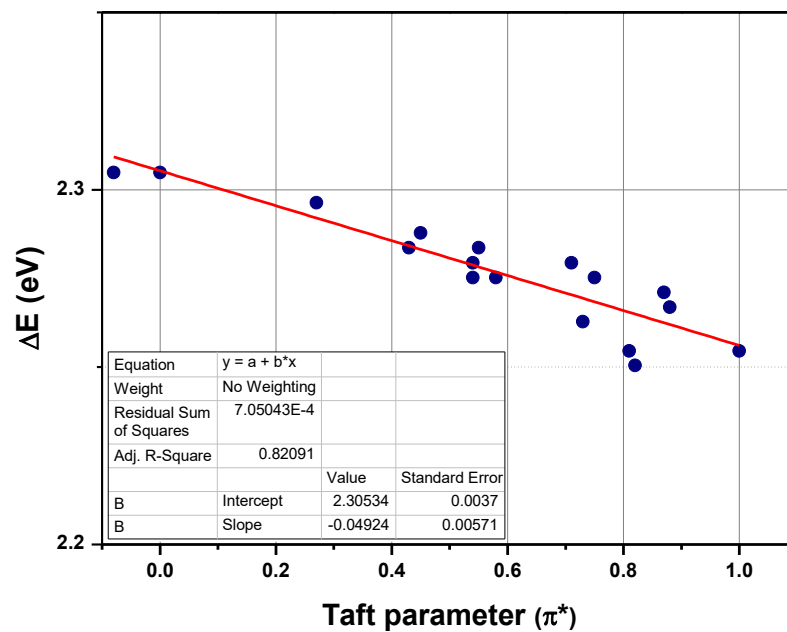


Compound D-A9

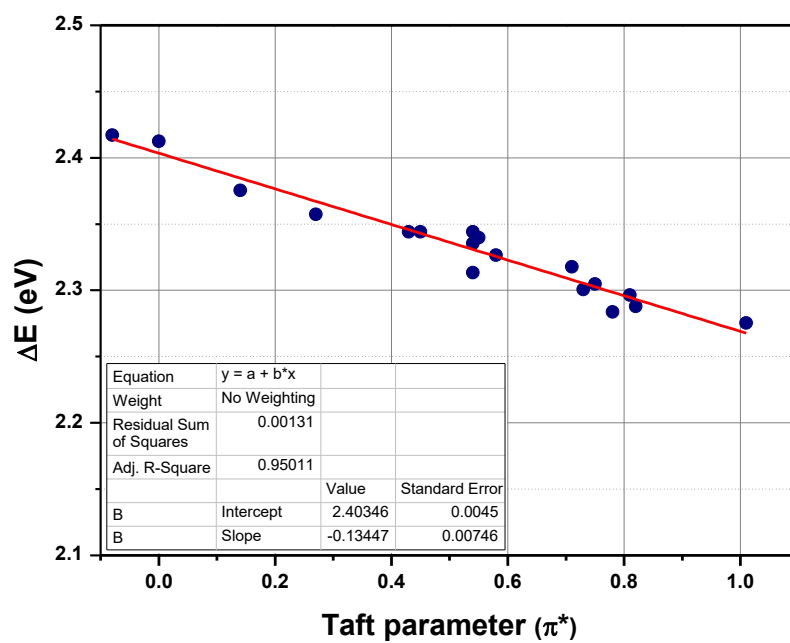




Compound D-A10



Compound D-A11



### Results of the linear correlation analyses

The position of the UV/Vis absorption maxima with regard to the dipolarity/polarizability  $\pi^*$  can also be interpreted using a Catalan parameters, namely, the solvent dipolarity (SdP) and the solvent polarity/polarizability (SPP) using the following equations :

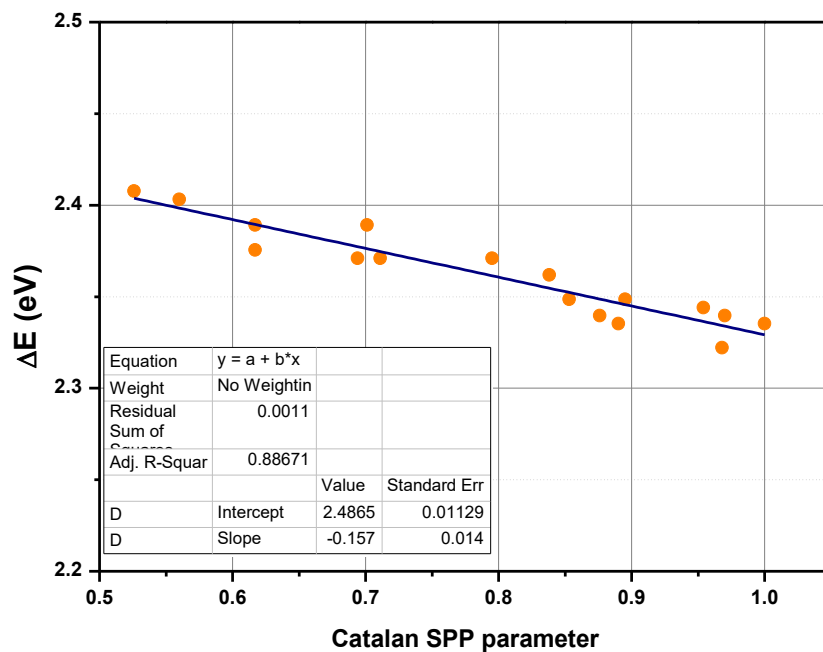
$$\nu_{\max} (\text{cm}^{-1}) = \nu_{\max,02} (\text{cm}^{-1}) + b \times \text{SPP}$$

**Table S3.** Solvent-independent correlation coefficients a and b of the Catalan parameters SdP and SPP.

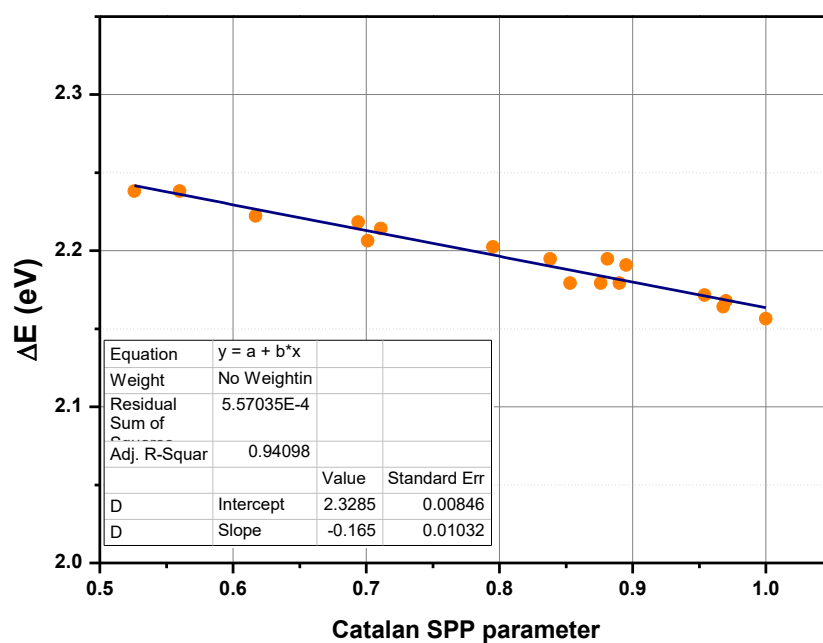
Compounds	$\nu_{\max,02}$	b	R <sup>2</sup>
<b>D-A0</b>	2.4865	-0.157	0.887
<b>D-A1</b>	2.3285	-0.165	0.940
<b>D-A2</b>	2.0749	-0.099	0.821
<b>D-A3</b>	2.052	-0.048	0.092
<b>D-A4</b>	2.2856	-0.316	0.817
<b>D-A5</b>	1.8327	0.2513	0.046
<b>D-A6</b>	2.2418	-0.080	0.081
<b>D-A7</b>	2.3053	-0.053	0.071
<b>D-A8</b>	2.5457	-0.270	0.809
<b>D-A9</b>	2.3121	-0.172	0.900
<b>D-A10</b>	2.3476	-0.089	0.646
<b>D-A11</b>	2.5440	-0.274	0.860

Position of the absorption maxima of dyes in 22 solvents of different polarities vs. the Catalan parameter SPP

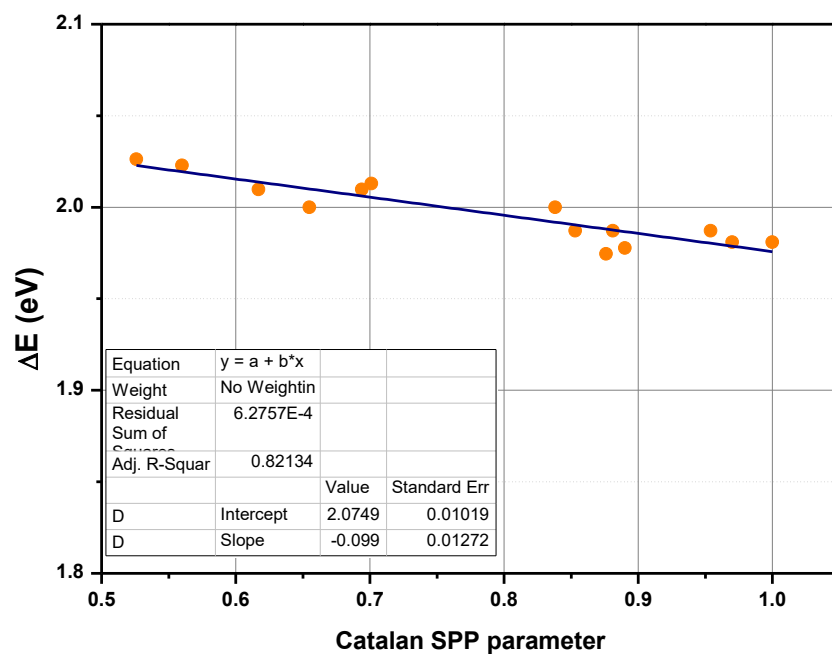
Compound D-A0



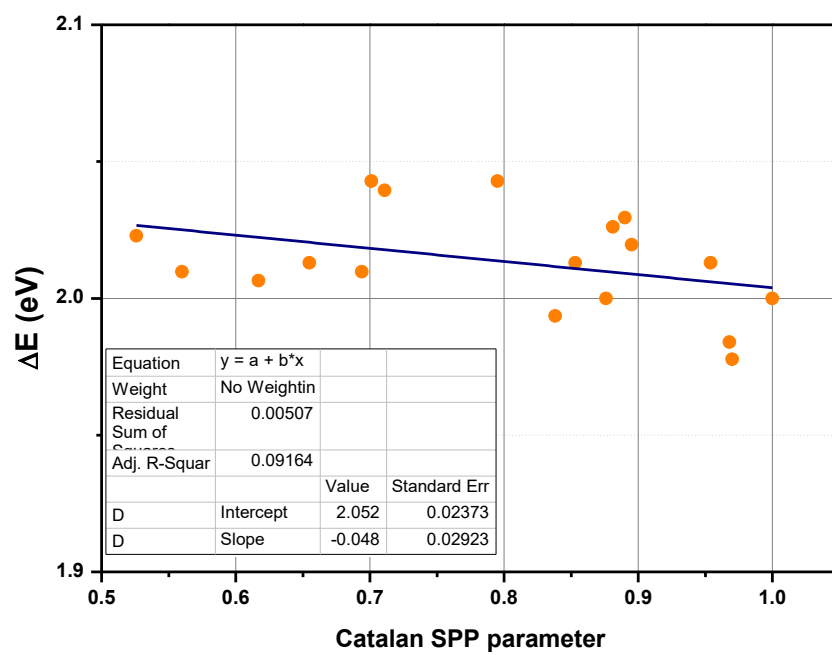
Compound D-A1



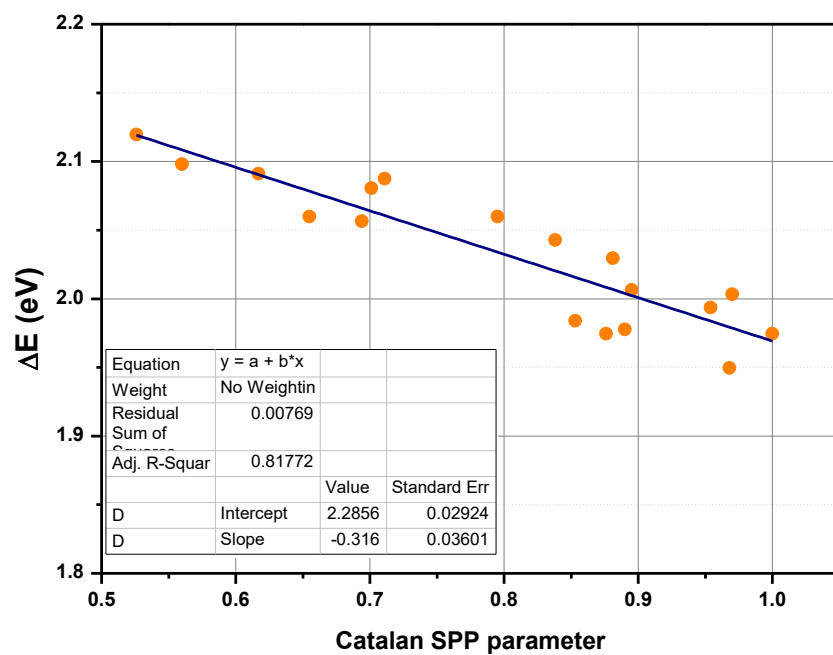
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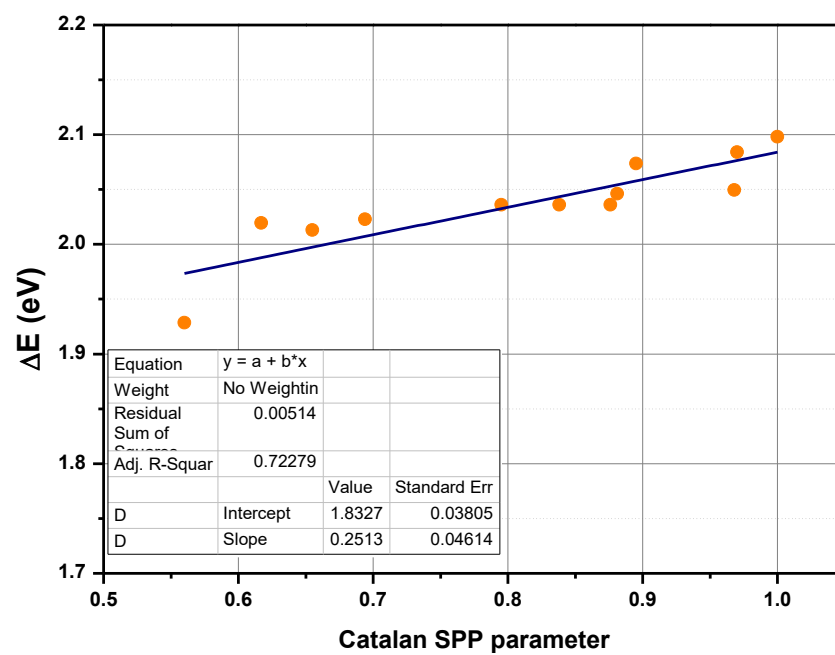
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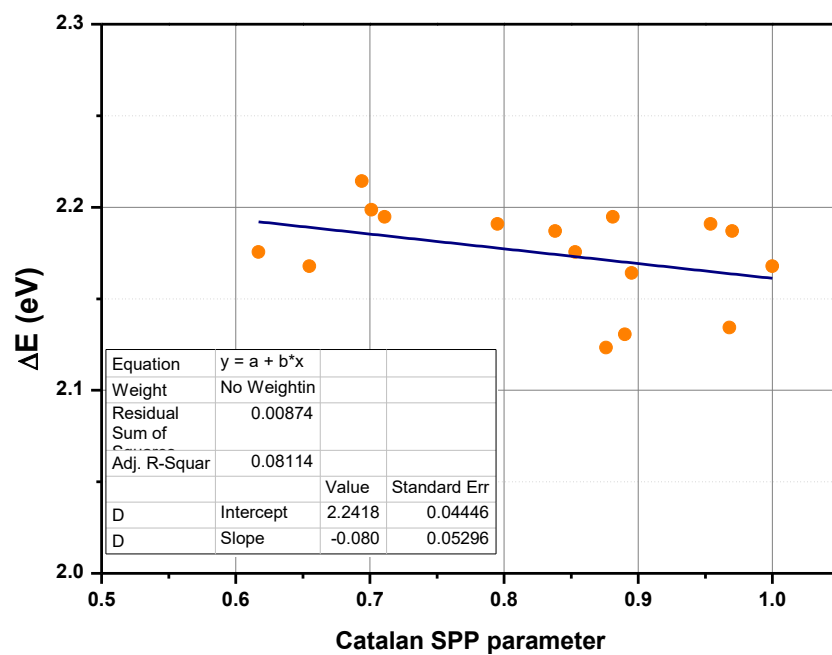
### Compound D-A4



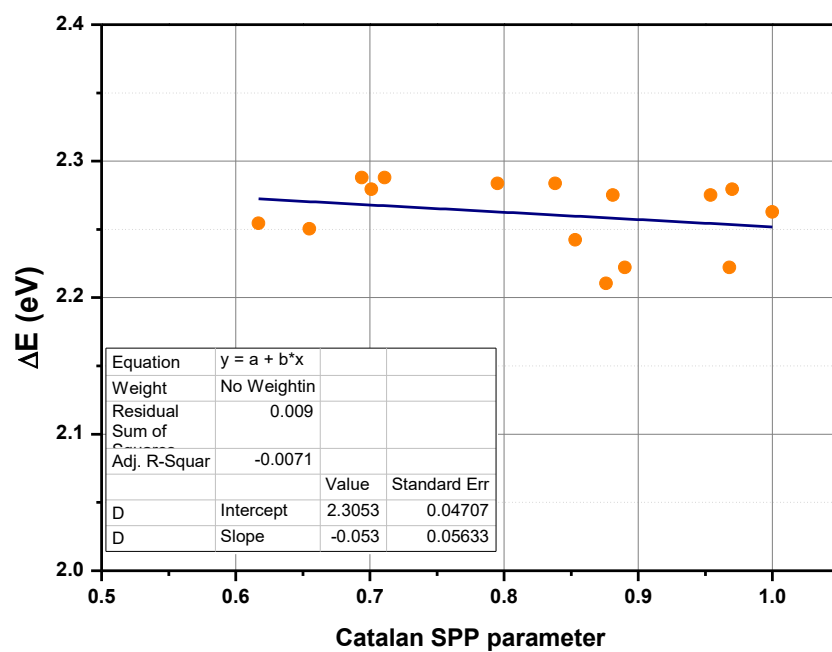
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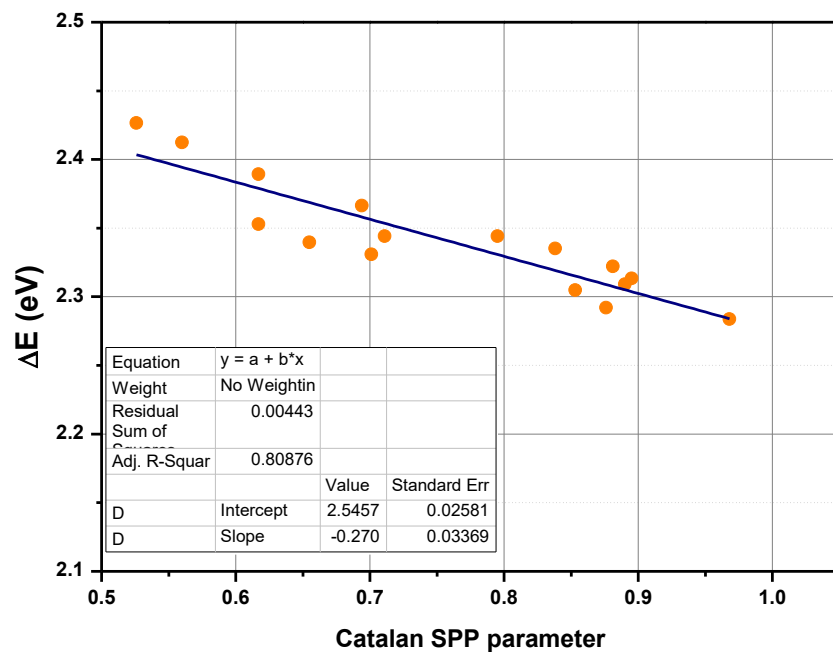
Compound D-A6



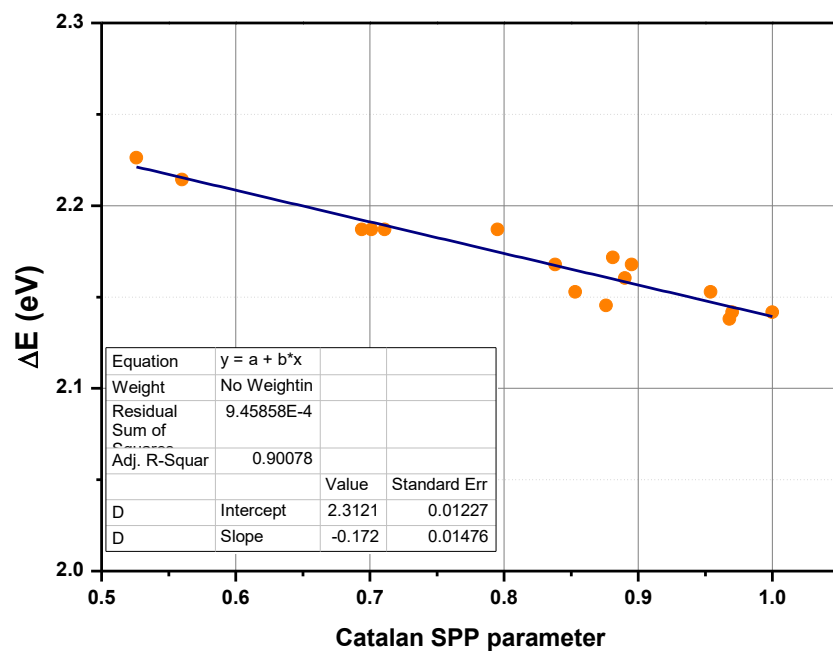
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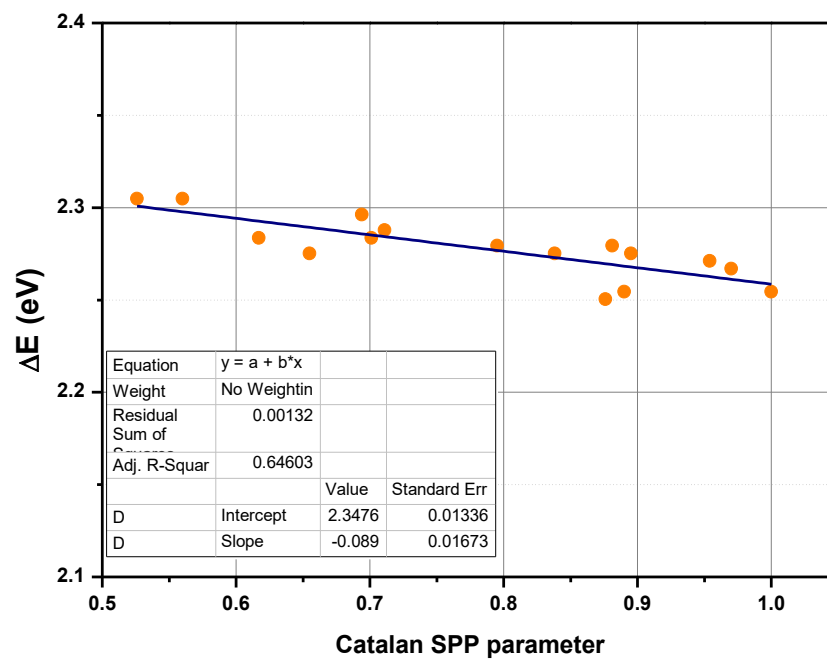
Compound D-A8



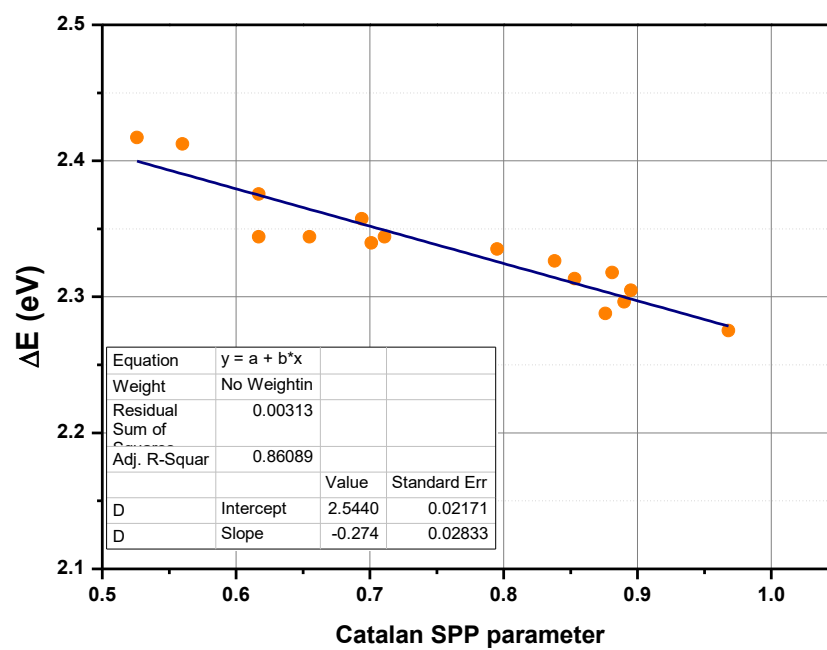
Compound D-A9



### Compound D-A10



### Compound D-A11

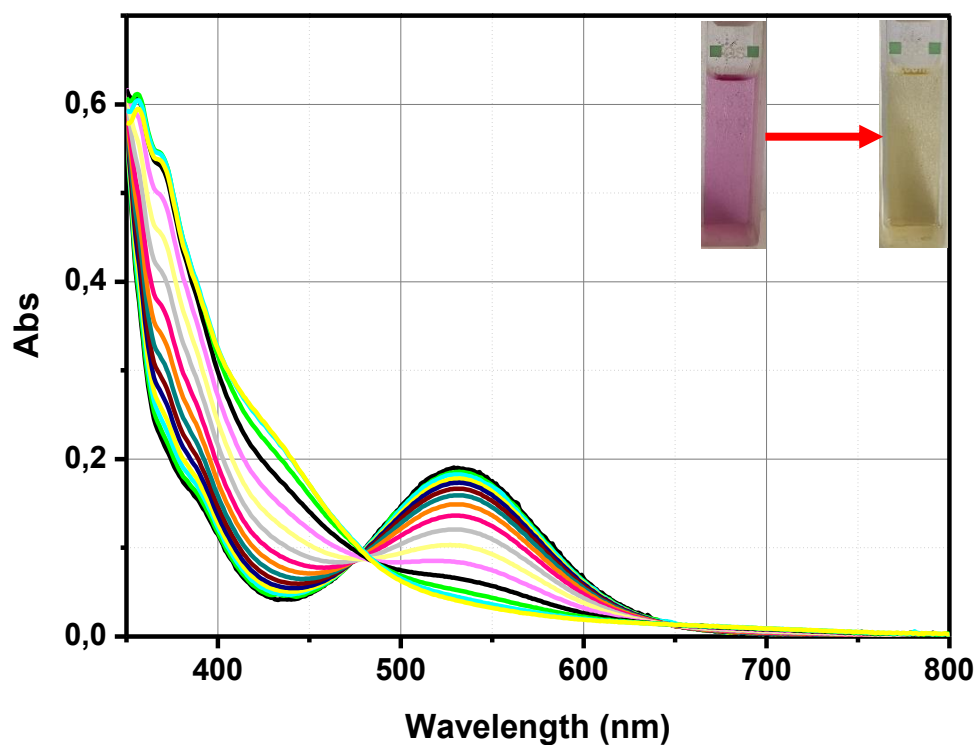




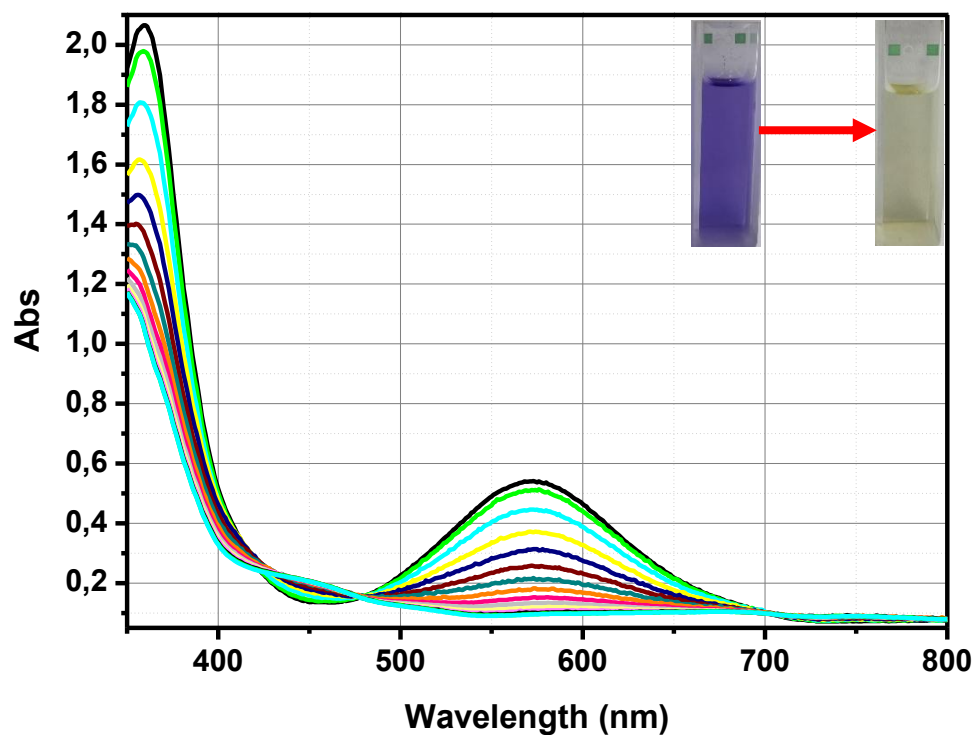
UV-visible absorption spectra of dyes recorded during the kinetics of discoloration in dichloromethane while using nitrosonium cation as the oxidizing agent.

UV-visible absorption spectra presented in the following figures have been recorded with a delay of 1 minute between each spectrum.

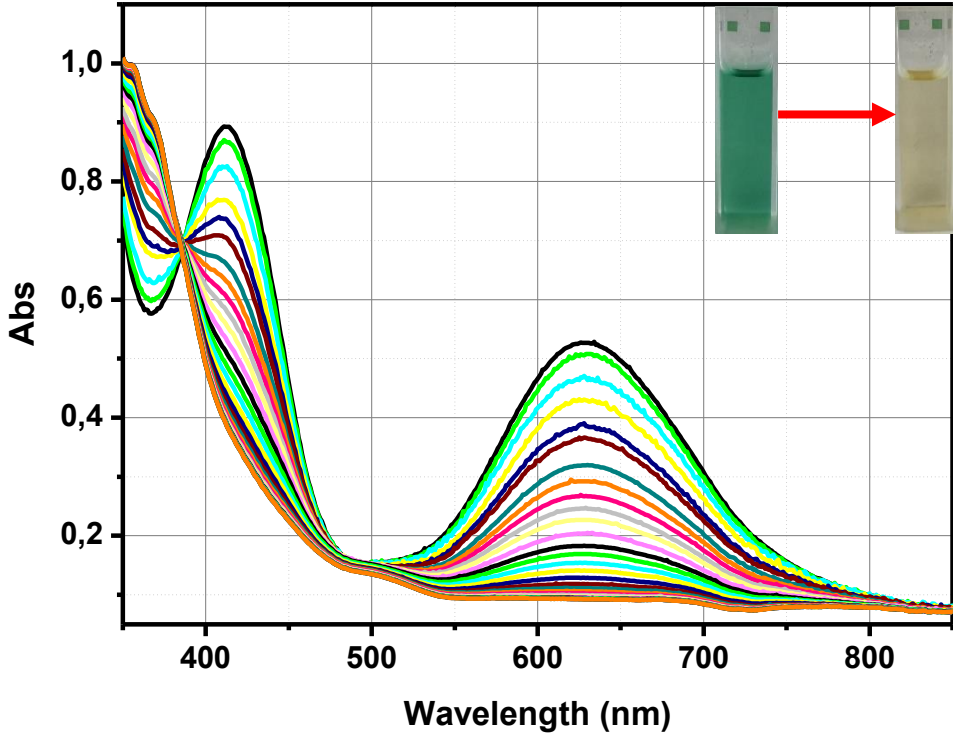
Compound D-A0



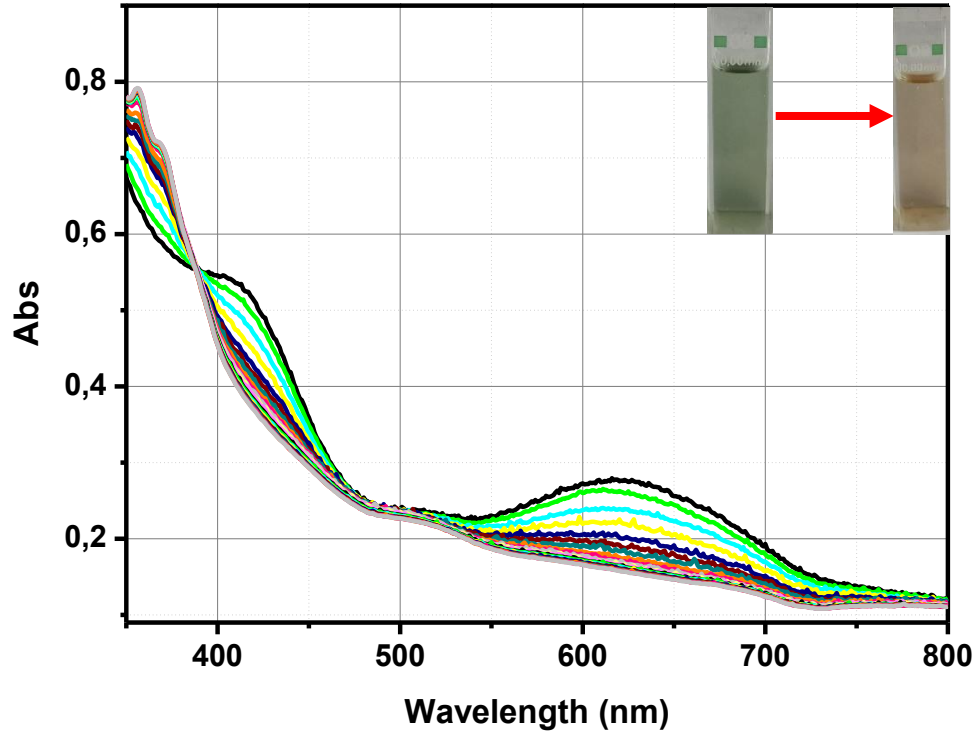
Compound D-A1



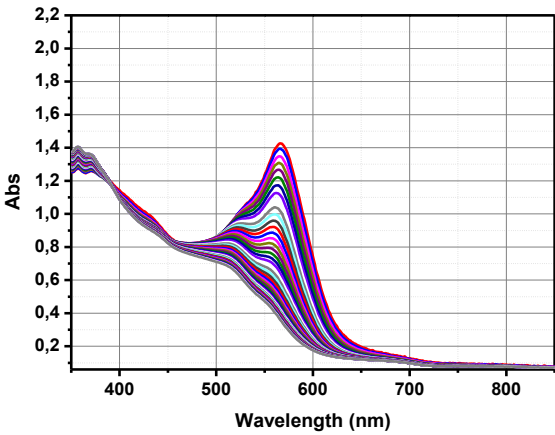
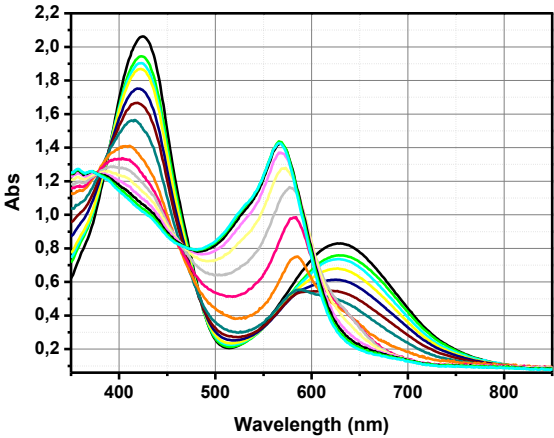
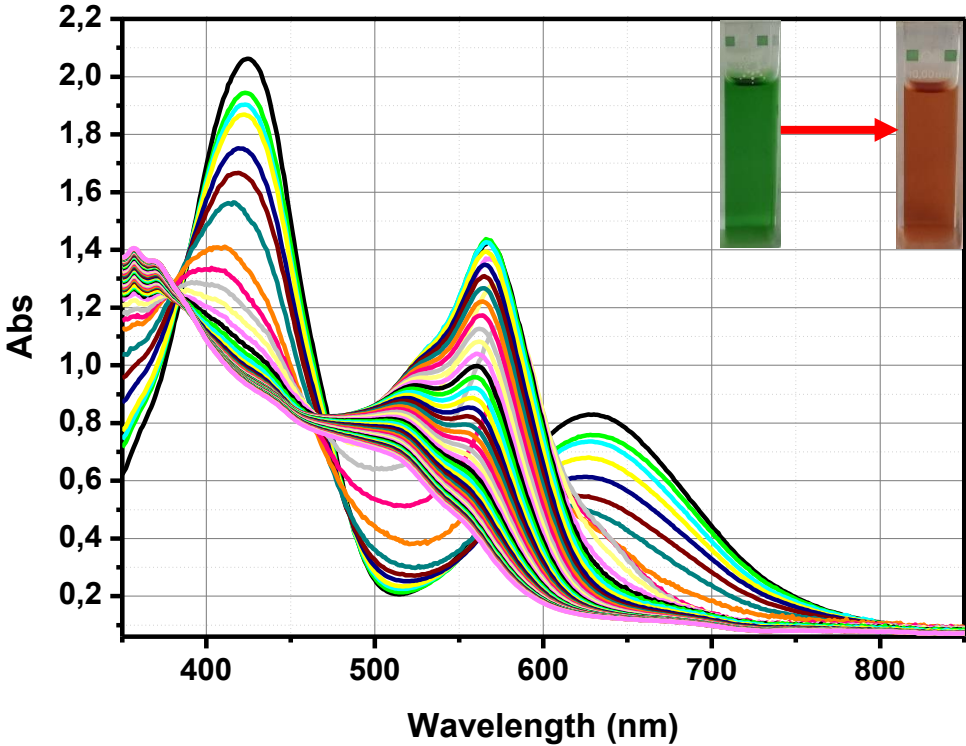
Compound D-A2



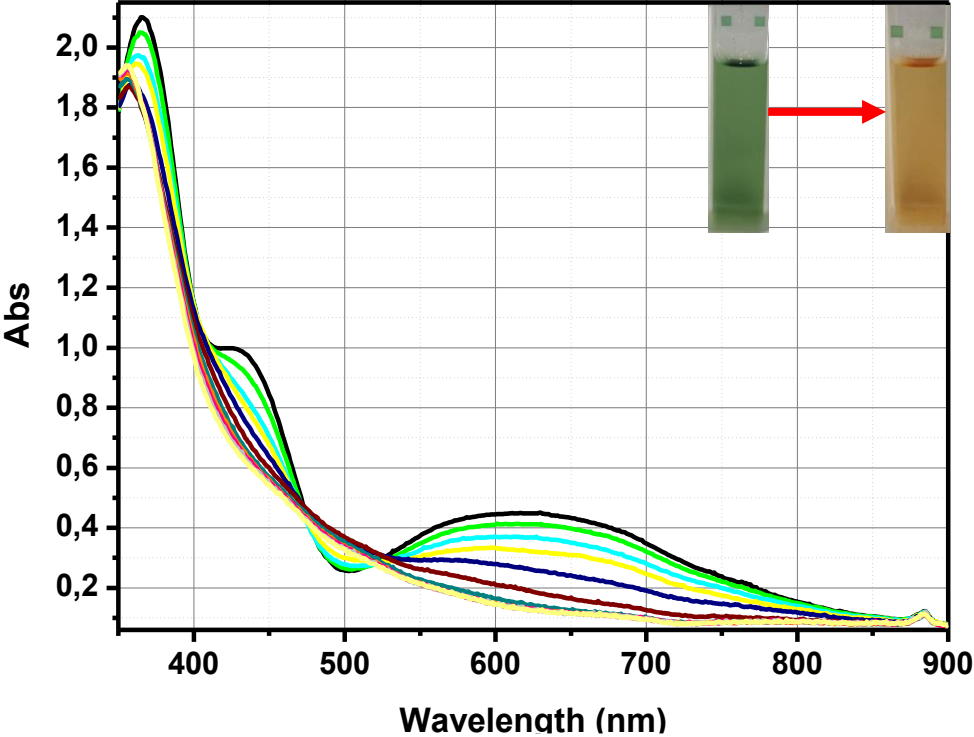
Compound D-A3



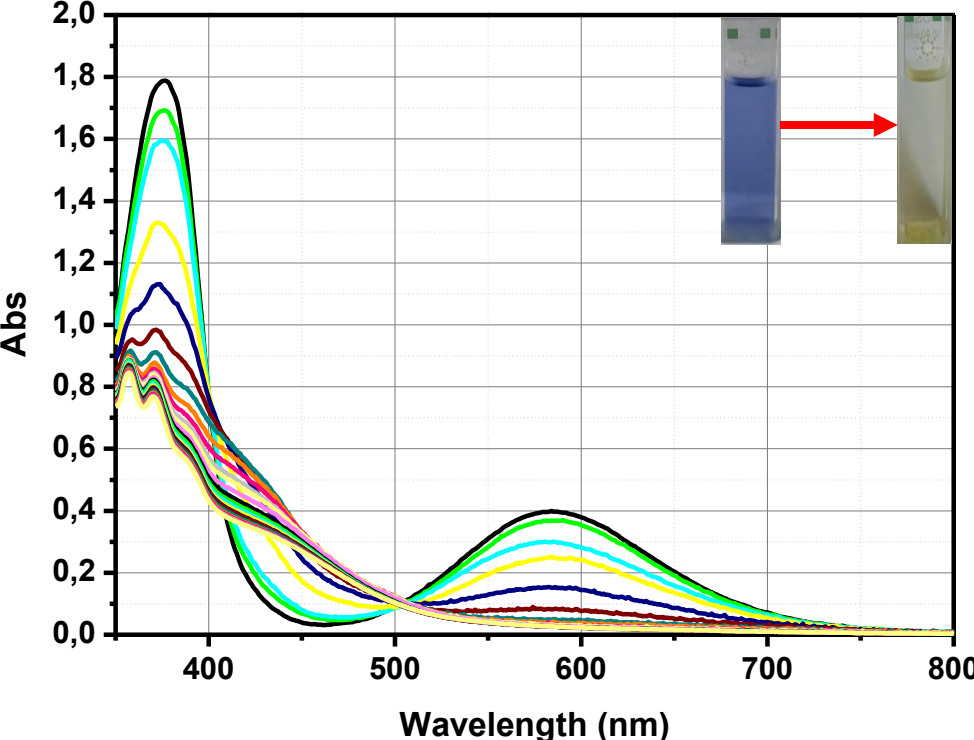
Compound D-A4



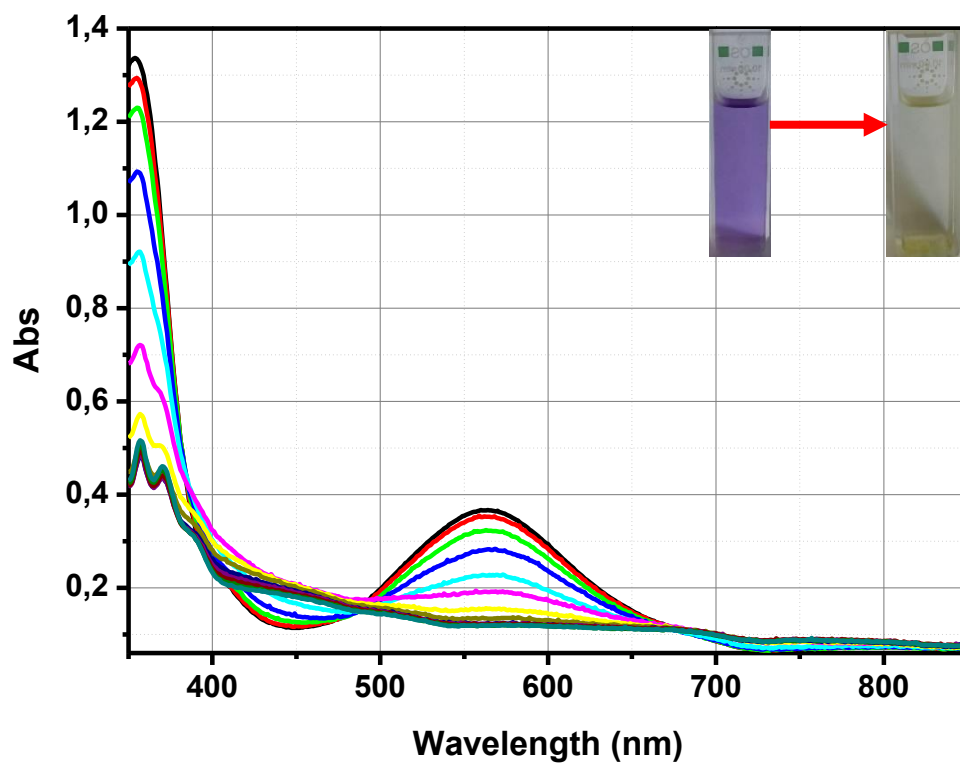
Compound D-A5



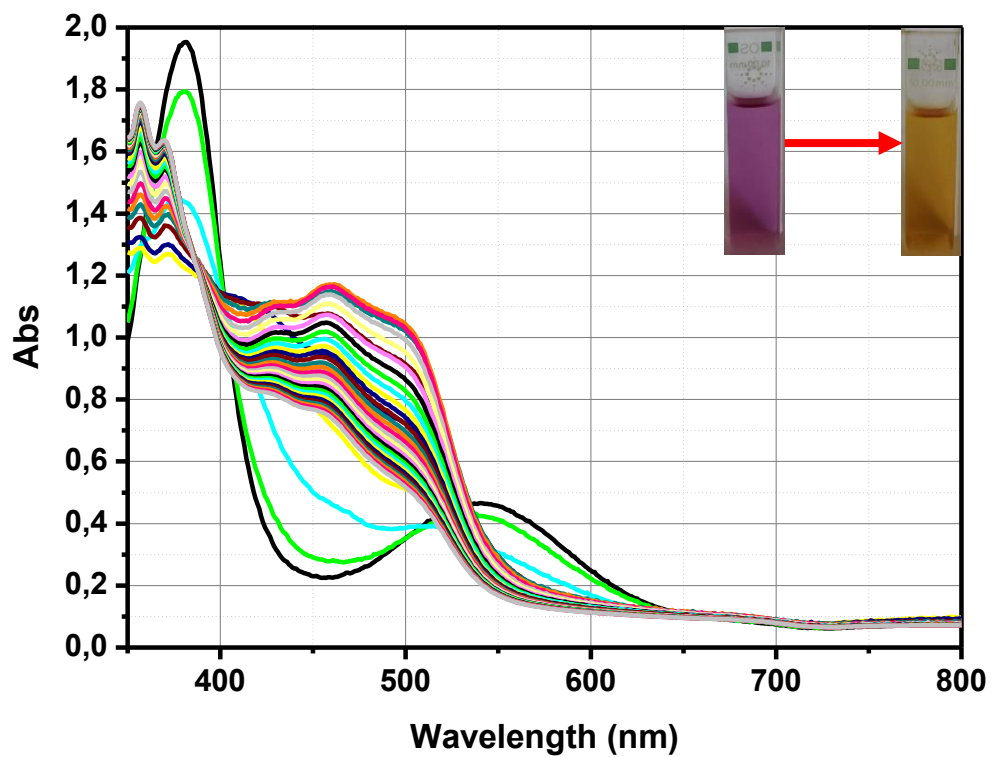
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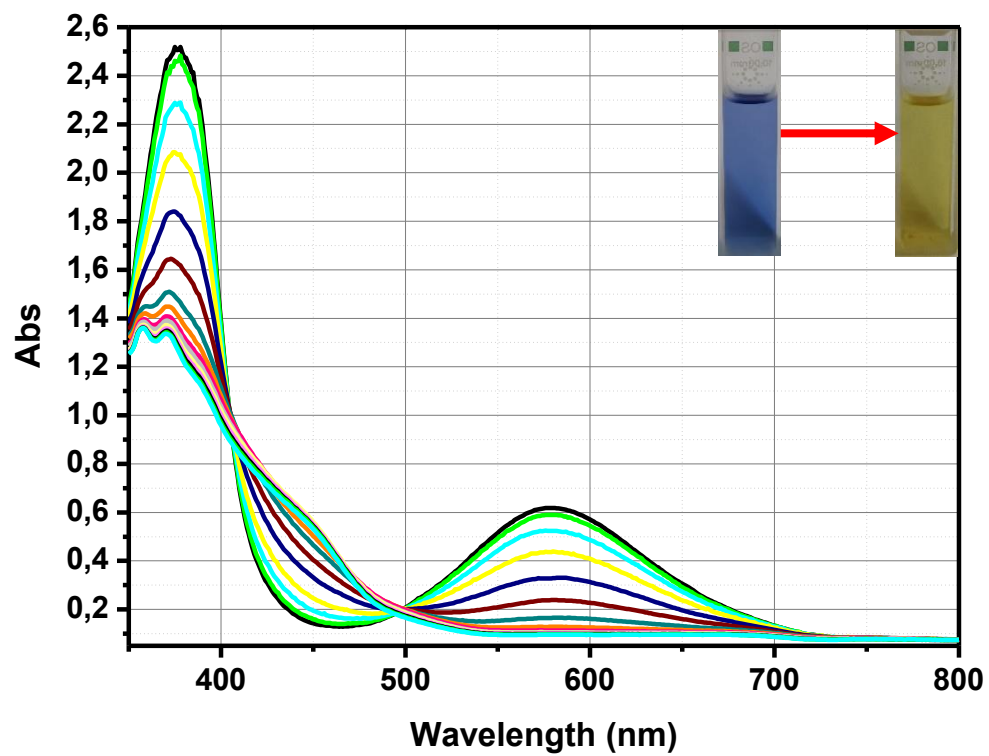
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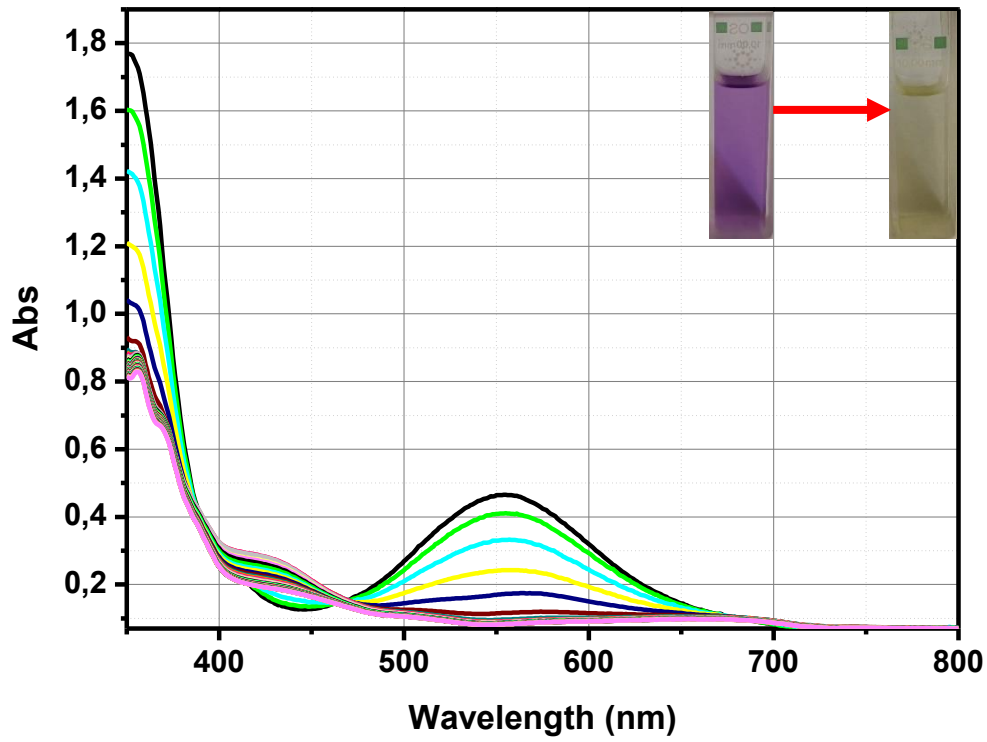
Compound D-A8



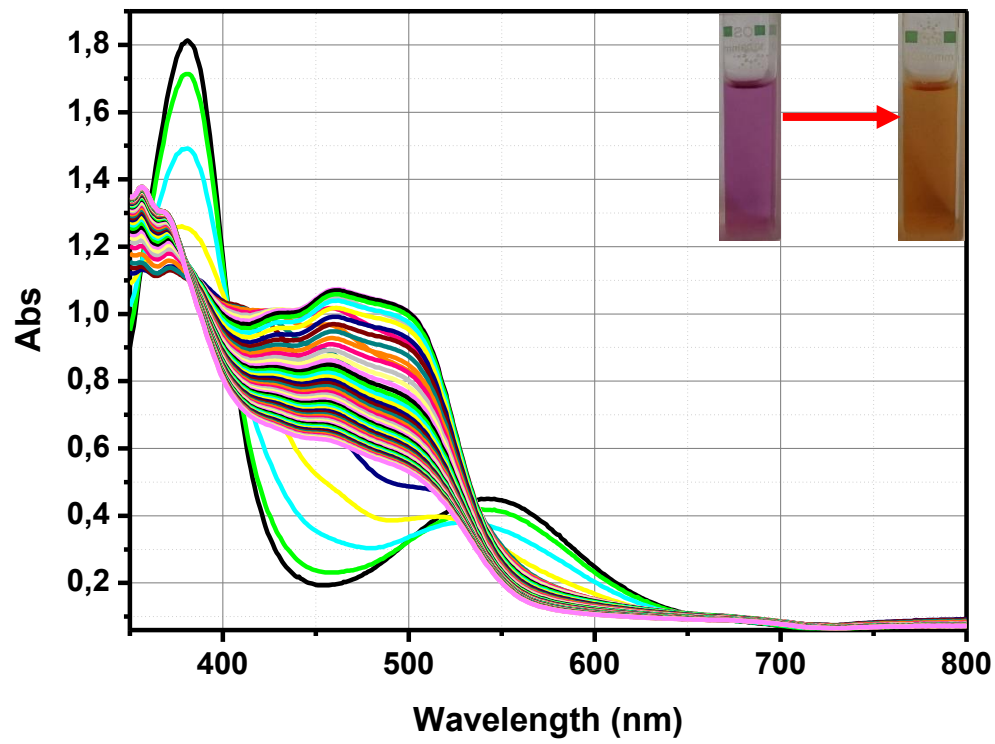
Compound D-A9



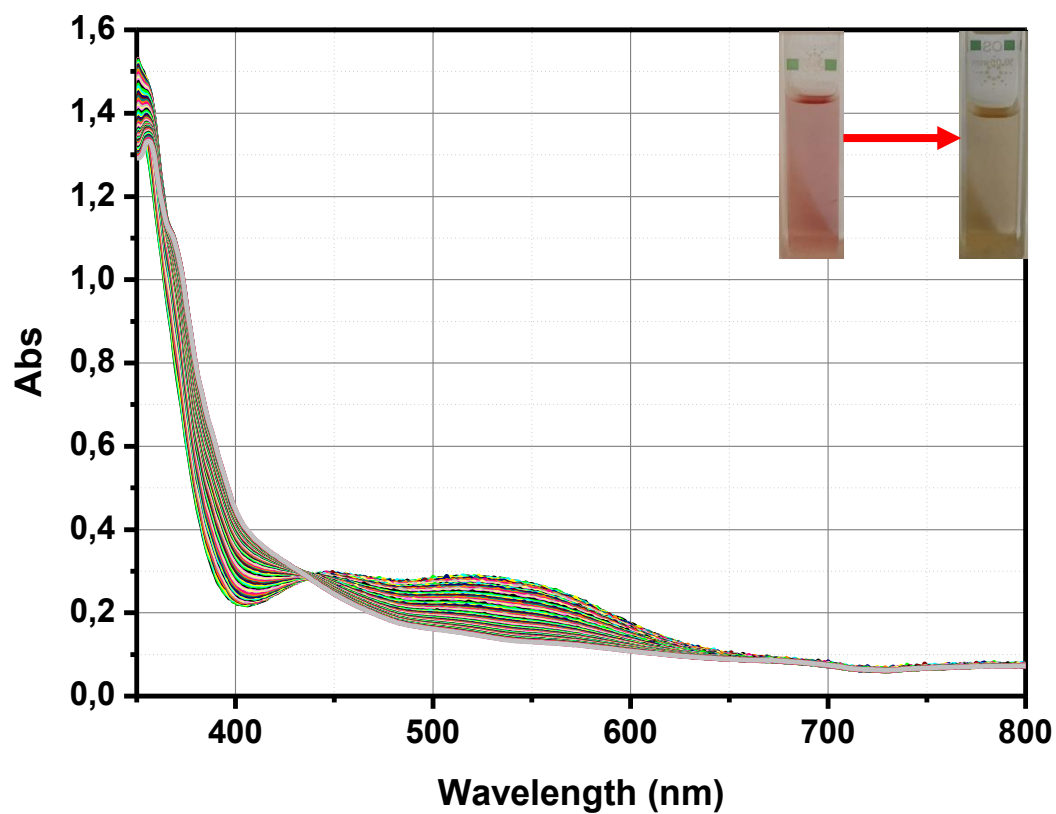
Compound D-A10



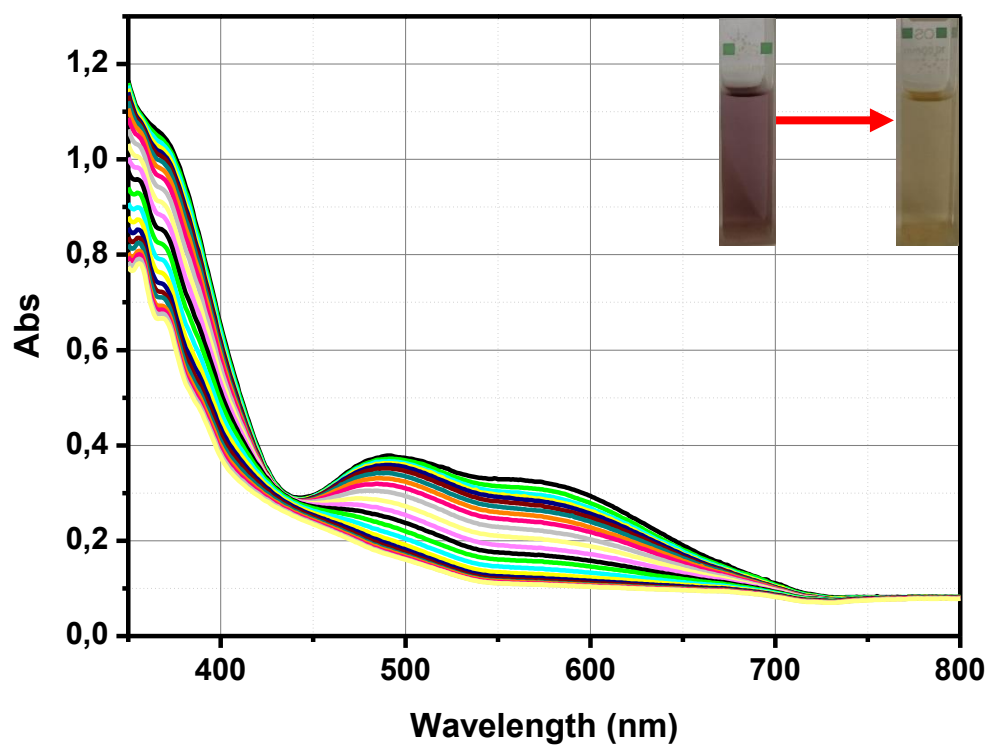
Compound D-A11



Compound A-D-A0

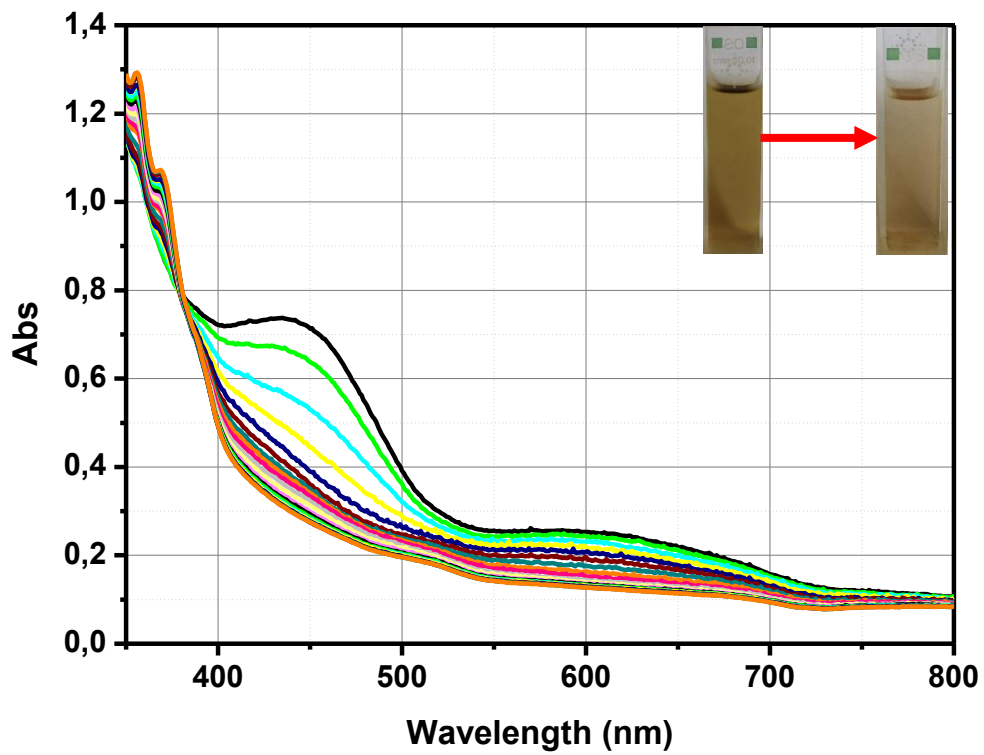


Compound A-D-A1

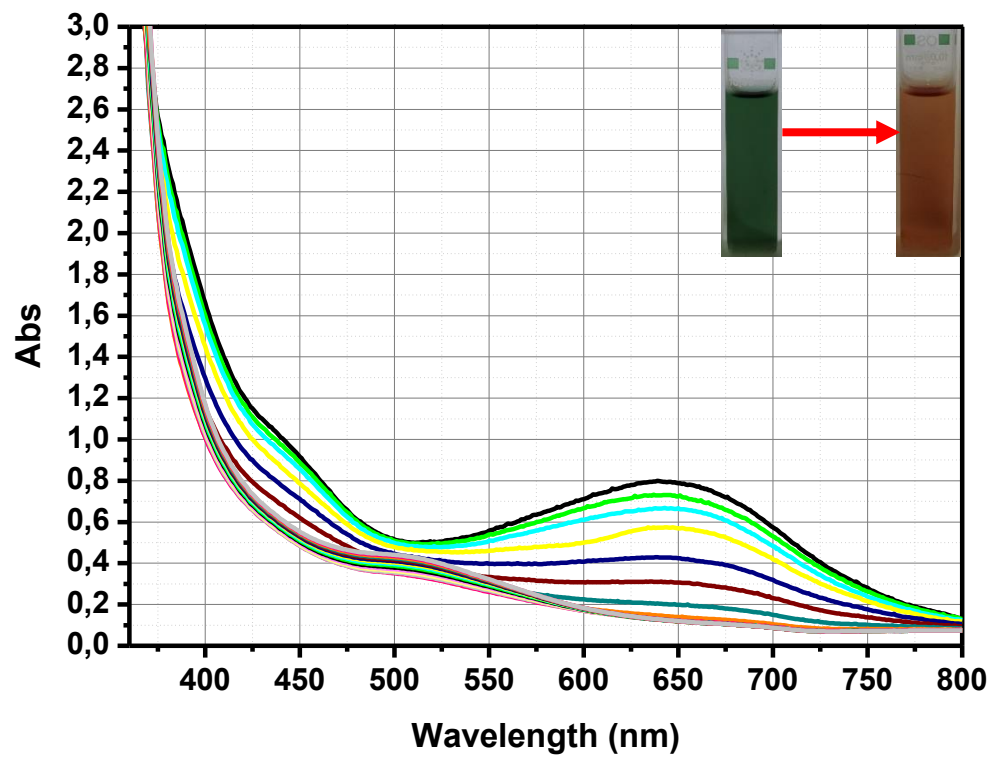


Compound A-D-A2

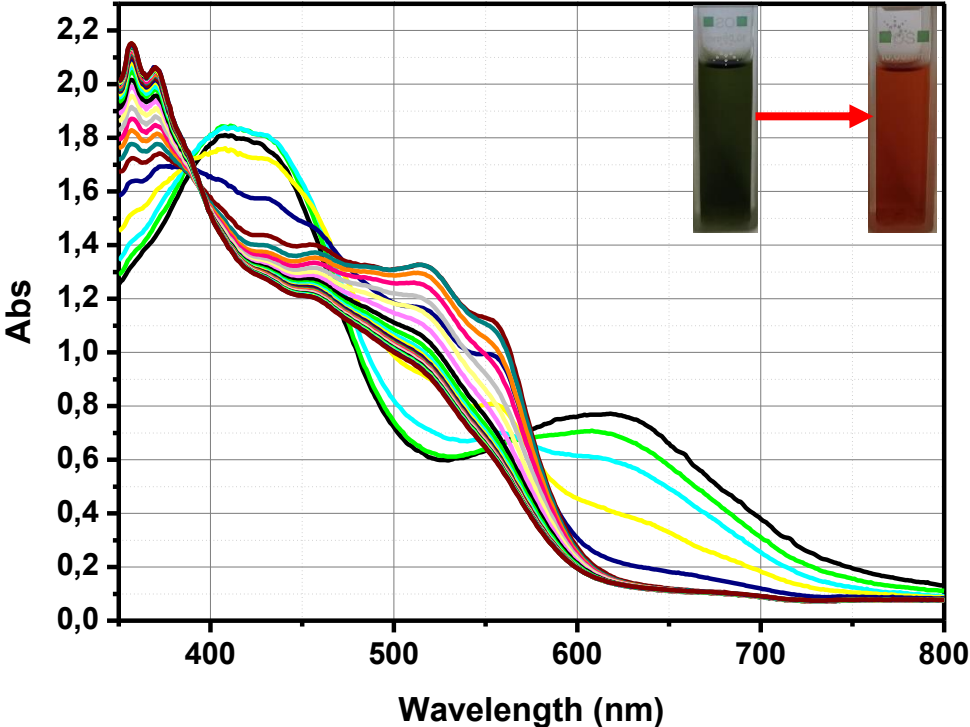




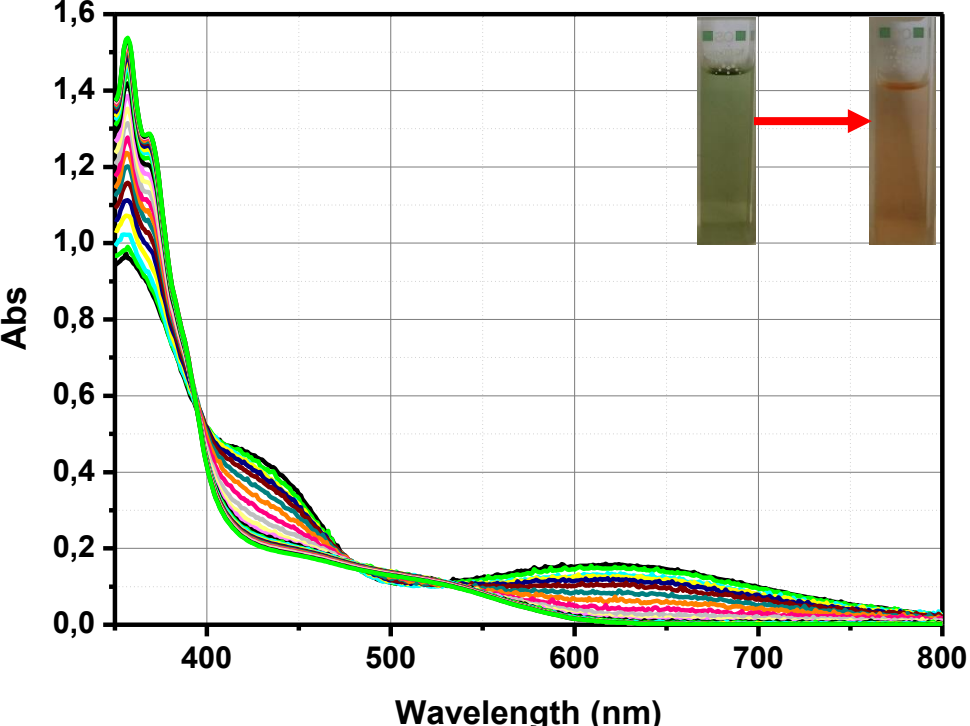
Compound A-D-A3



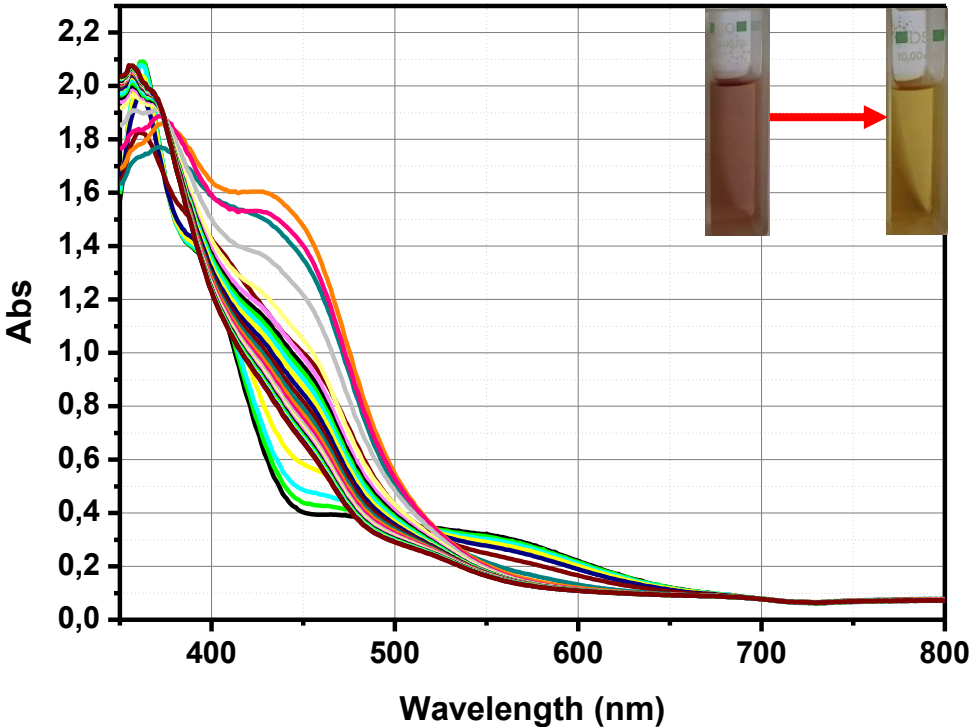
Compound A-D-A4



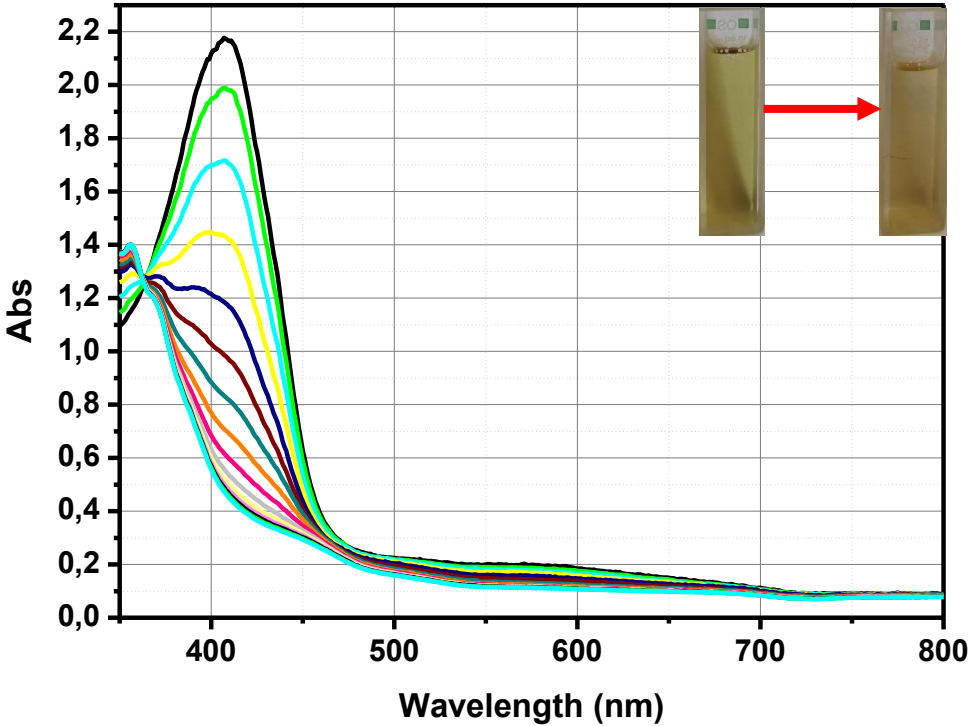
Compound A-D-A5



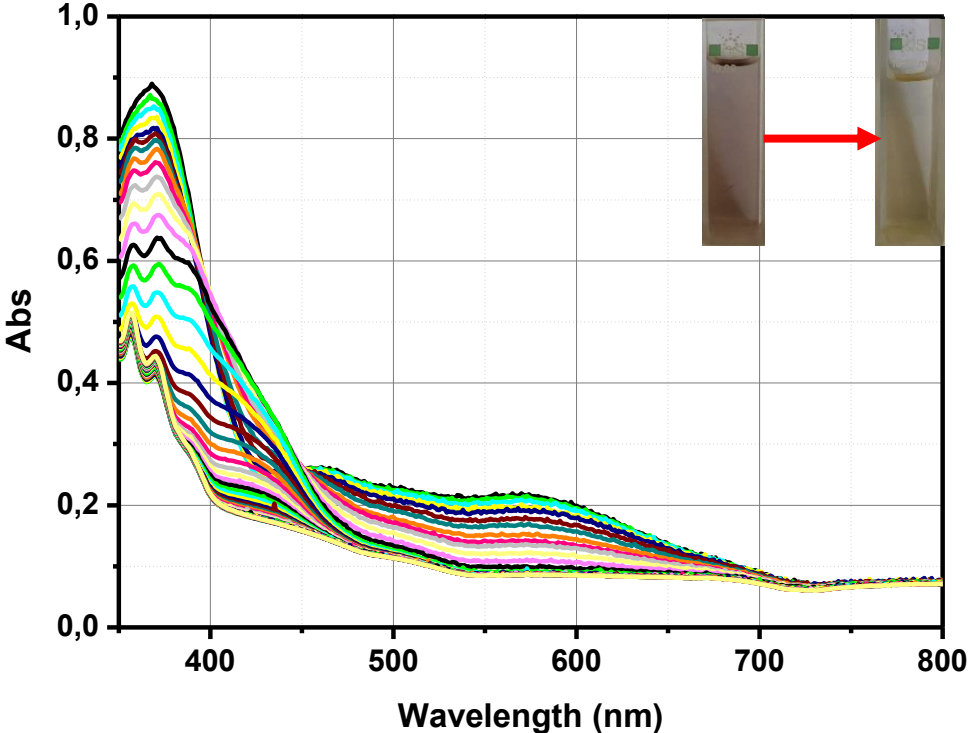
Compound A-D-A8



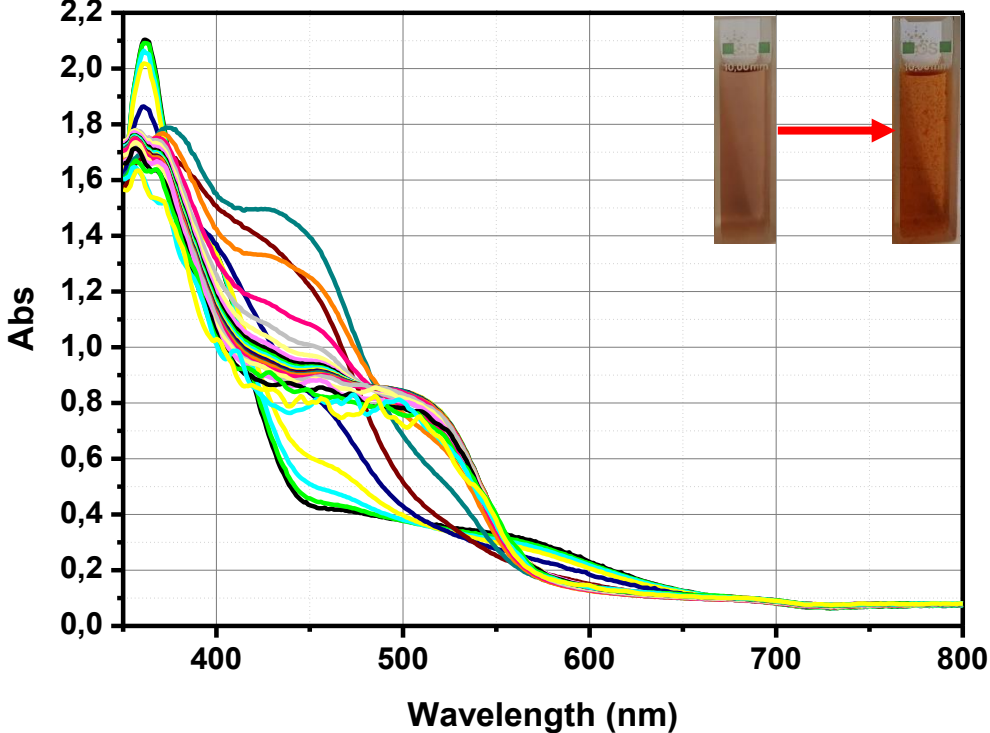
Compound A-D-A9



Compound A-D-A10



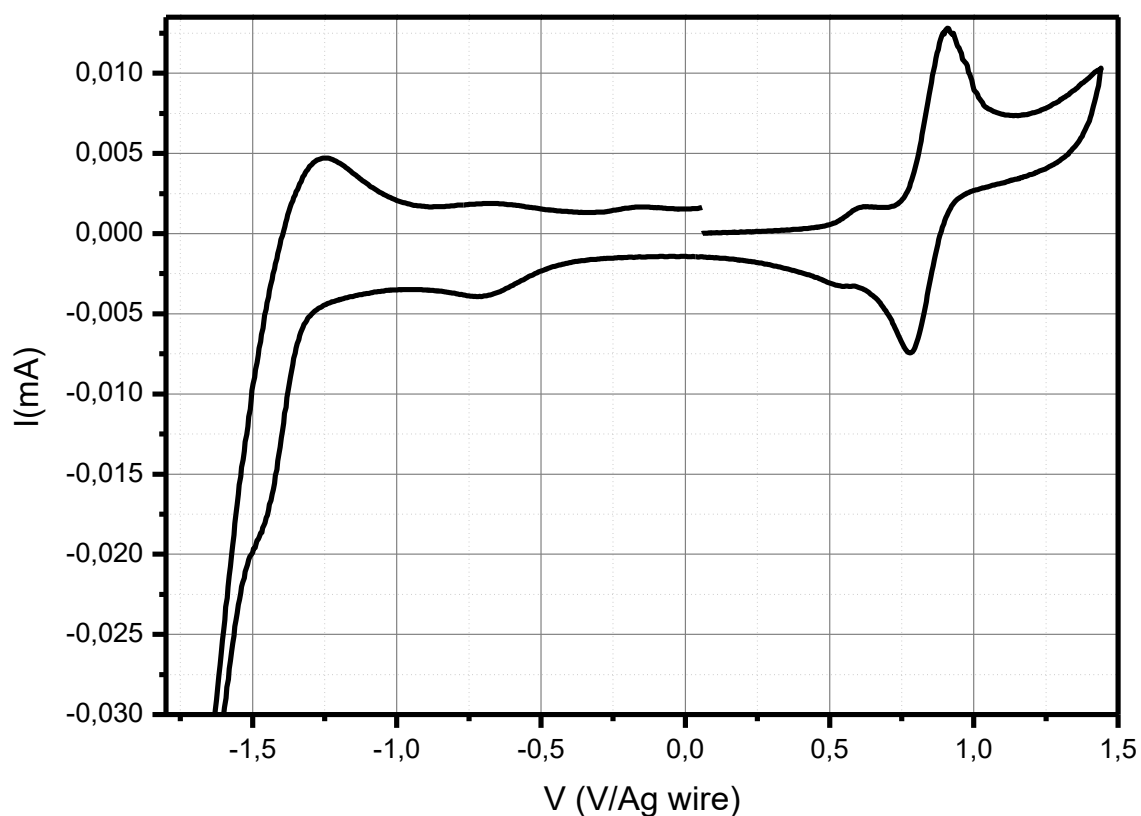
Compound A-D-A11



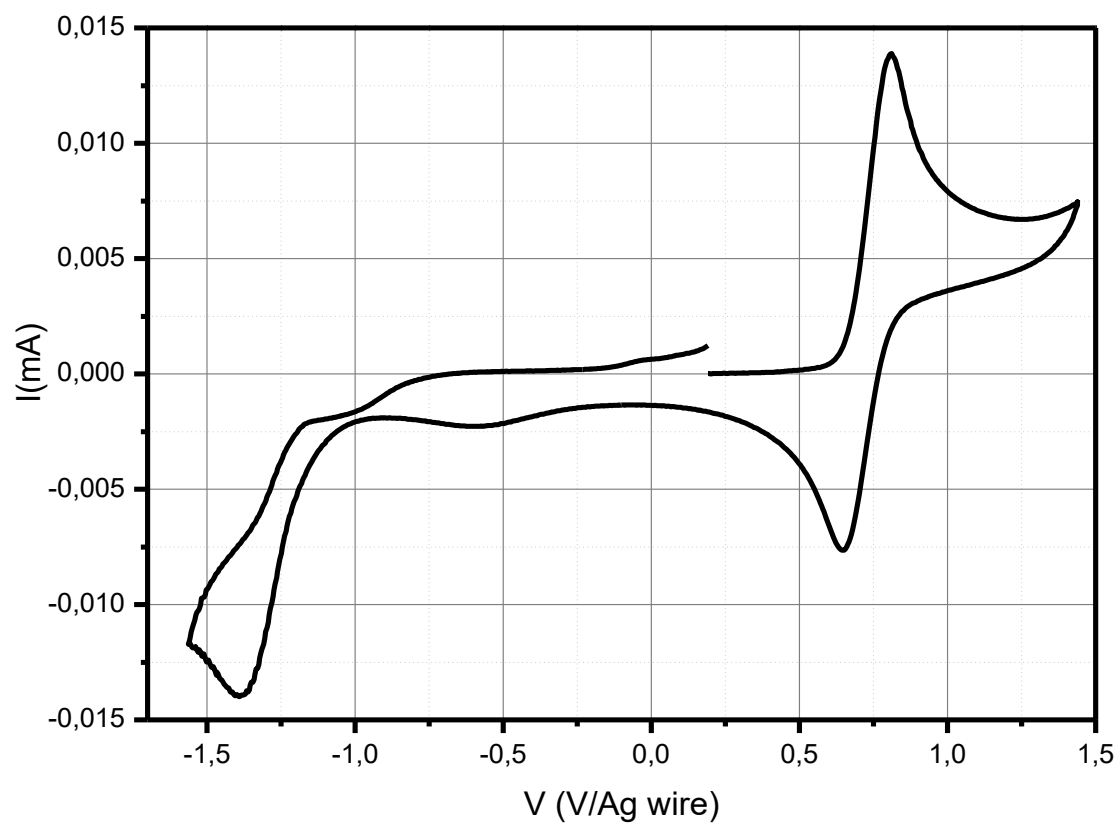
### Cyclic voltammograms of the different dyes

The electrochemical properties of the investigated compounds were measured in dichloromethane by cyclic voltammetry, scan rate  $100 \text{ mV}\cdot\text{s}^{-1}$ , with tetrabutylammonium perchlorate (0.1M) as the supporting electrolyte in a standard one-compartment, three-electrode electrochemical cell under an argon stream using a VSP BioLogic potentiostat. The working, pseudo-reference and counter electrodes were platinum disk ( $\text{Ø} = 1 \text{ mm}$ ), Ag wire, and Au wire gauze, respectively. Ferrocene was used as an internal standard.

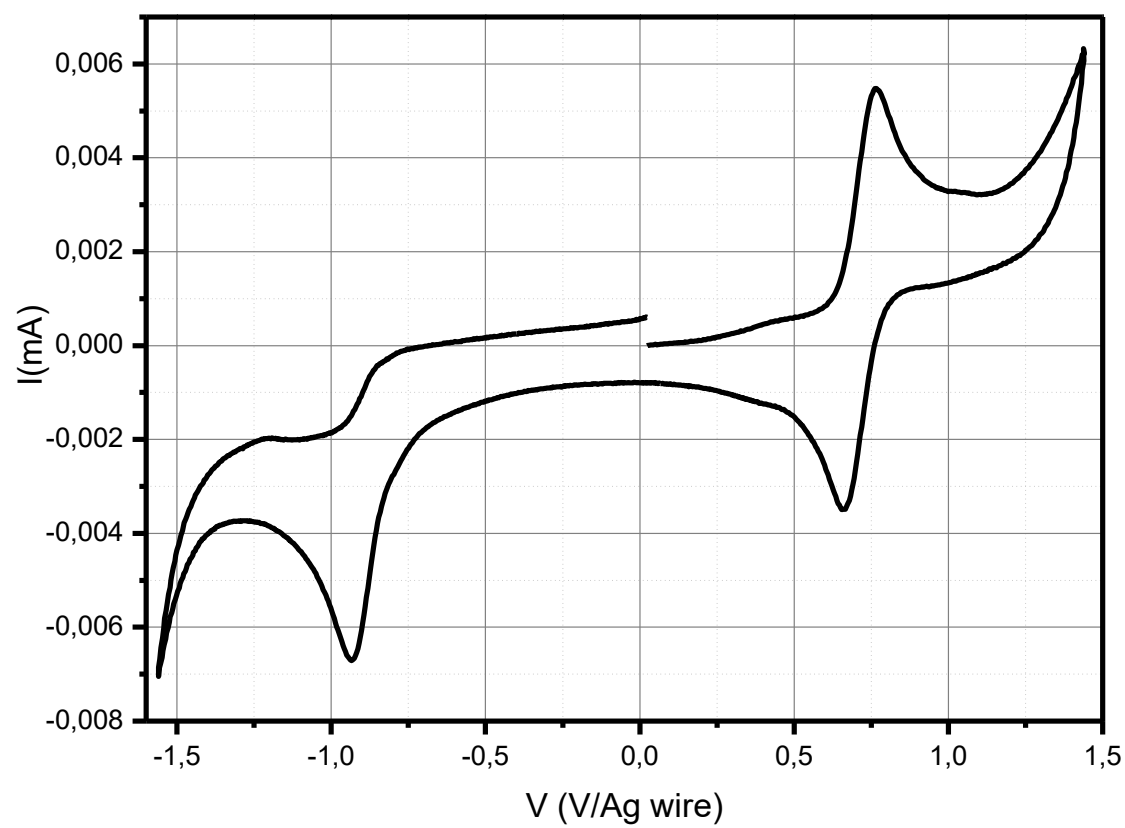
#### Compound D-A0



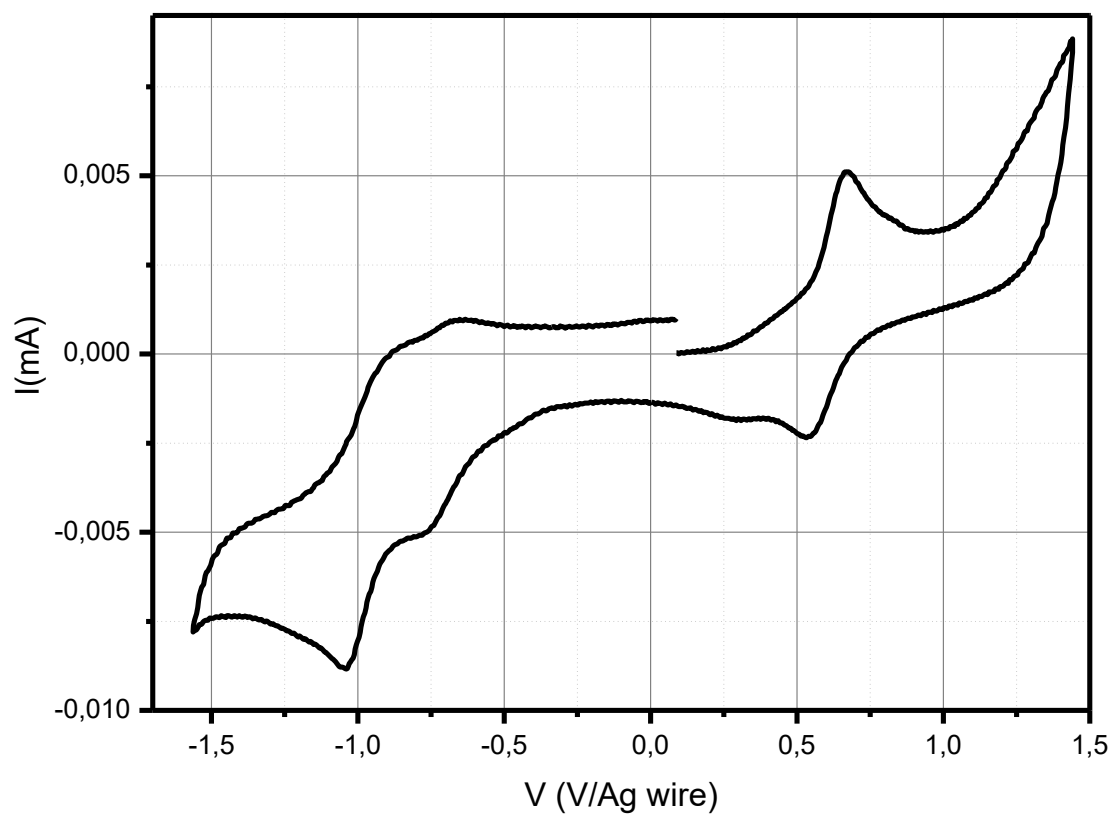
Compound D-A1



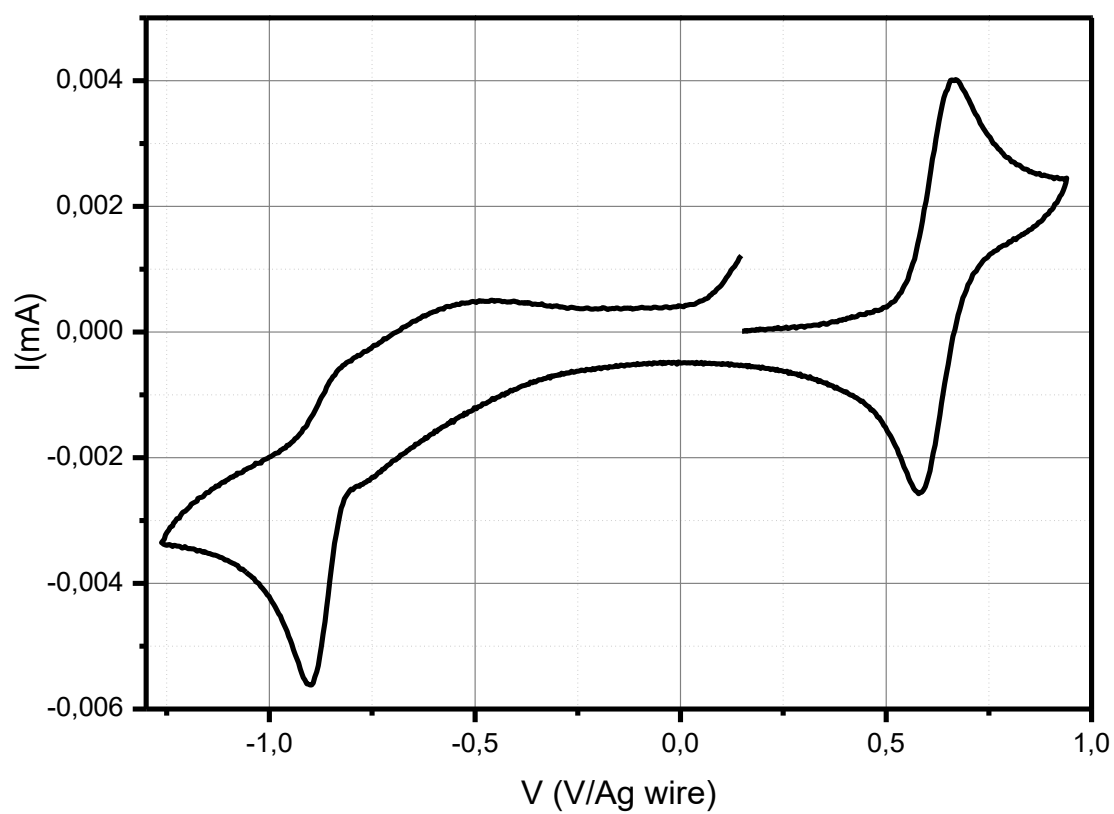
Compound D-A2



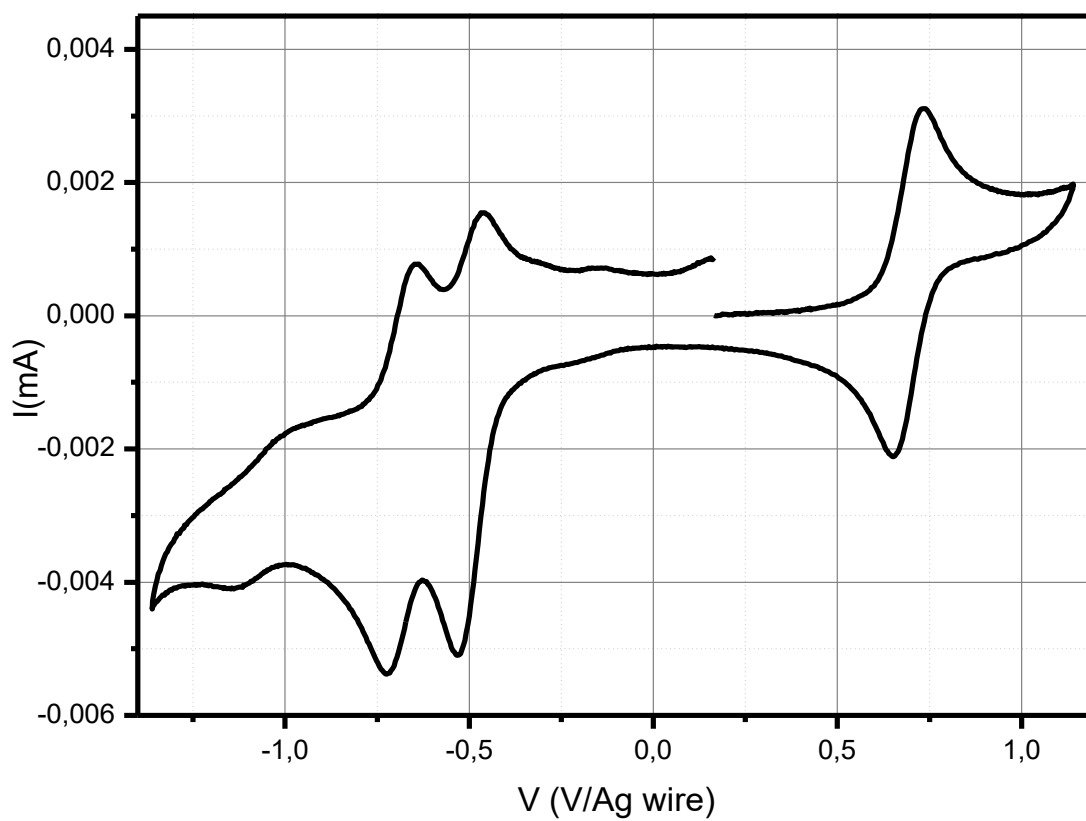
Compound D-A3



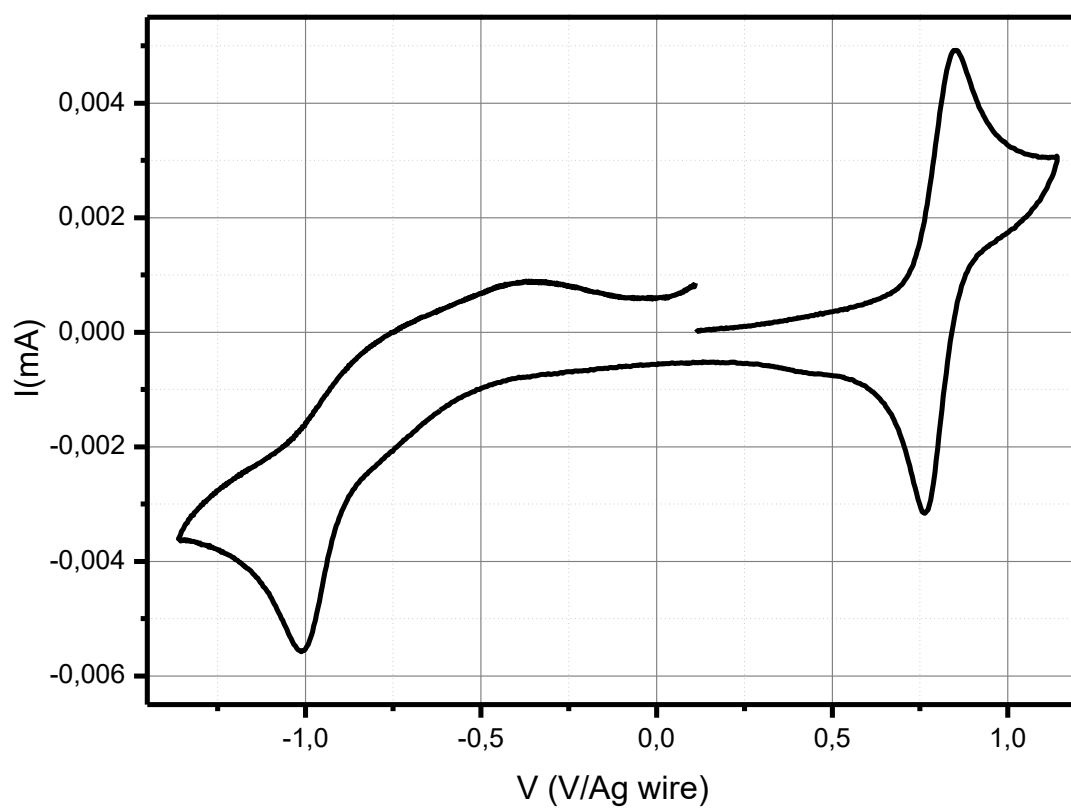
Compound D-A4



Compound D-A5

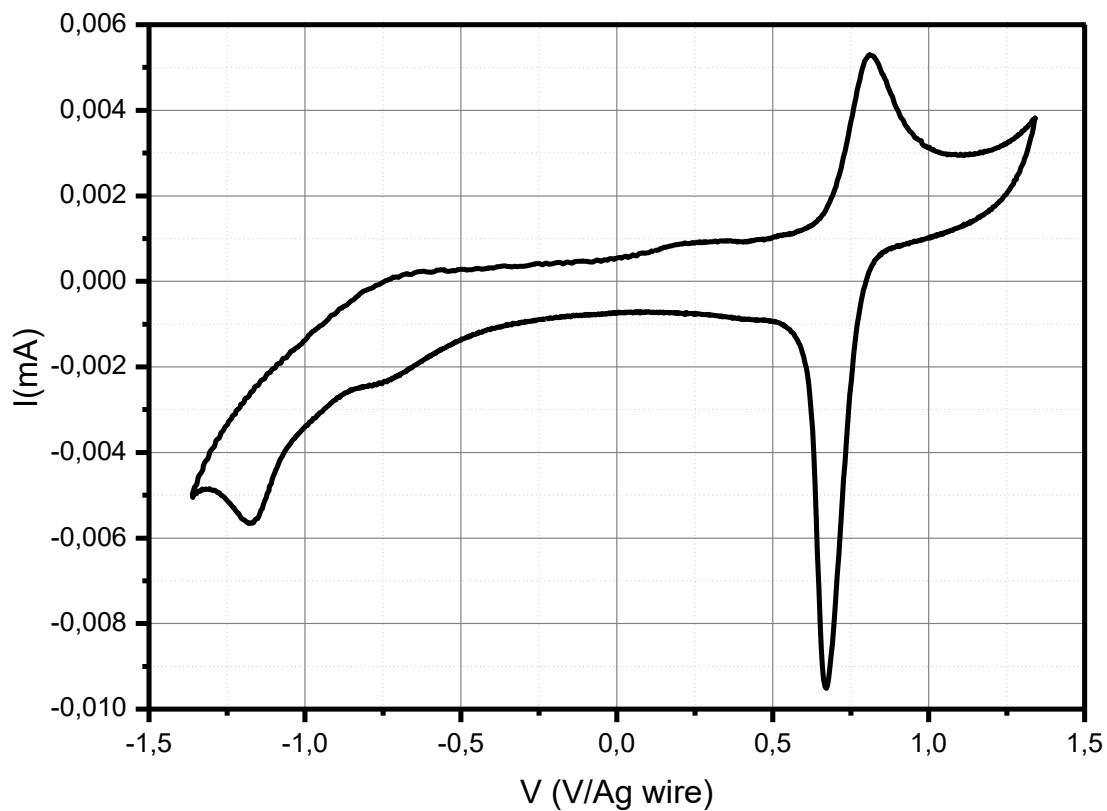


Compound D-A6

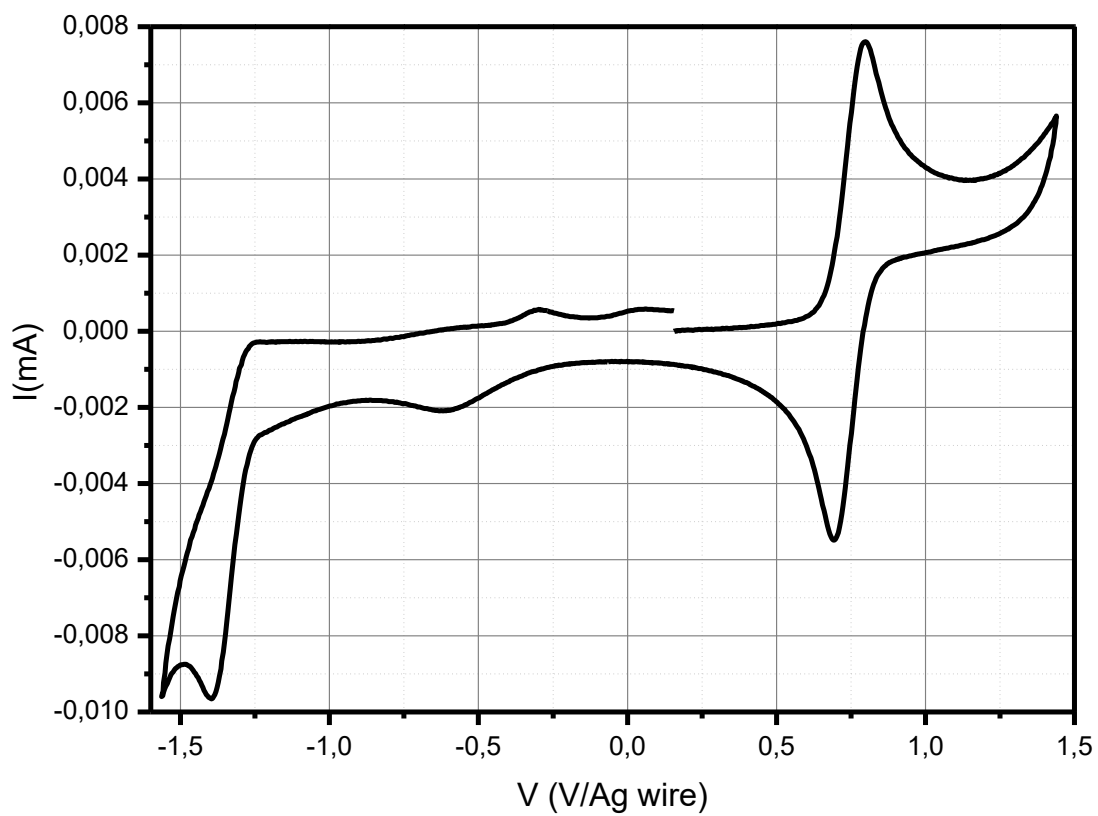




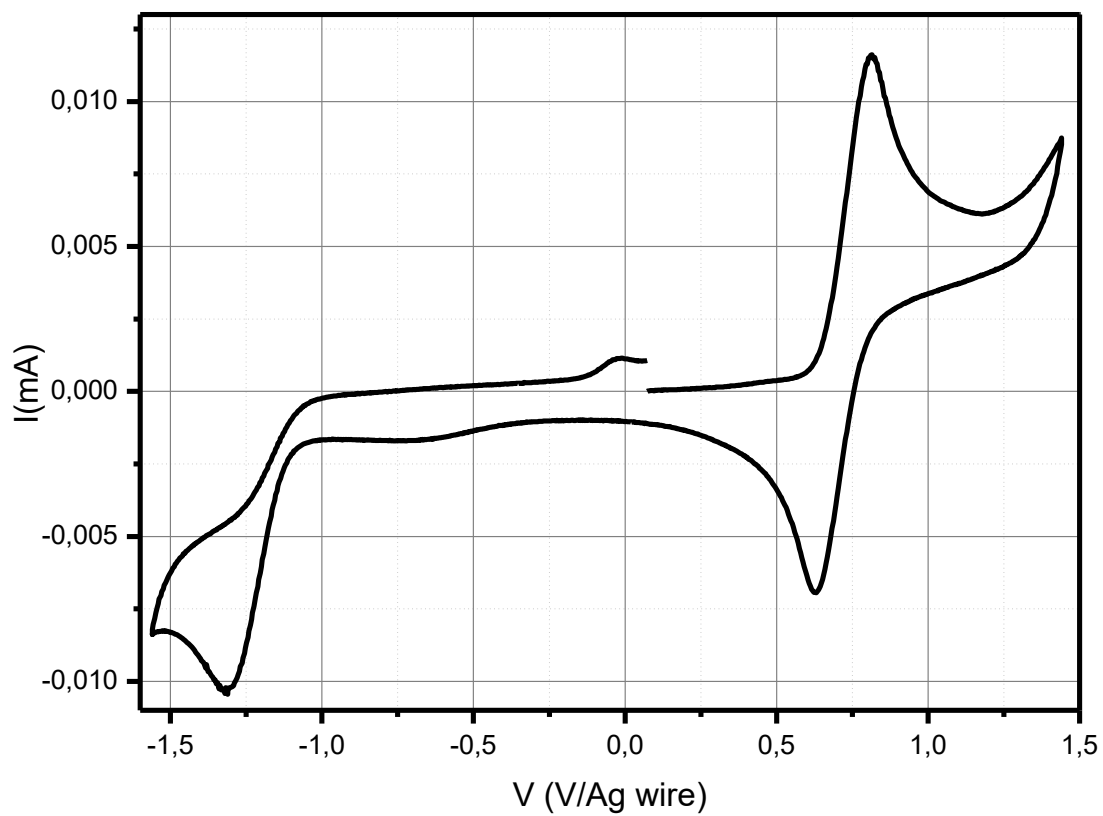
Compound D-A7



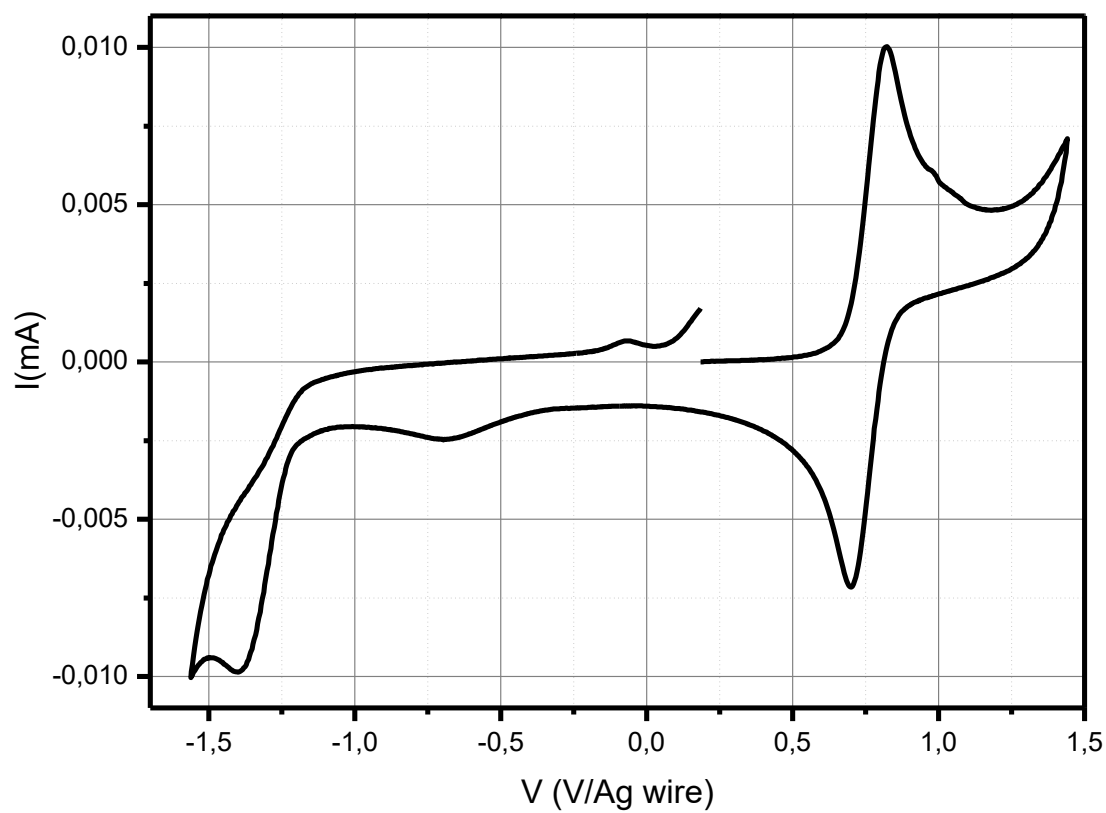
Compound D-A8



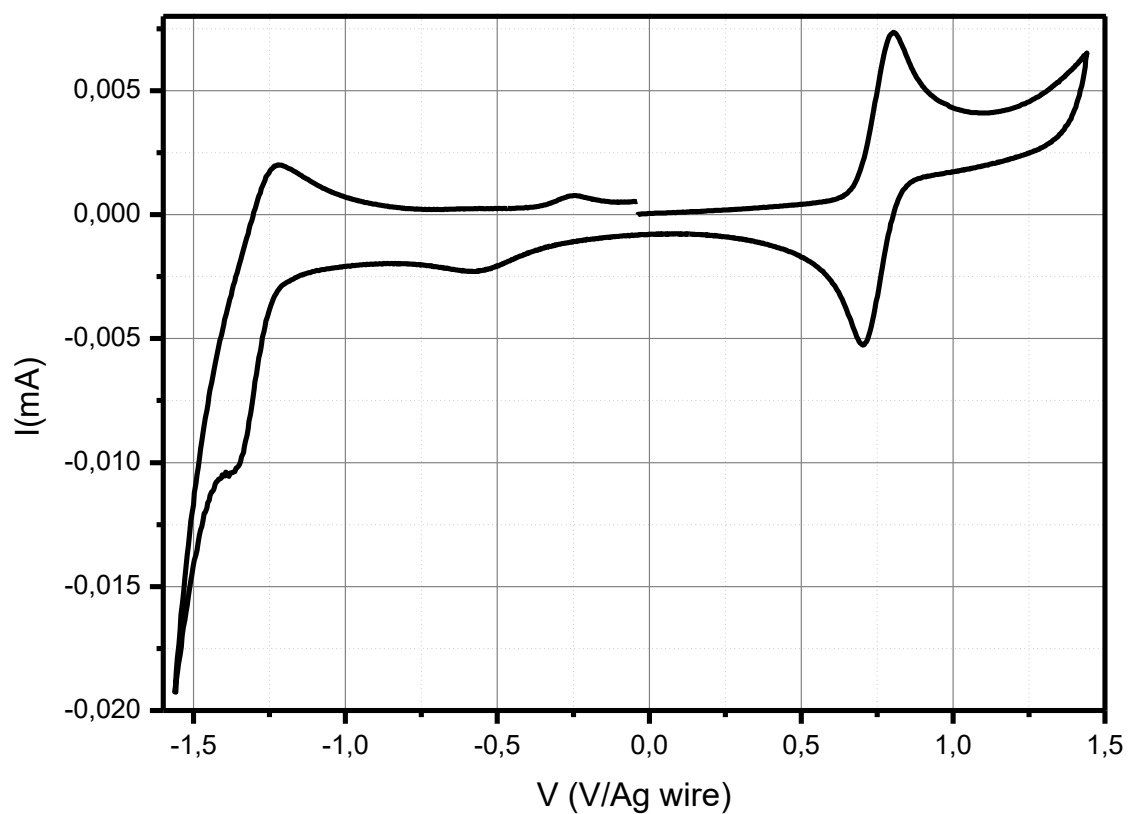
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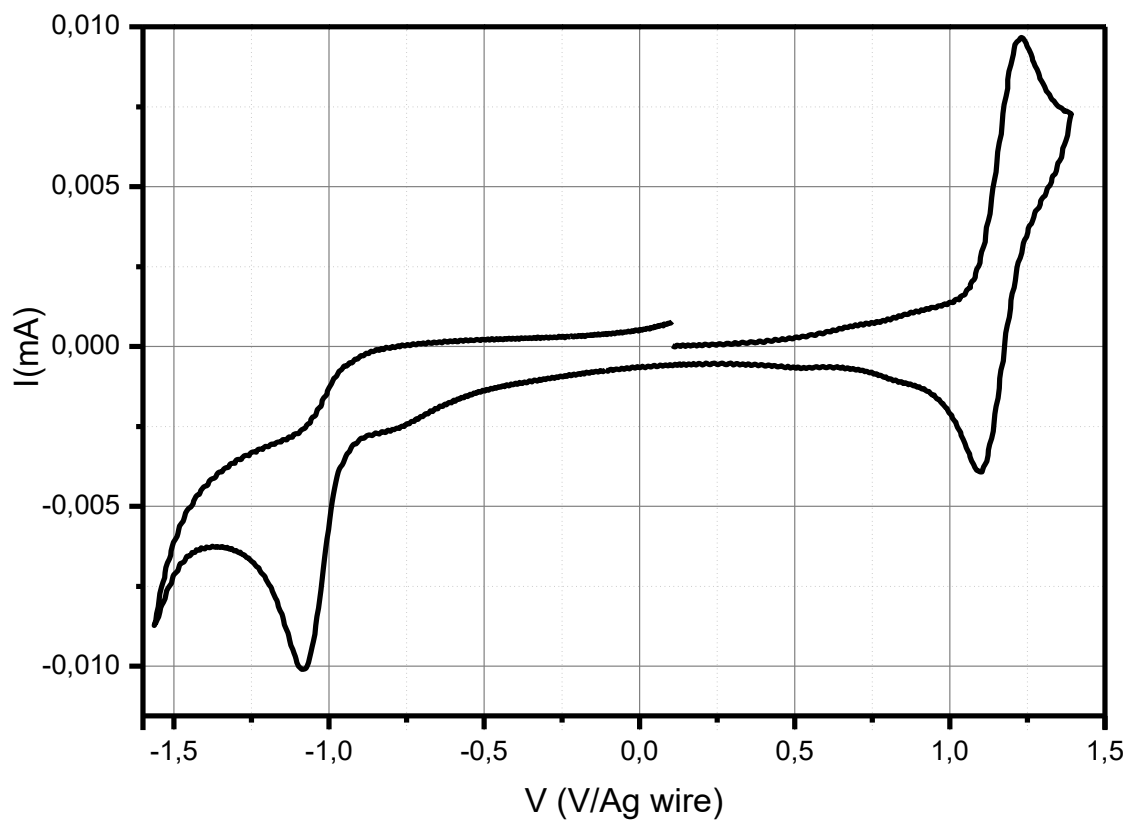
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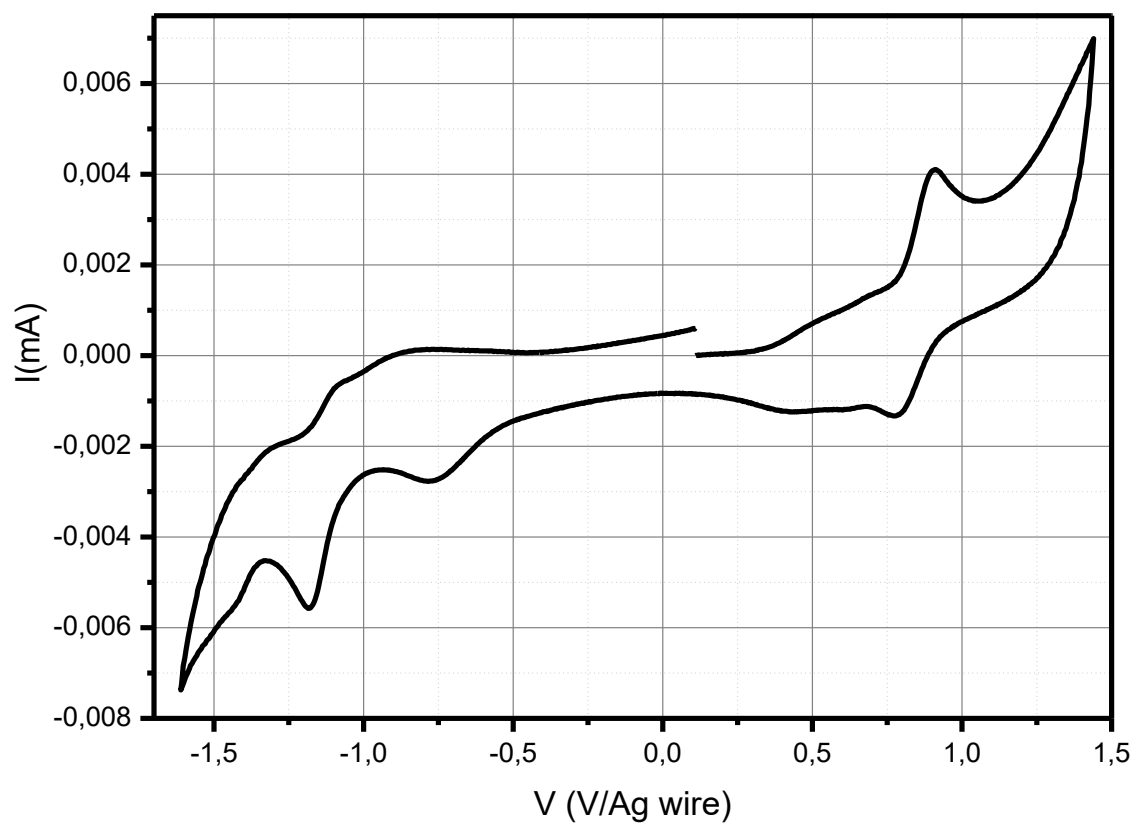
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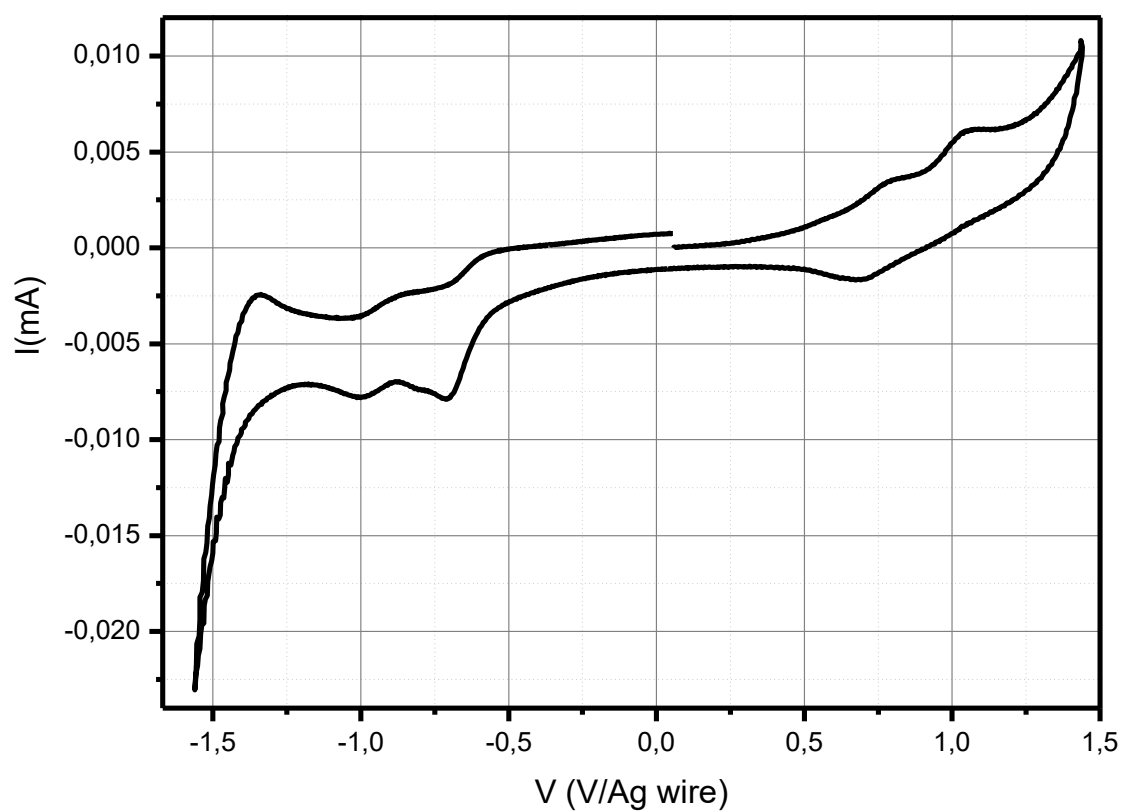
Compound A-D-A0



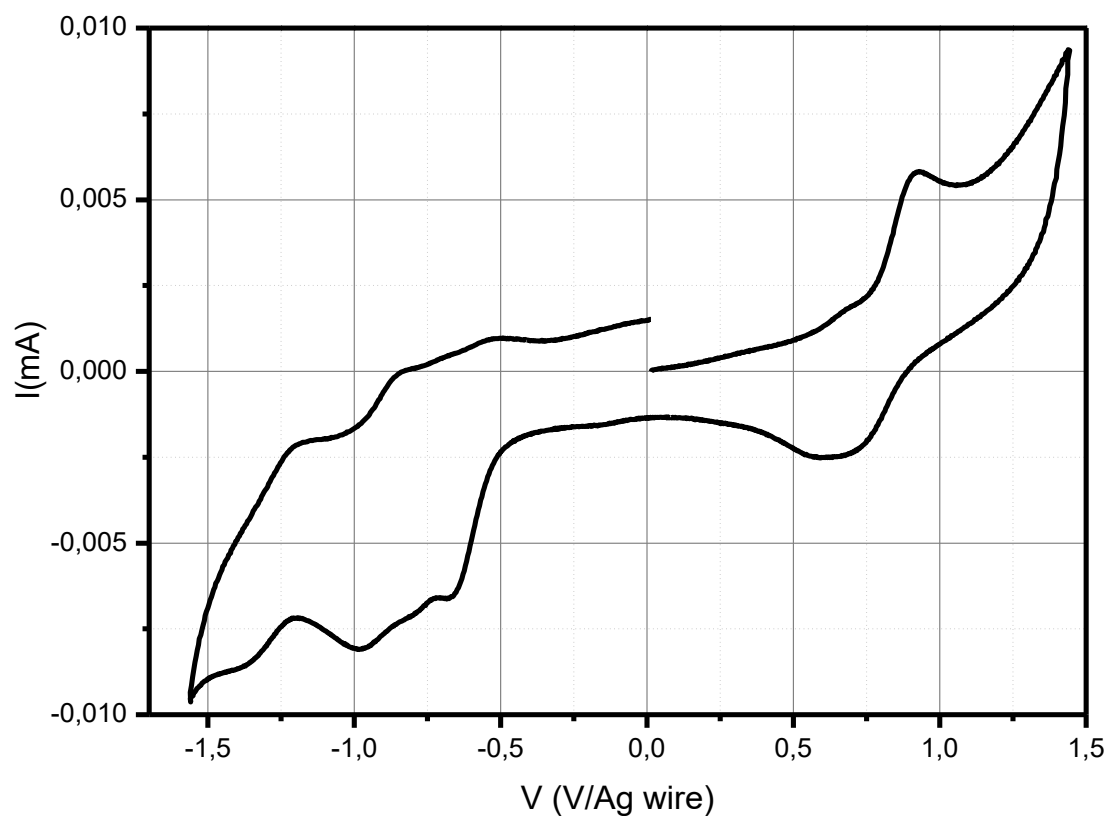
Compound A-D-A1



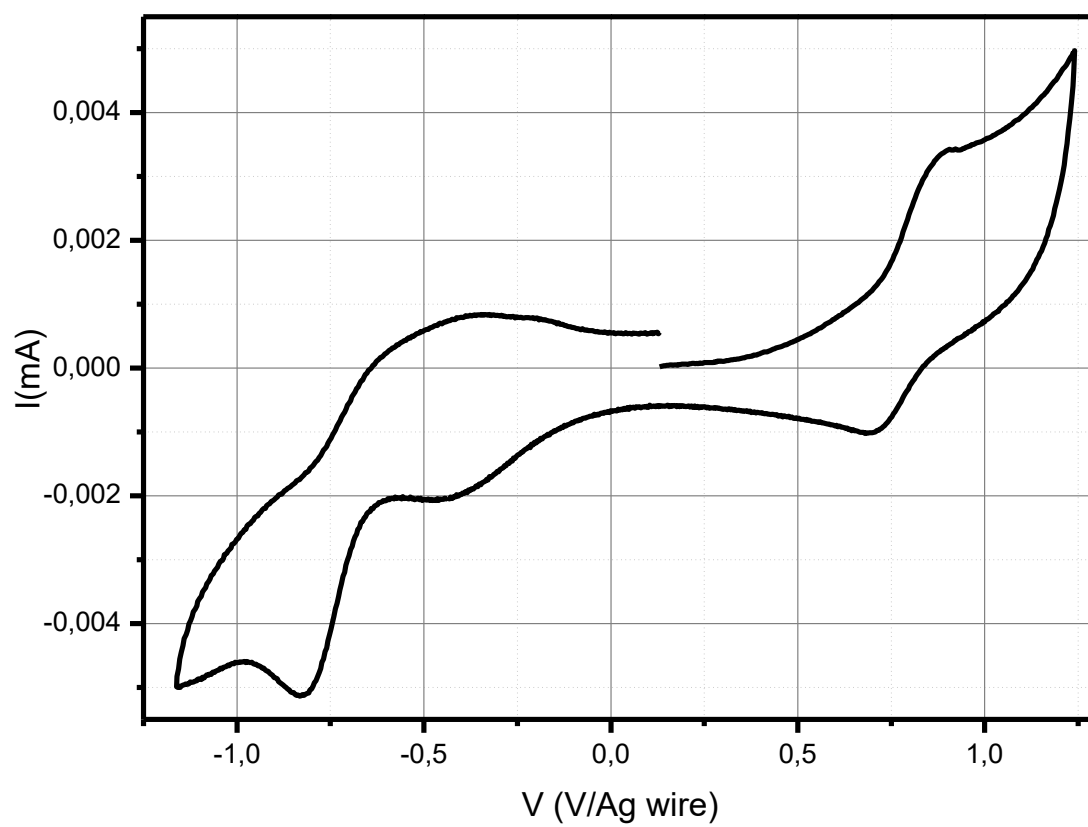
Compound A-D-A2



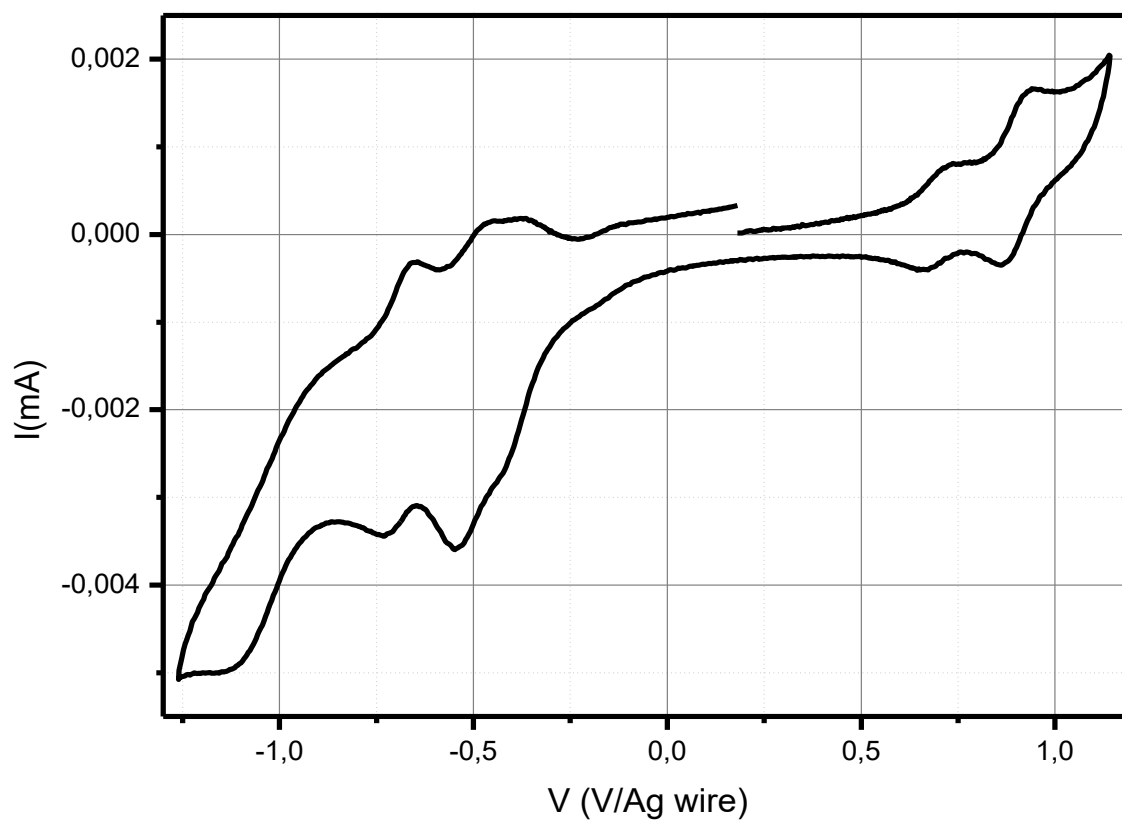
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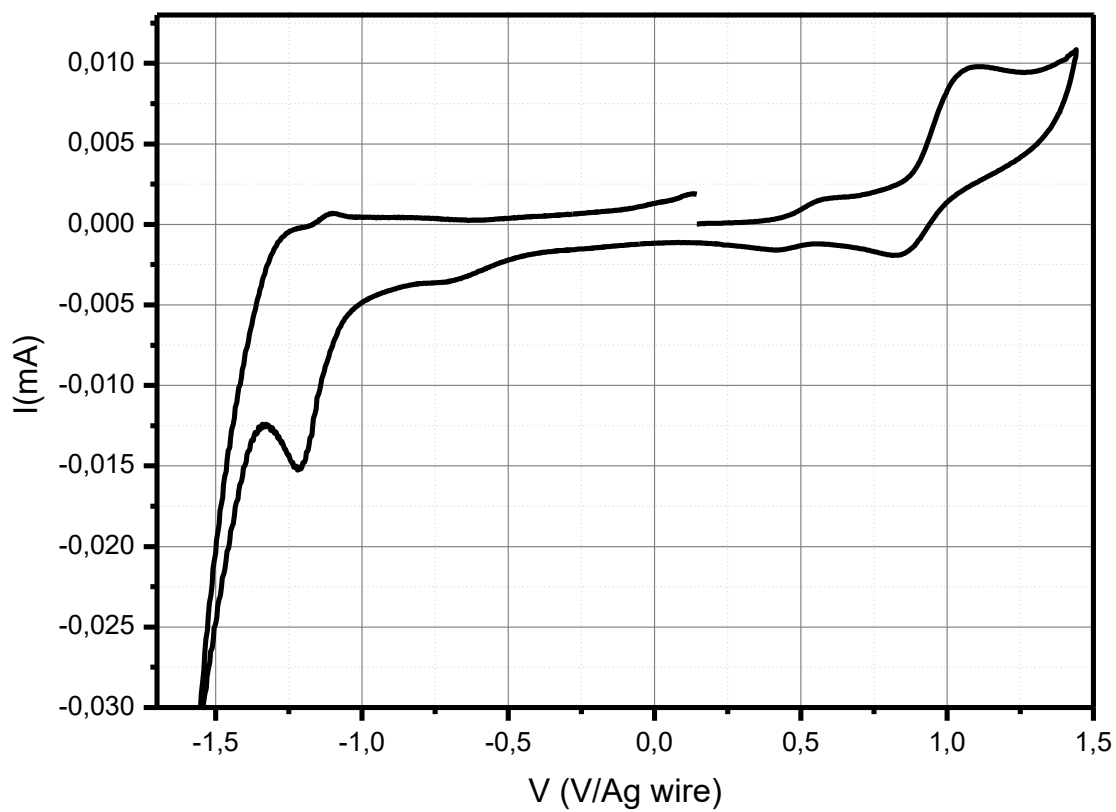
Compound A-D-A4



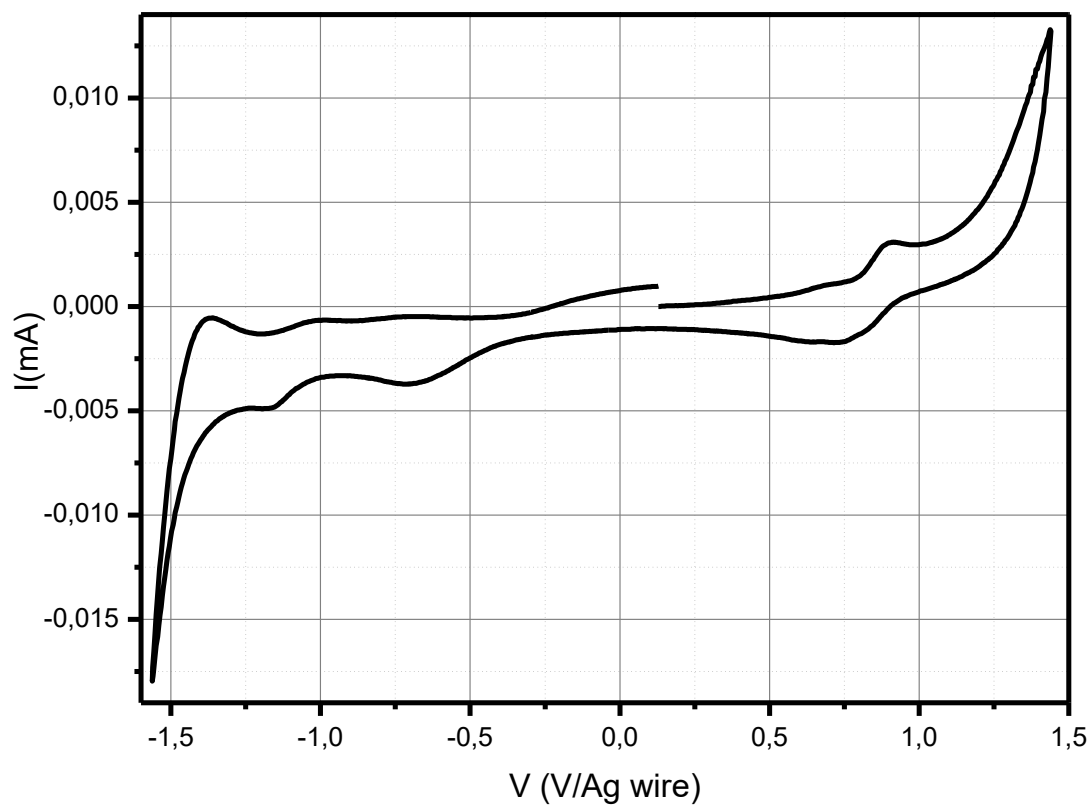
Compound A-D-A5



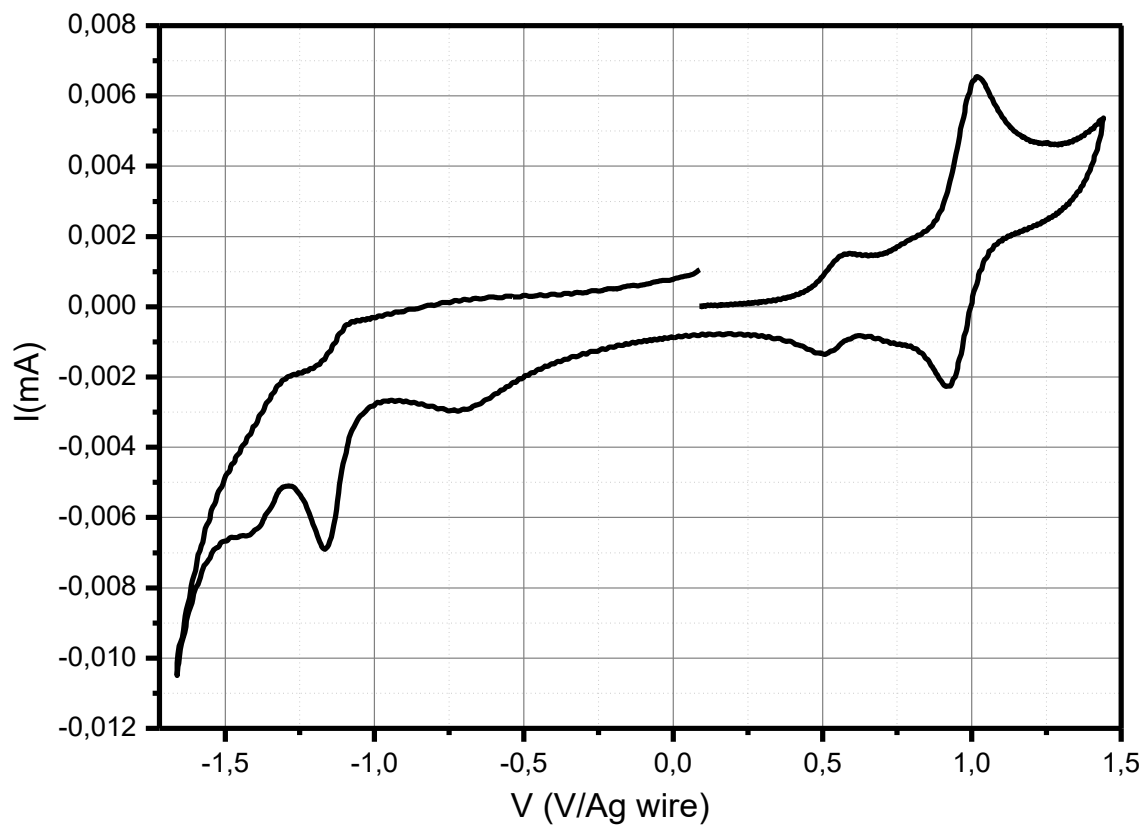
Compound A-D-A8



Compound A-D-A10



Compound A-D-A11



## Optimized geometries and HOMO LUMO electronic distributions of all compounds

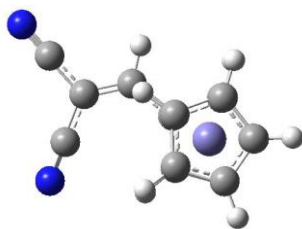
Computational details: All quantum mechanical calculations were computed using Gaussian Package [1]. All geometry optimizations were performed using density functional theory (DFT) with the global hybrid exchange-correlation functional B3LYP [2] and all minima on the potential energy surface were verified via a calculation of vibrational frequencies, ensuring no imaginary frequencies were present. The Pople double-zeta basis set with a double set of polarization functions on non-hydrogen atoms (6-3111G(d,p))[3,4] was used throughout. This computational approach was chosen in consistency with previous works, as it provides good agreement with experimental data. Excited states were probed using time dependent density functional theory (TD-DFT) using the same functional. All transitions (singlet-singlet) were calculated vertically with respect to the singlet ground state geometry. Solvent effects were taken into account by using the implicit polarizable continuum model (PCM) [5,6]. DCM where chosen in analogy with the experiments. Computed spectra were simulated by convoluting each transition with Gaussians functions-centered on each absorption maximum- using a constant full width at half maximum (FWHM) value of 0.2 eV. The assignment of electronic transitions for  $\lambda_{\max}$  has been determined with GaussSum 3.0 software [7]

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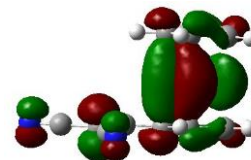


Compound D-A0

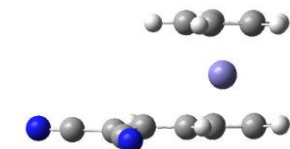
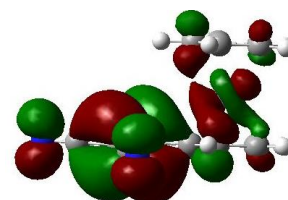
D-A0



Homo

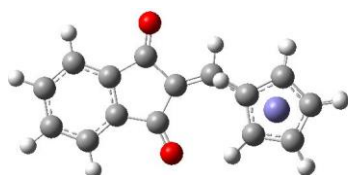


Lumo

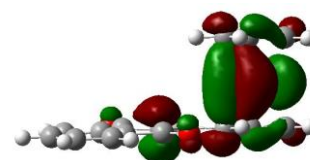


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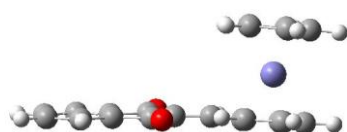
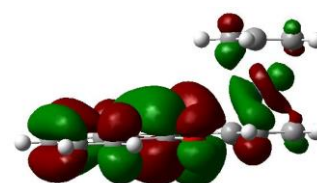
D-A1



Homo

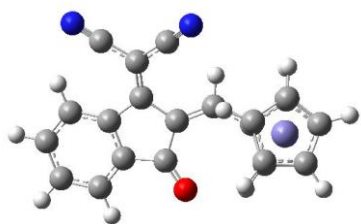


Lumo

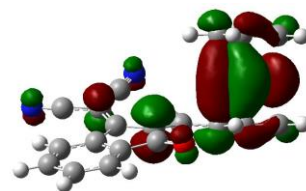


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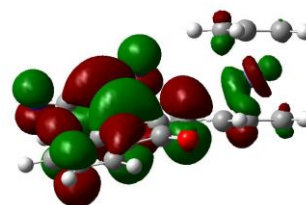
D-A2



Homo

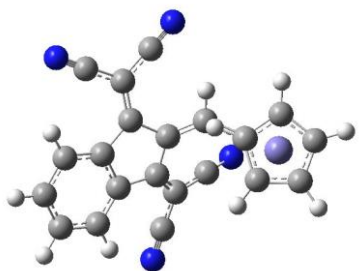


Lumo

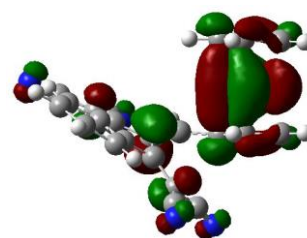


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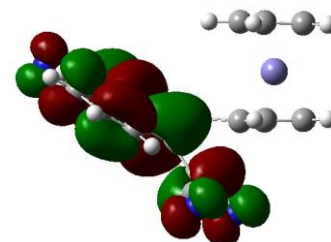
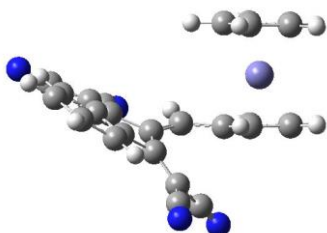
D-A3



Homo

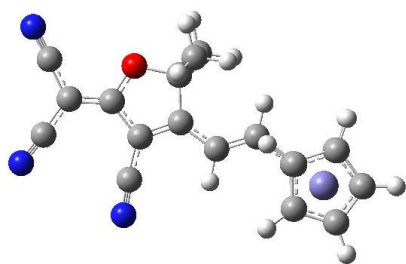


Lumo

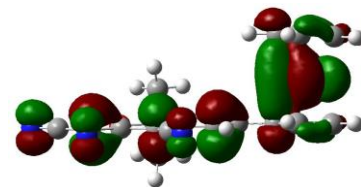


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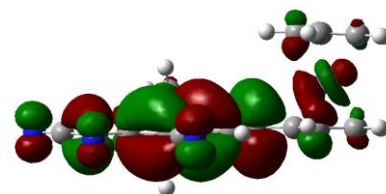
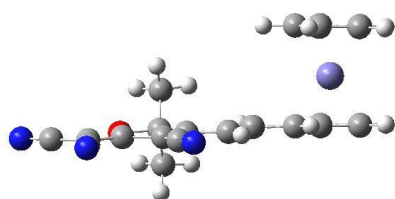
D-A4



Homo

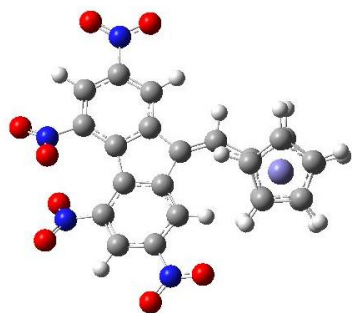


Lumo

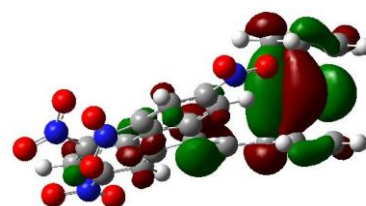


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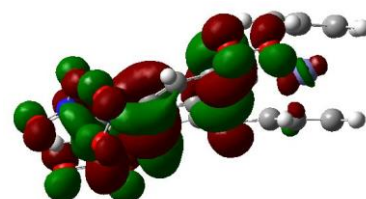
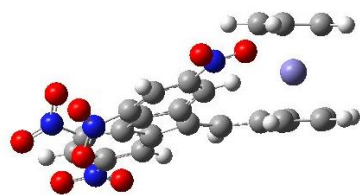
D-A5



Homo

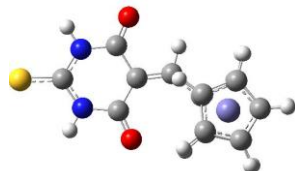


Lumo

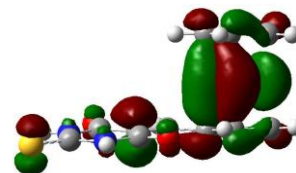


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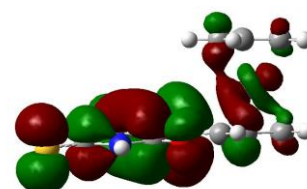
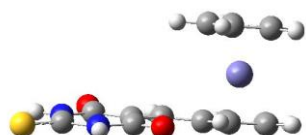
D-A6



Homo

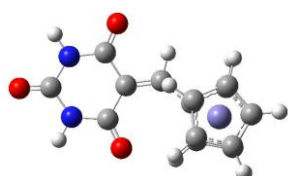


Lumo



Compound D-A7

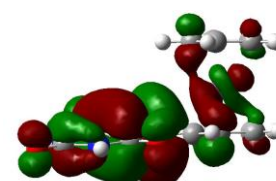
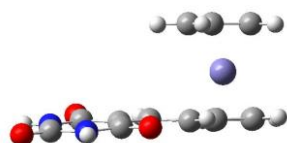
D-A7



Homo

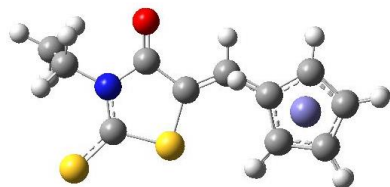


Lumo

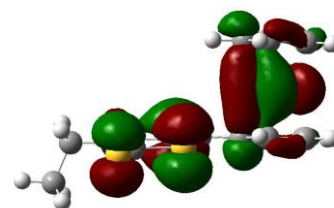


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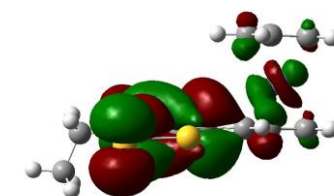
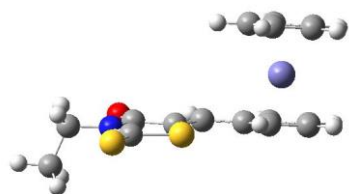
D-A8



Homo

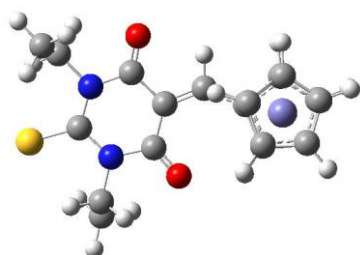


Lumo

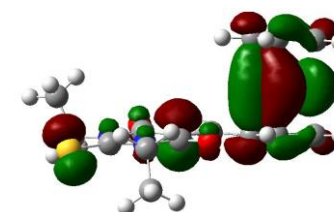


Compound D-A9

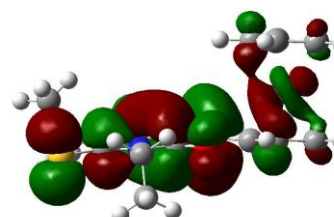
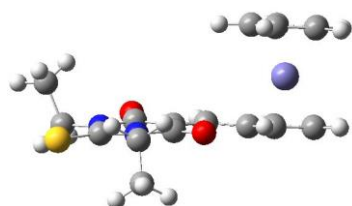
D-A9



Homo

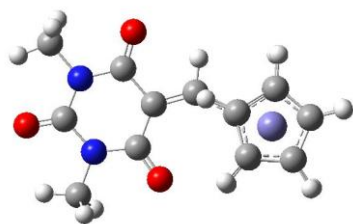


Lumo

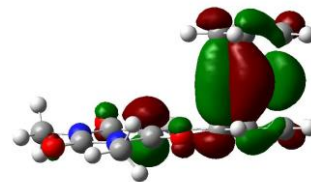


Compound D-A10

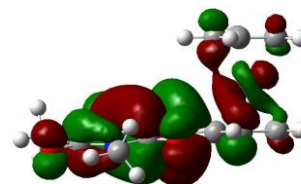
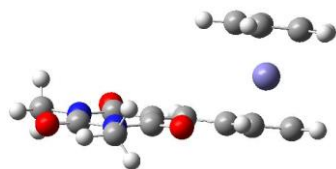
D-A10



Homo

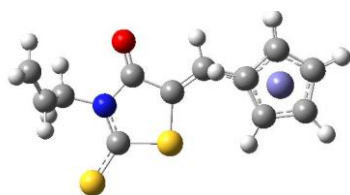


Lumo

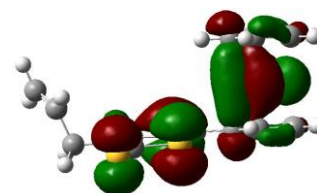


Compound D-A11

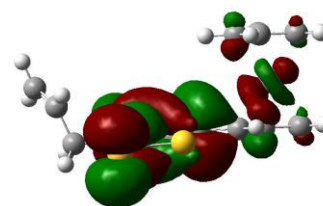
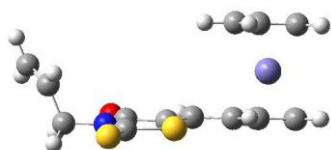
D-A11



Homo

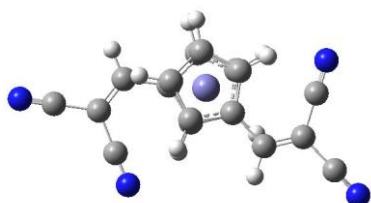


Lumo

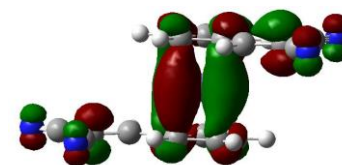


## Compound A-D-A0

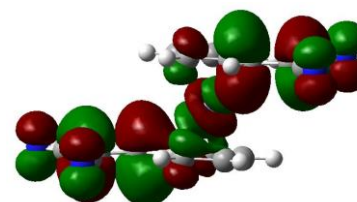
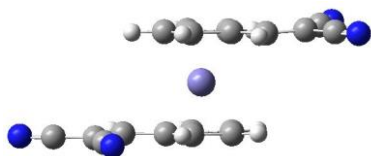
A-D-A0



Homo

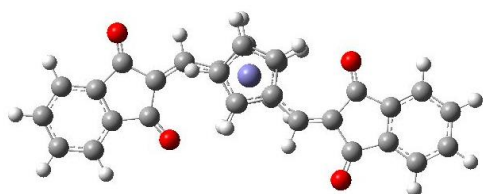


Lumo

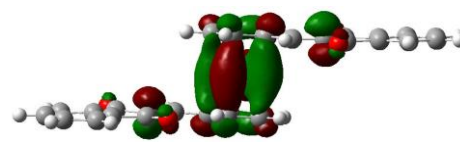


## Compound A-D-A1

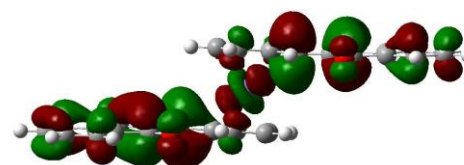
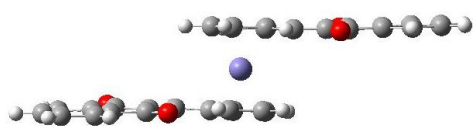
A-D-A1



Homo

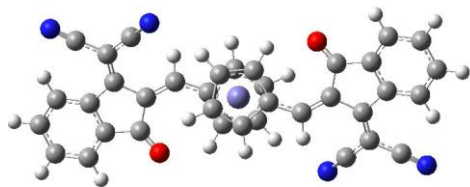


Lumo

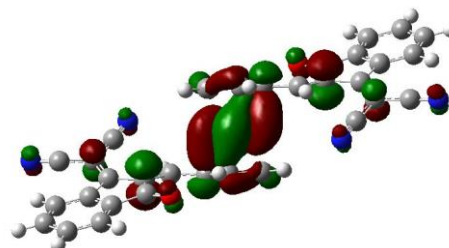


## Compound A-D-A2

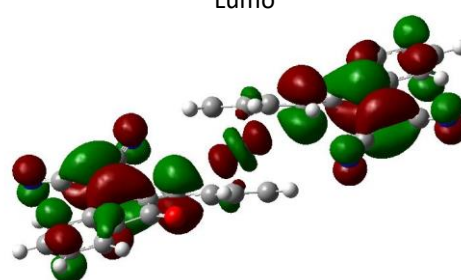
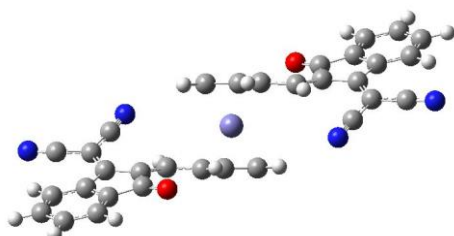
A-D-A2



Homo

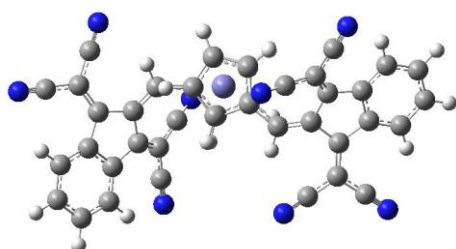


Lumo

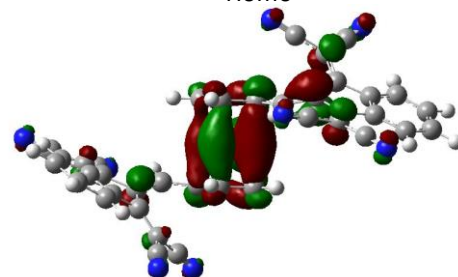


## Compound A-D-A3

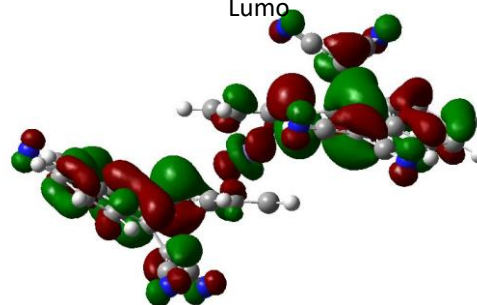
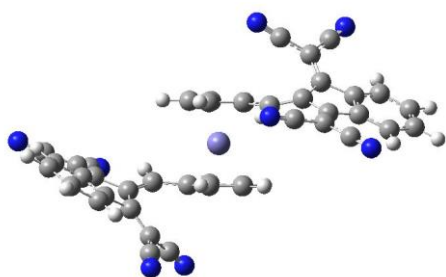
A-D-A3



Homo



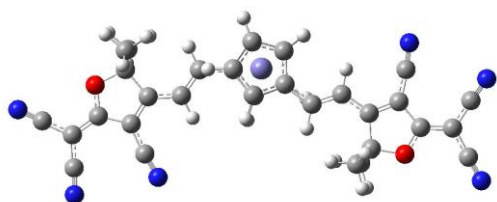
Lumo



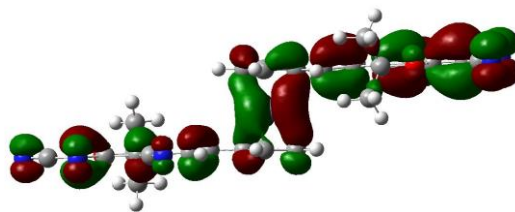


## Compound A-D-A4

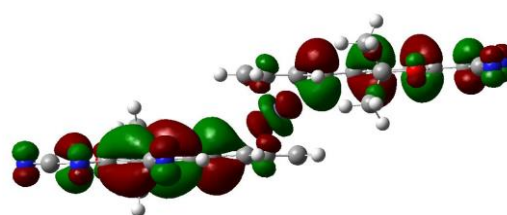
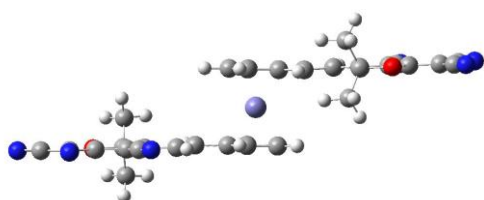
A-D-A4



Homo

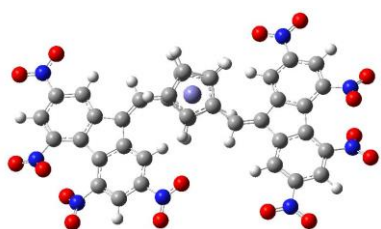


Lumo

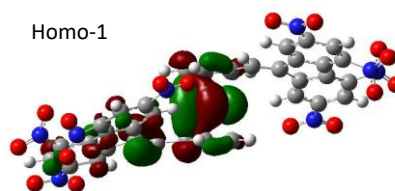


## Compound A-D-A5

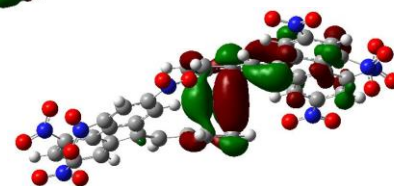
A-D-A5



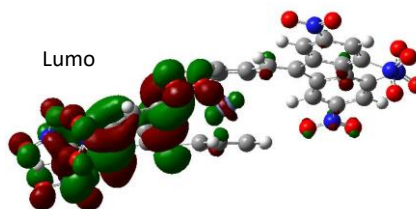
Homo-1



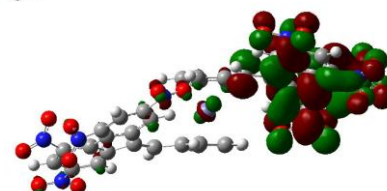
Homo



Lumo

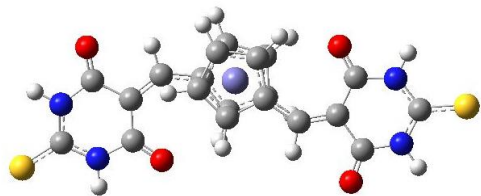


Lumo+1

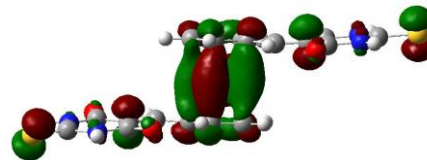


## Compound A-D-A6

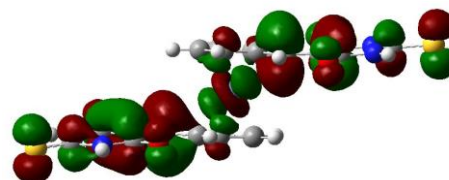
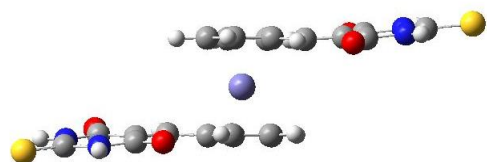
A-D-A6



Homo

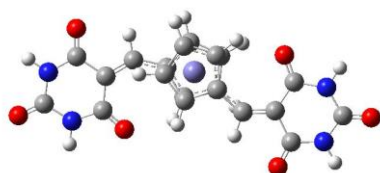


Lumo

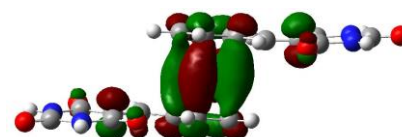


## Compound A-D-A7

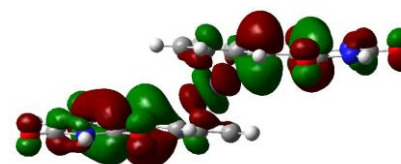
A-D-A7



Homo

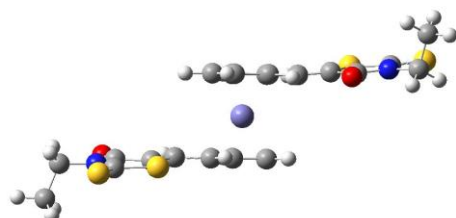
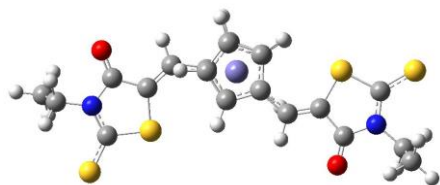


Lumo

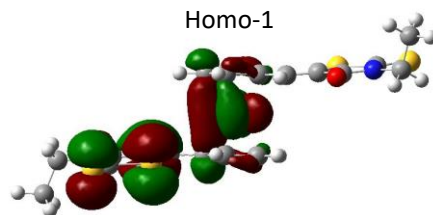


## Compound A-D-A8

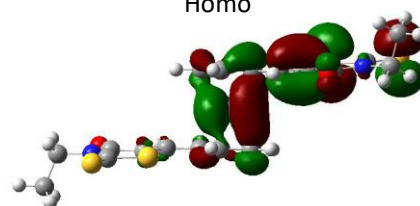
A-D-A8



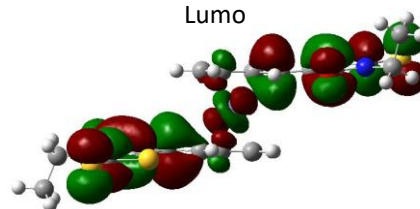
Homo-1



Homo

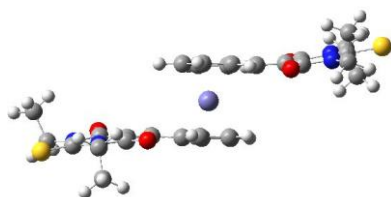
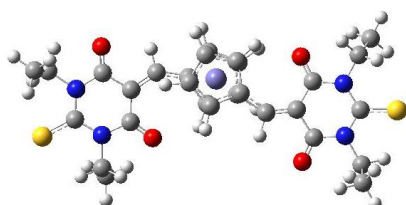


Lumo

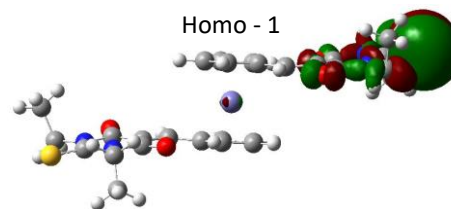


## Compound A-D-A9

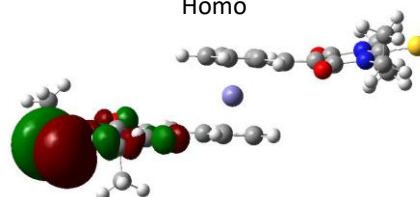
A-D-A9



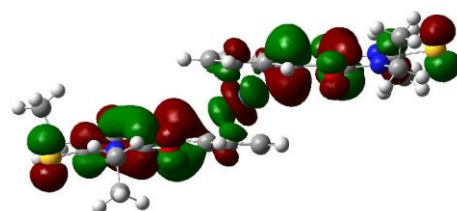
Homo - 1



Homo

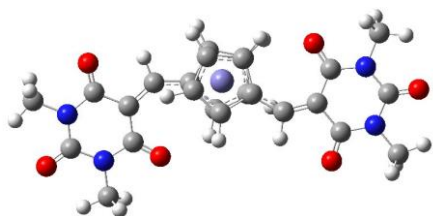


Lumo

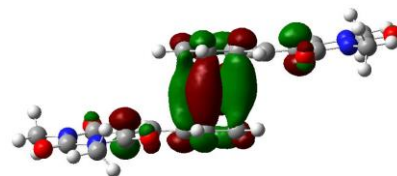


## Compound A-D-A10

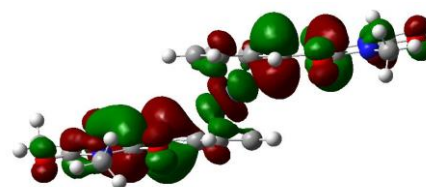
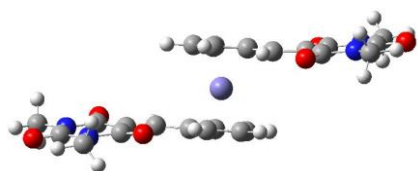
A-D-A10



Homo

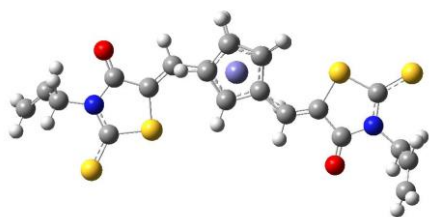


Lumo

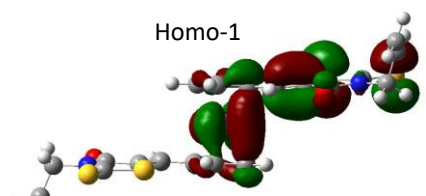


## Compound A-D-A11

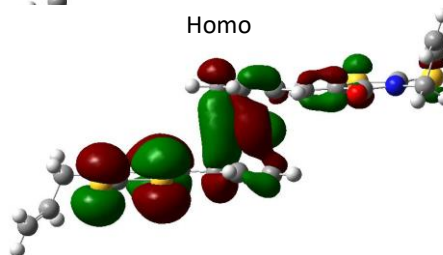
A-D-A11



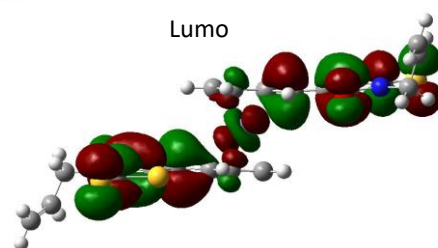
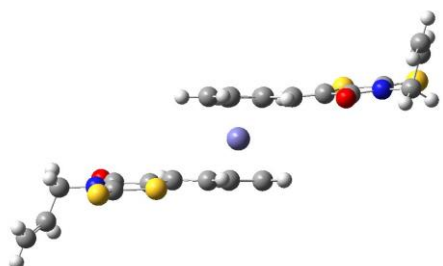
Homo-1



Homo



Lumo



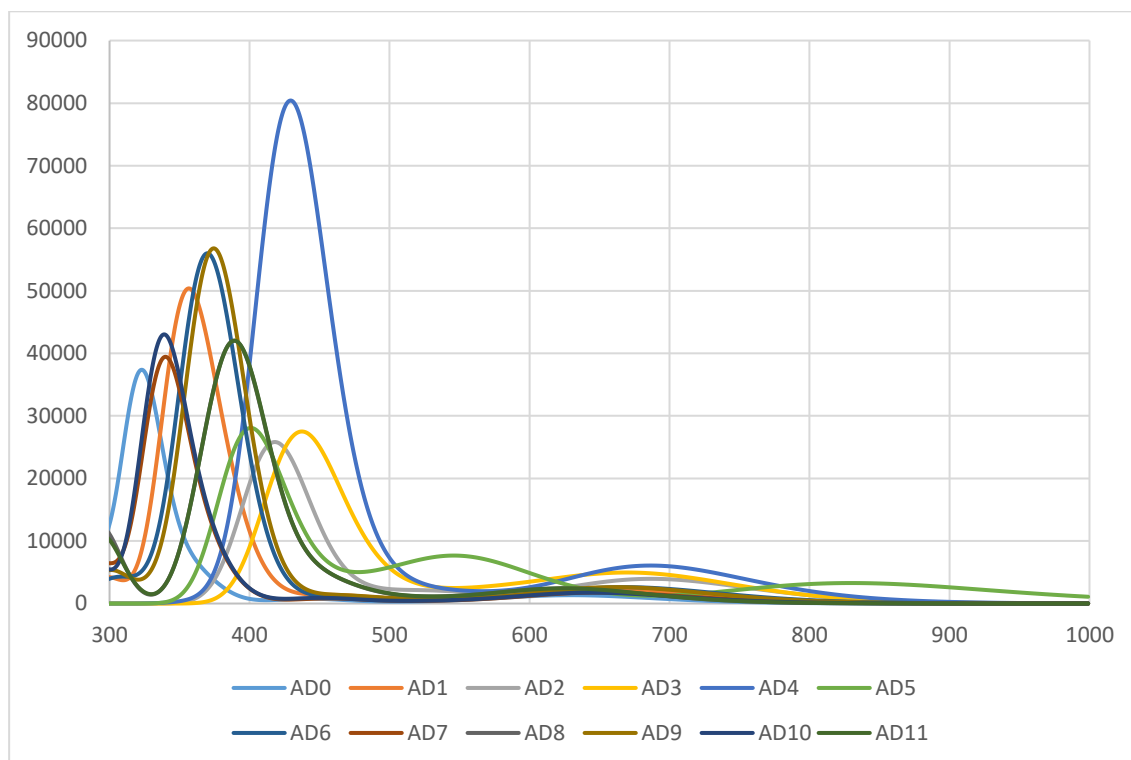
### Energy levels of D-A0-D-A-11

	<b>Homo-1</b>	<b>Homo</b>	<b>Lumo</b>	<b>Lumo+1</b>
AD0	-6,400	-6,326	-2,773	-1,208
AD1	-5,961	-5,887	-2,657	-2,240
AD2	-6,170	-6,071	-3,291	-2,789
AD3	-6,478	-6,360	-3,613	-3,549
AD4	-6,493	-6,336	-3,459	-1,437
AD5	-6,573	-6,474	-4,150	-3,479
AD6	-6,283	-6,207	-3,020	-1,260
AD7	-6,210	-6,145	-2,793	-1,011
AD8	-6,056	-5,908	-2,586	-1,202
AD9	-6,107	-6,063	-2,840	-1,083
AD10	-6,074	-6,009	-2,613	-0,886
AD11	-6,065	-5,920	-2,602	-1,234

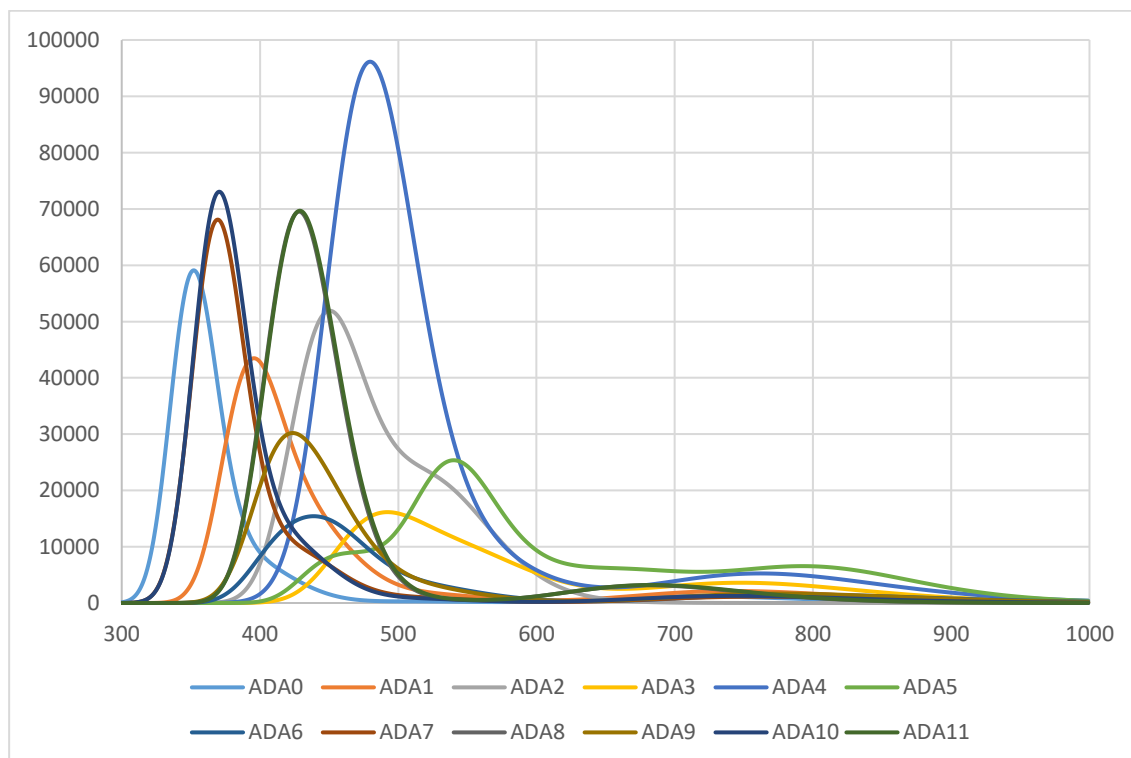
### Energy levels of A-D-A0-A-D-A-11

	<b>Homo-1</b>	<b>Homo</b>	<b>Lumo</b>	<b>Lumo+1</b>
ADA0	-7,065	-7,015	-3,465	-3,060
ADA1	-6,249	-6,185	-2,983	-2,675
ADA2	-6,561	-6,401	-3,577	-3,423
ADA3	-6,933	-6,901	-3,963	-3,889
ADA4	-6,930	-6,877	-3,983	-3,749
ADA5	-6,573	-6,474	-4,150	-3,479
ADA6	-6,771	-6,709	-3,531	-3,185
ADA7	-6,697	-6,629	-3,312	-2,922
ADA8	-6,275	-6,273	-2,934	-2,695
ADA9	-6,306	-6,299	-3,264	-2,921
ADA10	-6,459	-6,392	-3,049	-2,664
ADA11	-6,291	-6,289	-2,951	-2,711

### Simulated absorption spectra of D-A0-D-A-11 in the 300-1000 nm range



### Simulated absorption spectra of A-D-A0-A-D-A-11 in the 300-1000 nm range



Main transitions involved in the different absorption bands observed in the simulated UV-visible absorption spectra of D-A dyads **D-A<sub>x</sub>**, **x = 0-11** and A-D-A triads **A-D-A<sub>x</sub>**, **x = 0-11**.

<b>AD 0</b>				
No.	Wavelength (nm)	Osc. Strengt h	Major contribs	Minor contribs
1	669.316524575	0.0004	H-1->LUMO (64%), H-1->L+2 (24%)	HOMO->L+1 (9%)
2	632.15312809	0.019	H-1->L+1 (13%), HOMO->LUMO (51%), HOMO->L+2 (31%)	
3	536.333404041	0.0039	H-3->LUMO (11%), H-3->L+2 (10%), H-2->LUMO (24%), H-2->L+2 (20%), H-1->L+1 (29%)	
4	500.299382666	0.0001	H-2->L+1 (24%), HOMO->L+1 (62%)	H-3->L+1 (5%), H-1->LUMO (6%)
5	443.243933263	0.011	H-2->LUMO (20%), H-1->L+1 (41%), HOMO->LUMO (27%)	H-3->LUMO (3%), H-2->L+2 (3%), HOMO->L+2 (3%)
6	422.505343371	0.0005	H-3->L+1 (10%), H-2->L+1 (22%), H-1->LUMO (27%), H-1->L+2 (34%)	HOMO->L+1 (4%)
7	359.27033617	0.0717	H-1->L+1 (11%), HOMO->LUMO (15%), HOMO->L+2 (58%)	H-3->LUMO (5%), H-2->LUMO (8%)
8	352.227821057	0.0005	H-3->L+1 (12%), H-2->L+1 (22%), H-1->L+2 (39%), HOMO->L+1 (21%)	
9	324.684944776	0.391	H-3->LUMO (32%), H-2->LUMO (40%), H-2->L+2 (10%)	H-5->LUMO (4%), H-4->LUMO (4%), H-3->L+2 (5%)
10	319.934438656	0.0315	H-4->LUMO (38%), H-3->LUMO (20%), H-2->L+2 (25%)	H-3->L+2 (7%), H-2->LUMO (3%), HOMO->L+2 (2%)
11	317.720813398	0.138	H-4->LUMO (55%), H-3->LUMO (26%), H-2->L+2 (11%)	H-3->L+2 (3%)
12	285.316288142	0.0244	H-6->LUMO (63%), H-5->LUMO (29%)	H-6->L+2 (3%)
13	284.19793933	0.1047	H-6->LUMO (30%), H-5->LUMO (60%)	H-2->LUMO (2%)
14	260.695542405	0.0001	HOMO->L+3 (94%)	H-3->L+3 (2%), H-2->L+3 (3%)
15	251.892877049	0.0007	H-1->L+3 (99%)	
16	246.788735867	0.0004	H-3->L+1 (68%), H-2->L+1 (26%)	
17	241.684586768	0.0	HOMO->L+4 (97%)	
18	239.462671918	0.0174	H-4->L+1 (39%), H-3->L+2 (40%), H-2->L+2 (15%)	
19	238.499938467	0.0002	H-1->L+4 (97%)	
20	236.900399366	0.0005	H-5->L+1 (72%), H-4->L+2 (11%)	H-7->L+1 (2%), H-6->L+2 (6%)

AD 1				
No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	689.222263673	0.0003	H-1->LUMO (64%), H-1->L+2 (18%)	H-1->L+4 (8%), HOMO->L+3 (7%)
2	653.063961086	0.0347	H-1->L+3 (10%), HOMO->LUMO (54%), HOMO->L+2 (19%), HOMO->L+4 (11%)	
3	542.481702088	0.007	H-3->LUMO (15%), H-2->LUMO (19%), H-2->L+2 (11%), H-1->L+3 (29%)	H-3->L+2 (9%), H-3->L+4 (5%), H-2->L+4 (7%)
4	505.913383981	0.0001	H-2->L+3 (19%), HOMO->L+3 (63%)	H-3->L+3 (6%), H-1->LUMO (7%)
5	460.257602688	0.0188	H-2->LUMO (15%), H-1->L+3 (37%), HOMO->LUMO (29%)	H-3->LUMO (4%), HOMO->L+2 (3%), HOMO->L+4 (5%)
6	437.10274286	0.0003	H-3->L+3 (14%), H-2->L+3 (18%), H-1->LUMO (25%), H-1->L+2 (17%), H-1->L+4 (20%)	
7	417.975906052	0.0022	HOMO->L+1 (98%)	
8	403.135077263	0.0	H-1->L+1 (98%)	
9	381.70122841	0.0086	H-4->LUMO (84%)	H-10->L+1 (3%), H-9->L+1 (2%), H-4->L+1 (4%)
10	378.415923002	0.2201	H-2->LUMO (21%), H-1->L+3 (13%), HOMO->LUMO (14%), HOMO->L+2 (28%), HOMO->L+4 (19%)	
11	363.078929988	0.0003	H-10->LUMO (5%), H-9->LUMO (5%), H-4->LUMO (5%)	
12	356.153605114	0.0001	H-4->L+1 (79%)	
13	353.331983506	0.6318	H-3->L+3 (19%), H-2->L+3 (19%), H-1->L+2 (19%), H-1->L+4 (15%), HOMO->L+3 (23%)	
14	338.87499115	0.0176	H-3->LUMO (57%), H-2->LUMO (31%)	H-4->LUMO (2%), HOMO->L+4 (2%)
15	332.272586729	0.0033	H-2->L+1 (85%)	H-3->L+1 (8%)
16	330.74799395	0.0072	H-5->LUMO (91%)	
17	313.764881721	0.0008	H-3->LUMO (15%), H-3->L+4 (10%), H-2->L+2 (17%), H-2->L+4 (18%)	H-6->LUMO (3%), H-5->LUMO (5%), H-3->L+2 (8%), H-2->LUMO (9%), H-1->L+3 (5%), HOMO->L+2 (3%)
18	302.267767839	0.0021	H-3->L+1 (86%), H-2->L+1 (10%)	
19	297.902864106	0.0566	H-10->LUMO (39%), H-9->LUMO (49%), H-4->L+1 (11%)	
20	295.989765594	0.0026	H-6->LUMO (84%)	H-7->L+1 (4%)
			H-10->LUMO (32%), H-10->L+1 (10%), H-9->LUMO (25%), H-8->LUMO (14%)	H-9->L+1 (9%)



<b>AD 2</b>				
No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	744.963005541	0.0004	H-1->LUMO (57%), H-1->L+1 (19%), H-1->L+2 (12%)	H-1->L+5 (6%), HOMO->L+3 (4%)
2	688.342177505	0.0577	HOMO->LUMO (53%), HOMO->L+1 (14%), HOMO->L+2 (12%), HOMO->L+5 (10%)	H-1->L+3 (6%)
3	557.232328145	0.0121	H-3->LUMO (18%), H-3->L+2 (11%), H-2->LUMO (15%), H-1->L+3 (19%)	H-3->L+1 (9%), H-3->L+5 (8%), H-2->L+1 (6%), H-2->L+2 (6%), H-2->L+5 (4%)
4	515.934388965	0.0183	H-1->L+3 (10%), HOMO->LUMO (37%), HOMO->L+1 (24%)	H-1->LUMO (2%), HOMO->L+2 (5%), HOMO->L+3 (8%), HOMO->L+5 (6%)
5	512.861191364	0.0023	H-1->LUMO (18%), HOMO->L+3 (45%)	H-3->L+3 (2%), H-2->L+3 (7%), H-1->L+1 (3%), H-1->L+2 (3%), H-1->L+3 (4%), H-1->L+5 (5%), HOMO->LUMO (5%)
6	482.35369208	0.0003	H-3->L+3 (12%), H-2->L+3 (12%), H-1->LUMO (22%), H-1->L+1 (30%), HOMO->L+3 (11%)	H-1->L+2 (6%), H-1->L+5 (5%)
7	463.630966316	0.0098	H-2->LUMO (15%), H-1->L+3 (34%), HOMO->L+1 (40%)	H-3->LUMO (2%)
8	433.026659026	0.0003	H-3->L+3 (14%), H-1->L+1 (45%), H-1->L+2 (10%), H-1->L+5 (17%)	H-2->L+3 (8%)
9	418.102761895	0.3765	H-3->LUMO (14%), H-2->LUMO (63%), HOMO->L+1 (10%)	
10	388.458166533	0.0093	H-3->LUMO (41%), HOMO->L+2 (17%), HOMO->L+5 (16%)	H-3->L+5 (3%), H-1->L+3 (7%), HOMO->L+1 (6%)

<b>AD 3</b>				
No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	746.892728989	0.0004	H-1->L+1 (76%), H-1->L+2 (11%)	H-1->L+4 (3%), HOMO->L+3 (3%)
2	683.108501445	0.065	HOMO->L+1 (67%), HOMO->L+2 (11%)	H-1->L+3 (4%), HOMO->L+4 (5%), HOMO->L+6 (3%)
3	597.571780471	0.0205	HOMO->LUMO (97%)	
4	563.359655635	0.004	H-1->LUMO (85%)	H-3->L+1 (4%), H-1->L+3 (3%)
5	553.007105318	0.01	H-3->L+1 (27%), H-3->L+2 (11%), H-2->L+1 (16%), H-1->LUMO (13%), H-1->L+3 (10%)	H-3->L+4 (4%), H-3->L+6 (3%), H-2->L+2 (3%), H-1->L+4 (2%)

6	507.1757875	0.001	HOMO->L+3 (48%)	H-3->L+3 (4%), H-2->L+3 (8%), H-1->L+1 (9%), H-1->L+2 (4%), H-1->L+4 (2%), H-1->L+6 (3%), HOMO->L+4 (9%), HOMO->L+5 (3%)
7	492.371998778	0.021	H-1->L+3 (33%), HOMO->L+1 (20%)	H-3->L+1 (5%), H-2->L+1 (5%), H-1->L+4 (7%), H-1->L+5 (2%), HOMO->L+2 (9%), HOMO->L+4 (5%), HOMO->L+6 (4%)
8	462.420531897	0.0067	H-3->L+3 (20%), H-2->LUMO (10%), H-1->L+1 (11%), H-1->L+2 (15%), H-1->L+4 (10%)	H-3->L+4 (3%), H-2->L+3 (9%), H-1->L+5 (4%), H-1->L+6 (8%)
9	452.860665542	0.0881	H-2->LUMO (77%)	H-4->LUMO (5%), H-3->L+3 (2%)
10	433.072035391	0.3293	H-2->L+1 (67%)	H-3->L+1 (6%), H-2->LUMO (4%), H-1->L+3 (3%), HOMO->L+1 (6%), HOMO->L+2 (3%)

#### AD 4

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	736.160747015	0.0005	H-1->LUMO (74%), H-1->L+3 (12%)	H-1->L+1 (4%), H-1->L+2 (4%), HOMO->L+2 (3%)
2	687.578710139	0.089	HOMO->LUMO (62%), HOMO->L+3 (14%)	H-2->LUMO (4%), H-1->L+2 (4%), HOMO->L+1 (4%), HOMO->L+2 (4%)
3	553.179819802	0.0187	H-3->LUMO (36%), H-3->L+3 (18%), H-1->L+2 (18%)	H-3->L+1 (5%), H-3->L+2 (5%), H-2->LUMO (6%), H-1->L+3 (5%)
4	512.140910456	0.0001	H-3->L+2 (7%), H-3->L+3 (2%), H-2->L+2 (9%), H-2->L+3 (3%), HOMO->L+2 (48%), HOMO->L+3 (14%)	H-1->LUMO (9%), H-1->L+3 (4%)
5	488.453661948	0.0367	H-3->LUMO (10%), H-1->L+2 (31%), HOMO->LUMO (22%), HOMO->L+3 (13%)	H-2->LUMO (6%), H-1->L+3 (9%), HOMO->L+2 (3%)
6	457.793423964	0.0001	H-3->L+2 (26%), H-1->LUMO (15%), H-1->L+3 (29%)	H-3->L+3 (8%), H-2->L+2 (4%), H-1->L+1 (4%), H-1->L+2 (7%), H-1->L+6 (4%)
7	429.456851445	1.1775	H-2->LUMO (76%), HOMO->LUMO (11%)	H-1->L+2 (2%), HOMO->L+3 (3%)
8	395.35775833	0.0309	H-3->LUMO (35%), H-1->L+2 (11%), HOMO->L+3 (23%)	H-3->L+3 (3%), H-2->LUMO (6%), H-1->L+3 (4%), HOMO->LUMO (3%), HOMO->L+1 (6%), HOMO->L+2 (6%)
9	362.951384696	0.0017	H-5->LUMO (51%), H-3->L+2 (14%)	H-4->LUMO (4%), H-3->L+3 (4%), H-1->L+2 (2%), H-1->L+3 (8%), HOMO->L+2 (8%), HOMO->L+3 (3%)
10	357.622639858	0.002	H-5->LUMO (39%), H-3->L+2 (17%), H-1->L+3 (10%), HOMO->L+2 (10%)	H-7->LUMO (3%), H-4->LUMO (4%), H-3->L+3 (4%), H-1->L+1

(3%), H-1->L+2 (4%), HOMO->L+3 (4%)

**AD 5**

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	833.507179914	0.0162	H-1->LUMO (47%), HOMO->LUMO (32%)	H-1->L+1 (4%), H-1->L+4 (7%), H-1->L+8 (4%) H-1->L+1 (2%), H-1->L+4 (4%), H-1->L+8 (2%), HOMO->L+8 (3%)
2	828.660560167	0.0323	H-1->LUMO (27%), HOMO->LUMO (57%) HOMO->LUMO (10%), HOMO->L+1 (25%), HOMO->L+4 (29%), HOMO->L+8 (20%)	H-2->LUMO (3%), H-1->L+7 (8%)
3	642.338581557	0.0025	H-1->LUMO (25%), H-1->L+1 (17%), H-1->L+4 (30%), H-1->L+8 (18%)	HOMO->L+7 (8%)
4	629.713002246	0.0004	H-3->LUMO (14%), H-3->L+4 (10%), H-3->L+8 (12%), H-2->LUMO (45%)	H-3->L+1 (4%), H-2->L+8 (2%), H-1->L+7 (6%)
5	580.722215514	0.0392	H-3->LUMO (11%), H-2->LUMO (40%), H-1->L+7 (20%)	H-3->L+4 (3%), H-3->L+8 (5%), HOMO->L+1 (8%), HOMO->L+4 (2%), HOMO->L+8 (2%) H-3->LUMO (5%), H-3->L+8 (2%), HOMO->L+2 (7%), HOMO->L+4 (9%), HOMO->L+8 (4%)
6	547.294928102	0.0489	H-2->LUMO (10%), HOMO->L+1 (58%) H-1->L+1 (50%), HOMO->L+7 (32%)	H-3->L+7 (3%), H-2->L+7 (5%), H-1->L+2 (3%), H-1->L+8 (5%) H-1->L+7 (4%), HOMO->L+1 (5%)
7	536.914052539	0.0225	H-2->LUMO (10%), HOMO->L+1 (58%) H-1->L+1 (50%), HOMO->L+7 (32%)	H-3->L+7 (3%), H-2->L+7 (5%), H-1->L+2 (3%), H-1->L+8 (5%) H-1->L+7 (4%), HOMO->L+1 (5%)
8	520.3298347	0.0001	H-2->LUMO (10%), HOMO->L+1 (58%) H-1->L+1 (50%), HOMO->L+7 (32%)	H-3->L+7 (3%), H-2->L+7 (5%), H-1->L+2 (3%), H-1->L+8 (5%) H-1->L+7 (4%), HOMO->L+1 (5%)
9	502.978470638	0.0148	HOMO->L+2 (85%) H-3->L+7 (13%), H-1->L+1 (17%), H-1->L+2 (15%), H-1->L+4 (15%), HOMO->L+7 (24%)	H-2->L+7 (9%)
10	500.279195466	0.0	H-3->LUMO (48%), H-1->L+7 (24%), HOMO->L+4 (14%)	H-3->L+8 (3%), H-1->L+2 (3%), HOMO->L+2 (2%) H-3->LUMO (2%), H-3->L+7 (3%), H-1->L+1 (8%), H-1->L+8 (3%)
11	481.1743432	0.0299	H-3->LUMO (48%), H-1->L+7 (24%), HOMO->L+4 (14%)	H-3->L+8 (3%), H-1->L+2 (3%), HOMO->L+2 (2%) H-3->LUMO (2%), H-3->L+7 (3%), H-1->L+1 (8%), H-1->L+8 (3%)
12	476.917309737	0.0017	H-1->L+2 (76%)	H-3->L+1 (3%), H-3->L+4 (8%), H-3->L+8 (5%), H-2->L+4 (5%), HOMO->L+3 (2%), HOMO->L+8 (5%)
13	457.236292271	0.0004	HOMO->L+3 (94%)	H-3->L+1 (3%), H-3->L+4 (8%), H-3->L+8 (5%), H-2->L+4 (5%), HOMO->L+3 (2%), HOMO->L+8 (5%)
14	447.564049571	0.0011	H-3->LUMO (13%), H-2->L+1 (23%), H-1->L+7 (13%), HOMO->L+4 (16%)	H-3->L+7 (3%), H-1->L+2 (2%), H-1->L+4 (7%), H-1->L+8 (4%)
15	434.209543364	0.0001	H-1->L+3 (81%) H-4->LUMO (42%), H-3->L+7 (10%), H-1->L+3 (10%),	H-2->L+1 (7%), H-2->L+7 (2%)
16	429.055587127	0.0011	H-1->L+3 (81%) H-4->LUMO (42%), H-3->L+7 (10%), H-1->L+3 (10%),	H-2->L+1 (7%), H-2->L+7 (2%)

17	428.595799959	0.0015	H-1->L+4 (14%), H-1->L+8 (10%) H-4->LUMO (48%), H-3->L+7 (10%), H-1->L+4 (16%), H-1->L+8 (11%)	H-1->L+3 (7%) H-4->LUMO (7%), H-3->L+1 (5%), H-3->L+4 (3%), H-3->L+8 (2%), H-2->L+2 (2%)
18	425.433870954	0.0678	H-2->L+1 (61%), HOMO->L+4 (10%)	
19	407.159676241	0.1097	H-5->LUMO (51%), H-2->L+2 (42%)	
20	394.992491039	0.2802	H-5->LUMO (39%), H-2->L+2 (50%)	H-6->LUMO (2%), H-3->L+1 (2%), H-2->L+3 (3%)

#### AD 6

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	727.222670023	0.0005	H-1->LUMO (70%), H-1->L+1 (12%), H-1->L+3 (10%)	HOMO->L+2 (5%)
2	669.714217103	0.0379	HOMO->LUMO (60%), HOMO->L+1 (12%), HOMO->L+3 (15%)	H-1->L+2 (8%)
3	554.739118623	0.0079	H-4->LUMO (21%), H-3->LUMO (21%), H-1->L+2 (21%)	H-4->L+1 (8%), H-4->L+3 (9%), H-3->L+1 (6%), H-3->L+3 (8%)
4	503.386898141	0.0001	H-3->L+2 (15%), HOMO->L+2 (65%)	H-4->L+2 (7%), H-1->LUMO (6%)
5	469.352638599	0.015	H-3->LUMO (10%), H-1->L+2 (46%), HOMO->LUMO (24%)	H-4->LUMO (5%), HOMO->L+1 (3%), HOMO->L+3 (7%)
6	441.256292306	0.0003	H-4->L+2 (17%), H-3->L+2 (15%), H-1->LUMO (20%), H-1->L+1 (12%), H-1->L+3 (31%)	
7	424.865303996	0.0003	H-2->LUMO (95%)	H-2->L+1 (3%)
8	382.218980863	0.3503	H-3->LUMO (27%), H-1->L+2 (12%), HOMO->LUMO (14%), HOMO->L+1 (19%), HOMO->L+3 (23%)	
9	363.984948514	0.5669	H-5->LUMO (10%), H-4->LUMO (44%), H-3->LUMO (32%)	H-1->L+2 (3%), HOMO->L+1 (3%), HOMO->L+3 (6%)
10	355.683610684	0.0022	H-4->L+2 (21%), H-3->L+2 (15%), H-1->L+1 (11%), H-1->L+3 (17%), HOMO->L+2 (22%)	H-8->LUMO (3%), H-6->LUMO (7%)
11	346.034588368	0.0036	H-6->LUMO (89%)	
12	336.556890828	0.0128	H-4->LUMO (19%), H-4->L+3 (17%), H-3->L+1 (10%), H-3->L+3 (20%)	H-7->LUMO (6%), H-4->L+1 (6%), H-3->LUMO (4%), H-1->L+2 (6%), HOMO->L+1 (3%), HOMO->L+3 (3%)
13	327.195505798	0.0254	H-5->LUMO (83%)	H-4->LUMO (6%), H-3->LUMO (3%), H-3->L+3 (2%)

14	310.286283128	0.0011	H-9->LUMO (81%)	H-8->LUMO (4%), H-7->LUMO (8%), H-2->L+1 (4%) H-9->LUMO (3%), H-8->L+1 (3%)
15	304.989159235	0.0026	H-8->LUMO (87%)	
16	304.002042498	0.0485	H-7->LUMO (80%)	H-9->LUMO (8%)
17	284.217483924	0.0052	H-10->LUMO (92%)	H-9->L+4 (3%)
18	279.911936181	0.0148	HOMO->L+1 (52%), HOMO->L+3 (36%)	H-2->L+1 (5%)
19	279.508077488	0.0014	H-1->L+1 (56%), H-1->L+3 (32%)	H-2->L+1 (5%) H-9->LUMO (4%), H-2->LUMO (3%), H-2->L+3 (6%), H-1->L+1 (4%), H-1->L+3 (2%), HOMO->L+1 (3%), HOMO->L+3 (2%)
20	278.103703316	0.001	H-2->L+1 (74%)	

### AD 7

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	699.408771999	0.0004	H-1->LUMO (68%), H-1->L+2 (23%)	HOMO->L+1 (7%)
2	652.548384275	0.0253	H-1->L+1 (10%), HOMO->LUMO (56%), HOMO->L+2 (29%)	
3	546.42658886	0.0051	H-2->LUMO (31%), H-2->L+2 (23%), H-1->L+1 (25%)	H-3->LUMO (9%), H-3->L+2 (8%)
4	502.285662827	0.0001	H-2->L+1 (23%), HOMO->L+1 (64%)	H-3->L+1 (3%), H-1->LUMO (6%)
5	456.49555601	0.0115	H-2->LUMO (18%), H-1->L+1 (45%), HOMO->LUMO (25%)	HOMO->L+2 (6%)
6	430.754935247	0.0005	H-2->L+1 (25%), H-1->LUMO (23%), H-1->L+2 (37%)	H-3->L+1 (8%), HOMO->L+1 (3%)
7	367.916534652	0.1126	H-2->LUMO (14%), H-1->L+1 (11%), HOMO->LUMO (14%), HOMO->L+2 (53%)	
8	353.291710869	0.0001	H-3->L+1 (10%), H-2->L+1 (27%), H-1->L+2 (32%), HOMO->L+1 (21%)	H-7->LUMO (3%), HOMO->L+2 (2%)
9	339.431634167	0.5129	H-3->LUMO (64%), H-2->LUMO (25%)	
10	332.254778144	0.0165	H-4->LUMO (91%)	H-5->LUMO (3%) H-6->LUMO (4%), H-5->LUMO (5%), H-3->L+2 (8%), H-2->LUMO (8%), H-1->L+1 (4%), HOMO->L+2 (4%)
11	327.01427708	0.0383	H-3->LUMO (20%), H-2->L+2 (43%)	H-4->LUMO (4%), H-2->L+2 (3%)
12	325.477628468	0.0016	H-5->LUMO (88%)	

13	295.650975325	0.0022	H-7->LUMO (92%)	H-7->L+2 (4%)
14	293.808367526	0.0881	H-6->LUMO (90%)	
15	273.08692102	0.0081	H-10->LUMO (86%) H-8->LUMO (75%), HOMO->L+3 (19%)	H-9->LUMO (4%), H-8->LUMO (3%), H-5->L+3 (5%)
16	258.284259343	0.0087	H-8->LUMO (19%), HOMO->L+3 (78%)	H-10->LUMO (2%)
17	251.117398198	0.0318	H-1->L+3 (96%)	
18	248.764432208	0.0012	H-3->L+1 (73%), H-2->L+1 (20%)	
19	244.940916299	0.0		H-9->LUMO (3%), HOMO->L+6 (3%)
20	243.737109798	0.0047	HOMO->L+4 (89%)	

### AD 8

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	646.121178864	0.0003	H-1->LUMO (49%), H-1->L+1 (15%), H-1->L+3 (20%), HOMO->L+2 (11%)	
2	627.545644644	0.0344	H-1->L+2 (15%), HOMO->LUMO (39%), HOMO->L+1 (13%), HOMO->L+3 (22%)	H-2->LUMO (3%), H-2->L+3 (2%)
3	528.446820443	0.0102	H-4->LUMO (19%), H-4->L+1 (12%), H-4->L+3 (21%), H-1->L+2 (37%)	HOMO->LUMO (3%)
4	506.016623183	0.0001	H-4->L+2 (20%), H-2->L+2 (14%), H-1->LUMO (10%), HOMO->L+2 (52%)	
5	450.802432506	0.0536	H-4->L+1 (4%), H-4->L+3 (6%), H-2->LUMO (6%), HOMO->L+1 (2%), HOMO->L+3 (7%)	
6	437.735464667	0.0006	H-4->LUMO (13%), H-1->L+2 (22%), HOMO->LUMO (39%)	
7	413.777175985	0.0003	H-4->L+2 (27%), H-1->LUMO (36%), H-1->L+3 (24%)	H-1->L+1 (6%)
8	393.750612971	0.5032	H-3->LUMO (94%)	H-3->L+1 (5%)
9	371.532747033	0.1928	H-2->LUMO (49%), H-1->L+2 (10%), HOMO->LUMO (17%), HOMO->L+3 (10%)	H-4->LUMO (3%), HOMO->L+1 (9%)
10	360.38773657	0.0	H-4->LUMO (24%), H-2->LUMO (39%), HOMO->L+3 (15%)	H-1->L+2 (9%), HOMO->L+1 (9%)
11	331.384489796	0.0005	H-4->L+2 (38%), H-1->L+1 (13%), H-1->L+3 (20%), HOMO->L+2 (24%)	H-1->LUMO (2%)
12	319.184926919	0.001	H-4->LUMO (36%), H-4->L+1 (10%), H-4->L+3 (32%)	H-2->L+1 (3%), H-2->L+3 (6%), H-1->L+2 (4%), HOMO->L+1 (2%)
			H-5->LUMO (96%)	

13	301.84830922	0.0647	H-6->LUMO (47%), HOMO->L+1 (32%), HOMO->L+3 (16%)	
14	297.195917859	0.0259	H-7->LUMO (56%), H-6->LUMO (16%), HOMO->L+1 (12%)	HOMO->L+3 (9%)
15	293.398156591	0.0023	H-1->L+1 (61%), H-1->L+3 (30%)	H-7->LUMO (3%)
16	290.933435827	0.0589	H-10->LUMO (30%), H-9->LUMO (10%), H-7->LUMO (18%), H-6->LUMO (14%), HOMO->L+1 (12%)	H-3->L+1 (3%), HOMO->L+3 (7%)
17	286.967232987	0.0403	H-10->LUMO (44%), H-8->LUMO (14%), H-6->LUMO (12%)	H-7->LUMO (9%), H-3->L+1 (7%), H-2->L+1 (3%), HOMO->L+1 (4%), HOMO->L+3 (3%)
18	284.106766756	0.0138	H-8->LUMO (76%)	H-10->LUMO (7%), H-8->L+1 (3%), H-7->LUMO (3%)
19	277.599339525	0.0021	H-10->LUMO (10%), H-3->L+1 (79%)	H-3->LUMO (5%), H-3->L+3 (3%)
20	272.54065113	0.0207	H-9->LUMO (33%), H-2->L+1 (54%)	H-10->LUMO (4%), HOMO->L+3 (2%)

#### AD 9

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	712.675708526	0.0004	H-1->LUMO (68%), H-1->L+1 (14%), H-1->L+3 (10%)	HOMO->L+2 (6%)
2	663.194399637	0.038	HOMO->LUMO (57%), HOMO->L+1 (14%), HOMO->L+3 (14%)	H-1->L+2 (9%)
3	550.209430249	0.008	H-4->LUMO (28%), H-4->L+1 (12%), H-4->L+3 (11%), H-3->LUMO (10%), H-1->L+2 (23%)	H-5->LUMO (3%), H-3->L+1 (3%), H-3->L+3 (3%)
4	504.000784603	0.0001	H-4->L+2 (13%), H-3->L+2 (11%), HOMO->L+2 (64%)	H-1->LUMO (6%)
5	468.607578094	0.0002	H-2->LUMO (89%)	H-2->L+1 (3%), H-1->L+2 (4%)
6	465.091878656	0.0179	H-4->LUMO (9%), H-3->LUMO (8%), H-2->LUMO (7%), HOMO->L+1 (3%), HOMO->L+3 (6%)	HOMO->L+1 (3%), HOMO->L+3 (6%)
7	438.773376552	0.0004	H-1->L+2 (40%), HOMO->LUMO (23%)	H-5->L+2 (2%), H-3->L+2 (7%)
8	382.101186551	0.4823	H-4->L+2 (23%), H-1->LUMO (22%), H-1->L+1 (13%), H-1->L+3 (27%)	HOMO->LUMO (14%), H-3->LUMO (34%), H-1->L+2 (10%), HOMO->L+1 (18%), HOMO->L+3 (19%)
9	366.188767831	0.4337	H-4->LUMO (28%), H-3->LUMO (42%)	H-5->LUMO (8%), H-1->L+2 (5%), HOMO->L+1 (7%), HOMO->L+3 (8%)

10	355.469460169	0.0003	H-4->L+2 (29%), H-1->L+1 (14%), H-1->L+3 (17%), HOMO->L+2 (23%)	H-10->LUMO (3%), H-6->LUMO (2%), H-5->L+2 (3%), H-3->L+2 (6%)
11	340.410172457	0.0019	H-6->LUMO (95%)	
12	334.866152633	0.0057	H-5->LUMO (10%), H-4->LUMO (27%), H-4->L+3 (19%)	H-7->LUMO (4%), H-4->L+1 (9%), H-3->L+1 (7%), H-3->L+3 (7%), H-1->L+2 (5%), HOMO->L+3 (3%)
13	329.894348541	0.0178	H-5->LUMO (70%)	H-9->LUMO (5%), H-4->L+1 (4%), H-4->L+3 (6%), H-3->LUMO (4%), H-3->L+3 (4%)
14	319.217798693	0.0034	H-9->LUMO (75%)	H-8->LUMO (7%), H-5->LUMO (6%), H-2->L+1 (5%)
15	303.503446702	0.0277	H-8->LUMO (78%)	H-11->LUMO (5%), H-9->LUMO (4%), H-7->LUMO (9%)
16	301.386049424	0.0084	H-10->LUMO (81%)	H-10->L+1 (2%), H-7->LUMO (8%)
17	301.012874826	0.0306	H-7->LUMO (70%)	H-11->LUMO (4%), H-10->LUMO (6%), H-9->LUMO (4%), H-8->LUMO (5%)
18	293.412043289	0.0005	H-2->L+1 (80%)	H-9->LUMO (6%), H-2->LUMO (3%), H-2->L+3 (9%)
19	288.388986351	0.0143	H-11->LUMO (84%)	H-8->LUMO (7%)
20	275.367447001	0.0152	HOMO->L+1 (50%), HOMO->L+3 (43%)	

#### AD 9

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	685.905028835	0.0004	H-1->LUMO (65%), H-1->L+2 (25%)	HOMO->L+1 (8%)
2	646.424363984	0.0249	H-1->L+1 (11%), HOMO->LUMO (54%), HOMO->L+2 (30%)	
3	542.268163979	0.0053	H-3->LUMO (11%), H-3->L+2 (10%), H-2->LUMO (25%), H-2->L+2 (21%), H-1->L+1 (27%)	
4	502.794894409	0.0001	H-2->L+1 (23%), HOMO->L+1 (63%)	H-3->L+1 (4%), H-1->LUMO (6%)
5	451.936257973	0.0128	H-2->LUMO (18%), H-1->L+1 (42%), HOMO->LUMO (27%)	H-3->LUMO (3%), H-2->L+2 (2%), HOMO->L+2 (5%)
6	427.915348285	0.0006	H-3->L+1 (10%), H-2->L+1 (22%), H-1->LUMO (25%), H-1->L+2 (35%)	HOMO->L+1 (3%)
7	366.795435218	0.1266	H-2->LUMO (13%), H-1->L+1 (11%), HOMO->LUMO (15%), HOMO->L+2 (53%)	H-3->LUMO (2%)



8	353.331983506	0.0003	H-3->L+1 (13%), H-2->L+1 (24%), H-1->L+2 (34%), HOMO->L+1 (21%)	
9	338.50490898	0.5328	H-3->LUMO (56%), H-2->LUMO (28%)	H-5->LUMO (7%)
10	332.183562888	0.0674	H-5->LUMO (80%)	H-4->LUMO (9%), H-3->LUMO (7%)
11	325.999666103	0.0007	H-4->LUMO (79%)	H-5->LUMO (8%), H-2->L+2 (4%)
12	324.31125559	0.0164	H-3->LUMO (16%), H-3->L+2 (11%), H-2->L+2 (39%)	H-6->LUMO (3%), H-5->LUMO (3%), H-4->LUMO (8%), H-2->LUMO (9%), H-1->L+1 (3%), HOMO->L+2 (3%)
13	292.064245865	0.0038	H-8->LUMO (72%), H-7->LUMO (18%)	H-8->L+2 (4%), H-6->LUMO (3%)
14	290.531207996	0.0694	H-6->LUMO (88%)	H-8->LUMO (3%)
15	285.191592704	0.0148	H-8->LUMO (18%), H-7->LUMO (79%)	
16	276.140210277	0.0146	H-10->LUMO (92%)	H-5->L+4 (4%)
17	252.559925469	0.0987	H-9->LUMO (98%)	
18	247.142928643	0.0042	HOMO->L+3 (79%)	H-3->L+1 (8%), H-2->L+1 (3%), HOMO->L+5 (4%)
19	246.59240043	0.0001	H-3->L+1 (60%), H-2->L+1 (24%), HOMO->L+3 (10%)	
20	244.945755403	0.0195	HOMO->L+4 (94%)	

#### AD 10

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	685.905028835	0.0004	H-1->LUMO (65%), H-1->L+2 (25%)	HOMO->L+1 (8%)
2	646.424363984	0.0249	H-1->L+1 (11%), HOMO->LUMO (54%), HOMO->L+2 (30%)	
3	542.268163979	0.0053	H-3->LUMO (11%), H-3->L+2 (10%), H-2->LUMO (25%), H-2->L+2 (21%), H-1->L+1 (27%)	
4	502.794894409	0.0001	H-2->L+1 (23%), HOMO->L+1 (63%)	H-3->L+1 (4%), H-1->LUMO (6%)
5	451.936257973	0.0128	H-2->LUMO (18%), H-1->L+1 (42%), HOMO->LUMO (27%)	H-3->LUMO (3%), H-2->L+2 (2%), HOMO->L+2 (5%)
6	427.915348285	0.0006	H-3->L+1 (10%), H-2->L+1 (22%), H-1->LUMO (25%), H-1->L+2 (35%)	HOMO->L+1 (3%)
7	366.795435218	0.1266	H-2->LUMO (13%), H-1->L+1 (11%), HOMO->LUMO (15%), HOMO->L+2 (53%)	H-3->LUMO (2%)
8	353.331983506	0.0003	H-3->L+1 (13%), H-2->L+1 (24%), H-1->L+2 (34%), HOMO->L+1 (21%)	

9	338.50490898	0.5328	(34%), HOMO->L+1 (21%) H-3->LUMO (56%), H-2->LUMO (28%)	H-5->LUMO (7%) H-4->LUMO (9%), H-3->LUMO (7%)
10	332.183562888	0.0674	H-5->LUMO (80%)	H-5->LUMO (8%), H-2->L+2 (4%)
11	325.999666103	0.0007	H-4->LUMO (79%)	H-6->LUMO (3%), H-5->LUMO (3%), H-4->LUMO (8%), H-2->LUMO (9%), H-1->L+1 (3%), HOMO->L+2 (3%)
12	324.31125559	0.0164	H-3->LUMO (16%), H-3->L+2 (11%), H-2->L+2 (39%)	H-8->L+2 (4%), H-6->LUMO (3%)
13	292.064245865	0.0038	H-8->LUMO (72%), H-7->LUMO (18%)	H-8->LUMO (3%)
14	290.531207996	0.0694	H-6->LUMO (88%)	H-8->LUMO (3%)
15	285.191592704	0.0148	H-8->LUMO (18%), H-7->LUMO (79%)	
16	276.140210277	0.0146	H-10->LUMO (92%)	H-5->L+4 (4%)
17	252.559925469	0.0987	H-9->LUMO (98%)	
18	247.142928643	0.0042	HOMO->L+3 (79%) H-3->L+1 (60%), H-2->L+1 (24%), HOMO->L+3 (10%)	H-3->L+1 (8%), H-2->L+1 (3%), HOMO->L+5 (4%)
19	246.59240043	0.0001		
20	244.945755403	0.0195	HOMO->L+4 (94%)	

#### AD 11

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	647.403232271	0.0003	H-1->LUMO (50%), H-1->L+1 (15%), H-1->L+3 (20%), HOMO->L+2 (11%)	
2	628.2133817	0.0348	H-1->L+2 (15%), HOMO->LUMO (39%), HOMO->L+1 (12%), HOMO->L+3 (22%)	H-2->LUMO (3%)
3	528.762337991	0.0103	H-4->LUMO (19%), H-4->L+1 (11%), H-4->L+3 (21%), H-1->L+2 (37%)	HOMO->LUMO (3%)
4	506.181893575	0.0001	H-4->L+2 (20%), H-2->L+2 (13%), H-1->LUMO (10%), HOMO->L+2 (53%)	
5	451.90331321	0.0527	H-4->LUMO (12%), H-1->L+2 (22%), HOMO->LUMO (39%)	H-4->L+1 (4%), H-4->L+3 (5%), H-2->LUMO (6%), HOMO->L+1 (2%), HOMO->L+3 (7%)
6	438.633669469	0.0005	H-4->L+2 (27%), H-1->LUMO (36%), H-1->L+3 (24%)	H-1->L+1 (6%)

7	412.332279132	0.001	H-3->LUMO (94%) H-2->LUMO (48%), H-1->L+2 (10%), HOMO->LUMO (16%), HOMO->L+3 (10%)	H-3->L+1 (5%) H-4->LUMO (3%), HOMO->L+1 (9%)
8	394.151173106	0.4965	H-4->LUMO (25%), H-2->LUMO (39%), HOMO->L+3 (14%)	H-1->L+2 (9%), HOMO->L+1 (9%)
9	371.967457735	0.2011	H-4->L+2 (38%), H-1->L+1 (12%), H-1->L+3 (19%), HOMO->L+2 (24%)	
10	360.513486122	0.0	H-4->LUMO (36%), H-4->L+3 (31%)	H-1->LUMO (2%) H-4->L+1 (9%), H-2->L+1 (3%), H-2->L+3 (6%), H-1->L+2 (4%), HOMO->L+1 (2%)
11	332.094586737	0.0005	H-5->LUMO (96%) H-6->LUMO (39%), HOMO->L+1 (37%), HOMO->L+3 (17%)	
12	320.116167959	0.001	H-7->LUMO (33%), H-6->LUMO (25%), HOMO->L+1 (12%)	H-11->LUMO (2%), H-8->LUMO (9%), H-1->L+1 (3%), HOMO->L+3 (8%)
13	303.555462277	0.0552	H-11->LUMO (16%), H-8->LUMO (34%), H-7->LUMO (34%)	
14	298.347313358	0.0226	H-8->LUMO (10%), H-1->L+1 (54%), H-1->L+3 (23%)	H-1->L+1 (8%), H-1->L+3 (3%)
15	296.039237392	0.0043	H-10->LUMO (10%), H-7->LUMO (21%), H-6->LUMO (24%), HOMO->L+1 (10%)	H-11->LUMO (4%) H-11->LUMO (9%), H-9->LUMO (5%), H-8->LUMO (5%), H-3->L+1 (2%), H-2->L+1 (4%), HOMO->L+3 (6%)
16	295.763819209	0.0021	H-9->LUMO (86%)	H-9->L+1 (3%) H-11->LUMO (3%), H-8->LUMO (8%), H-3->LUMO (5%), H-2->L+1 (6%)
17	290.211584224	0.0881	H-3->L+1 (73%) H-11->LUMO (10%), H-10->LUMO (26%), H-3->L+1 (12%), H-2->L+1 (40%)	
18	284.93598008	0.0101		
19	279.899297933	0.005		
20	274.198184338	0.0072		H-8->LUMO (6%)

#### ADA 0

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	716.298994813	0.016	H-1->LUMO (71%), H-1->L+3 (18%)	HOMO->L+2 (7%)
2	684.844194721	0.002	HOMO->LUMO (61%), HOMO->L+3 (21%)	H-1->L+1 (4%), H-1->L+2 (8%)
3	563.052647649	0.0002	H-3->LUMO (39%), H-3->L+3 (19%), H-1->L+2 (20%)	H-4->LUMO (9%), H-4->L+3 (4%), H-1->L+1 (4%)

4	515.977331609	0.0038	H-3->L+2 (22%), HOMO->L+1 (21%), HOMO->L+2 (46%) H-3->LUMO (22%), H-1->L+1 (22%), H-1->L+2 (35%), HOMO->LUMO (16%)	H-3->L+1 (3%), H-1->LUMO (4%)
5	447.725671718	0.0003		H-3->L+3 (2%) H-4->L+2 (5%), H-3->L+1 (5%), H-1->LUMO (5%), H-1->L+3 (4%)
6	419.972200434	0.0344	H-3->L+2 (26%), HOMO->L+1 (51%) H-1->L+1 (62%), H-1->L+2 (21%), HOMO->L+3 (12%)	HOMO->LUMO (4%)
7	397.984762341	0.0009	H-1->LUMO (12%), H-1->L+3 (14%), HOMO->L+1 (25%), HOMO->L+2 (28%)	H-4->L+2 (2%), H-3->L+1 (6%), H-3->L+2 (9%)
8	393.325908928	0.0717	H-2->LUMO (95%)	
9	352.628535302	0.791	H-3->L+1 (21%), H-1->L+3 (53%), HOMO->L+2 (10%)	H-6->LUMO (3%), H-3->L+2 (2%), H-1->LUMO (6%)
10	343.598805599	0.0898		

#### ADA 1

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	745.142093949	0.0292	H-1->LUMO (69%), H-1->L+4 (15%) HOMO->LUMO (61%), HOMO->L+4 (17%)	H-1->L+7 (4%), HOMO->L+5 (5%) H-1->L+1 (3%), H-1->L+5 (7%), HOMO->L+7 (6%)
2	711.326408561	0.0026	H-3->LUMO (36%), H-3->L+4 (14%), H-1->L+5 (17%) H-3->L+5 (14%), HOMO->L+1 (32%), HOMO->L+5 (38%)	H-6->LUMO (8%), H-6->L+4 (4%), H-3->L+7 (5%), H-1->L+1 (4%) H-3->L+1 (2%), H-1->LUMO (4%), HOMO->L+6 (2%)
3	573.390339047	0.0005	H-3->L+5 (14%), HOMO->L+1 (32%), HOMO->L+5 (38%) H-3->LUMO (18%), H-1->L+1 (39%), H-1->L+5 (22%), HOMO->LUMO (13%)	H-6->L+5 (3%), H-3->L+1 (3%), HOMO->L+5 (9%), HOMO->L+6 (3%) H-1->L+6 (6%), HOMO->LUMO (7%), HOMO->L+4 (6%), HOMO->L+7 (5%)
4	529.078232535	0.0184	H-1->L+1 (47%), H-1->L+5 (24%) H-3->L+5 (14%), H-1->LUMO (19%), H-1->L+4 (13%), H-1->L+7 (10%), HOMO->L+5 (15%)	H-6->L+5 (3%), H-3->L+1 (7%), HOMO->L+1 (6%), HOMO->L+6 (2%)
5	467.900192513	0.0009	H-5->LUMO (28%), H-4->L+1 (11%), H-2->LUMO (46%) H-5->L+1 (12%), H-4->LUMO (35%), HOMO->L+2 (30%)	H-5->L+1 (3%), H-4->LUMO (2%) H-4->L+1 (5%), H-2->LUMO (2%), HOMO->L+3 (5%)
6	449.169267877	0.1265		
7	428.092649031	0.0004		
8	415.427016292	0.1343		
9	391.586738084	0.5402		
10	389.973242576	0.012		

<b>ADA 2</b>				
No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	827.720094881	0.0	H-1->LUMO (62%), H-1->L+2 (15%), H-1->L+4 (14%)	H-1->L+9 (3%), HOMO->L+5 (3%)
2	731.383866283	0.0	HOMO->LUMO (55%), HOMO->L+2 (12%), HOMO->L+4 (15%)	H-1->L+5 (5%), HOMO->L+9 (6%)
3	596.450632666	0.0	H-4->LUMO (13%), H-3->LUMO (30%), H-3->L+4 (11%), H-1->L+5 (13%)	H-7->LUMO (3%), H-4->L+2 (4%), H-4->L+4 (6%), H-4->L+9 (2%), H-3->L+2 (8%), H-3->L+9 (4%)
4	528.739788529	0.292	HOMO->L+1 (95%)	HOMO->L+3 (4%)
5	505.027262779	0.0	H-3->L+5 (23%),	
6	503.305159585	0.0024	HOMO->L+5 (63%)	H-4->L+5 (3%), H-1->LUMO (5%)
7	484.124142961	0.0	H-1->L+1 (93%), H-1->L+5 (33%), HOMO->LUMO (32%), HOMO->L+2 (20%)	H-1->L+3 (7%)
8	451.557682967	0.0001	H-1->LUMO (30%), H-1->L+2 (34%), H-1->L+4 (11%)	H-3->LUMO (4%), HOMO->L+4 (5%), HOMO->L+9 (3%)
9	448.97408297	0.7539	H-2->LUMO (94%)	H-4->L+5 (4%), H-3->L+5 (9%), H-1->L+9 (6%)
10	448.454418245	0.0	H-1->L+5 (31%), HOMO->L+2 (48%)	H-3->LUMO (9%), H-2->L+1 (2%), H-1->L+2 (2%), HOMO->LUMO (3%)

<b>ADA 3</b>				
No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	752.605275053	0.0502	H-1->LUMO (57%), H-1->L+2 (12%), H-1->L+4 (15%)	H-2->LUMO (3%), H-1->L+7 (2%), HOMO->L+5 (3%)
2	714.853511371	0.003	HOMO->LUMO (49%), HOMO->L+2 (11%), HOMO->L+4 (17%)	H-1->L+3 (5%), H-1->L+5 (5%), HOMO->L+7 (3%)
3	570.82961792	0.0087	H-4->LUMO (21%), H-4->L+4 (15%), H-3->LUMO (10%), H-1->L+5 (10%)	H-4->L+2 (5%), H-4->L+7 (3%), H-3->L+2 (2%), H-3->L+4 (5%), H-1->L+3 (4%), HOMO->L+3 (5%), HOMO->L+5 (2%)
4	561.726137243	0.0827	HOMO->L+1 (10%), HOMO->L+3 (60%), HOMO->L+5 (11%)	H-3->L+5 (2%), H-1->LUMO (3%)
5	523.117982415	0.0065	HOMO->LUMO (21%), HOMO->L+2 (62%)	H-1->L+1 (3%), H-1->L+2 (2%), HOMO->L+1 (6%), HOMO->L+3 (3%)

6	522.324611418	0.0276	HOMO->L+1 (70%), HOMO->L+2 (10%) H-1->L+1 (45%), H-1->L+2 (14%), H-1->L+3 (22%)	H-1->LUMO (3%), H-1->L+1 (6%), H-1->L+2 (2%), HOMO->L+3 (4%) H-3->LUMO (2%), HOMO->L+1 (4%), HOMO->L+2 (3%), HOMO->L+3 (2%)
7	511.844911911	0.0059	H-1->LUMO (18%), H-1->L+1 (11%), H-1->L+2 (56%)	HOMO->L+1 (6%), HOMO->L+2 (2%)
8	508.090291829	0.0076	H-1->L+1 (31%), H-1->L+3 (48%)	H-4->LUMO (2%), H-3->LUMO (4%), H-1->L+5 (2%), HOMO->LUMO (5%)
9	500.178283896	0.0021		H-4->L+3 (2%), H-4->L+5 (9%), H-3->L+3 (2%), H-3->L+5 (9%), HOMO->L+6 (8%)
10	482.222367906	0.1944	HOMO->L+3 (20%), HOMO->L+5 (29%)	

#### ADA 4

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	766.896721793	0.0688	H-2->LUMO (15%), H-1->LUMO (58%)	H-2->L+5 (3%), H-1->L+2 (5%), H-1->L+5 (9%), HOMO->L+4 (4%)
2	733.287159997	0.0095	HOMO->LUMO (59%), HOMO->L+5 (12%)	H-3->LUMO (4%), H-1->L+1 (4%), H-1->L+4 (4%), HOMO->L+2 (6%)
3	577.826317809	0.0036	H-4->LUMO (38%), H-4->L+5 (15%), H-1->L+4 (11%)	H-6->LUMO (2%), H-4->L+2 (7%), H-3->LUMO (4%), H-2->L+4 (4%), H-1->L+1 (5%)
4	560.887550383	0.0941	HOMO->L+1 (64%), HOMO->L+4 (15%)	H-4->L+4 (4%), H-3->L+1 (3%), H-3->L+4 (4%), H-1->LUMO (3%), HOMO->L+3 (3%)
5	502.346716147	0.007	H-4->LUMO (10%), H-2->L+1 (12%), H-1->L+1 (55%)	H-3->LUMO (9%), H-1->L+4 (3%), HOMO->LUMO (6%)
6	484.294336206	0.6827	H-4->L+4 (11%), HOMO->L+1 (27%), HOMO->L+4 (26%)	H-4->L+1 (3%), H-3->L+4 (8%), H-2->LUMO (9%), H-1->LUMO (7%)
7	474.835100196	0.7398	H-2->LUMO (55%), H-1->LUMO (20%) H-2->L+4 (10%), H-1->L+1 (16%), H-1->L+4 (32%), HOMO->LUMO (13%), HOMO->L+5 (10%)	H-4->L+1 (2%), H-4->L+4 (7%), H-3->L+4 (2%), HOMO->L+1 (3%), HOMO->L+4 (3%)
8	458.504467336	0.0011	H-4->L+1 (10%), H-4->L+4 (16%), H-2->LUMO (16%), H-1->L+5 (15%), HOMO->L+4 (11%)	H-4->LUMO (5%), HOMO->L+2 (3%)
9	436.02670305	0.0129	H-3->LUMO (39%), H-2->L+1 (47%)	H-3->L+1 (4%), H-2->L+5 (4%), H-1->LUMO (7%), H-1->L+2 (4%)
10	421.413932267	0.005		H-6->LUMO (2%), H-1->L+1 (2%), HOMO->LUMO (4%)

**ADA 5**

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	804.517507055	0.0657	H-1->LUMO (44%), H-1->L+2 (12%), H-1->L+6 (16%), H-1->L+15 (10%)	HOMO->L+12 (3%)
2	784.114552316	0.0028	HOMO->LUMO (44%), HOMO->L+2 (10%), HOMO->L+6 (14%), HOMO->L+15 (12%)	H-1->L+1 (3%), H-1->L+12 (3%)
3	676.695737432	0.048	HOMO->L+1 (89%)	HOMO->LUMO (2%)
4	656.24407459	0.0038	H-1->L+1 (80%)	H-1->LUMO (5%), HOMO->LUMO (8%)
5	605.864899395	0.0336	H-1->LUMO (31%), HOMO->LUMO (18%)	H-2->LUMO (4%), H-1->L+2 (5%), H-1->L+6 (7%), H-1->L+15 (3%), HOMO->L+2 (5%), HOMO->L+6 (7%), HOMO->L+12 (3%), HOMO->L+15 (4%)
6	600.088054848	0.0064	H-1->LUMO (16%), HOMO->LUMO (24%), HOMO->L+6 (10%)	H-1->L+1 (9%), H-1->L+2 (4%), H-1->L+6 (6%), H-1->L+15 (3%), HOMO->L+2 (8%), HOMO->L+12 (3%), HOMO->L+15 (5%)
7	583.427570525	0.0007	H-4->LUMO (13%), H-4->L+6 (13%), H-4->L+15 (15%), H-1->L+12 (13%)	H-4->L+2 (8%), H-3->LUMO (6%), H-3->L+2 (3%), H-3->L+6 (5%), H-3->L+15 (4%), H-1->L+1 (5%), H-1->L+9 (3%), H-1->L+14 (2%)
8	540.424518404	0.2432	H-2->LUMO (83%)	HOMO->L+12 (3%)
9	537.915714401	0.0212	H-2->L+1 (58%)	H-4->L+12 (2%), H-3->LUMO (3%), H-3->L+1 (2%), H-3->L+12 (2%), H-1->L+2 (3%), HOMO->L+3 (5%), HOMO->L+9 (5%), HOMO->L+12 (6%)
10	532.029664488	0.0056	H-2->L+1 (28%), HOMO->L+12 (14%)	H-4->L+12 (5%), H-3->LUMO (4%), H-3->L+12 (5%), H-1->L+2 (4%), H-1->L+6 (3%), HOMO->L+1 (2%), HOMO->L+3 (7%), HOMO->L+9 (8%), HOMO->L+14 (2%)
11	494.769116933	0.0001	H-3->LUMO (27%), H-2->L+1 (11%), H-1->L+3 (25%), HOMO->L+2 (14%)	H-1->L+9 (6%), H-1->L+12 (7%)
12	484.521446763	0.0401	HOMO->L+3 (70%)	H-4->L+12 (3%), H-3->L+1 (4%), H-3->L+12 (2%), H-1->L+2 (3%), HOMO->L+12 (5%)

13	479.833557848	0.0038	H-3->L+1 (59%), H-1->L+2 (14%)	H-3->LUMO (4%), HOMO->L+2 (5%)
14	472.392718937	0.0039	H-3->LUMO (17%), H-1->L+3 (55%)	H-1->L+2 (5%), H-1->L+4 (2%), H-1->L+12 (5%), HOMO->L+2 (5%)
15	471.781556363	0.0051	H-3->LUMO (22%), H-3->L+1 (10%), HOMO->L+2 (42%), HOMO->L+6 (10%)	HOMO->L+4 (4%), HOMO->L+5 (3%)
16	465.913317847	0.0172	H-3->L+1 (17%), H-1->L+2 (41%), H-1->L+6 (11%)	H-4->L+12 (3%), H-1->L+3 (6%), H-1->L+4 (3%), H-1->L+5 (4%), H-1->L+15 (3%)
17	453.191728241	0.0036	H-4->LUMO (15%), HOMO->L+4 (13%), HOMO->L+5 (10%)	H-3->LUMO (9%), H-3->L+2 (3%), H-2->L+3 (3%), H-1->L+3 (2%), H-1->L+4 (6%), H-1->L+5 (4%), H-1->L+9 (7%), H-1->L+12 (8%), HOMO->L+6 (8%)
18	447.128252055	0.0306	HOMO->L+4 (31%), HOMO->L+5 (47%)	H-1->L+4 (2%), HOMO->L+9 (7%)
19	441.617784549	0.0253	H-4->L+1 (20%), H-1->L+4 (53%)	H-4->L+12 (2%), H-1->L+5 (3%), HOMO->L+4 (2%), HOMO->L+5 (2%), HOMO->L+9 (4%)
20	439.504406282	0.0001	HOMO->L+4 (19%), HOMO->L+5 (19%), HOMO->L+6 (14%)	H-4->LUMO (8%), H-2->L+3 (4%), H-1->L+4 (8%), H-1->L+5 (9%), H-1->L+9 (2%), H-1->L+12 (3%), HOMO->L+2 (4%)

#### ADA 6

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	794.974307593	0.02	H-1->LUMO (74%), H-1->L+2 (12%)	H-1->L+5 (6%), HOMO->L+3 (2%)
2	734.460002442	0.0027	HOMO->LUMO (64%), HOMO->L+2 (13%)	H-1->L+1 (3%), H-1->L+3 (4%), HOMO->L+5 (8%)
3	592.772007134	0.0004	H-6->LUMO (43%), H-6->L+2 (13%)	H-8->LUMO (3%), H-6->L+5 (8%), H-5->LUMO (7%), H-1->L+1 (2%), H-1->L+3 (8%), H-1->L+4 (5%)
4	526.472157164	0.0349	HOMO->L+1 (37%), HOMO->L+3 (28%), HOMO->L+4 (11%)	H-6->L+3 (7%), H-6->L+4 (4%), H-5->L+3 (3%), H-1->LUMO (3%)
5	476.038368256	0.0012	H-1->L+1 (46%), H-1->L+3 (18%), HOMO->LUMO (10%)	H-6->LUMO (9%), H-5->LUMO (4%), H-1->L+4 (7%)
6	454.587493628	0.1615	H-6->L+3 (10%), HOMO->L+1 (56%), HOMO->L+4 (10%)	H-6->L+1 (2%), H-6->L+4 (5%), H-5->L+3 (2%), HOMO->L+3 (8%)



7	444.738478414	0.002	H-3->LUMO (36%), H-3->L+1 (17%), H-2->LUMO (37%)	H-2->L+1 (6%)
8	444.164910125	0.0001	H-3->LUMO (37%), H-2->LUMO (36%), H-2->L+1 (18%)	H-3->L+1 (6%)
9	434.148725444	0.0004	H-1->L+1 (41%), H-1->L+3 (18%), H-1->L+4 (18%)	HOMO->LUMO (6%), HOMO->L+2 (4%), HOMO->L+5 (6%)
10	415.566257792	0.136	H-6->L+3 (13%), H-1->LUMO (17%), H-1->L+2 (12%), H-1->L+5 (15%)	H-6->L+1 (8%), H-6->L+4 (6%), HOMO->L+1 (3%), HOMO->L+3 (8%), HOMO->L+4 (6%)

#### ADA 7

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	766.091158009	0.0148	H-1->LUMO (74%), H-1->L+3 (17%)	HOMO->L+2 (5%)
2	714.153522333	0.0022	HOMO->LUMO (64%), HOMO->L+3 (21%)	H-1->L+1 (3%), H-1->L+2 (7%)
3	582.058086532	0.0002	H-3->LUMO (48%), H-3->L+3 (21%), H-1->L+2 (15%)	H-4->LUMO (5%), H-4->L+3 (2%), H-1->L+1 (2%)
4	518.653808878	0.012	H-3->L+2 (19%), HOMO->L+1 (26%), HOMO->L+2 (46%)	H-3->L+1 (2%), H-1->LUMO (3%)
5	462.248128448	0.0005	H-3->LUMO (16%), H-1->L+1 (32%), H-1->L+2 (35%), HOMO->LUMO (13%)	
6	436.318246805	0.0972	H-3->L+2 (19%), HOMO->L+1 (63%)	H-3->L+1 (3%), HOMO->L+2 (8%)
7	418.3143595	0.0006	H-1->L+1 (56%), H-1->L+2 (26%), HOMO->L+3 (10%)	HOMO->LUMO (4%)
8	405.415581101	0.0519	H-3->L+2 (18%), H-1->LUMO (15%), H-1->L+3 (22%), HOMO->L+2 (20%)	H-3->L+1 (9%), HOMO->L+1 (8%)
9	369.572531931	0.9676	H-2->LUMO (97%)	
10	352.568370051	0.0471	H-3->L+1 (42%), H-1->L+3 (37%)	H-8->LUMO (4%), H-1->LUMO (4%), HOMO->L+2 (8%)

#### ADA 8

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	682.206410324	0.0439	H-2->LUMO (14%), H-1->LUMO (43%), H-1->L+2 (11%)	H-2->L+2 (5%), H-2->L+5 (4%), H-1->L+5 (9%), HOMO->L+3 (3%), HOMO->L+4 (6%)
2	668.198291631	0.0026	HOMO->LUMO (45%), HOMO->L+2 (14%),	H-3->LUMO (4%), H-2->L+4 (2%), H-1->L+1 (3%), H-1->L+3 (3%), H-1->L+4 (5%)

3	547.802734999	0.0009	HOMO->L+5 (13%) H-6->LUMO (27%), H-6->L+2 (14%), H-6->L+5 (14%), H-1->L+4 (13%)	H-3->LUMO (3%), H-2->L+3 (3%), H-2->L+4 (5%), H-1->L+1 (3%), H-1->L+3 (6%)
4	522.390633742	0.0045	H-6->L+4 (10%), HOMO->L+1 (19%), HOMO->L+3 (14%), HOMO->L+4 (23%)	H-6->L+3 (4%), H-3->L+3 (5%), H-3->L+4 (9%), H-1->LUMO (6%)
5	448.421979139	0.0131	H-6->LUMO (12%), H-3->LUMO (12%), H-1->L+1 (20%), HOMO->LUMO (12%)	H-6->L+2 (4%), H-6->L+5 (3%), H-2->L+1 (5%), H-2->L+3 (2%), H-2->L+4 (3%), H-1->L+3 (5%), H-1->L+4 (9%), HOMO->L+1 (8%)
6	444.499311699	0.129	H-6->L+4 (10%), HOMO->L+1 (59%)	H-6->L+1 (2%), H-6->L+3 (5%), H-3->L+4 (4%), H-1->L+1 (4%), HOMO->L+4 (5%)
7	426.604937592	0.7574	H-2->LUMO (18%), H-1->LUMO (37%)	H-6->L+3 (2%), H-6->L+4 (5%), H-2->L+5 (2%), H-1->L+1 (8%), H-1->L+2 (3%), H-1->L+5 (4%), HOMO->LUMO (3%), HOMO->L+1 (4%), HOMO->L+4 (3%)
8	425.185847093	0.1501	H-1->L+1 (42%), H-1->L+4 (11%)	H-2->LUMO (3%), H-2->L+1 (4%), H-2->L+4 (4%), H-1->LUMO (8%), HOMO->LUMO (8%), HOMO->L+2 (3%), HOMO->L+5 (5%)
9	420.370899207	0.008	H-5->LUMO (41%), H-5->L+1 (25%), H-4->LUMO (18%)	H-4->L+1 (7%)
10	419.787347257	0.0028	H-5->LUMO (16%), H-4->LUMO (40%), H-4->L+1 (29%)	H-5->L+1 (8%)

#### ADA 9

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	779.627699253	0.0227	H-3->LUMO (63%), H-3->L+2 (12%)	H-3->L+5 (4%), H-2->LUMO (2%), H-1->LUMO (7%), HOMO->L+3 (3%)
2	725.435568499	0.0026	HOMO->LUMO (62%), HOMO->L+2 (14%)	H-3->L+1 (3%), H-3->L+3 (4%), HOMO->L+5 (8%)
3	586.490979244	0.0005	H-6->LUMO (44%), H-6->L+2 (14%), H-3->L+3 (10%)	H-8->LUMO (3%), H-6->L+5 (8%), H-5->LUMO (4%), H-3->L+1 (2%), H-3->L+4 (3%)

4	524.423454074	0.0308	H-6->L+3 (10%), HOMO->L+1 (33%), HOMO->L+3 (33%)	H-6->L+4 (3%), H-5->L+3 (4%), H-3->LUMO (3%), HOMO->L+4 (7%)
5	489.93990758	0.0016	H-2->LUMO (59%), H-2->L+1 (15%)	H-3->LUMO (6%), H-3->L+1 (3%), H-1->LUMO (9%), H-1->L+1 (5%)
6	489.630333355	0.0015	H-2->LUMO (12%), H-1->LUMO (58%), H-1->L+1 (18%)	H-3->LUMO (3%), H-2->L+1 (6%)
7	471.351098739	0.0018	H-6->LUMO (11%), H-3->L+1 (36%), H-3->L+3 (20%), HOMO->LUMO (11%)	H-5->LUMO (4%), H-3->L+4 (4%), H-2->L+1 (2%), H-1->L+1 (3%), H-1->L+3 (2%)
8	452.002161911	0.1907	H-6->L+3 (12%), HOMO->L+1 (59%)	H-6->L+1 (2%), H-6->L+4 (3%), H-5->L+3 (2%), HOMO->L+3 (9%), HOMO->L+4 (6%)
9	431.714868248	0.0005	H-3->L+1 (40%), H-3->L+3 (18%), H-3->L+4 (10%)	H-1->L+1 (4%), HOMO->LUMO (6%), HOMO->L+2 (5%), HOMO->L+5 (6%)
10	415.413097273	0.3607	H-6->L+3 (15%), H-3->LUMO (17%), H-3->L+2 (10%), H-3->L+5 (11%)	H-6->L+1 (7%), H-6->L+4 (3%), H-4->LUMO (9%), HOMO->L+1 (3%), HOMO->L+3 (9%), HOMO->L+4 (3%)

#### ADA 10

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	750.010241439	0.0169	H-1->LUMO (72%), H-1->L+3 (18%)	HOMO->L+2 (5%)
2	705.417575172	0.0022	HOMO->LUMO (63%), HOMO->L+3 (22%)	H-1->L+1 (3%), H-1->L+2 (7%)
3	575.626505466	0.0003	H-3->LUMO (44%), H-3->L+3 (21%), H-1->L+2 (17%)	H-4->LUMO (6%), H-4->L+3 (3%), H-1->L+1 (3%)
4	518.111964113	0.0099	H-3->L+2 (20%), HOMO->L+1 (23%), HOMO->L+2 (46%)	H-3->L+1 (2%), H-1->LUMO (4%)
5	458.40275451	0.0006	H-3->LUMO (18%), H-1->L+1 (28%), H-1->L+2 (35%), HOMO->LUMO (14%)	H-4->L+2 (2%), H-3->L+1 (3%), HOMO->L+2 (6%)
6	432.981292168	0.1007	H-3->L+2 (19%), HOMO->L+1 (63%)	H-4->L+2 (2%), H-3->L+1 (3%), HOMO->L+2 (6%)
7	414.648985025	0.0005	H-1->L+1 (59%), H-1->L+2 (24%), HOMO->L+3 (10%)	HOMO->LUMO (4%)
8	404.081064473	0.0749	H-3->L+2 (17%), H-1->LUMO (16%), H-1->L+3 (21%), HOMO->L+1 (10%), HOMO->L+2 (21%)	H-4->L+2 (2%), H-3->L+1 (7%)
9	370.301036414	1.0402	H-2->LUMO (97%)	H-10->LUMO (3%), H-1->LUMO (4%), HOMO->L+2 (9%)
10	350.812611092	0.0402	H-3->L+1 (36%), H-1->L+3 (40%)	

**ADA 11**

No.	Wavelength (nm)	Osc. Strength	Major contribs	Minor contribs
1	684.01298142	0.0447	H-2->LUMO (14%), H-1->LUMO (44%), H-1->L+2 (11%)	H-2->L+2 (5%), H-2->L+5 (4%), H-1->L+5 (9%), HOMO->L+3 (3%), HOMO->L+4 (7%)
2	669.858949766	0.0027	HOMO->LUMO (46%), HOMO->L+2 (14%), HOMO->L+5 (14%)	H-2->L+4 (2%), H-1->L+1 (3%), H-1->L+3 (3%), H-1->L+4 (5%)
3	548.602623948	0.001	H-6->LUMO (27%), H-6->L+2 (14%), H-6->L+5 (14%), H-1->L+4 (14%)	H-4->LUMO (2%), H-2->L+3 (2%), H-2->L+4 (5%), H-1->L+1 (3%), H-1->L+3 (6%)
4	523.405070129	0.0052	H-6->L+4 (10%), HOMO->L+1 (20%), HOMO->L+3 (13%), HOMO->L+4 (24%)	H-6->L+3 (4%), H-4->L+3 (3%), H-4->L+4 (6%), H-3->L+4 (4%), H-1->LUMO (6%)
5	449.543847035	0.0137	H-6->LUMO (12%), H-1->L+1 (21%), HOMO->LUMO (12%)	H-6->L+2 (3%), H-6->L+5 (3%), H-4->LUMO (8%), H-3->LUMO (5%), H-2->L+1 (5%), H-2->L+3 (2%), H-2->L+4 (3%), H-1->L+3 (5%), H-1->L+4 (9%), HOMO->L+1 (7%)
6	445.5215531	0.1359	H-6->L+4 (10%), HOMO->L+1 (59%)	H-6->L+1 (2%), H-6->L+3 (5%), H-4->L+4 (3%), H-1->L+1 (4%), HOMO->L+4 (6%)
7	427.148739104	0.7308	H-2->LUMO (18%), H-1->LUMO (35%)	H-6->L+3 (2%), H-6->L+4 (5%), H-2->L+5 (2%), H-1->L+1 (8%), H-1->L+2 (3%), H-1->L+5 (4%), HOMO->LUMO (3%), HOMO->L+1 (3%), HOMO->L+4 (3%)
8	425.88689548	0.1416	H-1->L+1 (41%), H-1->L+4 (12%)	H-2->LUMO (3%), H-2->L+1 (3%), H-2->L+4 (4%), H-1->LUMO (7%), HOMO->LUMO (9%), HOMO->L+2 (3%), HOMO->L+5 (5%)
9	421.91585453	0.0433	H-4->LUMO (25%), H-4->L+1 (14%), H-3->LUMO (33%), H-3->L+1 (18%)	H-1->LUMO (2%)
10	418.554429182	0.0009	H-5->LUMO (58%), H-5->L+1 (37%)	H-5->L+2 (3%)

## Cartesian coordinates of the optimized structures

### AD 0

H	1.82875800	-0.90121900	-3.32031100
C	1.57287800	-0.04668500	-2.71244600
H	3.46612900	1.14713200	-2.71766800
C	2.44316100	1.03924200	-2.39088200
H	-0.51824800	-0.50316300	-2.10650400
C	0.33028300	0.15930100	-2.06356400
C	1.74912500	1.92489000	-1.53415400
C	0.41203200	1.40421000	-1.33396900
H	2.13077700	2.84048400	-1.10767700
Fe	1.83423500	0.06646700	-0.64079300
H	4.54596900	-0.54078300	-0.12997300
C	2.66012100	-1.74237700	-0.05178500
C	3.54902800	-0.67244200	0.26293500
C	1.43507000	-1.51880800	0.64533000
C	2.87484100	0.21486500	1.15379000
H	3.27327100	1.13225900	1.55990400
C	1.57066400	-0.31145400	1.39079700
H	0.80441200	0.14540800	1.99935600
C	-0.53411600	2.03977000	-0.46886000
H	-0.14802600	2.88721000	0.08912100
C	-1.85781600	1.75310000	-0.25884900
H	0.55393800	-2.14060300	0.59820900
C	-2.56892200	0.70882900	-0.91759400
N	-3.16617900	-0.13117500	-1.44274000
C	-2.61402600	2.52933700	0.66934800
N	-3.23120800	3.15659600	1.42053700
H	2.86743200	-2.56170900	-0.72351500

### AD 1

H	2.44166000	-1.30727800	-3.01944100
C	1.98861600	-0.41895100	-2.60537500
H	3.62770700	1.09697200	-2.78483900
C	2.62058100	0.85684300	-2.47922500
H	-0.04506900	-1.12466600	-1.99058800
C	0.68476500	-0.33600200	-2.05719400
C	1.71233100	1.73701300	-1.84521500
C	0.48150200	1.01497800	-1.59004100
H	1.88836400	2.77317100	-1.59663200
Fe	2.07944100	0.13790300	-0.59310500
H	4.81381800	0.16686300	0.12264700
C	3.17155000	-1.33070600	0.38257300
C	3.83053100	-0.07118700	0.49974100
C	1.87948900	-1.21067900	0.97688800
C	2.94693000	0.82959500	1.16623200
H	3.14518600	1.86729400	1.38824500
C	1.74388900	0.12319200	1.46199800
H	0.86632100	0.53807500	1.93525300
C	-0.62149200	1.62049200	-0.90124000
H	-0.41522600	2.63251800	-0.55324900

H	1.12924100	-1.98505800	1.02918900
C	-1.88625100	1.20078900	-0.61085800
C	-2.81628400	2.09961600	0.12586700
C	-2.61331500	-0.05569200	-0.90444800
C	-4.10886500	1.36979000	0.26032200
C	-3.98985100	0.11315600	-0.34344200
C	-5.29690000	1.77093200	0.86088100
C	-5.05682500	-0.77774600	-0.36324900
C	-6.37091600	0.87923200	0.84353100
H	-5.38401000	2.74530800	1.32674300
C	-6.25212600	-0.37988200	0.23863400
H	-4.96079300	-1.74993100	-0.83192100
H	-7.31113100	1.16101500	1.30312700
H	-7.10263500	-1.05170400	0.24016700
O	-2.21766600	-1.05759400	-1.48390100
O	-2.57770400	3.22304400	0.54409000
H	3.56936800	-2.21165000	-0.09837900

## AD 2

H	-0.11376000	-3.65258200	-0.40198300
C	-0.26870500	-2.61344800	-0.65075200
H	0.40154200	-2.51445700	-2.78536400
C	0.00847700	-2.00982200	-1.91586200
H	-1.02197200	-1.74978300	1.26551100
C	-0.73642200	-1.61520300	0.23787100
C	-0.27495200	-0.62900300	-1.81587700
C	-0.77384200	-0.35992000	-0.47747000
H	-0.16180700	0.10838200	-2.59673900
Fe	1.16516300	-1.10887900	-0.42359300
H	3.01988500	0.65843700	-1.64501800
C	3.14828800	-1.45797400	-0.92237300
C	2.90918700	-0.05356700	-0.84132100
C	2.85431100	-2.03065100	0.35029500
C	2.47111500	0.23868400	0.48370400
H	2.17779900	1.21040900	0.85202700
C	2.43340900	-0.98105200	1.22084500
H	2.12105000	-1.09350100	2.24797400
C	-1.05277000	0.98300100	-0.06200700
H	-0.73959200	1.69905700	-0.81277300
H	2.91071800	-3.07915000	0.60138700
C	-1.67221300	1.51559700	1.04189000
C	-1.87552500	2.94825900	1.27894800
C	-2.41538200	0.78231600	2.10558700
C	-2.87600400	3.08453800	2.36254200
C	-3.17363100	1.80617000	2.86332500
C	-3.50526900	4.20056300	2.92158600
C	-4.06402100	1.60799200	3.90835000
C	-4.40903800	4.00405500	3.96736900
C	-4.68619900	2.72597200	4.46331500
H	-4.26591400	0.60823000	4.27389400
H	-5.38922300	2.60757900	5.27923800

H	-4.90516800	4.86376900	4.40198400
H	-3.32237200	5.20278700	2.56561500
C	-1.21112000	4.00227000	0.68110800
C	-1.48473900	5.37123400	0.96603700
N	-1.66193600	6.49978100	1.15187100
C	-0.13985800	3.85625900	-0.24775300
N	0.74756500	3.80956300	-0.98968800
O	-2.44088300	-0.41779800	2.32533500
H	3.46556600	-1.99803100	-1.80176200

### AD 3

H	0.98585200	-2.80815500	-1.57806900
C	0.70420200	-1.77062000	-1.67455300
H	1.91183100	-1.09186800	-3.43197100
C	1.19950300	-0.85904700	-2.65523700
H	-0.68201800	-1.49209500	0.04096600
C	-0.18076400	-1.07217700	-0.81581000
C	0.63733100	0.41449900	-2.40190700
C	-0.26089400	0.29606700	-1.27033700
H	0.81887300	1.32028100	-2.96069600
Fe	1.68592400	-0.18566100	-0.73550100
H	4.41139200	-0.36455400	-1.45971800
C	3.25172000	-1.03020400	0.33394300
C	3.75830700	-0.11651600	-0.63659300
C	2.39695000	-0.30650700	1.21840500
C	3.21614900	1.17281700	-0.35563300
H	3.39271500	2.07436700	-0.92242100
C	2.37930500	1.05353200	0.79326100
H	1.80178300	1.84877800	1.24055400
C	-0.88684500	1.44103700	-0.67331400
H	-0.41794100	2.37155000	-0.97000600
H	1.84503400	-0.71979000	2.04897200
C	-1.88567600	1.53649400	0.26231200
C	-2.07774400	2.71728700	1.12280800
C	-2.74682900	0.48221800	0.81236800
C	-2.66808700	2.22045900	2.37518200
C	-3.05396500	0.86841500	2.19419800
C	-2.87080600	2.84779100	3.60462000
C	-3.63454900	0.15007600	3.23779400
C	-3.44156500	2.11708700	4.64627400
C	-3.81653900	0.78399400	4.46654700
H	-3.92351800	-0.88413300	3.12047700
H	-4.25001600	0.23166900	5.29145400
H	-3.58949500	2.59165900	5.60871100
H	-2.58385800	3.87509000	3.77147400
C	-1.80898200	4.03260300	0.81134700
C	-2.01343900	5.11248700	1.71758500
N	-2.16178700	6.02392800	2.41471600
C	-1.36004900	4.46089700	-0.47155200
N	-1.00604300	4.85530600	-1.50012900
C	-3.33745300	-0.53452800	0.09708200

C	-3.23927700	-0.64017100	-1.32077200
N	-3.23133300	-0.73737900	-2.47308200
C	-4.20828300	-1.49768300	0.68405900
N	-4.91495700	-2.30223700	1.12167700
H	3.45612100	-2.08948800	0.37429200

**AD 4**

H	0.82778100	-1.18342600	-3.34483500
C	0.81946100	-0.25875700	-2.78782200
H	2.82248100	0.62157700	-3.26133900
C	1.87932900	0.69804700	-2.74202800
H	-1.15371800	-0.33355700	-1.75788500
C	-0.22696600	0.18772900	-1.94156200
C	1.49631500	1.74196100	-1.86430300
C	0.16923800	1.45242200	-1.37030200
H	2.08037800	2.61395100	-1.60998300
Fe	1.50367300	-0.04544300	-0.82643700
H	4.15374000	-1.02853700	-0.77082400
C	2.17270100	-1.91533300	-0.22700200
C	3.24564000	-0.97657400	-0.18919000
C	1.15292700	-1.45699800	0.66017200
C	2.89053600	0.06398400	0.72006100
H	3.48503600	0.93431800	0.95349800
C	1.59916100	-0.23647000	1.24583000
H	1.03937400	0.37449200	1.93828700
C	-0.54023400	2.27298300	-0.42991900
H	0.02432600	3.11545200	-0.04661600
H	0.20296000	-1.93749600	0.83906400
C	-1.83025900	2.08139800	-0.02563900
H	-2.38116300	1.24183800	-0.43693400
C	-2.54666700	2.88452400	0.89897400
C	-3.85580800	2.65667100	1.29070300
C	-2.05520500	4.12391600	1.62959800
C	-4.65278000	1.58556400	0.82402200
N	-5.25555700	0.69044900	0.40745000
C	-4.24714900	3.67347400	2.23066400
O	-3.23473400	4.51239300	2.43213800
C	-5.43783100	3.88822400	2.90641600
C	-0.93452000	3.84626200	2.63381100
H	-1.20342200	3.02183700	3.29587600
H	-0.00834000	3.59122900	2.11882600
H	-0.76148600	4.74153500	3.23328400
C	-1.76293900	5.30953800	0.70748000
H	-0.87189100	5.12291900	0.10804900
H	-2.60268100	5.49368200	0.03570300
H	-1.59084800	6.20012400	1.31412200
C	-5.55059100	4.99017100	3.79353400
N	-5.65445700	5.88574400	4.52034000
C	-6.57300200	3.05372100	2.76210500
N	-7.52618000	2.40132600	2.67814300
H	2.12778700	-2.80202500	-0.84127400



**AD 5**

H	0.85871900	-1.99622300	-2.94610900
C	0.70822400	-0.99259800	-2.57811100
H	2.12724600	0.21617600	-3.81639200
C	1.37480300	0.17989900	-3.04347500
H	-0.83385300	-1.30627500	-1.02112300
C	-0.16664800	-0.62770600	-1.52434800
C	0.90306200	1.27921300	-2.28974700
C	-0.07415000	0.80421500	-1.33420400
H	1.21396500	2.30833900	-2.39450700
Fe	1.77399900	-0.10801700	-1.01309300
H	4.51299900	-0.12030100	-1.69783000
C	3.23912900	-1.46064400	-0.43844000
C	3.83798800	-0.23843200	-0.86355300
C	2.38684600	-1.17353400	0.66963500
C	3.35452600	0.80691700	-0.02177300
H	3.60437900	1.85410000	-0.10140100
C	2.46024400	0.22704000	0.92602000
H	1.90734700	0.76278800	1.68339600
C	-0.78918600	1.72058900	-0.48388600
H	-0.66426900	2.74580100	-0.82234100
H	1.78201100	-1.88998400	1.20495500
C	-1.62525300	1.59478100	0.59181800
C	-2.39742800	2.72804200	1.10846100
C	-1.99950600	0.46622600	1.43898300
C	-2.40831000	4.04972200	0.66506900
C	-3.21544900	2.30728100	2.19476500
C	-1.44569600	-0.81009200	1.52500300
C	-3.03849100	0.86575400	2.33523300
C	-3.20910800	4.95937000	1.33380900
H	-1.81393000	4.38294400	-0.17352600
C	-3.92919500	3.30243700	2.89042000
C	-1.99591300	-1.71401700	2.41940100
H	-0.58928200	-1.09784800	0.93787900
C	-3.63760500	-0.13732000	3.12075100
C	-3.95790800	4.61526400	2.45815200
C	-3.11739800	-1.41665800	3.18951100
H	-4.51533000	5.36278000	3.00184700
H	-3.58361100	-2.16860700	3.80787600
N	-1.40263800	-3.05722600	2.53023800
O	-1.93116500	-3.85615200	3.29383300
O	-0.40777300	-3.30150900	1.85544300
N	-4.93522700	0.05451900	3.79151700
O	-5.17119600	-0.59816400	4.79635700
O	-5.72999800	0.82031400	3.25512700
N	-4.54772900	3.06578800	4.20664600
O	-5.55333500	3.69508300	4.49550400
O	-3.96982800	2.28881600	4.96021400
N	-3.23552300	6.35984600	0.87535300
O	-3.95213000	7.14709500	1.48211200

O	-2.54291200	6.65940800	-0.09052900
H	3.38409500	-2.42933500	-0.89251800

#### AD 6

H	2.08885900	-0.87661600	-3.32916100
C	1.73751400	-0.05073200	-2.72903400
H	3.57974500	1.20078000	-2.49363600
C	2.53167500	1.05076600	-2.28344000
H	-0.40120900	-0.57516900	-2.36601800
C	0.42656700	0.09375700	-2.21757300
C	1.71980900	1.88193300	-1.48191400
C	0.37894200	1.31639900	-1.44470100
H	2.02218900	2.79301300	-0.98729800
Fe	1.76956500	0.00436000	-0.63607900
H	4.43435100	-0.56432100	0.10881200
C	2.57745500	-1.80497100	-0.02547100
C	3.40854400	-0.72812900	0.40290400
C	1.28789400	-1.62832300	0.55952200
C	2.63465900	0.11651500	1.25364500
H	2.97238600	1.02783900	1.72336800
C	1.32705700	-0.44333700	1.35123900
H	0.49675200	-0.01978900	1.89660000
C	-0.61923500	1.90892500	-0.61257400
H	-0.22804700	2.73411900	-0.02223900
H	0.42944600	-2.26572000	0.41174800
C	-1.96327300	1.71267700	-0.38555200
C	-2.56839800	2.61496300	0.61628200
C	-2.81724000	0.73172900	-1.05676000
N	-3.94067800	2.45716500	0.83625000
O	-1.96880900	3.46918700	1.25216100
N	-4.17168100	0.75188500	-0.68279300
O	-2.47042600	-0.08147700	-1.89932000
H	-4.35306800	3.07465300	1.52470600
C	-4.77449500	1.56213700	0.23234200
H	-4.76173400	0.07391100	-1.14937400
S	-6.40476400	1.46796200	0.58725400
H	2.86519700	-2.59745800	-0.69977500

#### AD 7

H	2.08586900	-0.86581400	-3.33698200
C	1.73241600	-0.04460100	-2.73163900
H	3.56808800	1.21708100	-2.49785800
C	2.52178100	1.05945600	-2.28432400
H	-0.40268400	-0.58181300	-2.36188900
C	0.42217300	0.09083100	-2.21432100
C	1.70702500	1.88247100	-1.47629800
C	0.37081300	1.30844100	-1.43539500
H	2.00599100	2.79309900	-0.97868800
Fe	1.77359200	0.00104600	-0.63974700
H	4.44251500	-0.55321400	0.10385700
C	2.59323800	-1.80497600	-0.03456400

C	3.41753900	-0.72407500	0.39691400
C	1.30251300	-1.63792600	0.55079300
C	2.63813500	0.11339100	1.24974600
H	2.97014100	1.02556500	1.72195800
C	1.33377700	-0.45458300	1.34542600
H	0.50084400	-0.03790500	1.89205100
C	-0.63197500	1.90045600	-0.60383400
H	-0.24055500	2.72499800	-0.01252700
H	0.44807100	-2.28025700	0.40095900
C	-1.97386400	1.70791800	-0.37843200
C	-2.57802700	2.62063400	0.62195100
C	-2.82932900	0.72160000	-1.04950600
N	-3.94402900	2.47195600	0.84112400
O	-1.96554700	3.47335100	1.24972900
N	-4.17806700	0.74318000	-0.68345200
O	-2.46847700	-0.09316500	-1.88622200
H	-4.36412200	3.09075400	1.52376300
C	-4.79256900	1.56779300	0.23510000
H	-4.77574900	0.06760300	-1.14383300
O	-5.98144900	1.50429300	0.49079800
H	2.88610300	-2.59410000	-0.71063600

#### AD 8

H	-3.40142800	-2.11378100	1.84751100
C	-2.84713900	-1.19482300	1.73080500
H	-4.30341500	0.35814900	2.42106600
C	-3.32577700	0.11557300	2.03305100
H	-0.92529600	-1.90933600	0.87193400
C	-1.53071300	-1.08329400	1.21018400
C	-2.31022300	1.04532500	1.69658900
C	-1.16967700	0.31328400	1.19744700
H	-2.36345600	2.11909800	1.79826000
Fe	-2.84207000	-0.02124700	0.00763100
H	-5.53460800	0.57053300	-0.62533300
C	-4.07778400	-0.95472200	-1.37355700
C	-4.57676300	0.34678000	-1.07056400
C	-2.76491600	-0.80952300	-1.91405300
C	-3.57294100	1.29775500	-1.42283400
H	-3.63866100	2.36779700	-1.29550900
C	-2.45533300	0.58205100	-1.94565700
H	-1.52215900	1.01587700	-2.27299800
H	-2.11229100	-1.61231800	-2.22235800
C	1.22945000	0.41450000	0.39618800
S	1.70664400	-1.28977600	0.37471800
C	2.36314000	1.25460000	-0.02449900
C	3.34039500	-0.89647100	-0.16752500
O	2.37793400	2.46861400	-0.12331600
N	3.48715700	0.45420700	-0.31583200
S	4.48106900	-2.06831800	-0.44532700
C	4.74670600	1.08818300	-0.74546700
H	4.46179000	1.98482800	-1.29465400

H	5.23382800	0.39494500	-1.42944800
C	5.65702300	1.43501600	0.43061200
H	5.16889800	2.13435700	1.11237000
H	5.93999600	0.53924100	0.98665600
H	6.56846700	1.90556800	0.05398700
C	0.03942400	0.95358500	0.74829200
H	0.00818500	2.03927600	0.70130400
H	-4.59224700	-1.88758600	-1.19817000

### AD 9

H	2.09393000	-0.84769000	-3.31982600
C	1.73848700	-0.03655800	-2.70213200
H	3.58118900	1.20331900	-2.41296900
C	2.53037200	1.05032500	-2.21904600
H	-0.40519700	-0.56339900	-2.37773100
C	0.42152400	0.09952000	-2.20226700
C	1.70983800	1.86265100	-1.40633900
C	0.36726400	1.30070700	-1.39773300
H	2.00907400	2.75943800	-0.88429400
Fe	1.74771300	-0.03694600	-0.60963500
H	4.40022700	-0.62658600	0.16489800
C	2.54519800	-1.86191800	-0.03196600
C	3.36942100	-0.79675900	0.43717700
C	1.24607200	-1.69895100	0.53576300
C	2.58159900	0.02687200	1.29578000
H	2.91177900	0.92593300	1.79370900
C	1.27214100	-0.53409100	1.35740800
H	0.43295200	-0.12370200	1.89919500
C	-0.63638500	1.88976900	-0.56437400
H	-0.23640300	2.69697800	0.04376800
H	0.38996400	-2.33176900	0.35765200
C	-1.98446500	1.71702400	-0.34682500
C	-2.57603500	2.61998600	0.65309900
C	-2.83767500	0.75517500	-1.03013600
N	-3.96477800	2.52783900	0.86006700
O	-1.92671600	3.43807500	1.29202600
N	-4.20332700	0.73850400	-0.66244200
O	-2.44575600	-0.02679900	-1.88488800
C	-4.78741200	1.60273300	0.24345900
C	-4.52644300	3.49247500	1.84167900
C	-4.49146000	2.96522900	3.27353400
H	-5.54400000	3.70675600	1.52985300
H	-3.92835400	4.39577500	1.75283400
H	-4.90682100	3.72101500	3.94547300
H	-5.08844900	2.05684200	3.37357200
H	-3.46817500	2.75461600	3.59016300
C	-5.02988600	-0.28399000	-1.35545900
C	-5.60684600	0.21973900	-2.67573500
H	-5.82056300	-0.57167200	-0.66948500
H	-4.37758800	-1.13675100	-1.52480100
H	-6.19326000	-0.57763600	-3.14001300

H	-6.26430100	1.07651700	-2.51673700
H	-4.81295000	0.50528000	-3.36848300
S	-6.43464500	1.53381900	0.58614300
H	2.84398700	-2.63776300	-0.72069800

#### AD 10

H	2.07391400	-0.87355700	-3.33755300
C	1.71880400	-0.05186300	-2.73374200
H	3.54600500	1.22575800	-2.51900700
C	2.50251100	1.06032600	-2.29754000
H	-0.40944700	-0.60320000	-2.34554700
C	0.41058100	0.07697000	-2.20779900
C	1.68536600	1.88098000	-1.48842100
C	0.35464300	1.29697400	-1.43428800
H	1.98067500	2.79630700	-0.99716100
Fe	1.77575600	0.00384800	-0.64394300
H	4.45256300	-0.51434000	0.10040700
C	2.61837400	-1.78916500	-0.03069300
C	3.42973700	-0.69597000	0.39458800
C	1.32614700	-1.63484200	0.55498500
C	2.64064800	0.13629700	1.24364100
H	2.96191700	1.05485100	1.71095600
C	1.34313400	-0.44685400	1.34317000
H	0.50554100	-0.03759300	1.88826600
C	-0.64871200	1.89852800	-0.60492900
H	-0.25165500	2.72665400	-0.02297100
H	0.47946300	-2.28828300	0.40896000
C	-1.98968400	1.71871500	-0.37316600
C	-2.58339800	2.64724100	0.61351900
C	-2.84595100	0.72843600	-1.02794500
N	-3.95319900	2.53881400	0.84367300
O	-1.94147800	3.49278500	1.22627100
N	-4.20479800	0.74981500	-0.69144800
O	-2.45758400	-0.09940500	-1.84224800
C	-4.79536000	1.61906300	0.22174400
O	-5.98923400	1.57749600	0.46804100
C	-4.53734300	3.46924300	1.82228100
H	-4.06875100	3.32118500	2.79497700
H	-4.36495900	4.49580400	1.50020500
H	-5.60115600	3.27025000	1.88555000
C	-5.06276900	-0.23850000	-1.36356900
H	-5.01888200	-0.09013200	-2.44226900
H	-4.71542700	-1.24516000	-1.13205700
H	-6.07797000	-0.10262800	-1.00844700
H	2.92048600	-2.57851000	-0.70246200

#### AD 11

H	2.16276800	-0.16092900	-3.38558500
C	1.78402100	0.51048800	-2.62989400
H	3.55460500	1.80222000	-2.17663700
C	2.52222500	1.54988100	-1.98772000

H	-0.29719500	-0.21901500	-2.35165300
C	0.47655100	0.48036000	-2.07685200
C	1.67747800	2.16512600	-1.03029600
C	0.38503500	1.52259000	-1.08367100
H	1.93897300	2.98069400	-0.37257300
Fe	1.86912000	0.15760400	-0.57670200
H	4.56927700	-0.36653900	0.08297200
C	2.79860100	-1.67822700	-0.30787400
C	3.55554700	-0.64829100	0.32532500
C	1.49976400	-1.69857300	0.28322300
C	2.72546600	-0.03053100	1.30788900
H	3.00124400	0.79780100	1.94296800
C	1.45674200	-0.68184600	1.28201900
H	0.60009300	-0.42460600	1.88708700
H	0.68614400	-2.35221500	0.00710400
C	-2.00492500	1.49569800	-0.24970700
S	-2.79641500	0.37621700	-1.36982200
C	-2.98509200	2.00541500	0.72328700
C	-4.36229200	0.58688500	-0.58382700
O	-2.77923800	2.79351600	1.62783300
N	-4.25958800	1.45482400	0.46780400
S	-5.72764000	-0.19288700	-1.11071400
C	-5.40344600	1.82313600	1.32491900
H	-6.28796400	1.80884700	0.68623800
H	-5.22454900	2.84153200	1.66715100
C	-0.71100600	1.89097400	-0.22571800
H	-0.47789500	2.61340500	0.55252900
C	-5.57052800	0.88428400	2.48964100
H	-5.70347700	-0.16500000	2.24013000
C	-5.59262000	1.28120800	3.75917100
H	-5.74842100	0.57592900	4.56770800
H	-5.46202800	2.32358300	4.03334100
H	3.13966300	-2.31221600	-1.11249500

#### ADA 0

H	1.72776000	-0.91708700	-3.37467100
C	1.50162000	-0.06230100	-2.75518900
H	3.41468700	1.09831300	-2.80161100
C	2.39988300	1.00329100	-2.44727200
H	-0.57745100	-0.49439900	-2.09383200
C	0.28154200	0.15521500	-2.06871300
C	1.74151800	1.89139100	-1.56410600
C	0.40587000	1.38888700	-1.32964800
H	2.15105500	2.79324300	-1.13441700
Fe	1.82757700	0.02500900	-0.68615000
H	4.55391300	-0.39124300	-0.07836300
C	2.73985600	-1.73319800	-0.07496200
C	3.55671400	-0.59577600	0.27465600
C	1.46759600	-1.56321000	0.59267000
C	2.80753400	0.22650500	1.15214200
H	3.14038700	1.16292000	1.57302800

C	1.52601400	-0.37171800	1.35086100
H	0.72328800	0.03755600	1.94533900
C	-0.51487200	2.04647100	-0.44512700
H	-0.10050500	2.88180000	0.11031000
C	-1.83838400	1.78906100	-0.22314700
C	3.00398700	-2.83777900	-0.95404000
H	2.14816800	-3.47086000	-1.16595800
C	4.17918400	-3.22043400	-1.53709600
H	0.63050400	-2.24127700	0.52252600
C	5.42363800	-2.54681800	-1.35878900
N	6.44265800	-2.01690900	-1.22655600
C	4.21230400	-4.36913100	-2.38531000
N	4.24535400	-5.29822300	-3.07287400
C	-2.57877100	0.75902000	-0.87503500
N	-3.19775400	-0.06880600	-1.39294000
C	-2.57047400	2.58216400	0.71240300
N	-3.16786600	3.22103600	1.46872000

### ADA 1

H	1.85832800	-1.30332400	-3.39385300
C	1.48077700	-0.41631900	-2.90727100
H	3.16350100	1.03859900	-3.16893300
C	2.17868400	0.82400000	-2.78305300
H	-0.51639800	-1.07276100	-2.13864700
C	0.23721000	-0.31028600	-2.23722700
C	1.36769700	1.70716900	-2.03080400
C	0.13781400	1.02228300	-1.69364600
H	1.61171800	2.72070900	-1.74893400
Fe	1.78183300	0.04061400	-0.88612400
H	4.54823200	0.16802600	-0.28693400
C	2.99218200	-1.42195600	-0.04263800
C	3.59277100	-0.12026800	0.11728400
C	1.70562800	-1.37639700	0.62056600
C	2.70606300	0.68314000	0.87646000
H	2.86598300	1.71597200	1.14684700
C	1.54695900	-0.09182000	1.18995300
H	0.68045200	0.25766900	1.73092800
C	-0.88099900	1.64562100	-0.89188100
H	-0.60360300	2.63312300	-0.52364800
C	3.43572900	-2.58746300	-0.75961900
H	2.69369600	-3.38469500	-0.79738800
H	0.99980700	-2.19213100	0.66845300
C	4.60330200	-2.90920700	-1.37973400
C	4.75797700	-4.24324700	-2.02838100
C	5.87842500	-2.17232700	-1.56026800
C	6.13849800	-4.29597900	-2.58426500
C	6.79131900	-3.08900600	-2.30879700
C	6.77715800	-5.31900800	-3.27659100
C	8.10213000	-2.87180500	-2.71887300
C	8.09281800	-5.10486900	-3.68981000
H	6.26723200	-6.25153100	-3.48695300

C	8.74734300	-3.89568200	-3.41413900
H	8.60425100	-1.93611300	-2.50379900
H	8.61931900	-5.88188900	-4.23163800
H	9.76934100	-3.75774600	-3.74749300
C	-2.13327200	1.26470500	-0.52092900
C	-2.96992600	2.17213100	0.31634700
C	-2.93438600	0.04741300	-0.80103900
C	-4.27747100	1.48911900	0.51976600
C	-4.25624300	0.25190300	-0.13425000
C	-5.40085900	1.91445900	1.22053800
C	-5.35895200	-0.59463400	-0.10558900
C	-6.50960100	1.06749800	1.25182100
H	-5.41229200	2.87321700	1.72507600
C	-6.48880500	-0.17206800	0.59637900
H	-5.33846000	-1.55150500	-0.61339600
H	-7.40125900	1.36868300	1.78920600
H	-7.36485000	-0.80879700	0.63776800
O	-2.62252900	-0.94695800	-1.43956900
O	-2.65156400	3.26697600	0.75361200
O	6.17209600	-1.04424800	-1.19243100
O	3.91935000	-5.12842600	-2.09379000

## ADA 2

H	-0.14668100	-3.60925400	-0.56788100
C	-0.30350300	-2.56074200	-0.77411100
H	0.31292300	-2.38464600	-2.92269400
C	-0.05370000	-1.91053800	-2.02483400
H	-0.98429600	-1.76028100	1.19285400
C	-0.73490800	-1.59183900	0.16047000
C	-0.31924300	-0.53404500	-1.86471700
C	-0.76933200	-0.31033300	-0.50350000
H	-0.20835900	0.23302100	-2.61676700
Fe	1.16462900	-1.08464600	-0.53415500
H	3.31231300	-0.40318100	-2.26047900
C	3.09901700	-1.85760700	-0.56774000
C	3.06349300	-0.57442600	-1.22842300
C	2.64948300	-1.63764300	0.79426300
C	2.63197800	0.39180200	-0.29114400
H	2.47439000	1.44071700	-0.49473500
C	2.38312800	-0.26172000	0.95803700
H	2.01675100	0.20988500	1.85731300
C	-1.02872900	1.02045700	-0.02585500
H	-0.70097400	1.76820600	-0.73898500
C	3.35869500	-3.18704800	-1.04897600
H	3.03181100	-3.93674800	-0.33750400
H	2.53940500	-2.40669700	1.54440200
C	-1.64558100	1.50010200	1.09786200
C	-1.83326400	2.92345900	1.40676800
C	-2.42856000	0.72482200	2.10647600
C	-2.88256700	3.01935000	2.44430300
C	-3.21165400	1.72194800	2.87370400



C	-3.52852500	4.11631800	3.02192200
C	-4.14986700	1.48728300	3.86858700
C	3.97476800	-3.66355400	-2.17445600
C	4.75658100	-2.88535200	-3.18172800
C	4.16248200	-5.08603200	-2.48739500
C	5.53899100	-3.88021500	-3.95258000
C	5.21060800	-5.17885400	-3.52639800
C	6.47605300	-3.64264100	-4.94785900
C	5.85608500	-6.27410800	-4.10779300
C	7.11398800	-4.73976000	-5.52534400
C	6.80692300	-6.03740000	-5.10157700
H	5.65045900	-7.28958800	-3.80523800
H	7.31714300	-6.88000400	-5.55294600
H	7.85331300	-4.59052700	-6.30317200
H	6.70130800	-2.62932200	-5.25807100
C	-4.48052500	3.88251300	4.01528100
C	-4.78827500	2.58610400	4.44230400
H	-4.37562500	0.47486100	4.18135800
H	-5.52850000	2.43915100	5.21971000
H	-4.99112600	4.72644600	4.46372700
H	-3.32239700	5.13092300	2.71678100
C	3.43599700	-6.14926700	-1.99119400
C	-1.10589400	3.98512100	0.90851200
C	3.68798800	-7.50776400	-2.34037200
N	3.84826500	-8.62743900	-2.58424800
C	2.31163300	-6.01277800	-1.12522400
N	1.37764100	-5.96328900	-0.44339300
C	-1.35800600	5.34466300	1.25350300
N	-1.51833400	6.46506900	1.49396300
C	0.01954100	3.84586000	0.04438400
N	0.95441800	3.79409900	-0.63606400
O	-2.46234400	-0.48232100	2.27345600
O	4.78997000	-1.67774600	-3.34541700

### ADA 3

H	0.48274200	-2.93153500	-2.05473000
C	0.23441800	-1.88164800	-2.09152600
H	1.18272800	-1.21558800	-4.00553200
C	0.61280500	-0.97144400	-3.12227100
H	-0.85292700	-1.58421200	-0.17437300
C	-0.47366300	-1.16661800	-1.09280400
C	0.14807900	0.31772400	-2.76354700
C	-0.56257100	0.21022600	-1.50900100
H	0.28284700	1.22871200	-3.32696300
Fe	1.42587700	-0.35576100	-1.29386800
H	3.97244900	-0.41473300	-2.47756600
C	3.16578600	-1.19277700	-0.52245400
C	3.47709800	-0.22107900	-1.53982600
C	2.42611000	-0.49981300	0.50946800
C	2.97383300	1.03625400	-1.11991600
H	3.03303600	1.95732300	-1.67928100

C	2.33828700	0.86495900	0.14661900
H	1.83772900	1.63649300	0.71171100
C	-1.07797900	1.36600700	-0.81667600
H	-0.60460300	2.28783800	-1.13345500
C	3.35164500	-2.62269000	-0.50644700
H	2.63143600	-3.12942400	0.12488800
H	2.03237700	-0.95326200	1.40648800
C	-1.97239200	1.46613400	0.20943600
C	-2.05753200	2.64327200	1.09930400
C	-2.78877400	0.41785300	0.84445800
C	-2.48864000	2.13263800	2.40734500
C	-2.91045600	0.78657800	2.25816600
C	-2.52509300	2.74369000	3.66120300
C	-3.36073800	0.05758600	3.35761500
C	4.20490900	-3.42036700	-1.21310600
C	5.30029900	-3.04457900	-2.12247100
C	3.97453500	-4.86431600	-1.42825500
C	5.34823100	-4.07627400	-3.16304900
C	4.56462100	-5.17884900	-2.73625600
C	6.01542400	-4.11072000	-4.38645800
C	4.45686700	-6.31480200	-3.53926000
C	5.88655400	-5.24536300	-5.18594600
C	5.11869400	-6.33447100	-4.76594200
H	3.86313300	-7.16586400	-3.24086200
H	5.02983800	-7.20570800	-5.40337000
H	6.38508200	-5.27866200	-6.14704000
H	6.60633000	-3.27491200	-4.73180500
C	-2.96674700	2.00251500	4.75605100
C	-3.37698800	0.67517700	4.60721900
H	-3.67282000	-0.97235800	3.26348800
H	-3.70756000	0.11504700	5.47343000
H	-2.98520400	2.46299300	5.73629800
H	-2.20574800	3.76523800	3.80365800
C	3.38047400	-5.74898400	-0.55858200
C	-1.83457000	3.95754300	0.76068500
C	3.19435300	-7.13121300	-0.85161200
N	3.02282600	-8.25903000	-1.04253200
C	2.94972800	-5.38955500	0.75223800
N	2.59543400	-5.14384100	1.82563700
C	-1.93719700	5.03410900	1.68891000
N	-2.00974000	5.94044800	2.40383400
C	-1.54320800	4.38630000	-0.56755600
N	-1.31418000	4.77852900	-1.63140300
C	-3.48568800	-0.56827700	0.18914900
C	6.23239300	-2.06028300	-1.89783400
C	-3.55306300	-0.65324800	-1.23249700
N	-3.67627600	-0.73259000	-2.37934700
C	-4.30742000	-1.51912400	0.86237900
N	-4.97902100	-2.31105100	1.37142900
C	7.30832100	-1.78877500	-2.79300800
N	8.19078400	-1.53422700	-3.49574400

C	6.28465800	-1.30665000	-0.68875600
N	6.39522600	-0.70589800	0.29287900

#### ADA 4

H	1.49498800	-0.59001700	-3.49365800
C	1.41496400	0.23503800	-2.80194700
H	3.47553700	1.10882400	-2.83451300
C	2.46824600	1.13108600	-2.44773700
H	-0.68686500	0.05975400	-2.08662700
C	0.26153900	0.57292500	-2.04951900
C	1.96982900	2.03224500	-1.47310300
C	0.58518900	1.71078000	-1.22636600
H	2.52067500	2.82769200	-0.99355200
Fe	1.81339200	0.10123800	-0.75145600
H	4.45573500	-0.79886900	-0.31713900
C	2.45064700	-1.82826400	-0.31282500
C	3.45187700	-0.86587600	0.07302800
C	1.25002700	-1.50856800	0.42330900
C	2.88208400	-0.00078700	1.04149100
H	3.37763400	0.83604100	1.50969100
C	1.52811500	-0.40068500	1.25986900
H	0.82446000	0.08543300	1.91857800
C	-0.25365100	2.40466100	-0.28216100
H	0.25664400	3.14781500	0.31987500
C	2.54957500	-2.89220100	-1.27753600
H	1.61373600	-3.38322100	-1.51842600
H	0.31127500	-2.03640000	0.34713800
C	3.70731300	-3.32464900	-1.85232500
H	4.63460600	-2.84358100	-1.56154400
C	-1.59167600	2.20689800	-0.12935700
H	-2.08132100	1.47018000	-0.75783200
C	3.83744900	-4.38425000	-2.79690300
C	2.90498600	-5.17422600	-3.44244600
C	5.21502500	-4.82249800	-3.26011500
C	3.60509600	-6.10952400	-4.29307900
C	3.13955300	-7.10514700	-5.13555600
O	4.91731000	-5.91815400	-4.19578800
C	1.76602200	-7.40178500	-5.31515200
N	0.65901200	-7.68700700	-5.49929400
C	4.06948300	-7.88774600	-5.86960200
N	4.81729800	-8.53287600	-6.47389100
C	5.95164600	-3.74183100	-4.05408900
H	5.33470500	-3.37284200	-4.87490900
H	6.20995200	-2.90474700	-3.40359800
H	6.87412700	-4.15939500	-4.46097300
C	6.06253800	-5.41116200	-2.13081700
H	6.31235400	-4.63559900	-1.40492800
H	5.52624100	-6.21148400	-1.61871300
H	6.99038400	-5.81012500	-2.54402100
C	-2.44133100	2.88244200	0.79196400
C	-3.79626700	2.64823200	0.92383000

C	-2.05683500	3.96528600	1.78640300
C	1.49969700	-5.08361200	-3.31799200
N	0.35504600	-4.97448700	-3.19147200
C	-4.52247700	1.70274900	0.16142900
N	-5.06354700	0.91587500	-0.49065300
C	-4.32345600	3.51393000	1.94969500
O	-3.34533800	4.26480400	2.44644000
C	-5.60477000	3.66170100	2.45144200
C	-1.11633900	3.48487500	2.89380200
H	-1.49749300	2.57449700	3.35894300
H	-0.12194300	3.28316800	2.49564700
H	-1.03247800	4.26377600	3.65336200
C	-1.60379600	5.27117300	1.12978800
H	-0.63203900	5.14661000	0.65204700
H	-2.32340500	5.59570400	0.37669300
H	-1.51629400	6.04418800	1.89489700
C	-5.84796200	4.60829500	3.48124800
N	-6.05756900	5.37722000	4.32101700
C	-6.71144100	2.90721400	1.98955300
N	-7.64570900	2.31537900	1.64687500

#### ADA 5

H	0.77314900	-2.01508600	-2.97878600
C	0.64309700	-1.01202800	-2.60086500
H	2.06350900	0.19360300	-3.84703000
C	1.32707600	0.15230300	-3.05899700
H	-0.88621500	-1.31817100	-1.03030300
C	-0.21390800	-0.64458000	-1.53320500
C	0.88283400	1.24898200	-2.28337100
C	-0.09001100	0.78011300	-1.32515300
H	1.21415400	2.27284300	-2.37591000
Fe	1.74636800	-0.16712300	-1.03193100
H	4.54707200	-0.30435900	-1.61139700
C	3.15538800	-1.54049700	-0.32540000
C	3.80303600	-0.35421300	-0.83510100
C	2.29420600	-1.10492800	0.74944300
C	3.35785700	0.75810100	-0.07627900
H	3.66312900	1.78213400	-0.22838400
C	2.42213900	0.29622200	0.89507300
H	1.88178100	0.91372300	1.59655400
C	-0.79824200	1.70724100	-0.47025700
H	-0.66818000	2.72938900	-0.81468600
C	3.30733800	-2.94636600	-0.62822300
H	2.89872700	-3.55953500	0.17014600
H	1.66802500	-1.76010500	1.33716500
C	-1.63120400	1.58890400	0.60331000
C	-2.38799600	2.73349700	1.12684600
C	-2.02433500	0.46028400	1.44662900
C	-2.37578600	4.05677000	0.69141500
C	-3.21070300	2.31943400	2.20957300
C	-1.49526000	-0.82548400	1.52189400

C	-3.05720200	0.87138300	2.34188600
C	-3.16228600	4.97525800	1.36589500
H	-1.77551000	4.38577000	-0.14465000
C	-3.90751200	3.32020100	2.91236300
C	-2.06104900	-1.72617000	2.41019600
H	-0.64696100	-1.12665300	0.93073100
C	-3.67554700	-0.12533200	3.11872100
C	-3.91543800	4.63641200	2.48762000
C	-3.17726800	-1.41466800	3.18025000
H	-4.46194200	5.38910700	3.03549300
H	-3.65615800	-2.16164800	3.79522200
C	3.88913300	-3.66580700	-1.63065200
C	4.46995700	-3.29964200	-2.92198500
C	4.06183500	-5.12125700	-1.53751800
C	4.43749900	-2.08667300	-3.60486100
C	5.06931000	-4.44995900	-3.51840100
C	3.67997300	-5.97840500	-0.50755100
C	4.72175100	-5.60905200	-2.69801800
C	5.08697400	-1.99297700	-4.82556500
H	3.90219500	-1.23398200	-3.22324400
C	5.82096400	-4.25436800	-4.69130900
C	3.92488100	-7.33272100	-0.65840400
H	3.20074300	-5.62373500	0.39365900
C	4.84784100	-7.00449100	-2.83254800
C	5.82095900	-3.04520400	-5.36390600
C	4.48301800	-7.86903500	-1.81655900
H	6.39261800	-2.91908100	-6.27095300
H	4.59409500	-8.93630500	-1.93453100
N	5.03611800	-0.71838600	-5.56197000
O	5.67370000	-0.63208700	-6.60352300
O	4.35272400	0.18600500	-5.09244700
N	6.77397000	-5.25888300	-5.19625400
O	7.32021400	-5.97367300	-4.36213400
O	7.01129200	-5.28146900	-6.39351400
N	5.20902200	-7.65248400	-4.10584200
O	4.81563300	-7.11156800	-5.13440600
O	5.81607700	-8.71059900	-4.06483200
N	3.53492100	-8.25435400	0.42511600
O	3.74543600	-9.45000600	0.26185300
O	3.02587000	-7.77183300	1.42962300
N	-1.48695100	-3.07878900	2.51309700
O	-2.04483600	-3.88404300	3.24726000
O	-0.47666100	-3.32157400	1.86056400
N	-4.97022000	0.08584300	3.79053000
O	-5.21643600	-0.56707200	4.79217700
O	-5.75084300	0.86725900	3.25651300
N	-4.53054000	3.08388300	4.22682200
O	-5.52587100	3.72693900	4.51909700
O	-3.96474700	2.29235600	4.97416900
N	-3.16714600	6.37930100	0.91469800
O	-3.87150700	7.17352900	1.52580800

O -2.47179600 6.67140600 -0.05101200

**ADA 6**

H 2.00385300 -0.91731500 -3.40455000  
C 1.67541500 -0.09008900 -2.79312300  
H 3.52968500 1.15542900 -2.61860700  
C 2.49006800 1.00542600 -2.37095200  
H -0.44818600 -0.61498100 -2.35442300  
C 0.38456700 0.05319600 -2.23360700  
C 1.70561400 1.83474200 -1.53971700  
C 0.36997400 1.26981800 -1.45359400  
H 2.02836400 2.73971400 -1.04679400  
Fe 1.78875500 -0.04427900 -0.69762500  
H 4.44260100 -0.25678200 0.25826200  
C 2.78924200 -1.74031500 -0.03887400  
C 3.43063000 -0.54972900 0.47018600  
C 1.42300700 -1.72058400 0.45609100  
C 2.49319200 0.14941800 1.26623200  
H 2.67066000 1.08901400 1.76714400  
C 1.26100700 -0.57536800 1.26370400  
H 0.34967000 -0.27388900 1.75780500  
C -0.60981800 1.88563600 -0.60604700  
H -0.19639600 2.70831500 -0.02741100  
C 3.20482100 -2.76789900 -0.94914500  
H 2.38060800 -3.41011300 -1.25023200  
H 0.67306800 -2.46686200 0.24088400  
C 4.39177300 -3.16105300 -1.51273300  
C 5.70647500 -2.55239200 -1.27777000  
C 4.30156200 -4.33311800 -2.41593400  
N 5.50818700 -4.78624800 -2.95358600  
H 5.44614100 -5.58817300 -3.56899100  
N 6.78469600 -3.17933600 -1.91905800  
H 7.69251800 -2.76236300 -1.75214100  
O 3.26963700 -4.91415300 -2.71143300  
O 5.93945600 -1.57587900 -0.58418300  
C 6.75229300 -4.26270700 -2.74788900  
C -1.94847500 1.71278000 -0.36382200  
C -2.53296700 2.64372900 0.63084200  
C -2.82594100 0.72916800 -1.00926500  
N -3.90408400 2.51264100 0.86045800  
O -1.91093200 3.49505300 1.24588200  
N -4.17452700 0.78201500 -0.62784700  
O -2.49366100 -0.10746900 -1.83277400  
H -4.30285100 3.14828400 1.54066900  
C -4.75746100 1.62034700 0.27718500  
H -4.78052600 0.10522600 -1.07576900  
S -6.38429900 1.56048000 0.64321600  
S 8.12365000 -4.89716500 -3.45585500

**ADA 7**

H 2.00702500 -0.91497000 -3.40052800

C	1.67496500	-0.08996300	-2.78803300
H	3.52274300	1.16517800	-2.61397400
C	2.48411400	1.00932200	-2.36567100
H	-0.44628200	-0.62516400	-2.34701200
C	0.38351300	0.04675700	-2.22701800
C	1.69537700	1.83376900	-1.53283600
C	0.36345900	1.26165200	-1.44550400
H	2.01383800	2.73991800	-1.03921600
Fe	1.79088000	-0.04602800	-0.69396400
H	4.44778900	-0.25139700	0.25570900
C	2.79946900	-1.73926700	-0.04052300
C	3.43719700	-0.54774900	0.46919800
C	1.43471900	-1.72559800	0.45734200
C	2.49834900	0.14777100	1.26765200
H	2.67333300	1.08758500	1.76910400
C	1.26892000	-0.58129200	1.26635700
H	0.35715300	-0.28390200	1.76214900
C	-0.62071400	1.87685500	-0.59939500
H	-0.20778000	2.69975300	-0.02053500
C	3.21727300	-2.76799100	-0.95148300
H	2.39243300	-3.40996300	-1.25170600
H	0.68722300	-2.47443800	0.24232300
C	4.40085300	-3.16250800	-1.51625200
C	5.71883700	-2.55064600	-1.28342500
C	4.30374600	-4.34009100	-2.41895800
N	5.50001800	-4.79420800	-2.96130700
H	5.44387600	-5.59621000	-3.57725700
N	6.79215300	-3.17139500	-1.92370200
H	7.70429900	-2.76023000	-1.76603200
O	3.26319600	-4.91460000	-2.70161000
O	5.94109000	-1.57224600	-0.58706900
C	6.76069800	-4.26704000	-2.76220900
O	7.75850100	-4.72892500	-3.28303500
C	-1.95801200	1.70725500	-0.35904400
C	-2.54135000	2.64831100	0.63350100
C	-2.83624000	0.71912500	-1.00555100
N	-3.90720300	2.52827000	0.85913500
O	-1.90685600	3.49632600	1.24269000
N	-4.18047100	0.77500400	-0.63499300
O	-2.48968300	-0.12005000	-1.82216800
H	-4.31419600	3.16504200	1.53341500
C	-4.77496000	1.62867100	0.27180500
H	-4.79381300	0.10093800	-1.07706600
O	-5.96254600	1.59172300	0.53336200

#### ADA 8

H	1.94837000	-1.20954400	-3.09674500
C	1.58292600	-0.36633700	-2.53016300
H	3.22145000	1.13925900	-2.76525400
C	2.26081500	0.87580300	-2.34986400
H	-0.33714100	-1.14085200	-1.72171600

C	0.37001900	-0.32974000	-1.79296900
C	1.46992300	1.68810100	-1.49821200
C	0.27408600	0.95855600	-1.15323800
H	1.70922500	2.68481000	-1.15861100
Fe	1.97233800	-0.05304700	-0.50269800
H	4.75617800	0.04826400	-0.05593800
C	3.20964000	-1.57979200	0.18171700
C	3.83145700	-0.29480900	0.38047800
C	1.96716700	-1.56228700	0.91578600
C	2.99778300	0.47395500	1.23530100
H	3.18618400	1.48806800	1.55321200
C	1.85219600	-0.30950400	1.56761500
H	1.02128500	0.01245400	2.17705600
H	1.25720200	-2.37472900	0.95678500
C	4.82972800	-2.93500800	-1.21162500
S	6.27376100	-1.91361000	-1.23612400
C	5.08452600	-4.17686200	-1.96680200
C	7.17063100	-3.08641800	-2.20717900
O	4.30443900	-5.09360100	-2.14659700
N	6.39593900	-4.17918200	-2.48120500
S	8.73393300	-2.81669900	-2.68572100
C	6.87510800	-5.33482900	-3.26172400
H	7.58266700	-4.95086400	-3.99487900
H	6.00416900	-5.72885300	-3.78415300
C	7.51626700	-6.40679700	-2.38327300
H	8.38709600	-6.01379100	-1.85518700
H	6.80391500	-6.79293000	-1.65148800
H	7.84433900	-7.23820500	-3.01179500
C	-1.97720200	1.00568300	0.00115900
S	-2.75263200	-0.46938200	-0.59155000
C	-2.89619200	1.72352600	0.90552700
C	-4.23013400	-0.14118500	0.32108600
O	-2.67682800	2.77024800	1.48657200
N	-4.11328900	1.02489900	1.02555800
S	-5.53227400	-1.16485100	0.28039500
C	-5.19083200	1.56931200	1.87224600
H	-4.69716800	2.10136200	2.68463700
H	-5.73081800	0.71831600	2.28434100
C	-6.12686500	2.49718300	1.10104000
H	-5.58434000	3.35245900	0.69327100
H	-6.61898100	1.96831300	0.28265200
H	-6.89812300	2.87336700	1.77746700
C	3.64250500	-2.70710400	-0.60754100
H	2.91821700	-3.50974100	-0.72016700
C	-0.75010800	1.49192500	-0.28849100
H	-0.51738300	2.44016100	0.18927500

#### ADA 9

H	2.00242000	-0.89137100	-3.43596800
C	1.66417000	-0.07859900	-2.81061400
H	3.50504300	1.18243700	-2.60794300



C	2.46638000	1.01691900	-2.36605300
H	-0.45435000	-0.63298000	-2.38753600
C	0.36988700	0.04221600	-2.25242500
C	1.66999000	1.82243500	-1.52219900
C	0.33962100	1.24320300	-1.44940800
H	1.98218500	2.72129300	-1.01151300
Fe	1.77256000	-0.07099500	-0.71582300
H	4.42492200	-0.27225300	0.24499100
C	2.79127600	-1.76948900	-0.08677700
C	3.41643600	-0.58170800	0.44741900
C	1.42322000	-1.77285500	0.40397100
C	2.46810500	0.09350500	1.25219900
H	2.63374300	1.02589800	1.77044700
C	1.24422700	-0.64435500	1.23199700
H	0.32758800	-0.36226300	1.72776800
C	-0.64394200	1.84462900	-0.59195800
H	-0.22550900	2.65464000	-0.00015600
C	3.21220200	-2.78156300	-1.01546700
H	2.38533400	-3.41302400	-1.32982000
H	0.68239000	-2.52326500	0.17197900
C	4.39518800	-3.17539000	-1.58722400
C	5.70167600	-2.57299000	-1.34223200
C	4.29504500	-4.32810300	-2.50229800
N	5.49462800	-4.83014000	-3.03368300
N	6.80566800	-3.15541000	-2.00123900
O	3.23361900	-4.85840200	-2.79978200
O	5.88502200	-1.60947200	-0.61289700
C	6.74227900	-4.27188200	-2.81504000
C	-1.98348300	1.68091800	-0.34792800
C	-2.55525700	2.60461500	0.65012900
C	-2.85548400	0.70917600	-0.99996800
N	-3.94182000	2.53750100	0.86433000
O	-1.88576800	3.41617800	1.27425900
N	-4.21659500	0.72302700	-0.62648300
O	-2.47483800	-0.10131500	-1.83170100
C	-4.78357800	1.61734700	0.26328900
C	8.11313300	-2.49594600	-1.74308000
C	8.82014100	-3.05081200	-0.50953600
H	7.89839500	-1.43799500	-1.61668900
H	8.71868700	-2.63184200	-2.63369600
H	9.76577700	-2.52076000	-0.36833600
H	8.21468500	-2.91039400	0.38793700
H	9.04036300	-4.11350600	-0.62648900
C	5.35193700	-6.02361800	-3.90921700
C	5.11082400	-5.65553700	-5.37055200
H	4.51230400	-6.58923100	-3.51359400
H	6.25942700	-6.60898600	-3.79855200
H	5.00472200	-6.57073000	-5.95894400
H	4.19572000	-5.07107400	-5.48342900
H	5.94852500	-5.08569500	-5.77690600
C	-4.48339100	3.52405500	1.83634100

C	-4.45460000	3.01197200	3.27371200
H	-5.49733400	3.75381400	1.52393800
H	-3.86892300	4.41499400	1.73546700
H	-4.85436100	3.78288800	3.93776300
H	-5.06803100	2.11600100	3.38540900
H	-3.43470700	2.78600700	3.59072500
C	-5.06310800	-0.30159900	-1.29327700
C	-5.63380500	0.18073400	-2.62408700
H	-5.85678500	-0.55859900	-0.59876300
H	-4.42619400	-1.16960100	-1.44274600
H	-6.23514300	-0.61715700	-3.06773800
H	-6.27563700	1.05257800	-2.48458600
H	-4.83673700	0.43537400	-3.32519000
S	-6.42929400	1.58744100	0.60629400
S	8.12438900	-4.92413800	-3.51607800

#### ADA 10

H	2.01294900	-0.91620300	-3.40254900
C	1.67123500	-0.09157300	-2.79481500
H	3.50018800	1.19297500	-2.63837400
C	2.46519300	1.02277700	-2.38421700
H	-0.43962300	-0.65527800	-2.33900800
C	0.37984300	0.03040800	-2.22861000
C	1.66658700	1.84088400	-1.55351700
C	0.34416800	1.24960300	-1.45529200
H	1.97338200	2.75524400	-1.06761900
Fe	1.79735500	-0.03150300	-0.70342100
H	4.46412800	-0.20480600	0.22296700
C	2.82846300	-1.71067100	-0.04411200
C	3.45869300	-0.50858300	0.44864800
C	1.46845400	-1.70403500	0.46587600
C	2.52005600	0.18711700	1.24841600
H	2.69096100	1.13358100	1.73876400
C	1.29756400	-0.55271500	1.26486800
H	0.38702100	-0.25883600	1.76501900
C	-0.64464500	1.86414900	-0.61016300
H	-0.23275800	2.69212800	-0.03841800
C	3.24439700	-2.75220800	-0.94491100
H	2.41776700	-3.40006600	-1.22586200
H	0.72627600	-2.46203400	0.26463300
C	4.42039800	-3.15711700	-1.51638700
C	5.73351200	-2.53720700	-1.31004400
C	4.31305900	-4.34764400	-2.39336300
N	5.49264800	-4.83312700	-2.94965200
N	6.82511500	-3.15901000	-1.92341900
O	3.25569000	-4.91188600	-2.64487100
O	5.92927000	-1.53259100	-0.63936100
C	6.75745200	-4.28422200	-2.74234200
O	7.75334400	-4.76402900	-3.25546200
C	-1.98038500	1.69614700	-0.36453200
C	-2.56019600	2.64267400	0.61821100

C	-2.85162400	0.70204500	-1.00004500
N	-3.92953600	2.55580200	0.84934100
O	-1.90276900	3.48185400	1.22095500
N	-4.20817900	0.75074600	-0.66603000
O	-2.47111600	-0.14721700	-1.79440300
C	-4.78536900	1.64079600	0.23721600
O	-5.97865300	1.61964700	0.48387400
C	-4.50032300	3.50440700	1.81901400
H	-4.03833500	3.35458800	2.79458000
H	-4.30726000	4.52475400	1.48935000
H	-5.56785400	3.32578100	1.87941200
C	-5.08114100	-0.23583700	-1.32218600
H	-5.02255200	-0.11445900	-2.40337900
H	-4.75812700	-1.24368000	-1.06211700
H	-6.09652700	-0.06928400	-0.98110000
C	8.14388300	-2.54794000	-1.69213800
H	8.15889500	-1.53598100	-2.09708500
H	8.34195700	-2.50283200	-0.62197400
H	8.89112000	-3.15802600	-2.18662200
C	5.37887300	-6.01637700	-3.81732300
H	4.96745000	-6.85019700	-3.24897600
H	4.71401400	-5.79507900	-4.65165500
H	6.36879800	-6.26517200	-4.18247000

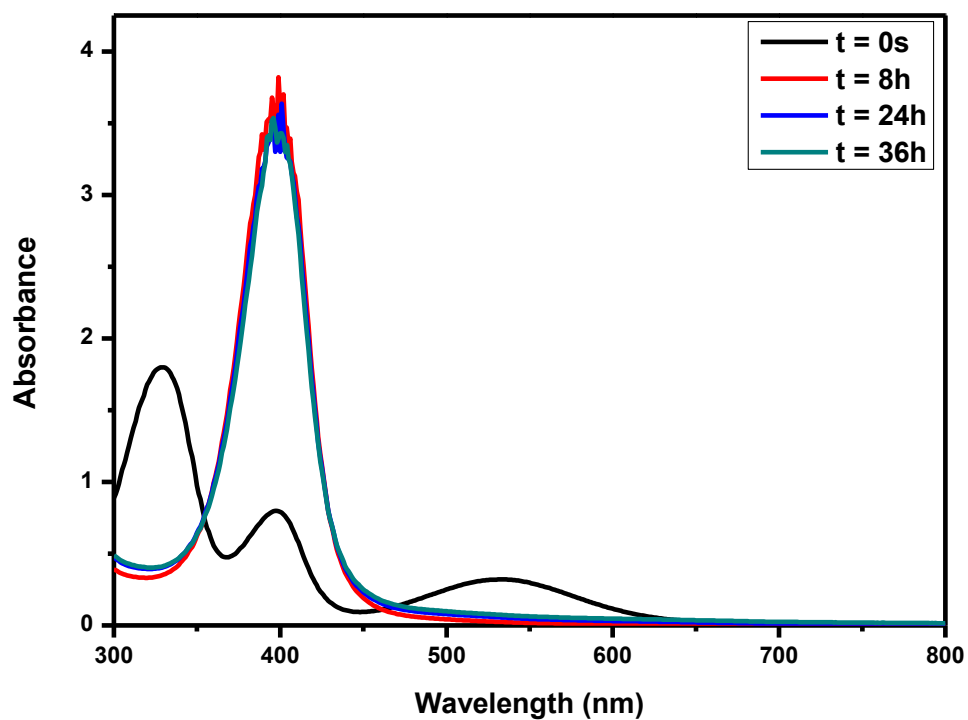
#### ADA 11

H	2.01294900	-0.91620300	-3.40254900
C	1.67123500	-0.09157300	-2.79481500
H	3.50018800	1.19297500	-2.63837400
C	2.46519300	1.02277700	-2.38421700
H	-0.43962300	-0.65527800	-2.33900800
C	0.37984300	0.03040800	-2.22861000
C	1.66658700	1.84088400	-1.55351700
C	0.34416800	1.24960300	-1.45529200
H	1.97338200	2.75524400	-1.06761900
Fe	1.79735500	-0.03150300	-0.70342100
H	4.46412800	-0.20480600	0.22296700
C	2.82846300	-1.71067100	-0.04411200
C	3.45869300	-0.50858300	0.44864800
C	1.46845400	-1.70403500	0.46587600
C	2.52005600	0.18711700	1.24841600
H	2.69096100	1.13358100	1.73876400
C	1.29756400	-0.55271500	1.26486800
H	0.38702100	-0.25883600	1.76501900
C	-0.64464500	1.86414900	-0.61016300
H	-0.23275800	2.69212800	-0.03841800
C	3.24439700	-2.75220800	-0.94491100
H	2.41776700	-3.40006600	-1.22586200
H	0.72627600	-2.46203400	0.26463300
C	4.42039800	-3.15711700	-1.51638700
C	5.73351200	-2.53720700	-1.31004400
C	4.31305900	-4.34764400	-2.39336300

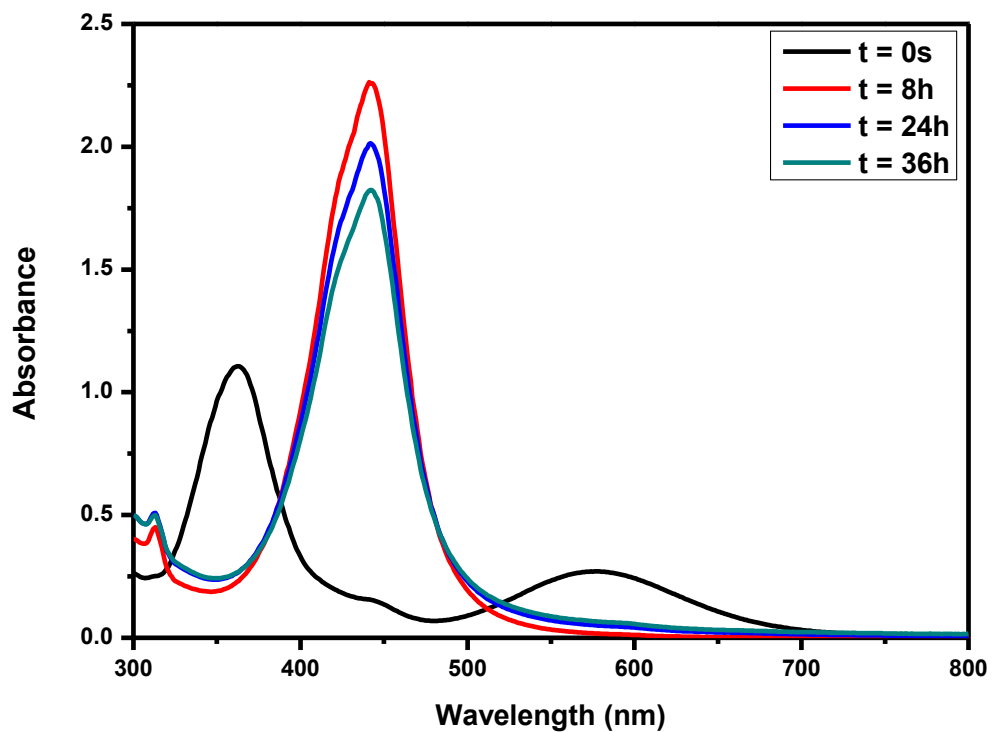
N	5.49264800	-4.83312700	-2.94965200
N	6.82511500	-3.15901000	-1.92341900
O	3.25569000	-4.91188600	-2.64487100
O	5.92927000	-1.53259100	-0.63936100
C	6.75745200	-4.28422200	-2.74234200
O	7.75334400	-4.76402900	-3.25546200
C	-1.98038500	1.69614700	-0.36453200
C	-2.56019600	2.64267400	0.61821100
C	-2.85162400	0.70204500	-1.00004500
N	-3.92953600	2.55580200	0.84934100
O	-1.90276900	3.48185400	1.22095500
N	-4.20817900	0.75074600	-0.66603000
O	-2.47111600	-0.14721700	-1.79440300
C	-4.78536900	1.64079600	0.23721600
O	-5.97865300	1.61964700	0.48387400
C	-4.50032300	3.50440700	1.81901400
H	-4.03833500	3.35458800	2.79458000
H	-4.30726000	4.52475400	1.48935000
H	-5.56785400	3.32578100	1.87941200
C	-5.08114100	-0.23583700	-1.32218600
H	-5.02255200	-0.11445900	-2.40337900
H	-4.75812700	-1.24368000	-1.06211700
H	-6.09652700	-0.06928400	-0.98110000
C	8.14388300	-2.54794000	-1.69213800
H	8.15889500	-1.53598100	-2.09708500
H	8.34195700	-2.50283200	-0.62197400
H	8.89112000	-3.15802600	-2.18662200
C	5.37887300	-6.01637700	-3.81732300
H	4.96745000	-6.85019700	-3.24897600
H	4.71401400	-5.79507900	-4.65165500
H	6.36879800	-6.26517200	-4.18247000

Modification of the UV-visible absorption spectra of DA0-DA11 and ADA0-ADA11 in DMSO at room temperature over time

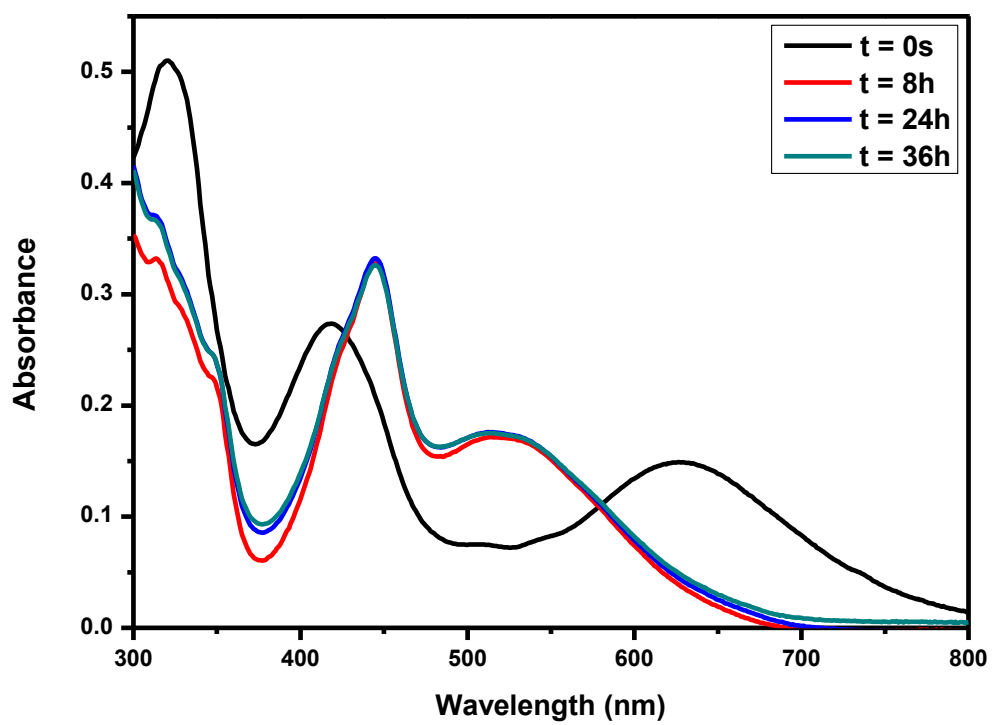
DA0



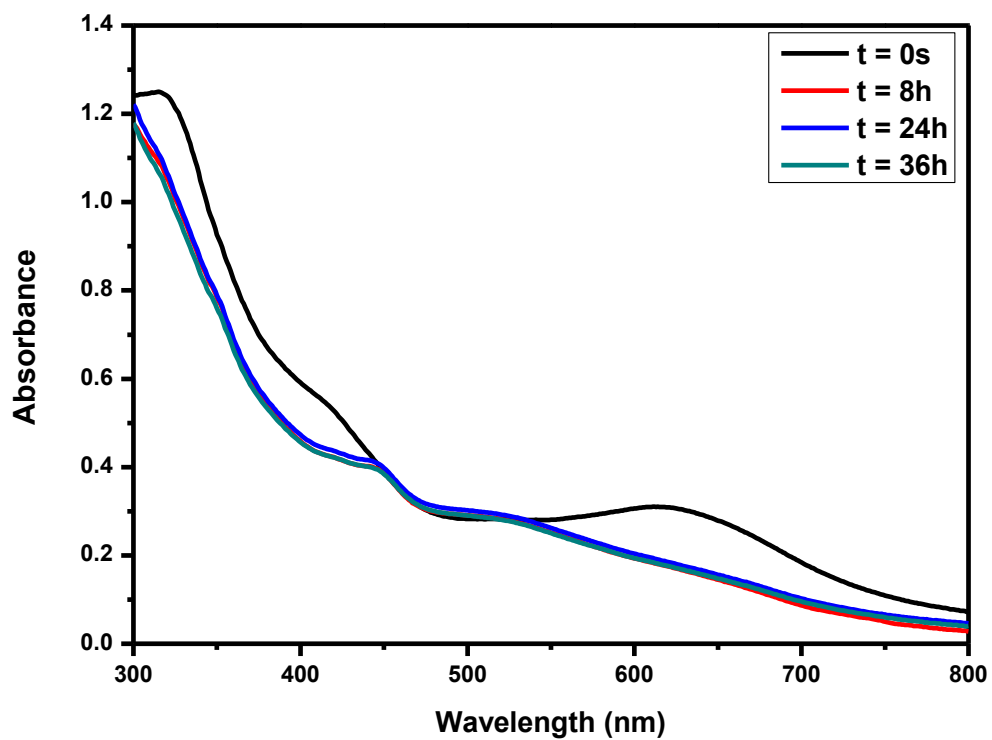
DA1



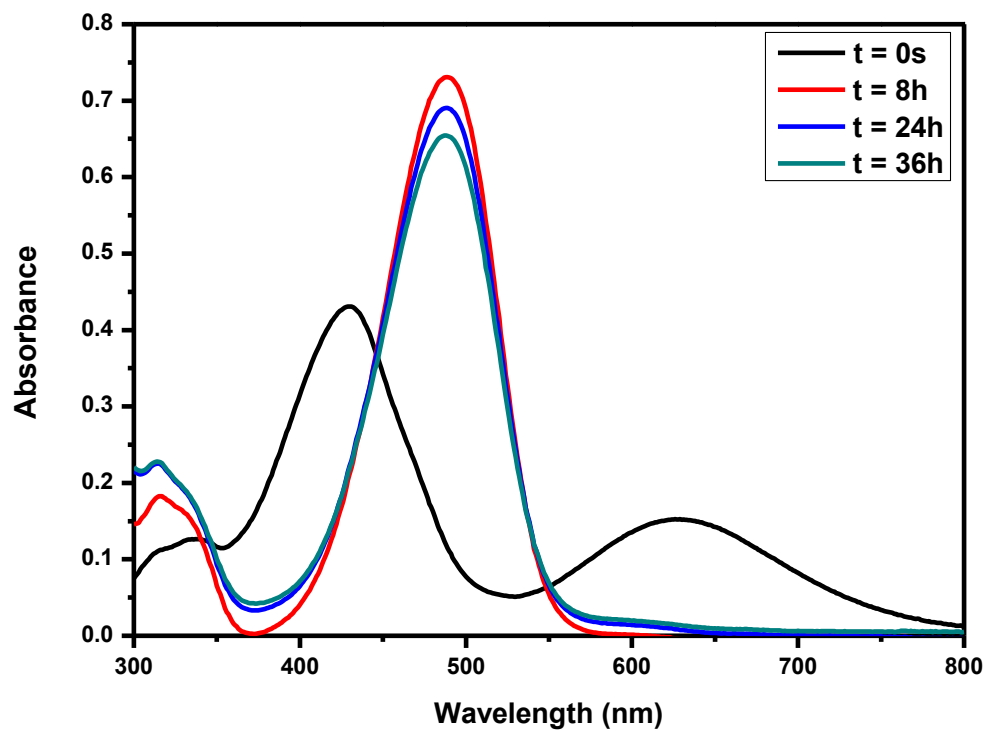
DA2



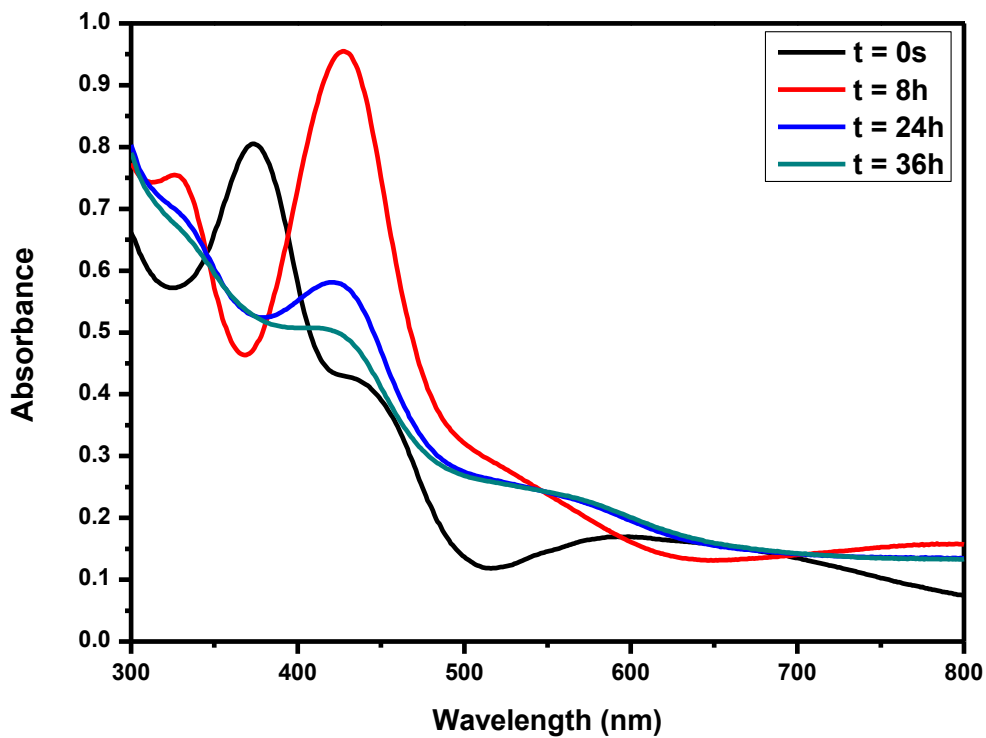
DA3



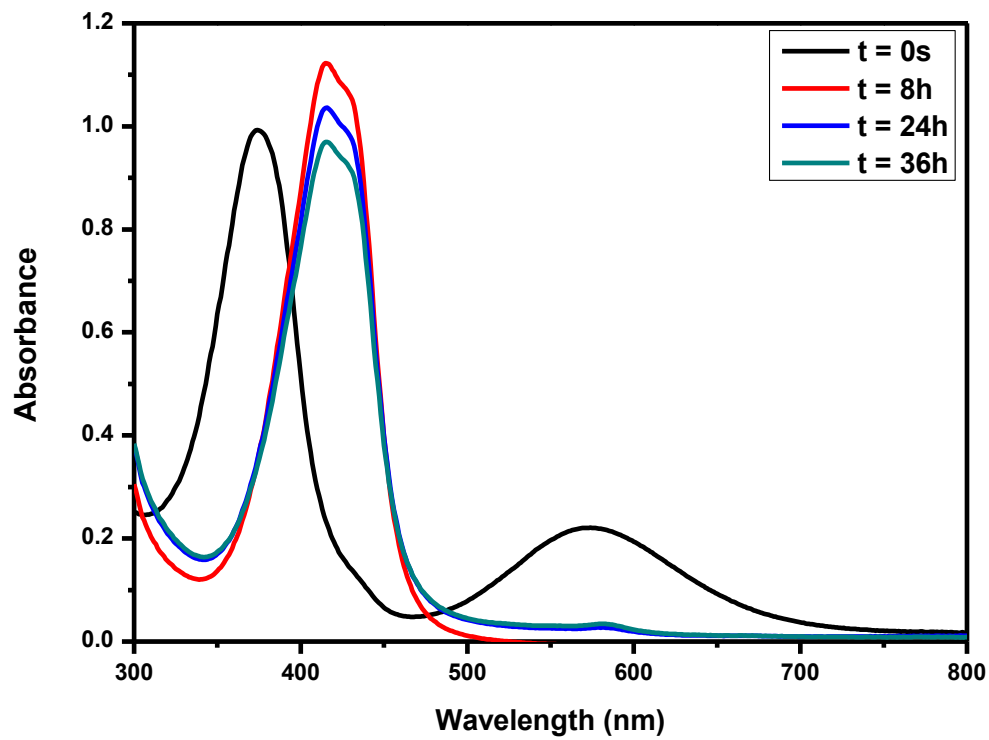
DA4



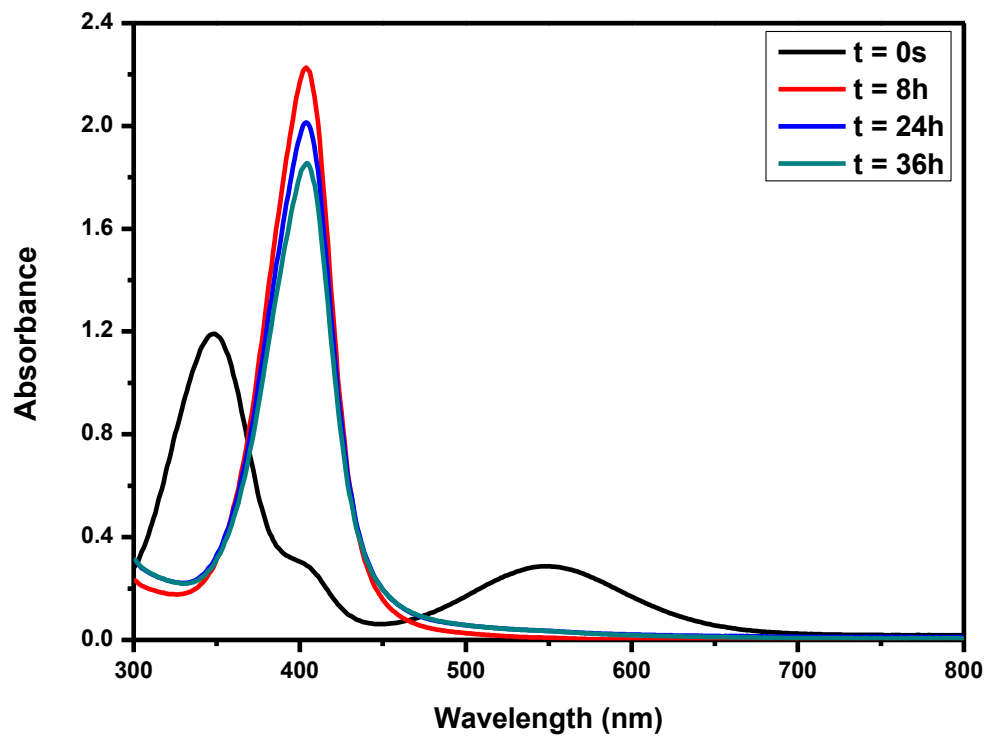
DA5



DA6

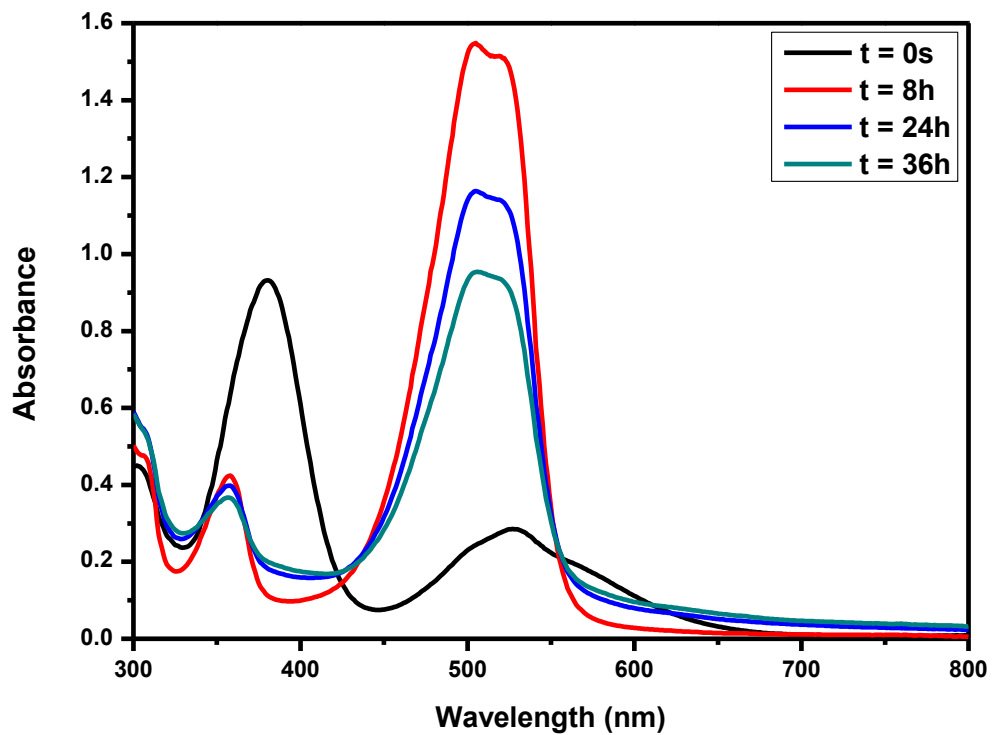


DA7

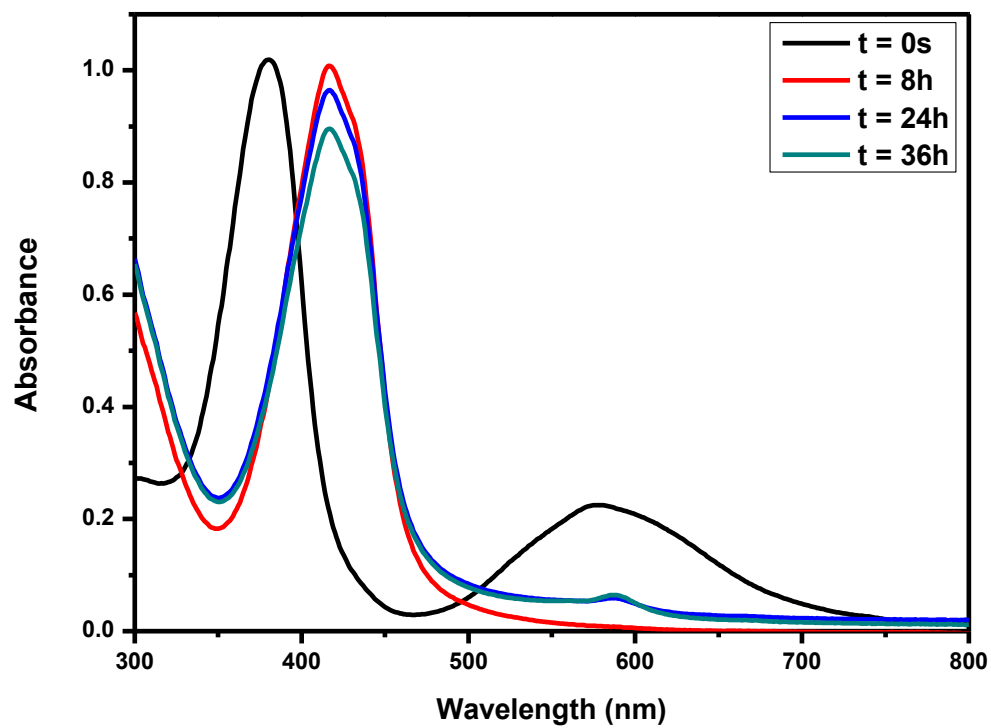




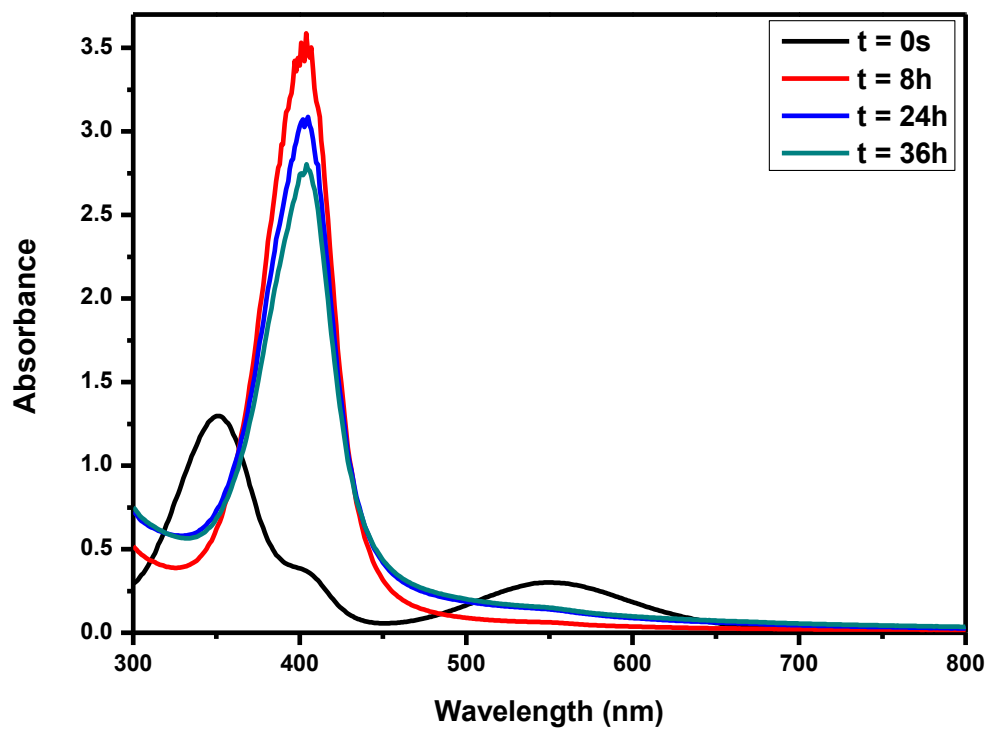
DA8



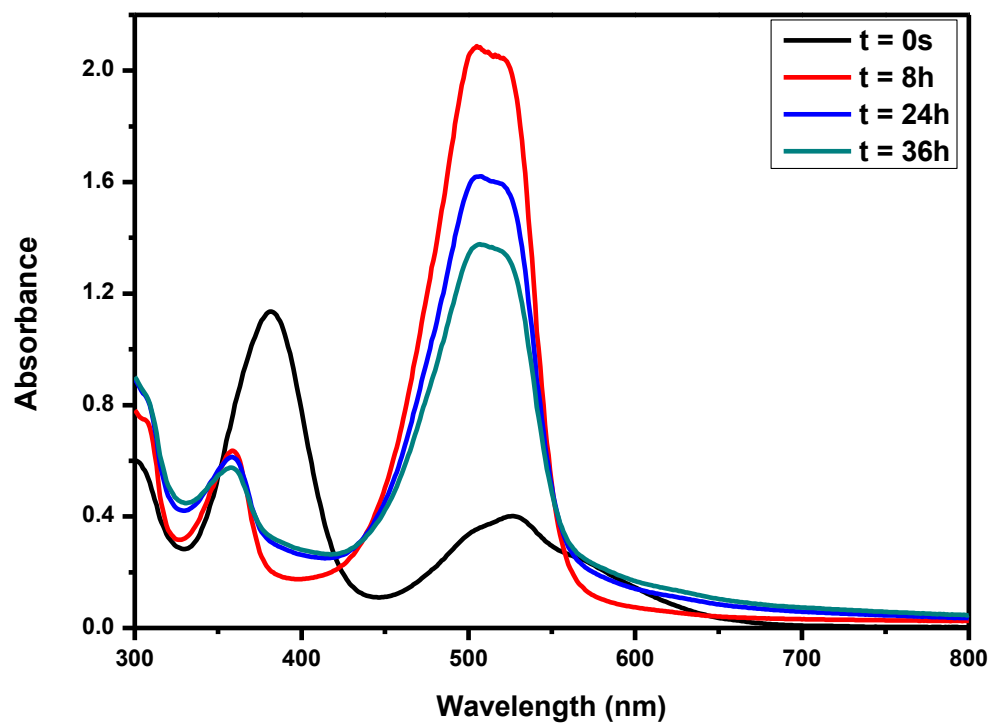
DA9



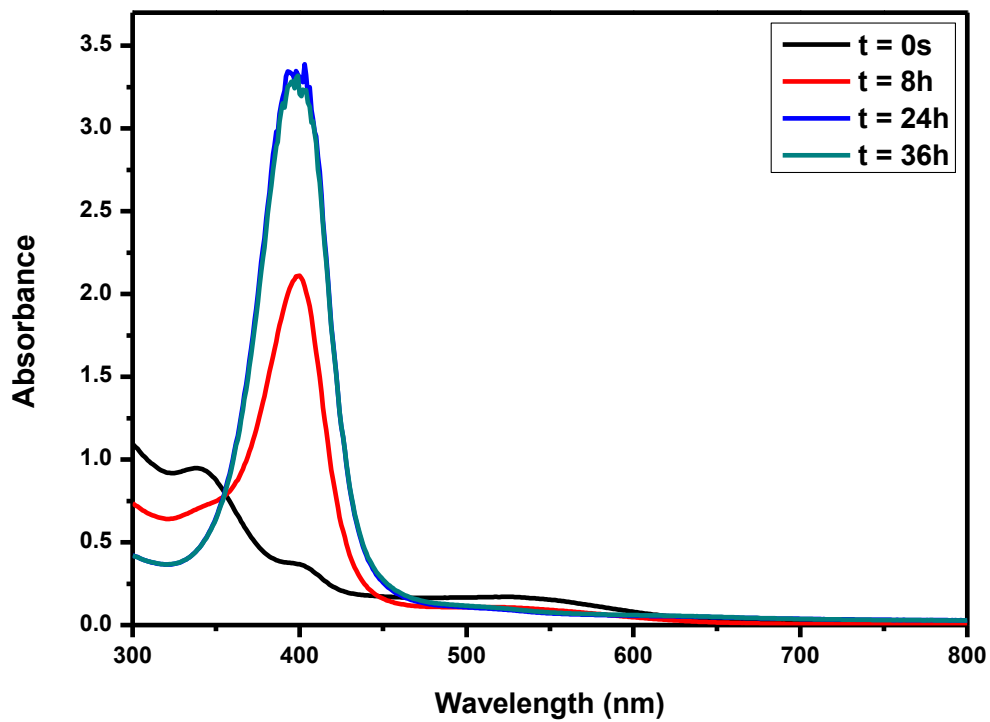
DA10



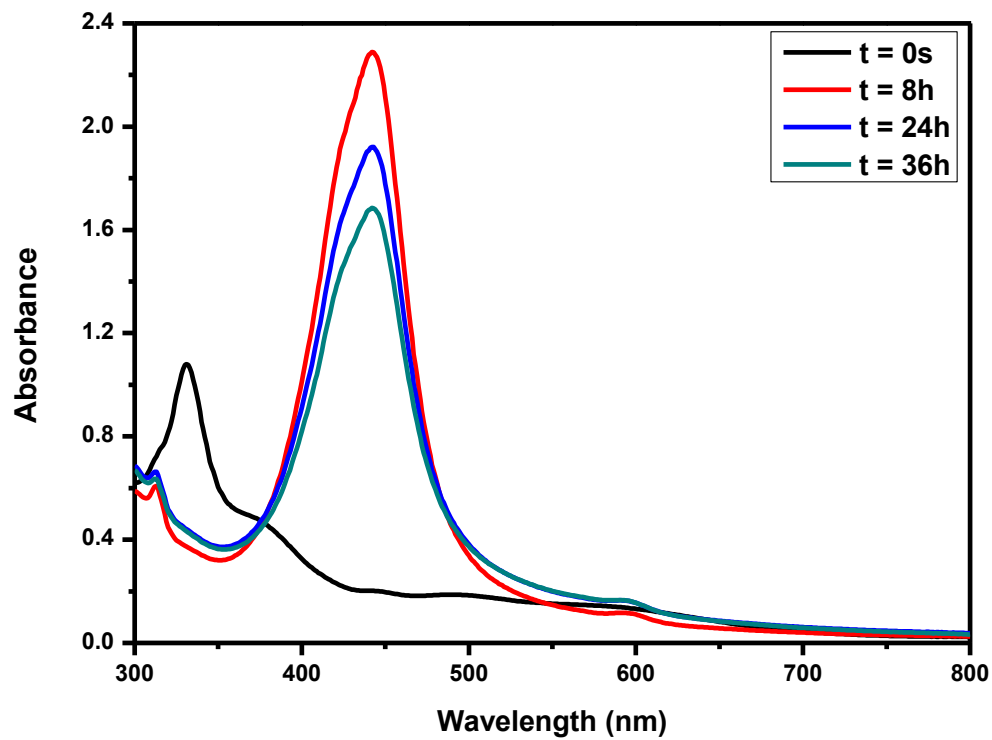
DA11



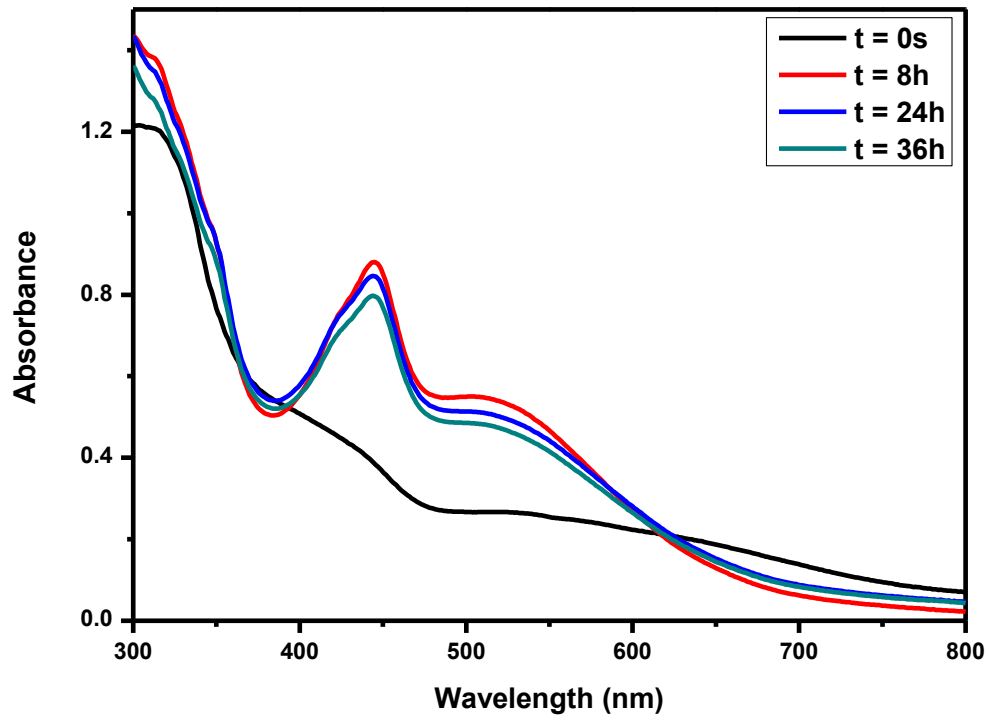
ADA0



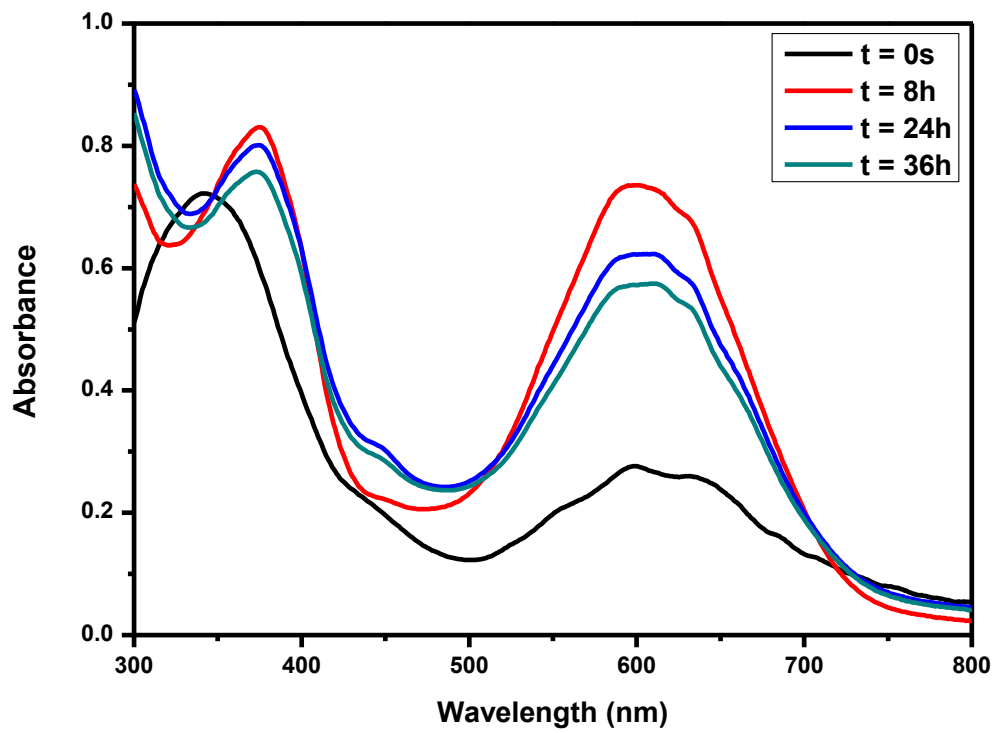
ADA1



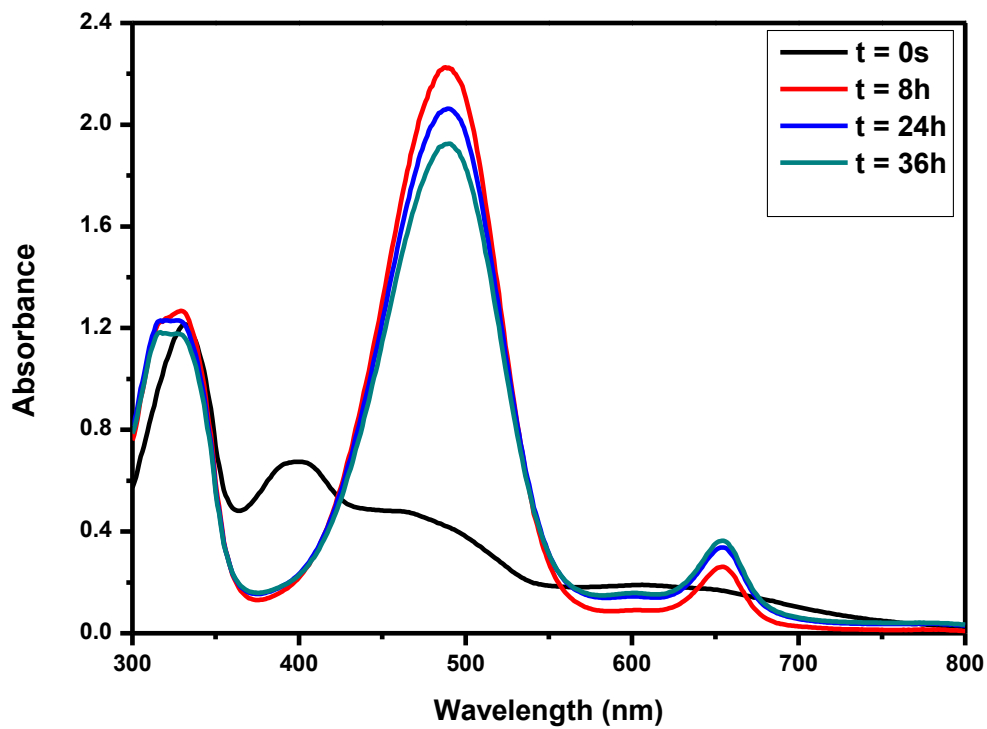
ADA2



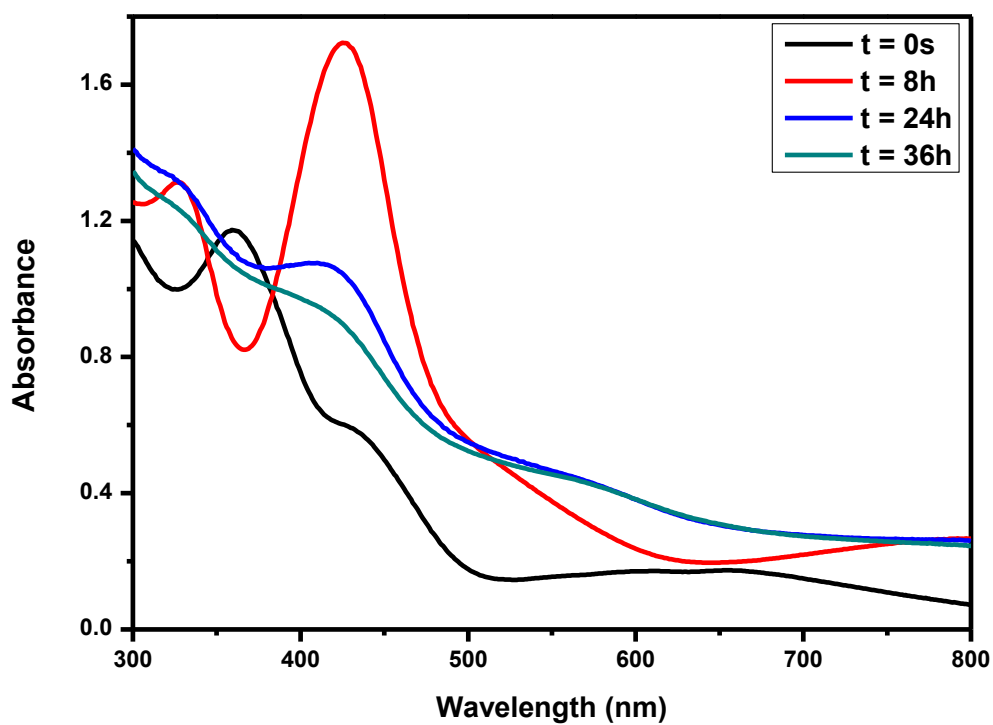
ADA3



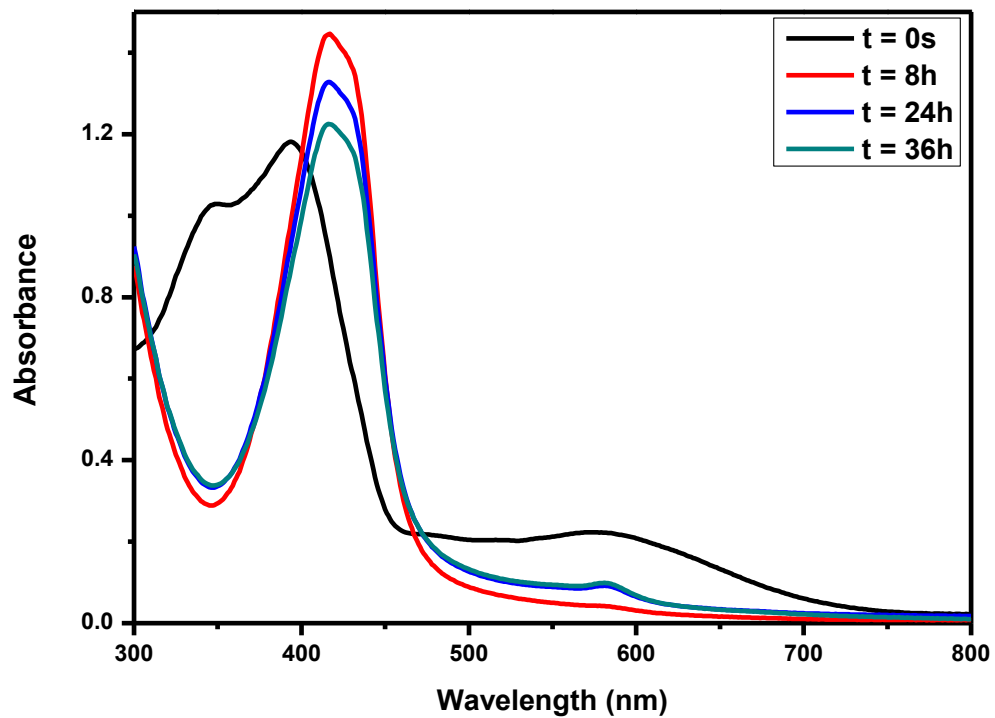
ADA4



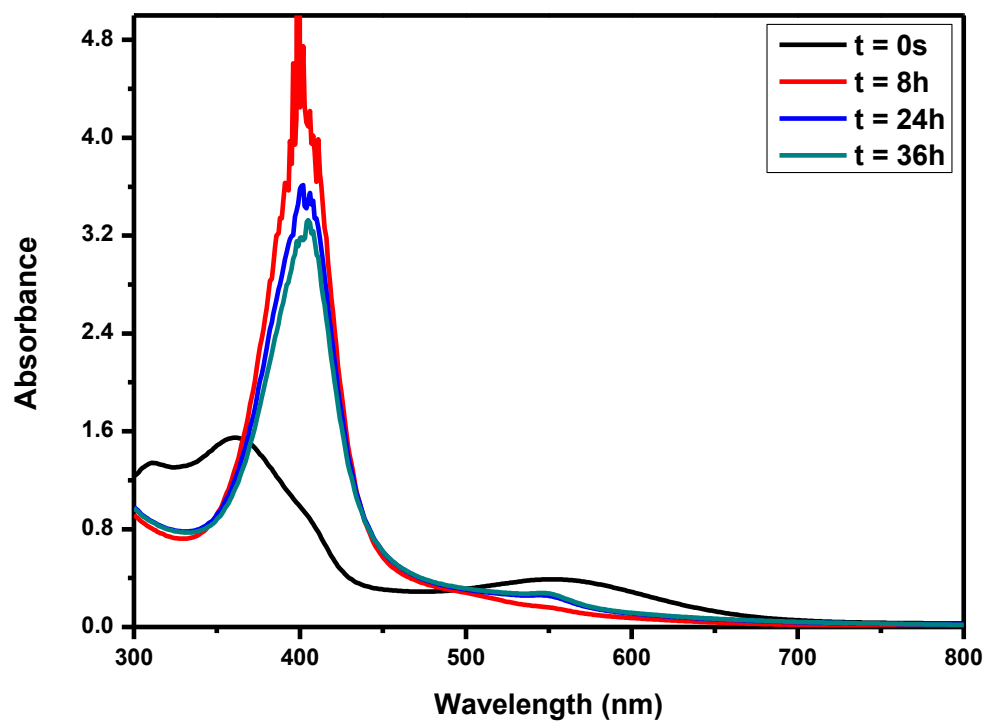
ADA5



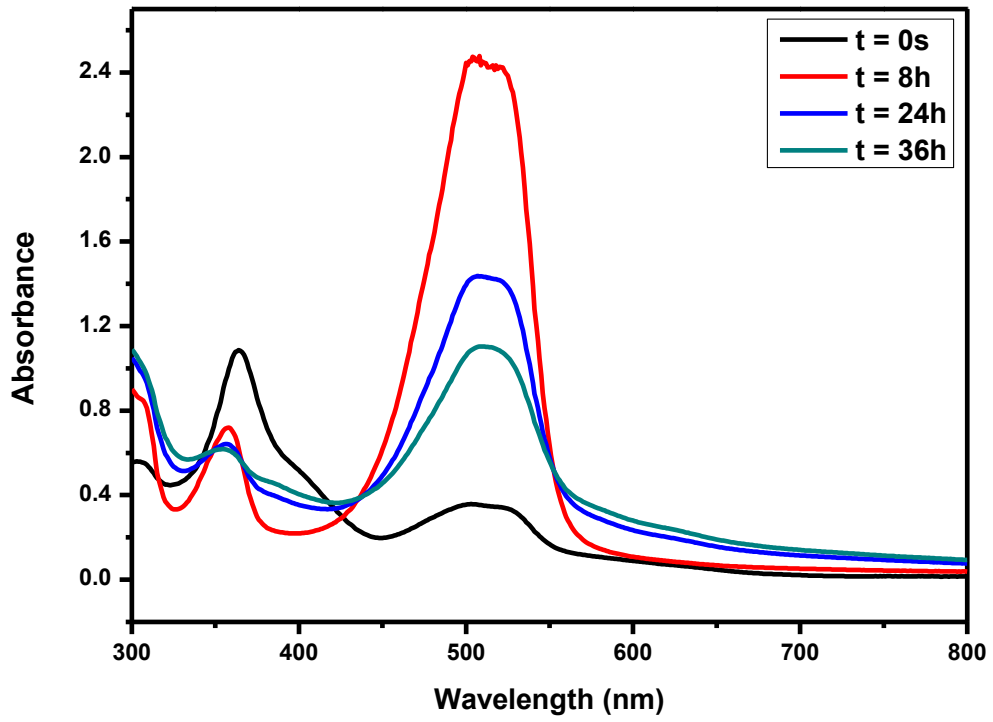
ADA6



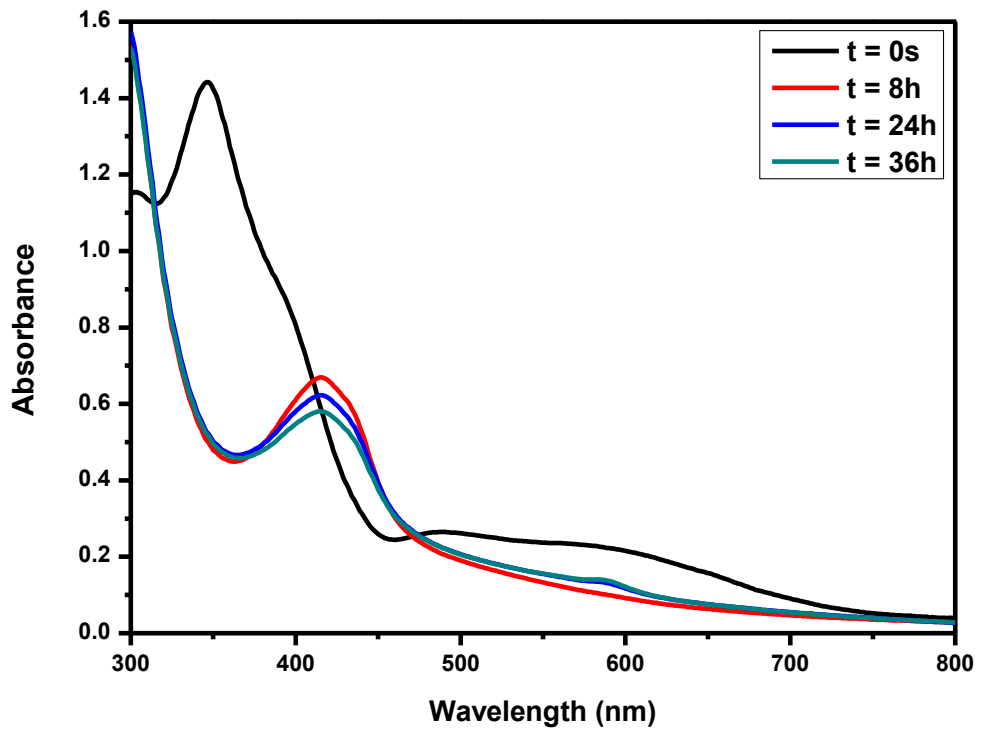
ADA7



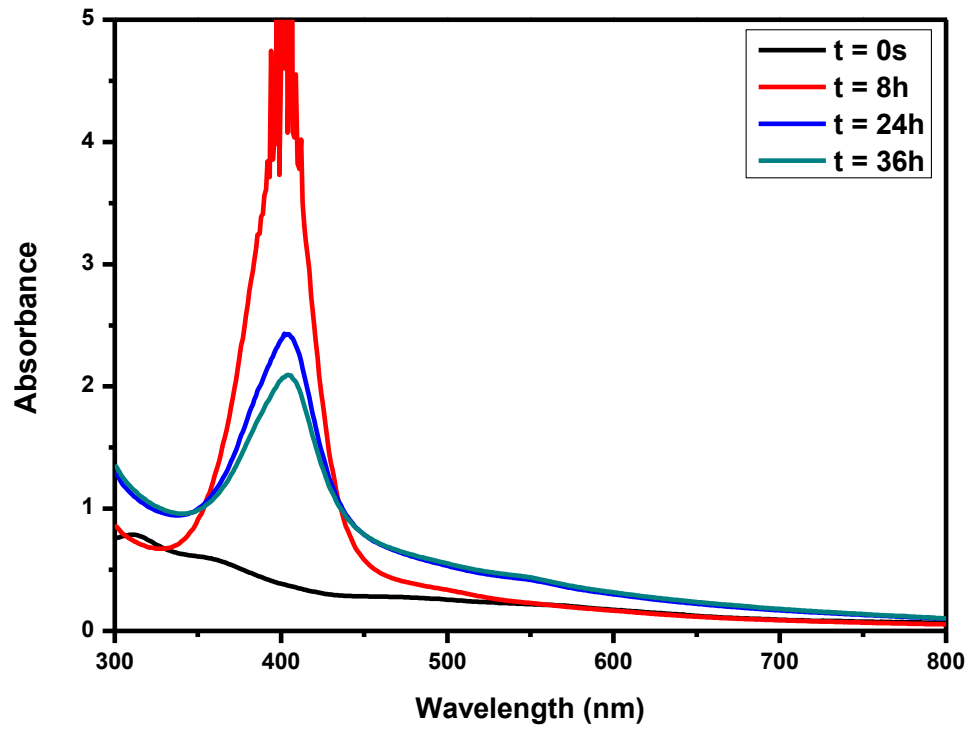
ADA8



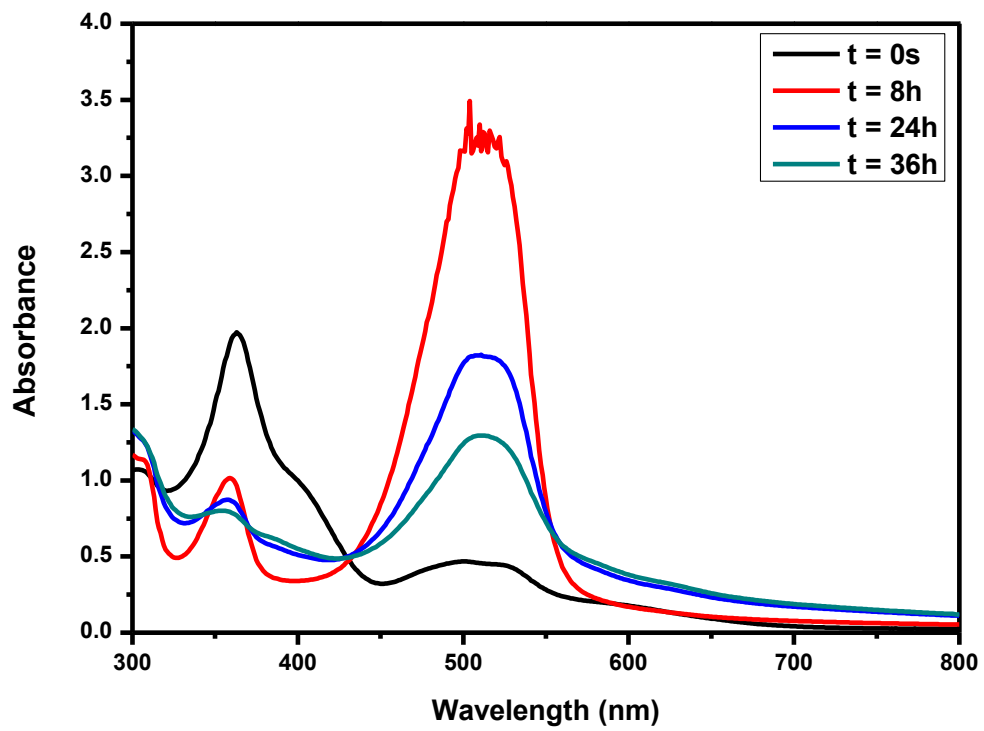
ADA9



ADA10



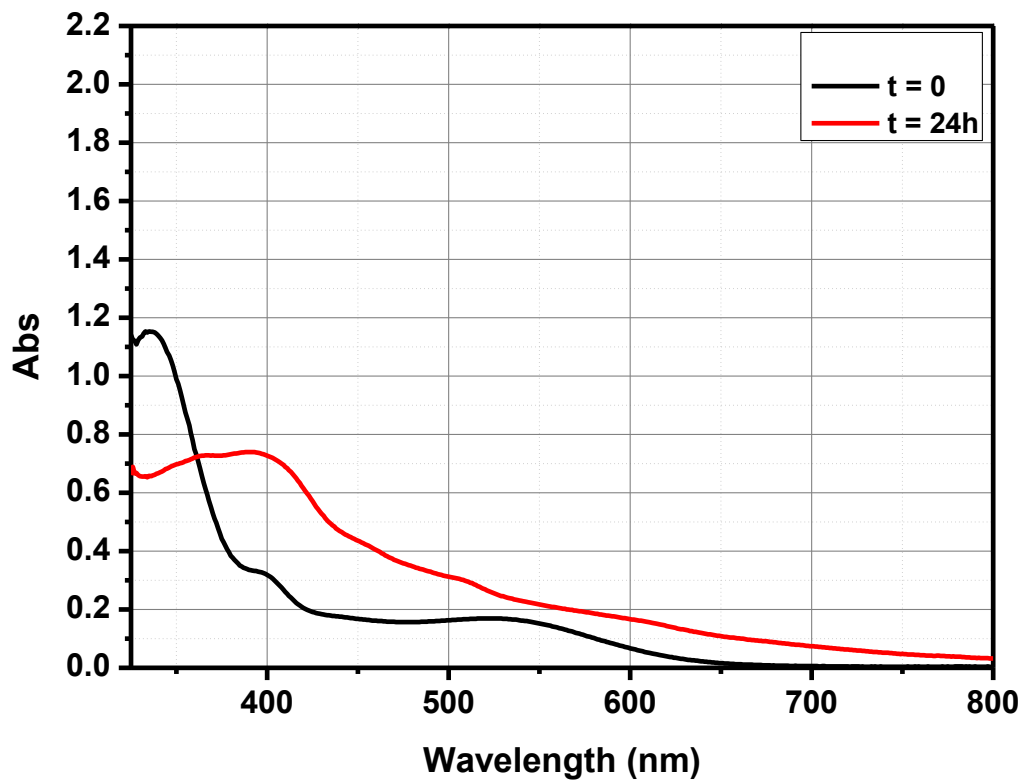
ADA11



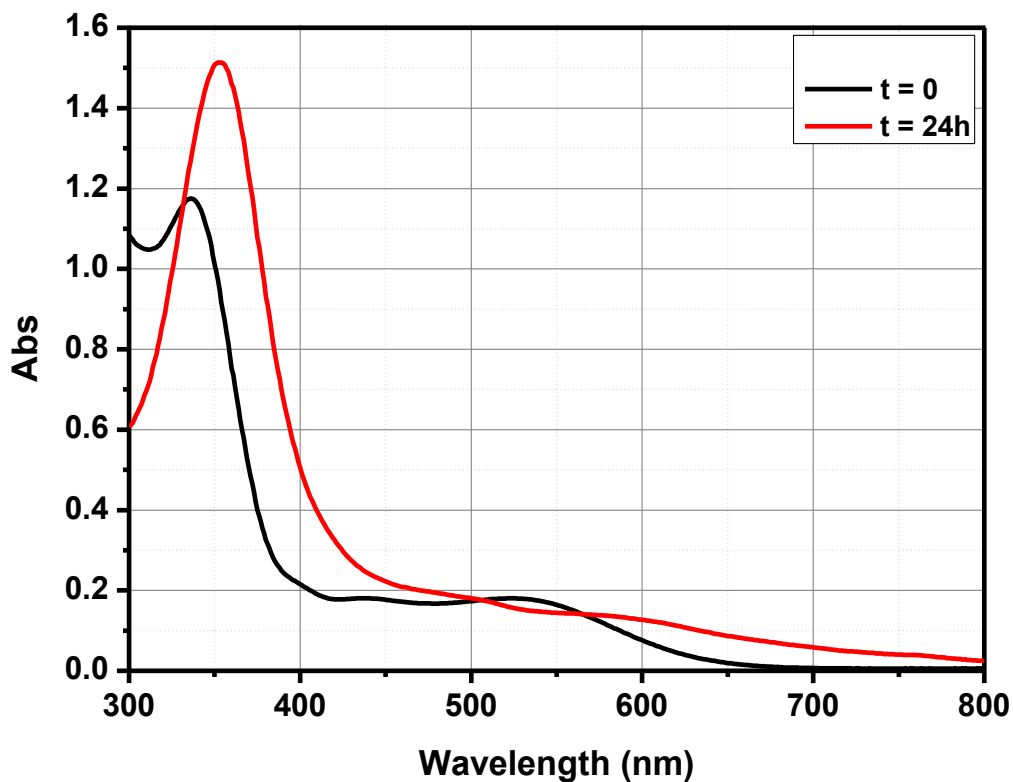


Modification of the UV-visible absorption spectra of A-D-A0 in different solvents at room temperature over time

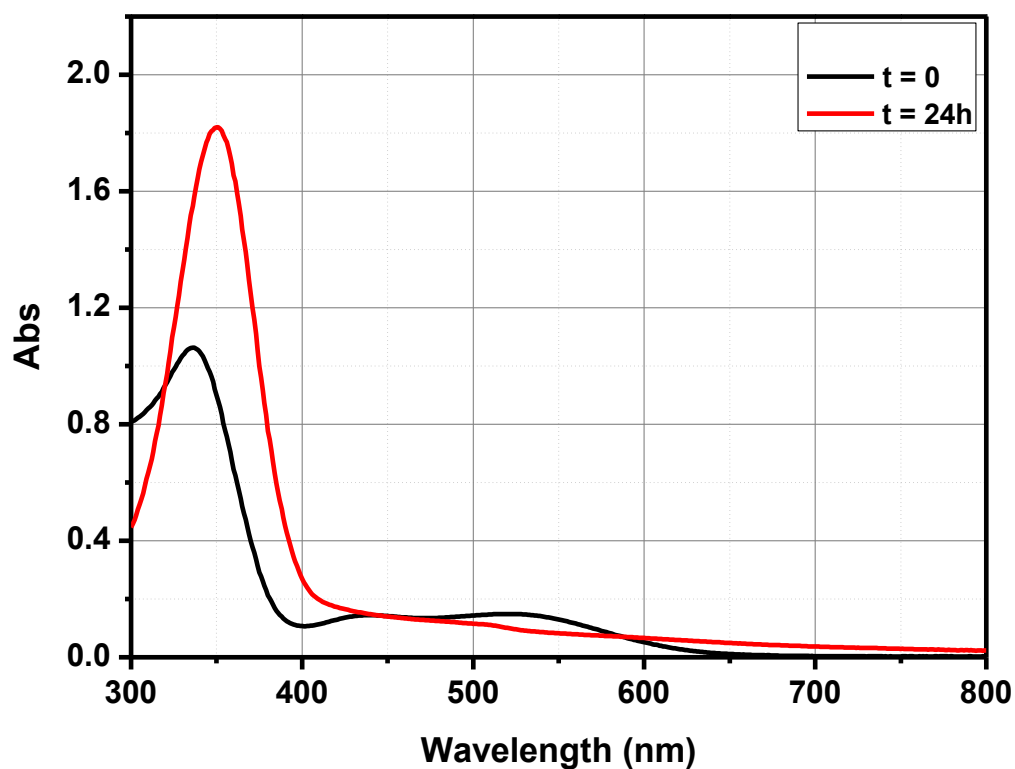
Acetone



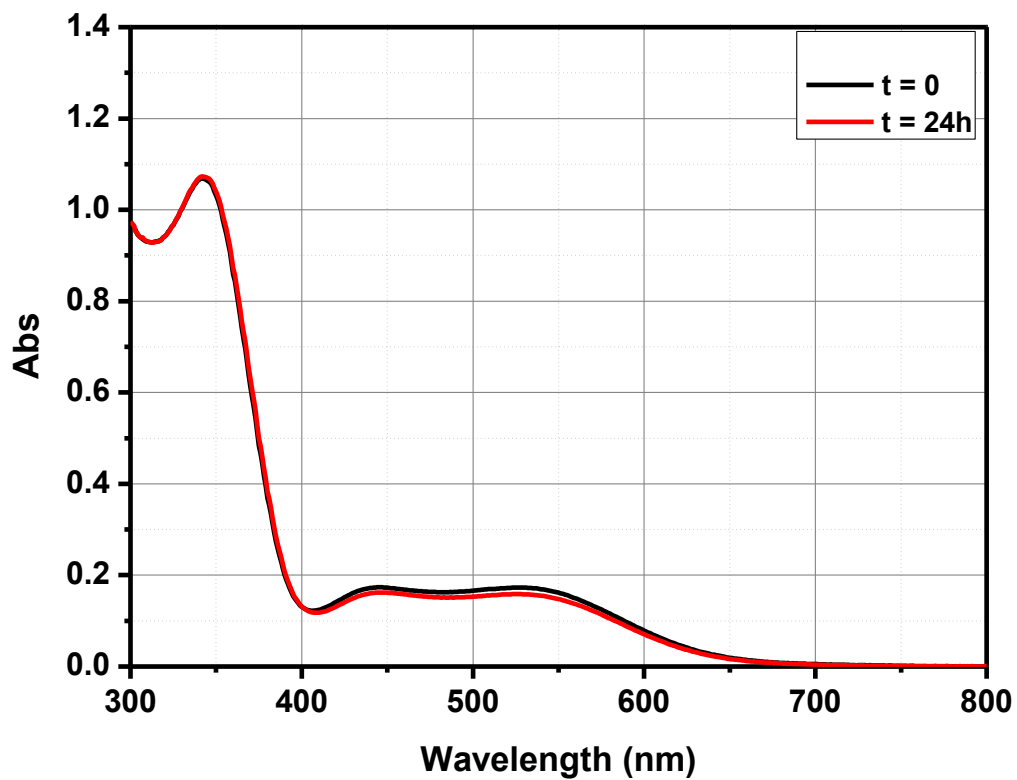
Acetonitrile



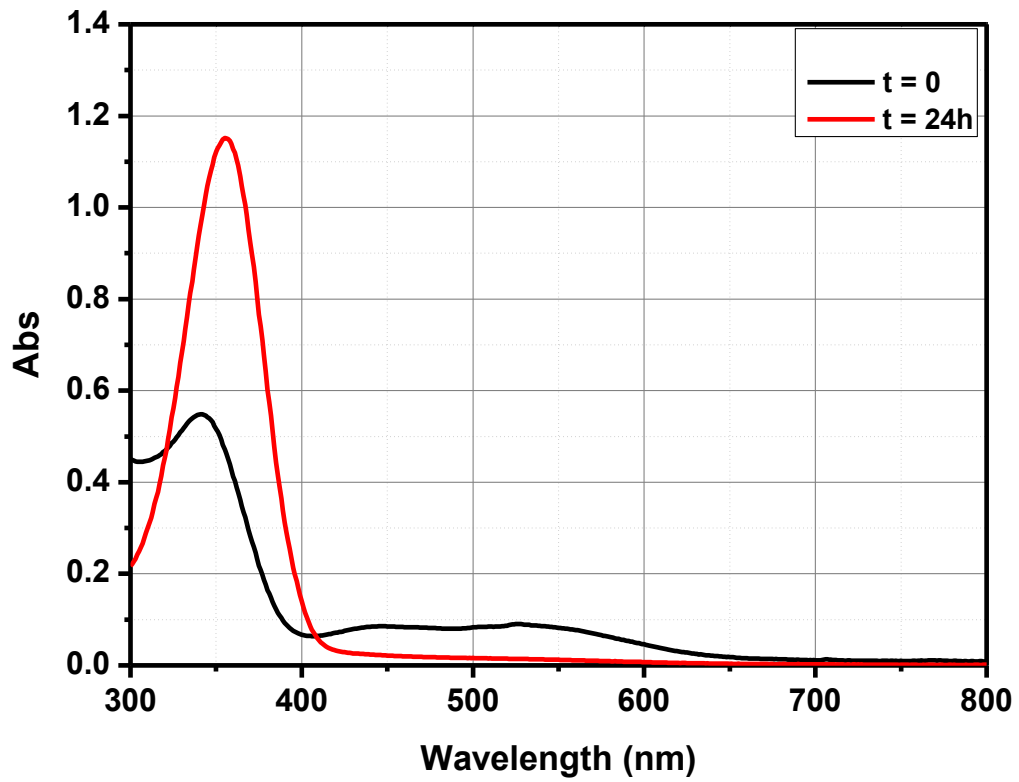
AcOEt



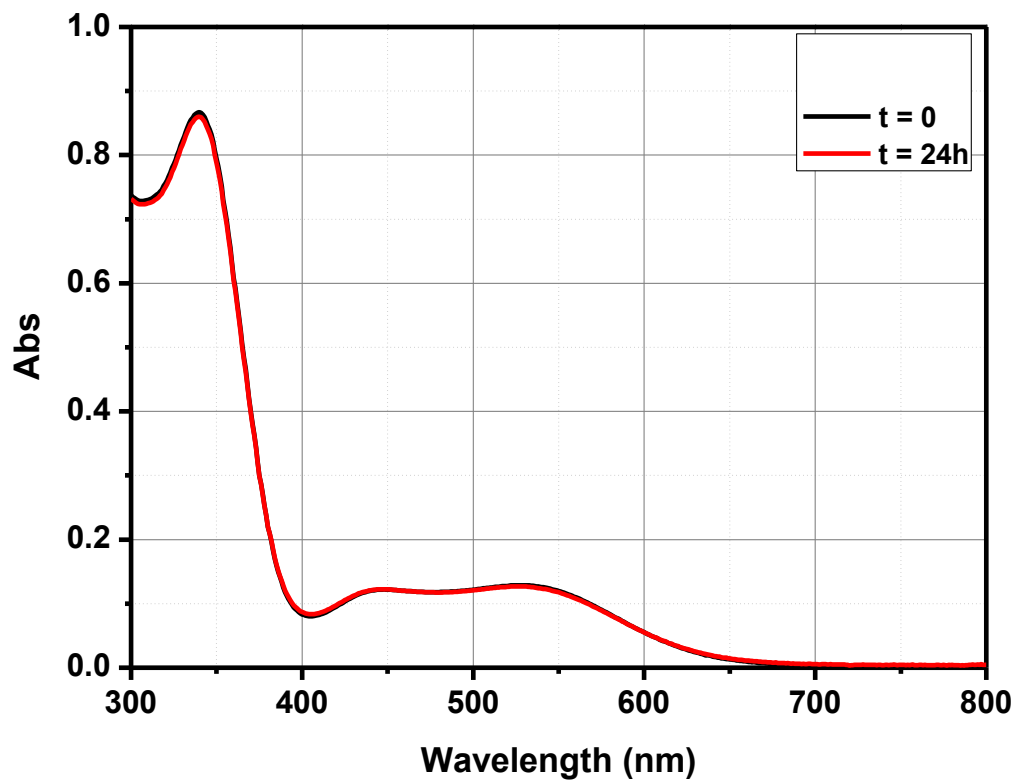
Anisole



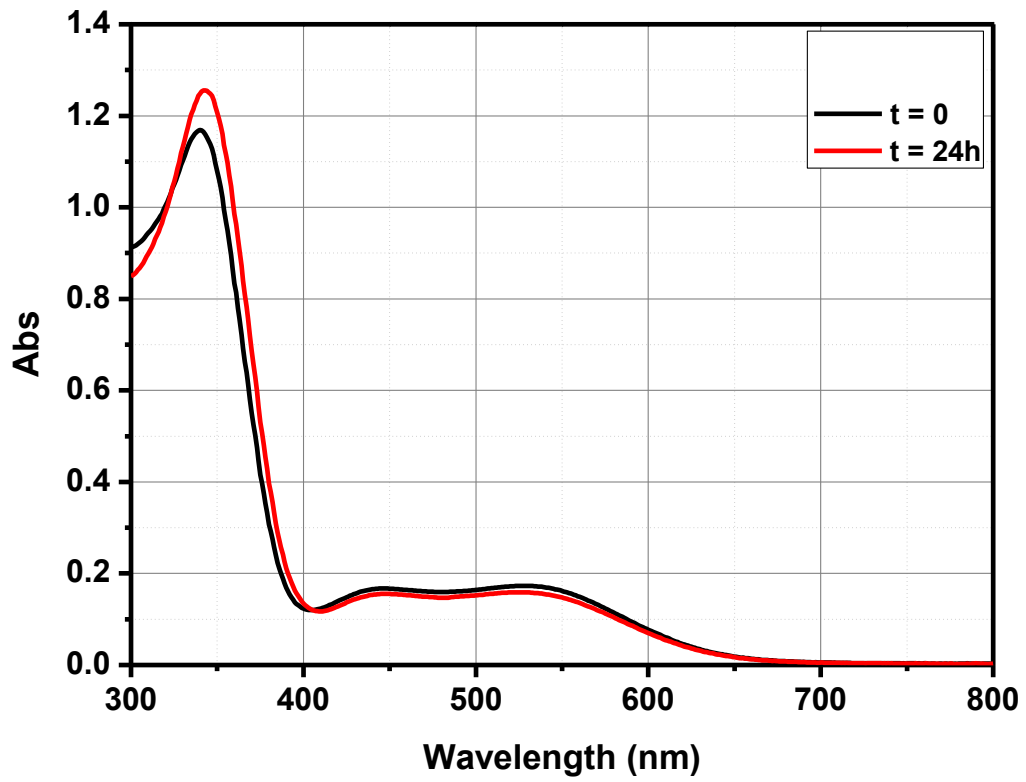
### Chloroforme



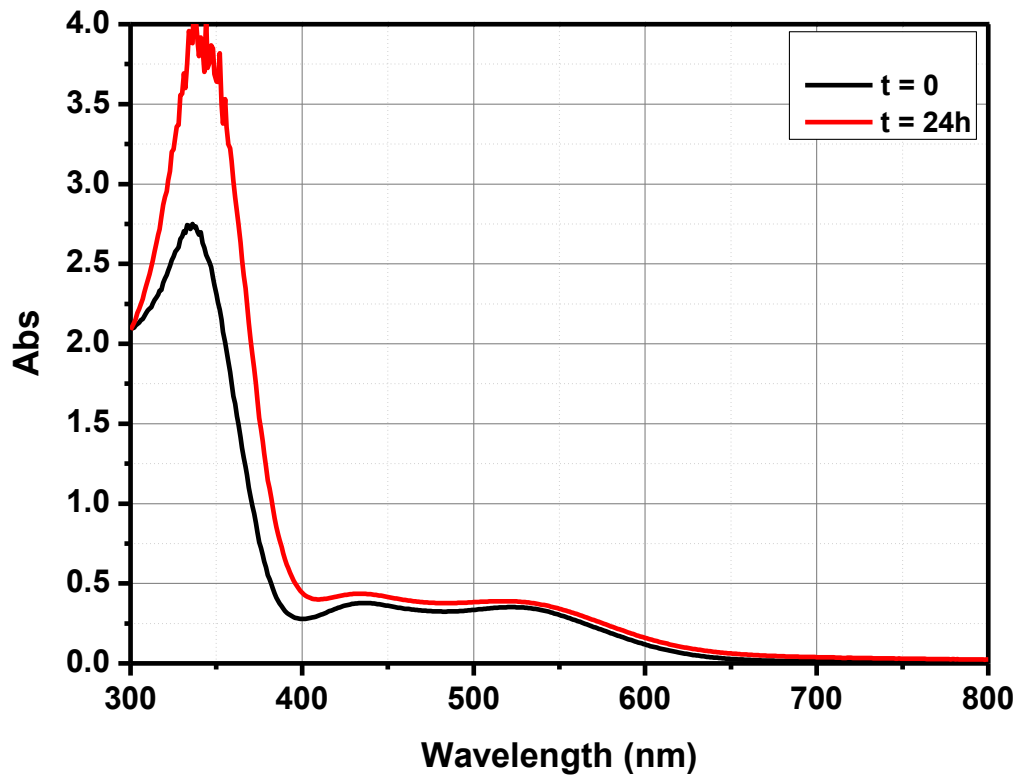
### 1,2-Dichloroethane



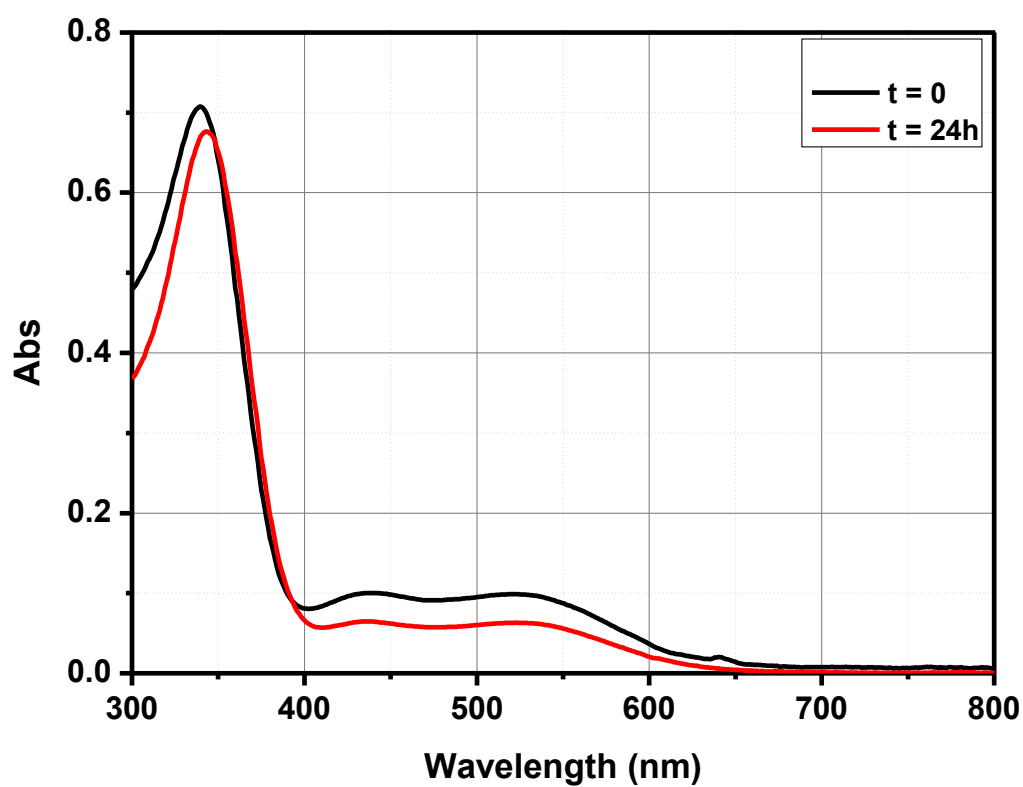
Dichloromethane



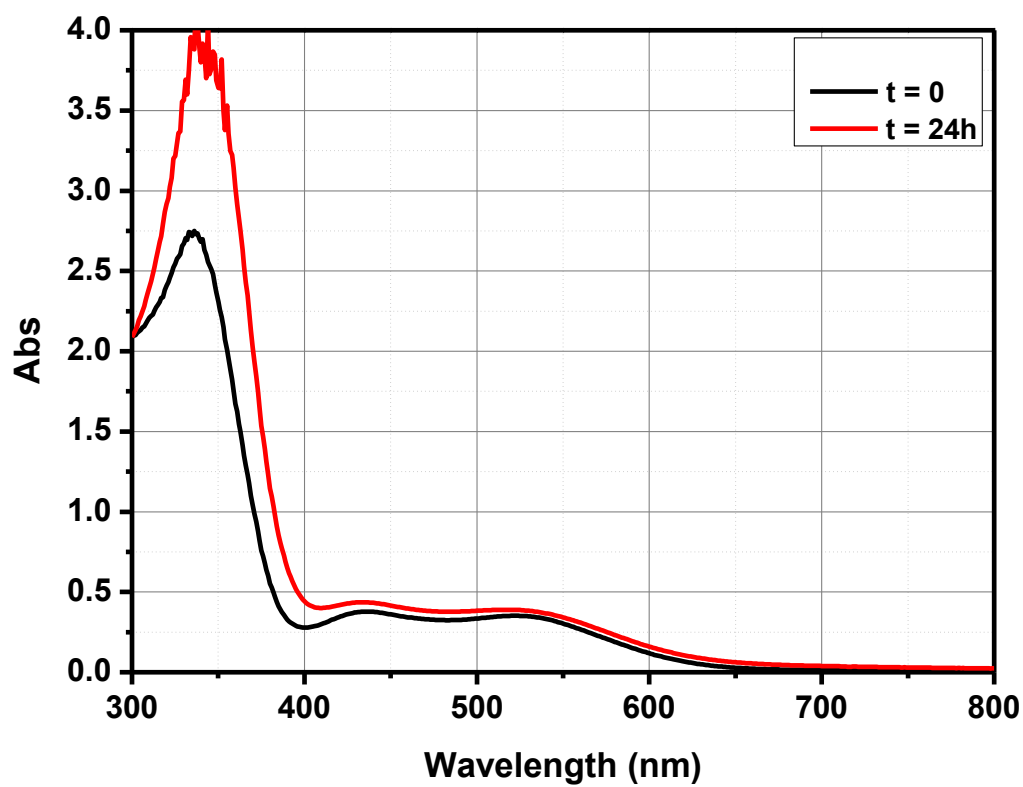
Diethyl carbonate



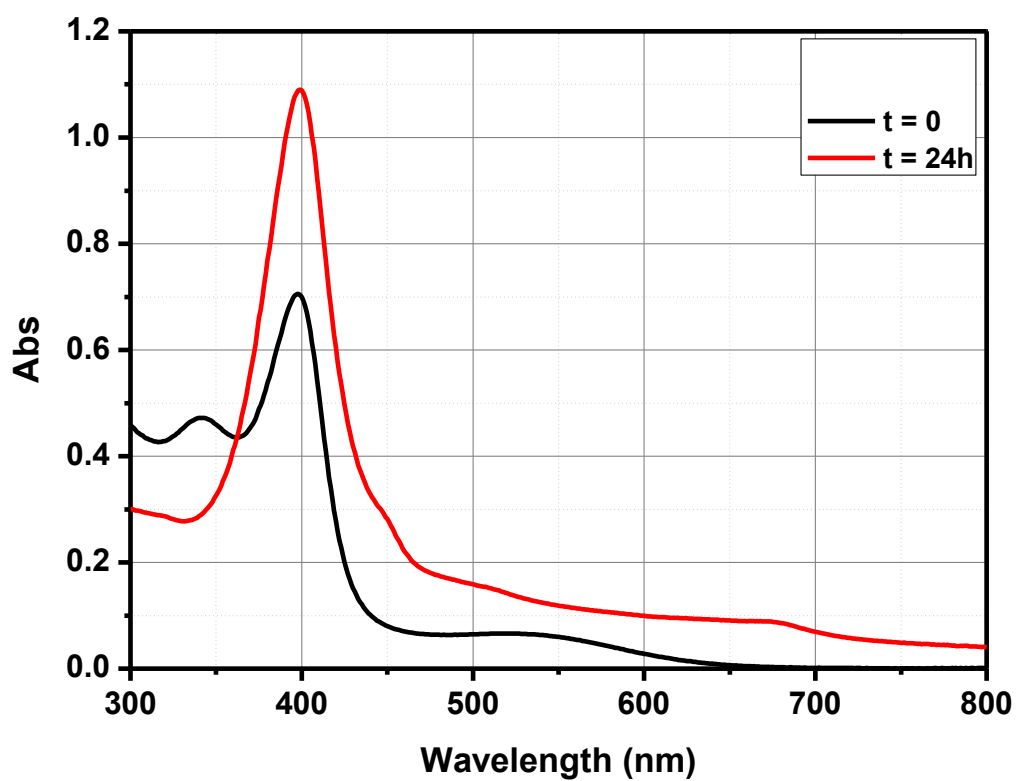
### Diglyme



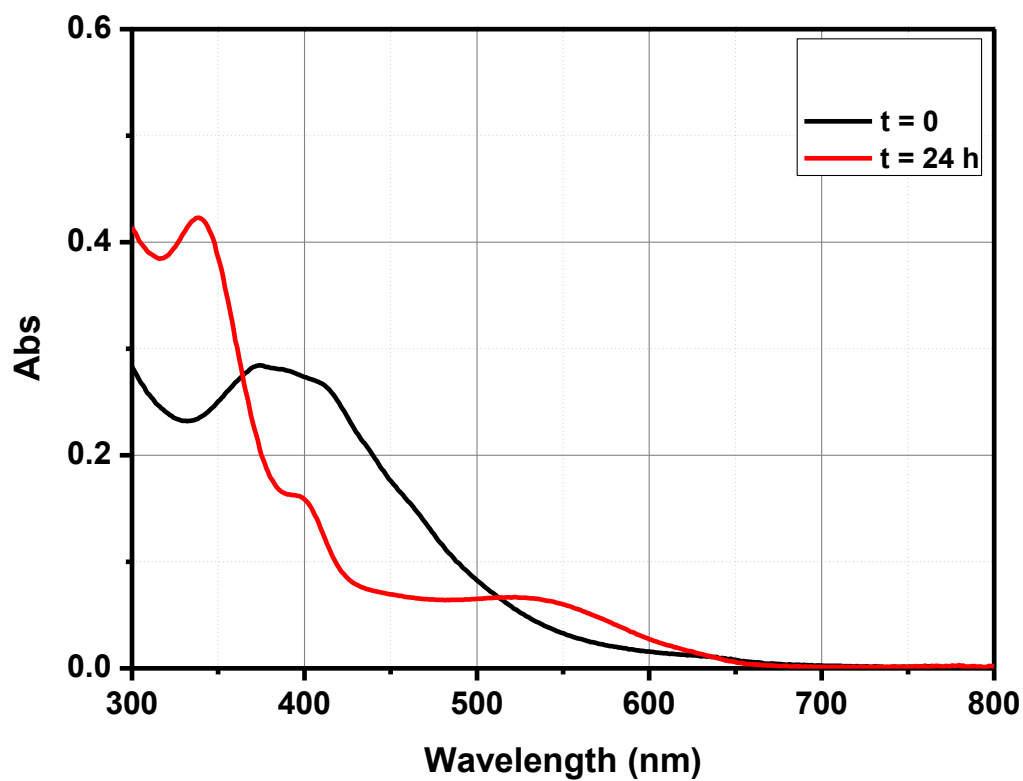
### Dioxane



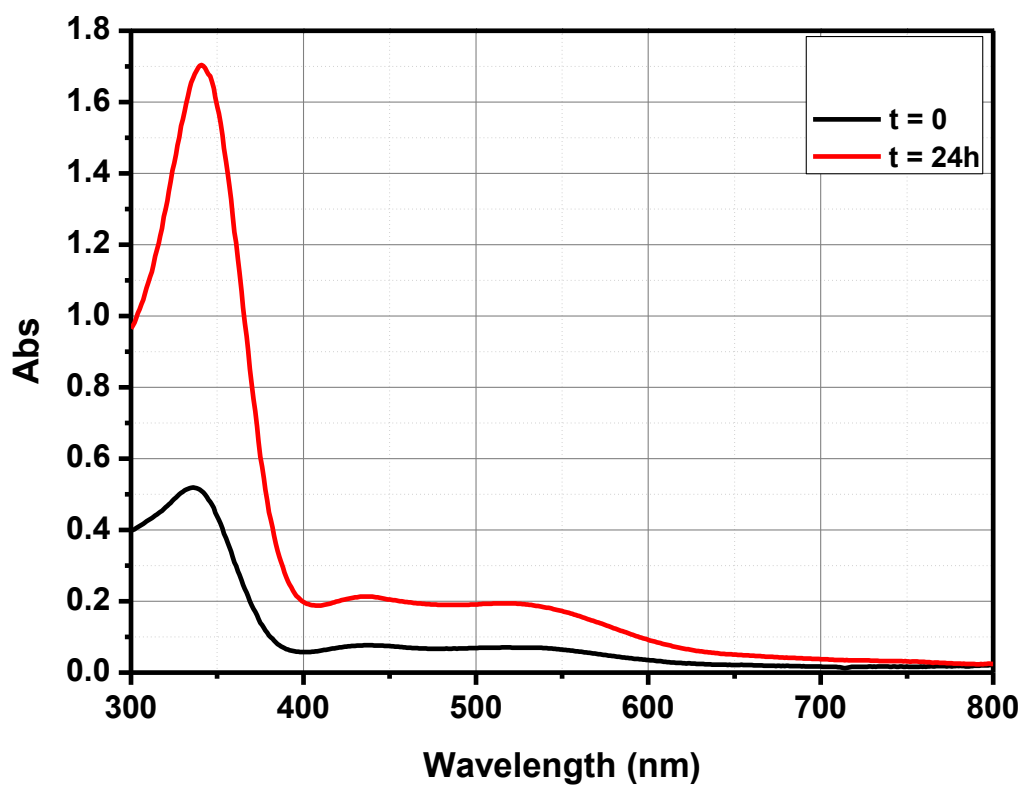
### Dimethylacetamide



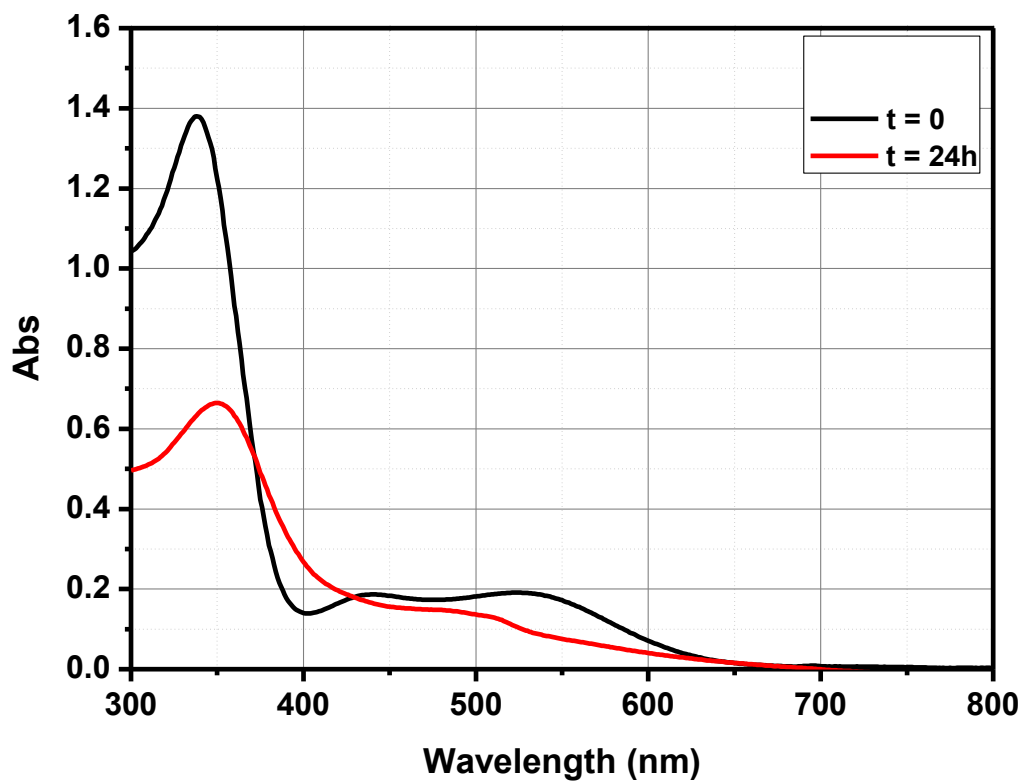
### DMF



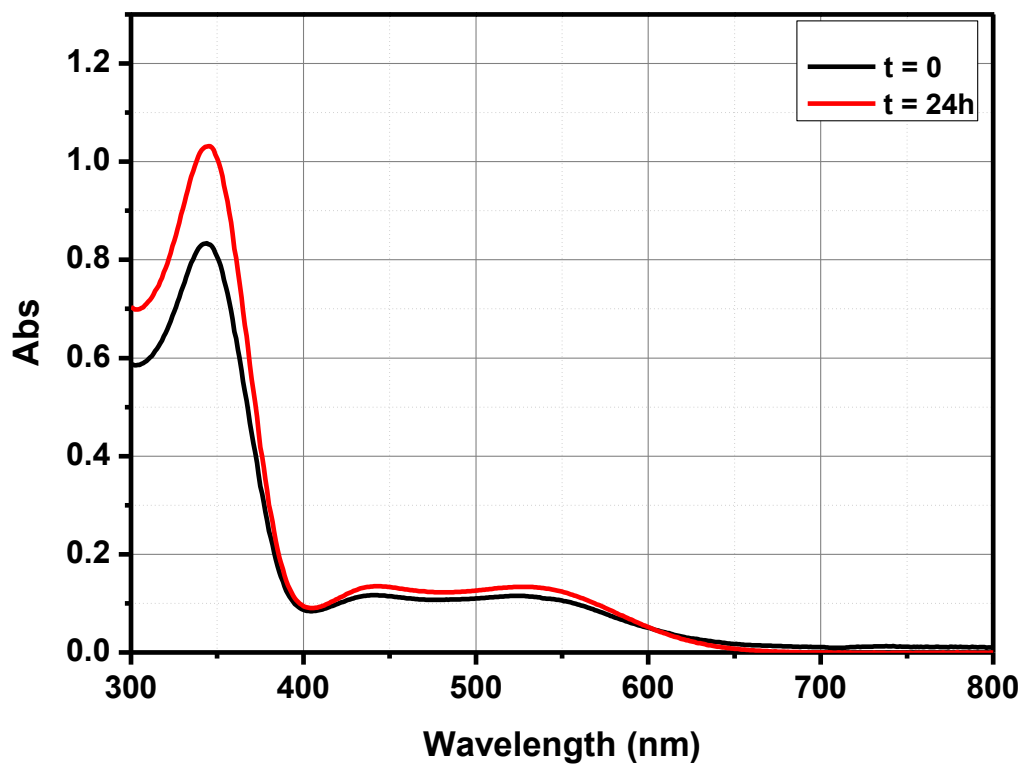
Diethyl ether



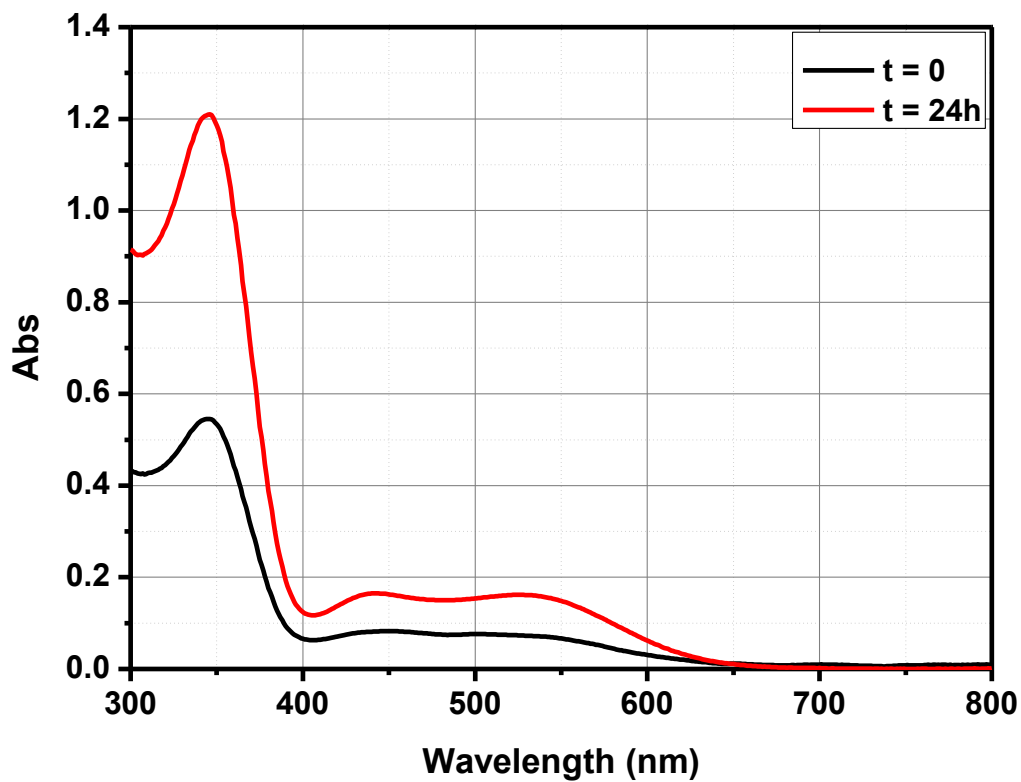
THF



Toluene



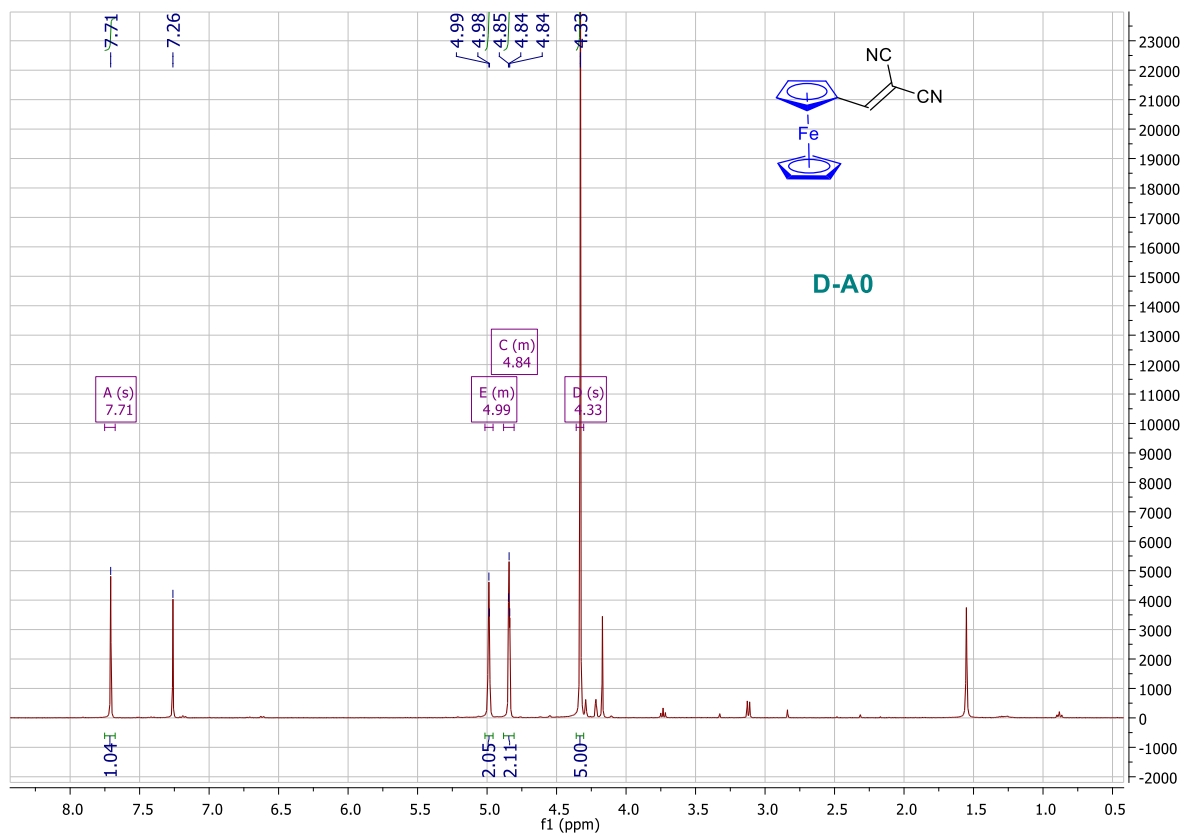
Xylene



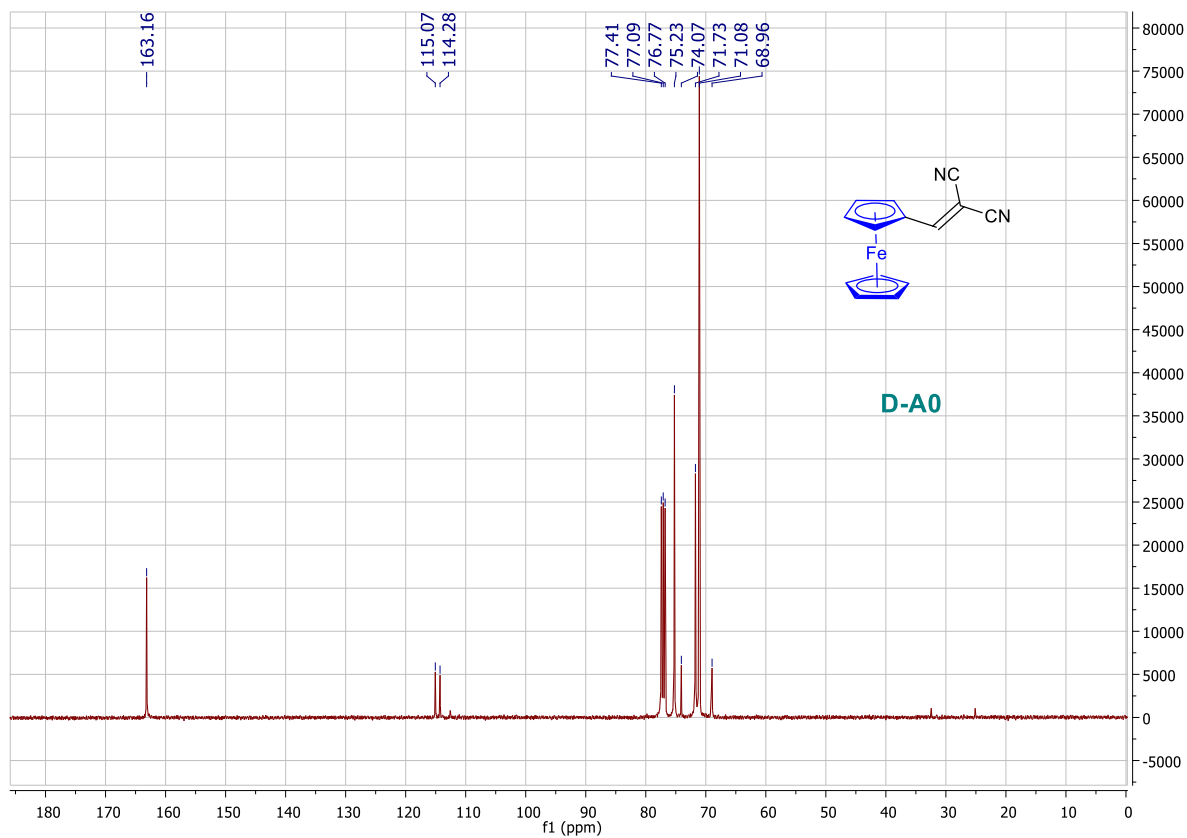


# $^1\text{H}$ and $^{13}\text{C}$ NMR spectra of the different dyes

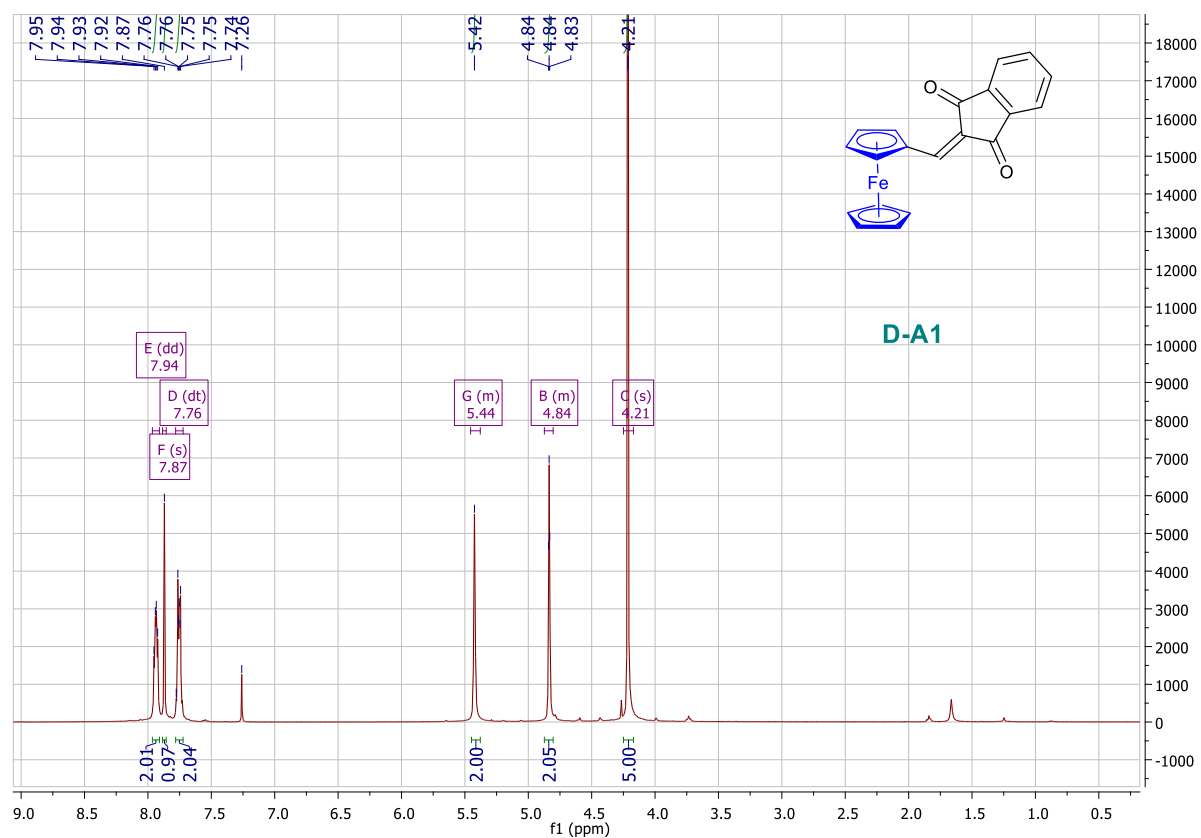
## $^1\text{H}$ NMR spectrum of D-A0



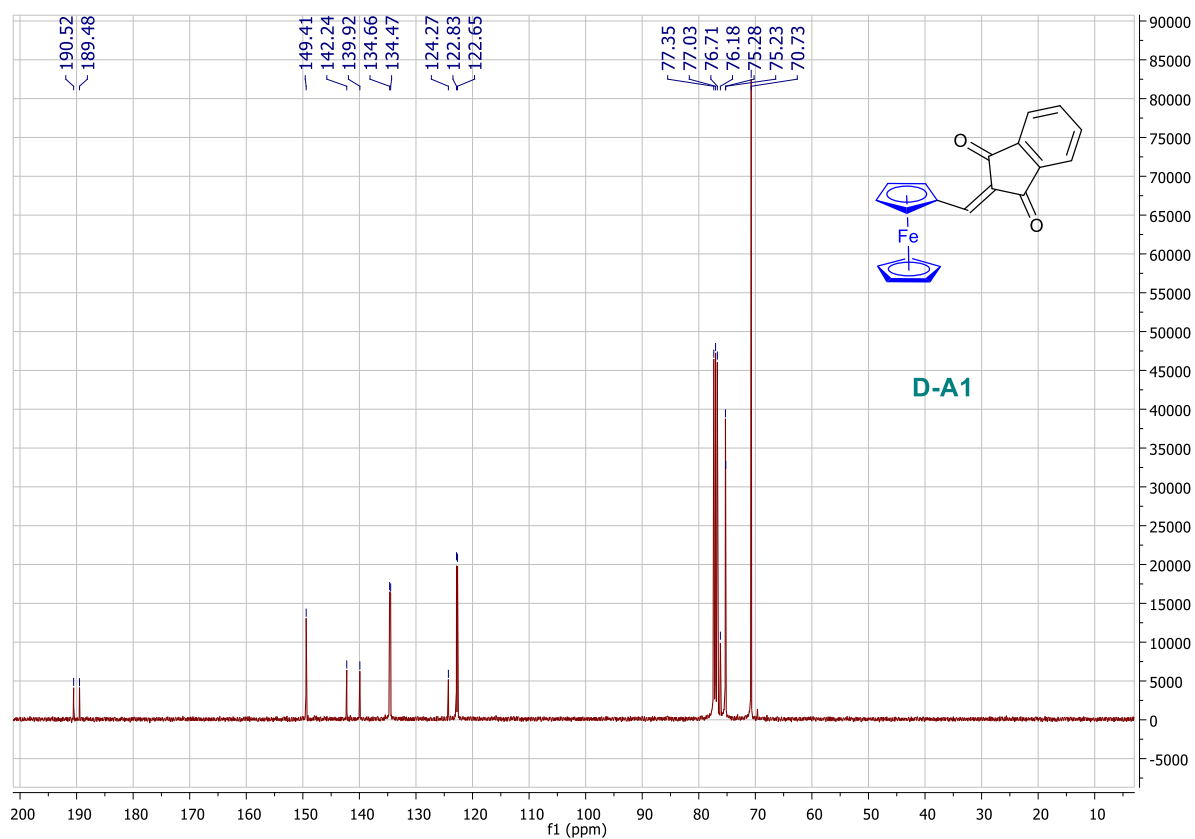
## $^{13}\text{C}$ NMR spectrum of D-A0



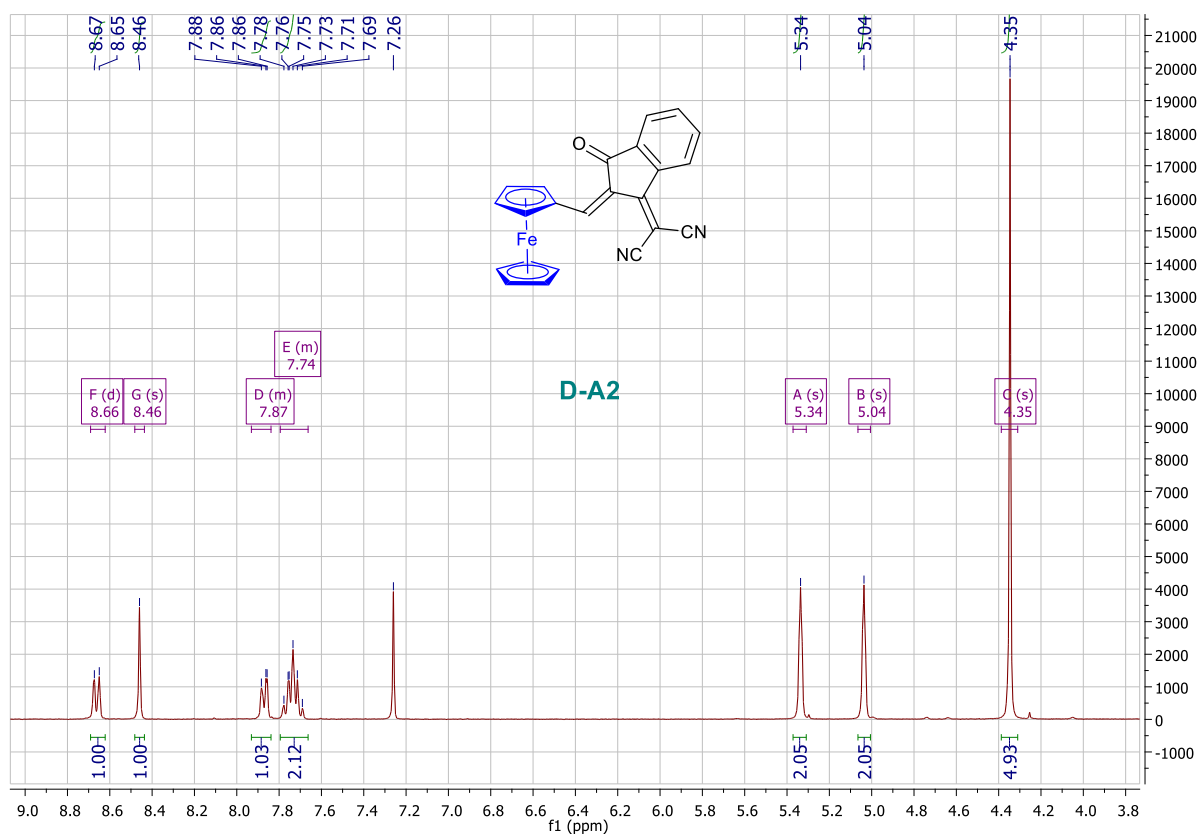
### <sup>1</sup>H NMR spectrum of D-A1



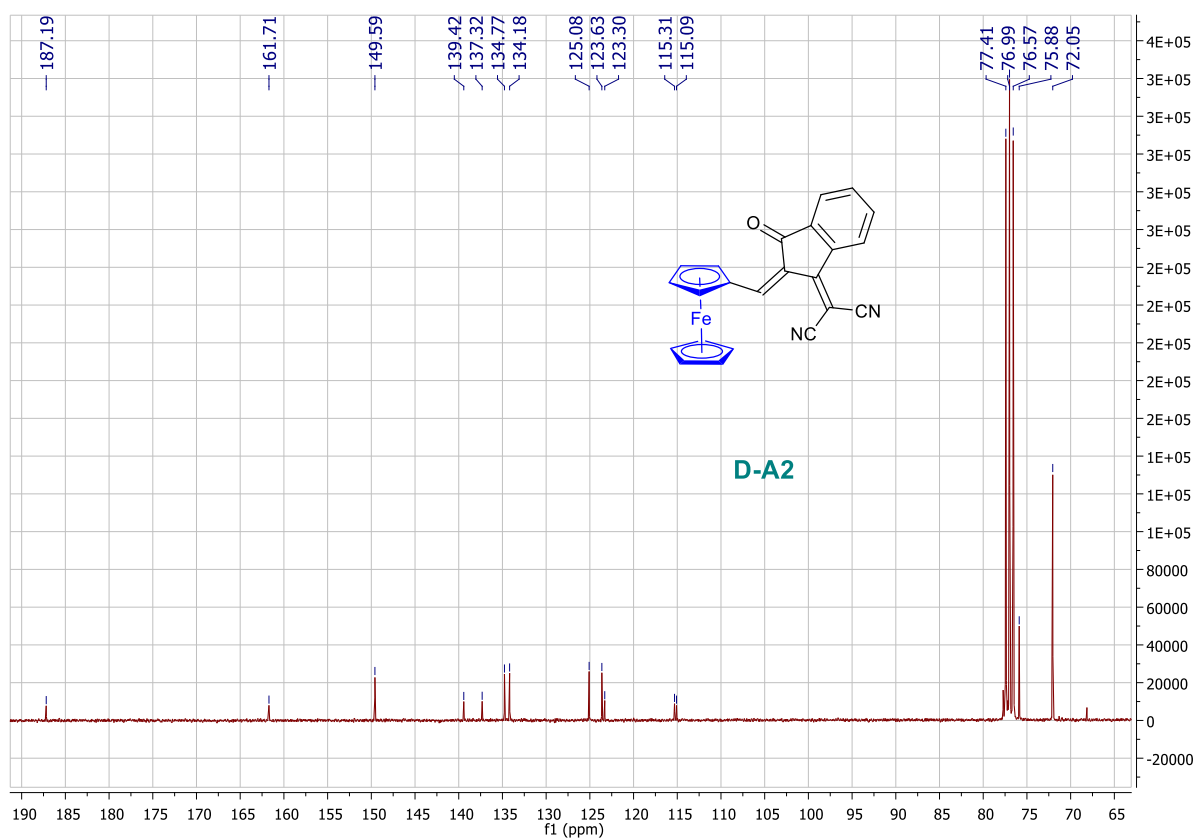
### <sup>13</sup>C NMR spectrum of D-A1



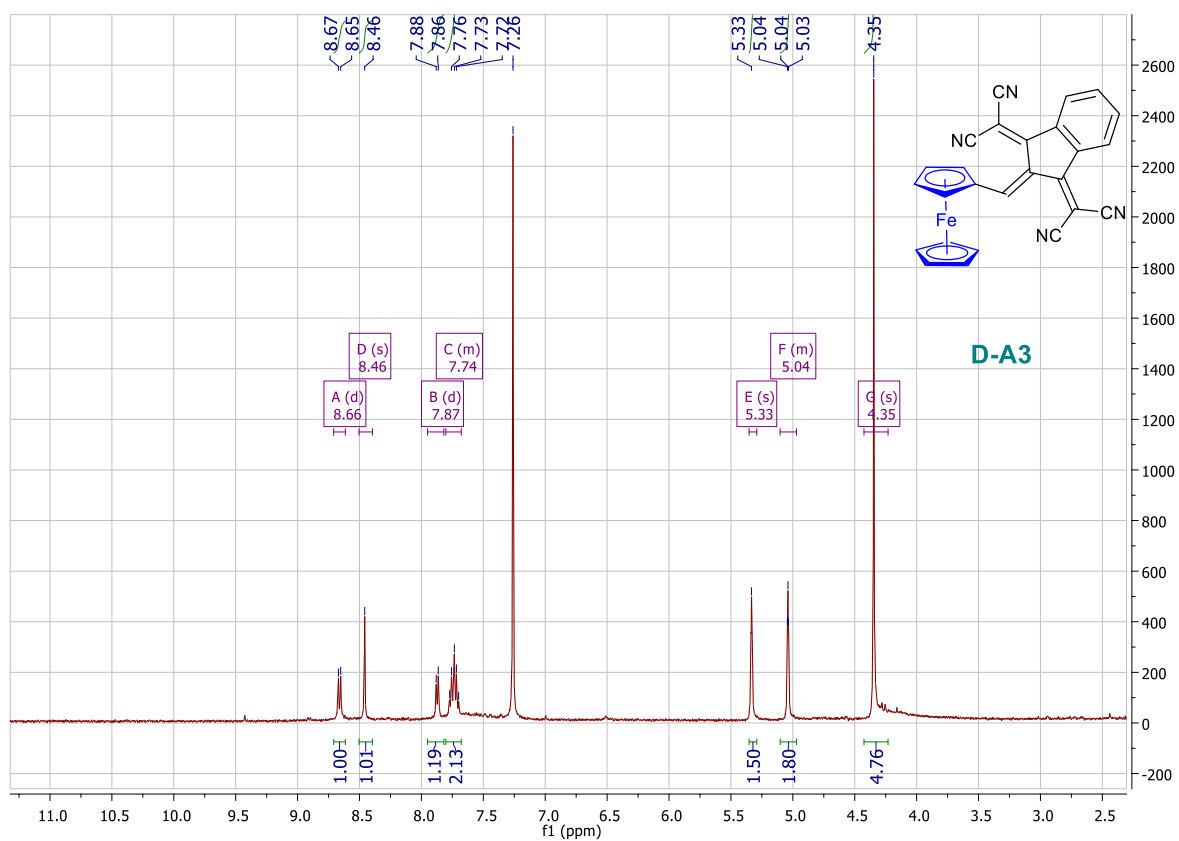
### <sup>1</sup>H NMR spectrum of D-A2



### <sup>13</sup>C NMR spectrum of D-A2



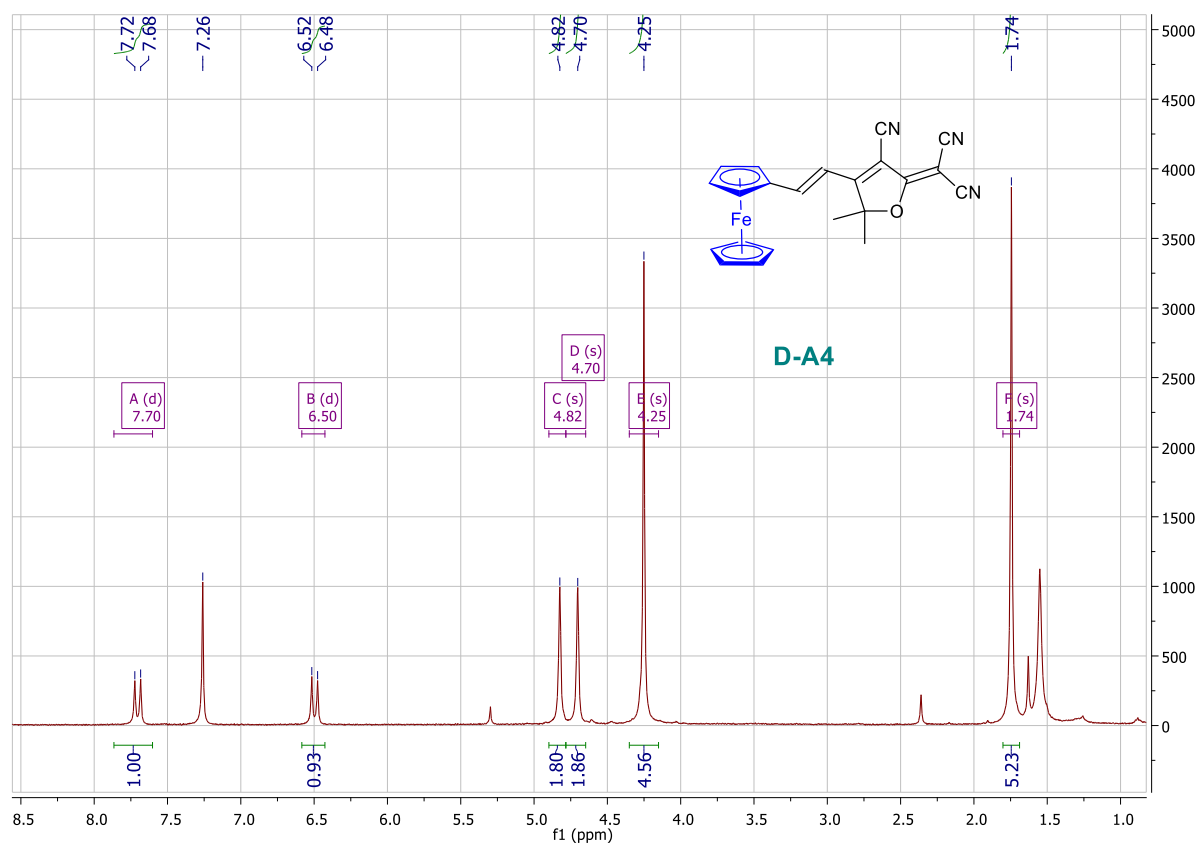
<sup>1</sup>H NMR spectrum of D-A3



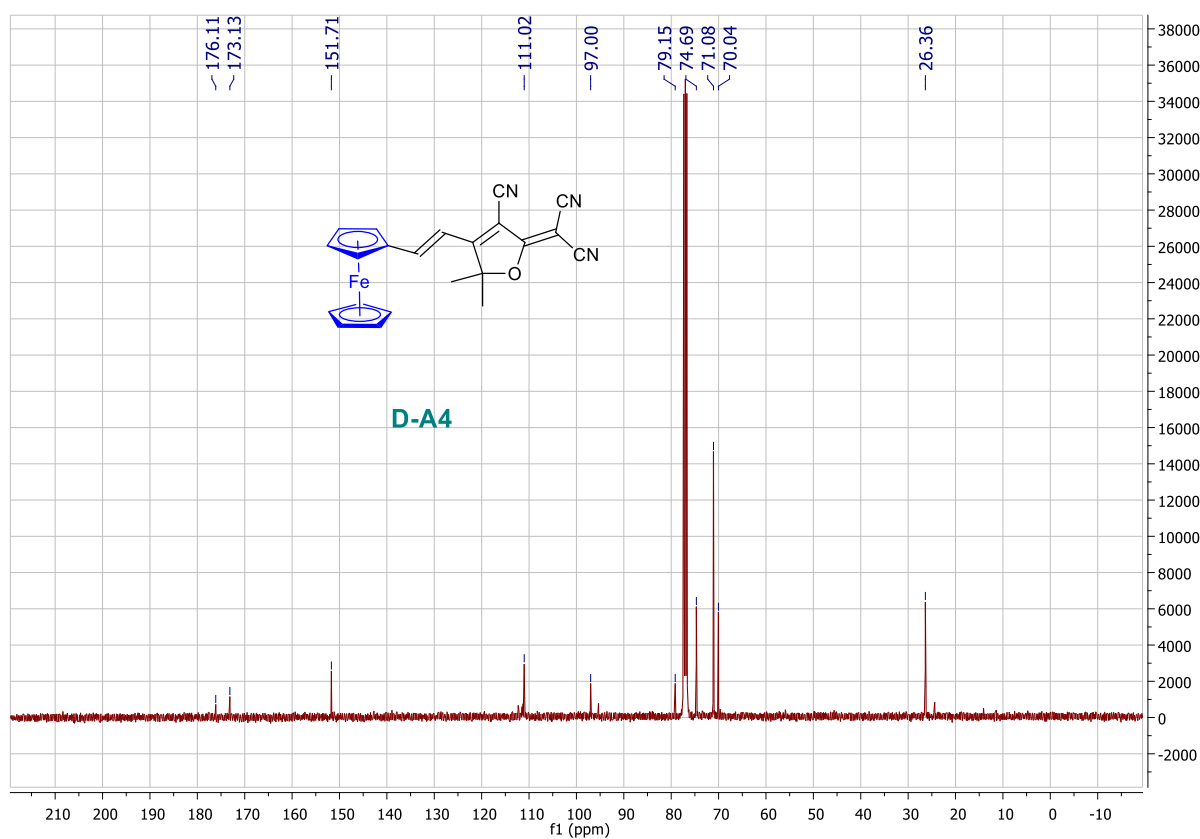
<sup>13</sup>C NMR spectrum of D-A3

**NOT SUFFICIENTLY SOLUBLE**

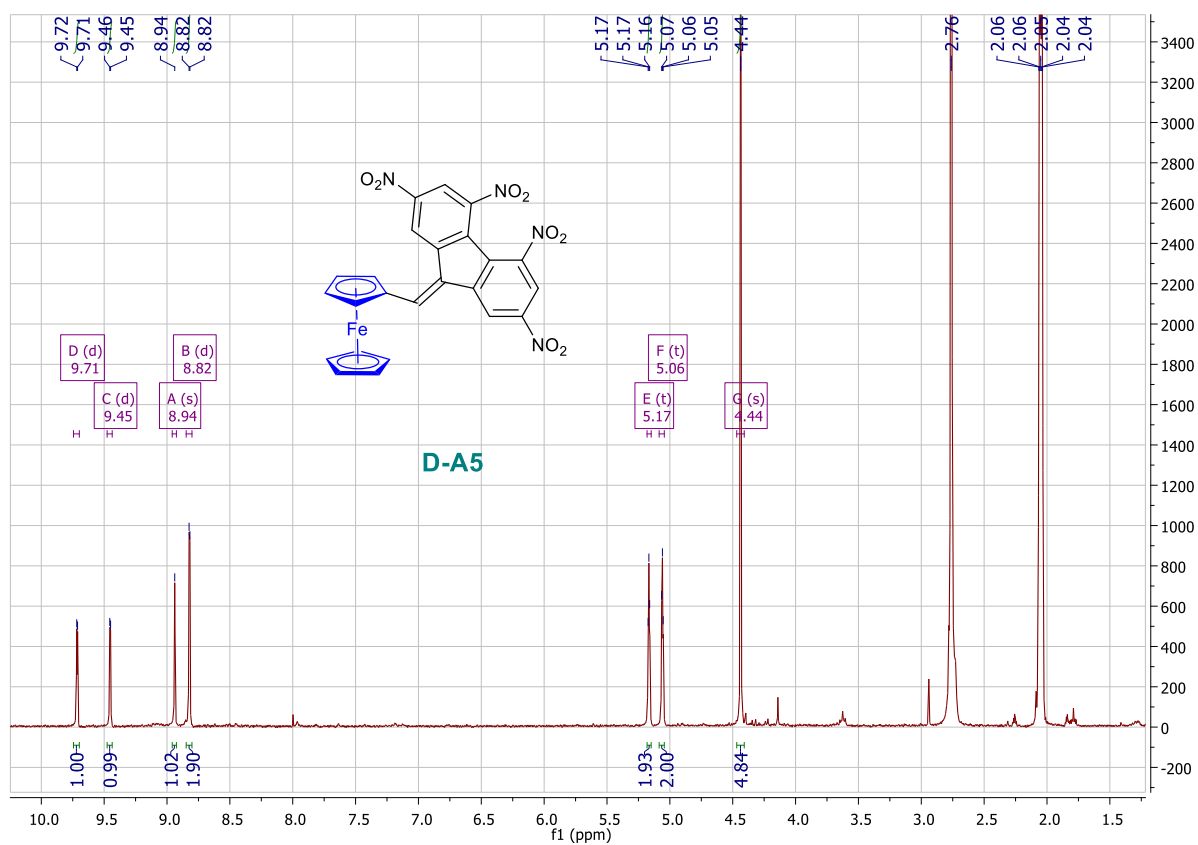
### <sup>1</sup>H NMR spectrum of D-A4



### <sup>13</sup>C NMR spectrum of D-A4



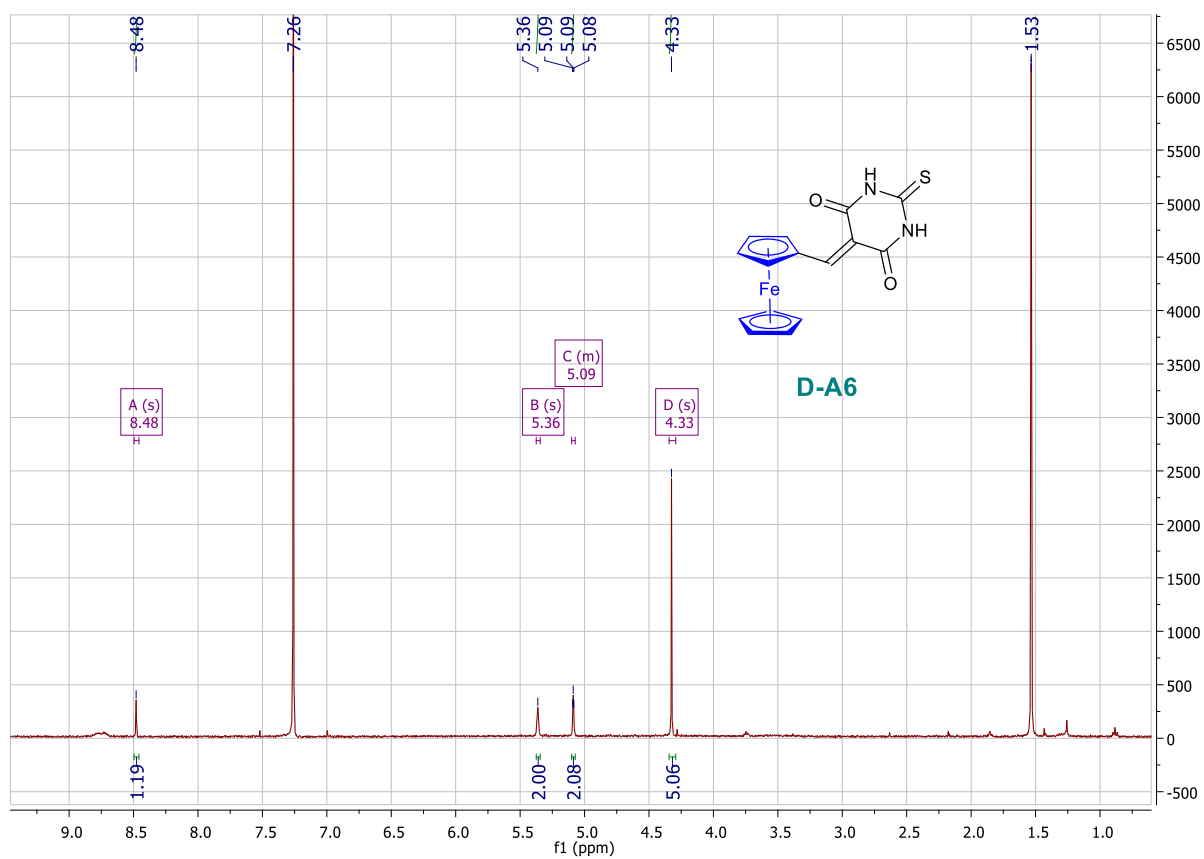
<sup>1</sup>H NMR spectrum of D-A5



<sup>13</sup>C NMR spectrum of D-A5

**NOT SUFFICIENTLY SOLUBLE**

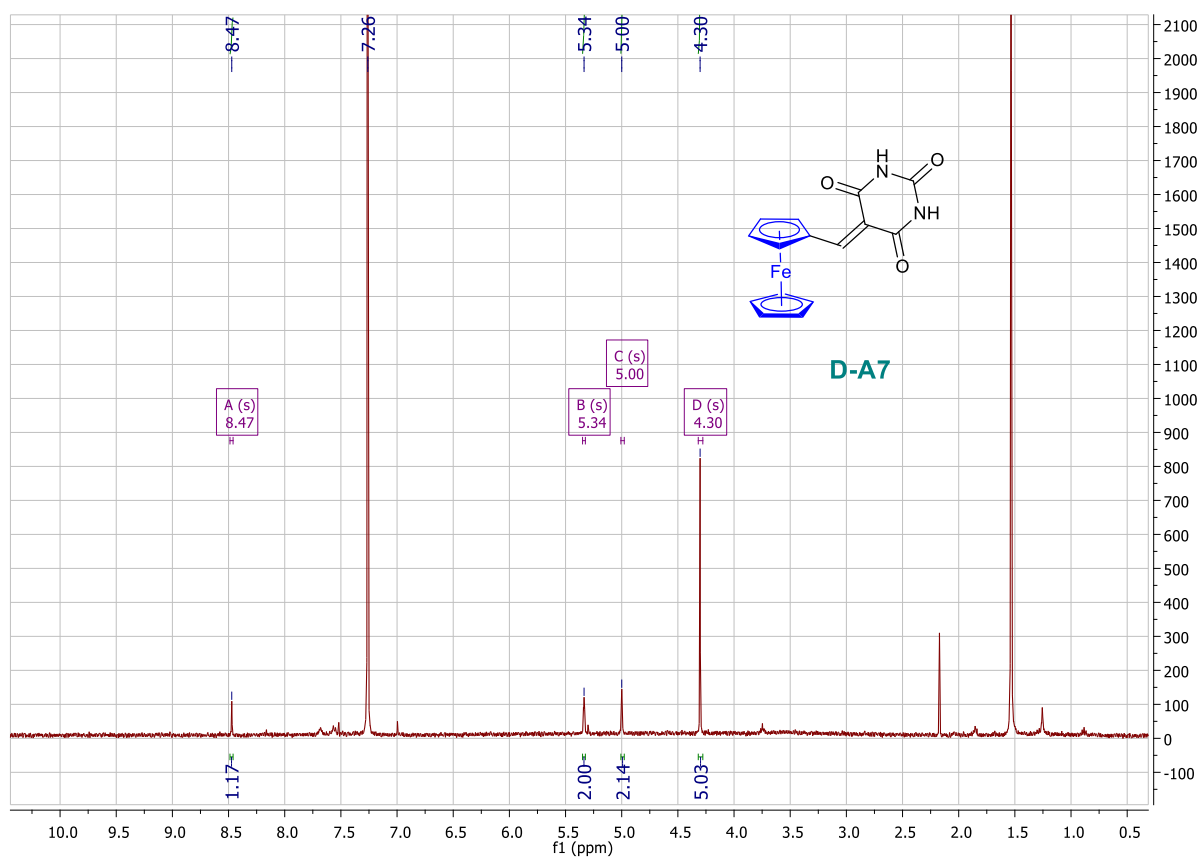
$^1\text{H}$  NMR spectrum of **D-A6**



$^{13}\text{C}$  NMR spectrum of **D-A6**

**NOT SUFFICIENTLY SOLUBLE**

$^1\text{H}$  NMR spectrum of D-A7

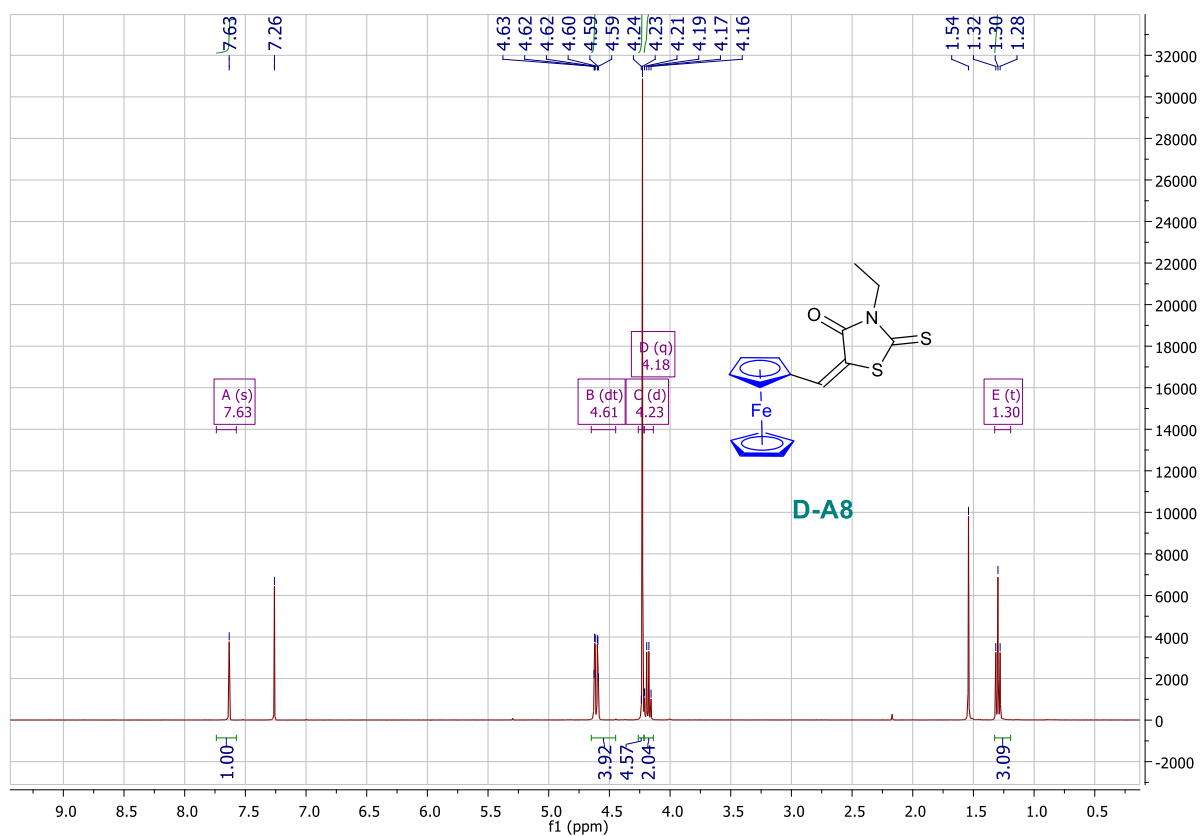


$^{13}\text{C}$  NMR spectrum of D-A7

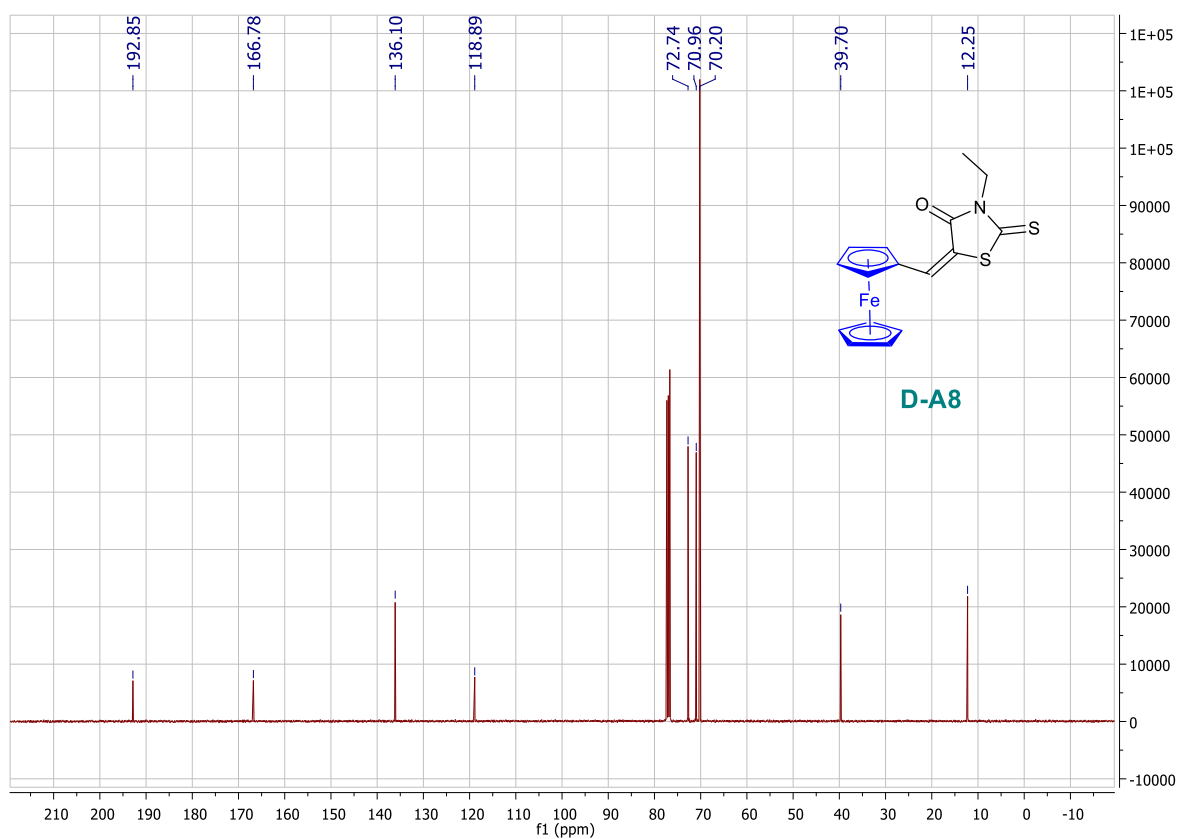
**NOT SUFFICIENTLY SOLUBLE**



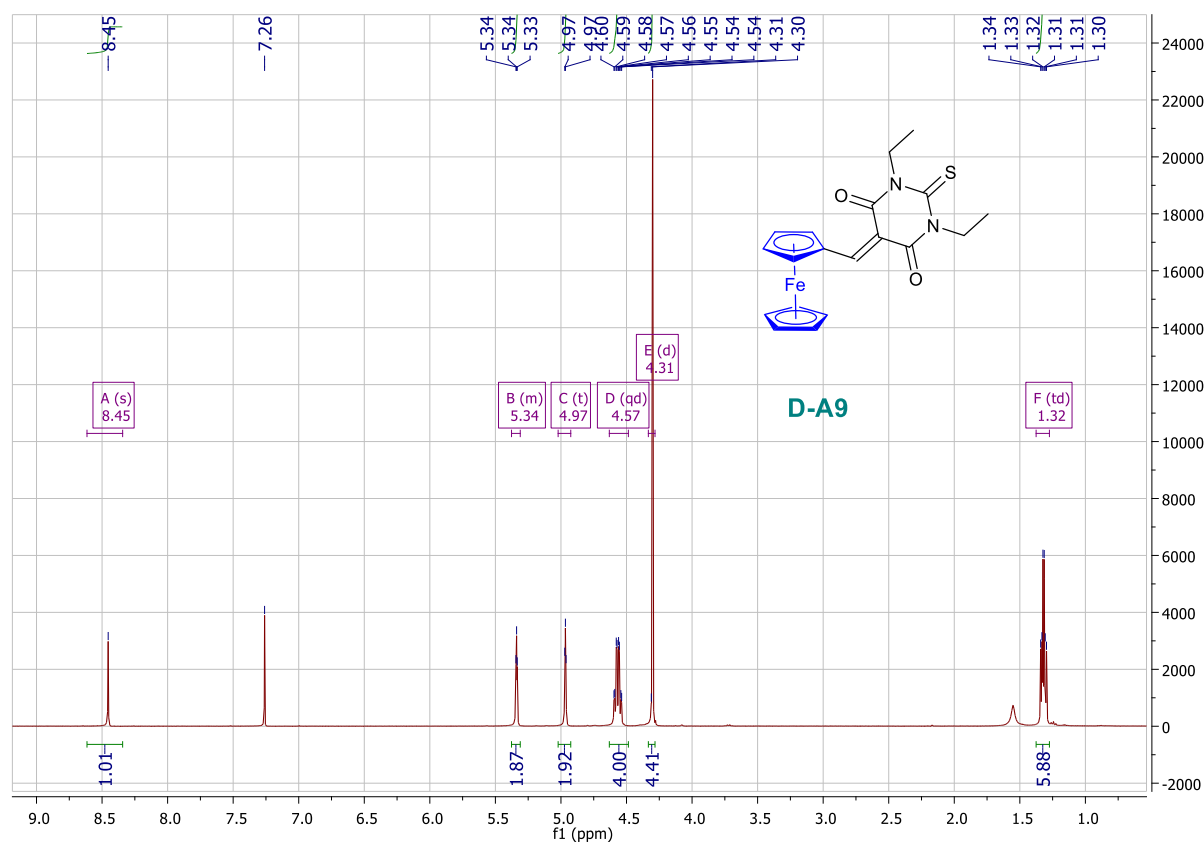
<sup>1</sup>H NMR spectrum of D-A8



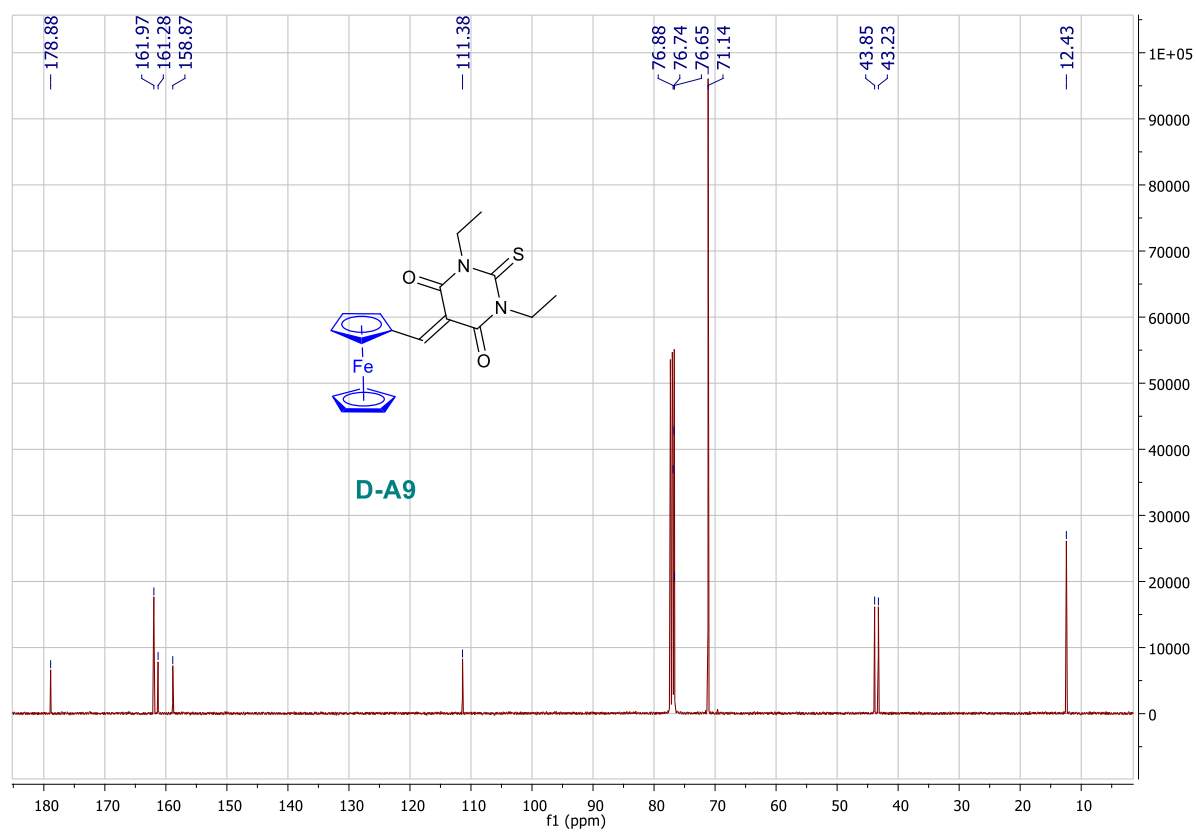
<sup>13</sup>C NMR spectrum of D-A8



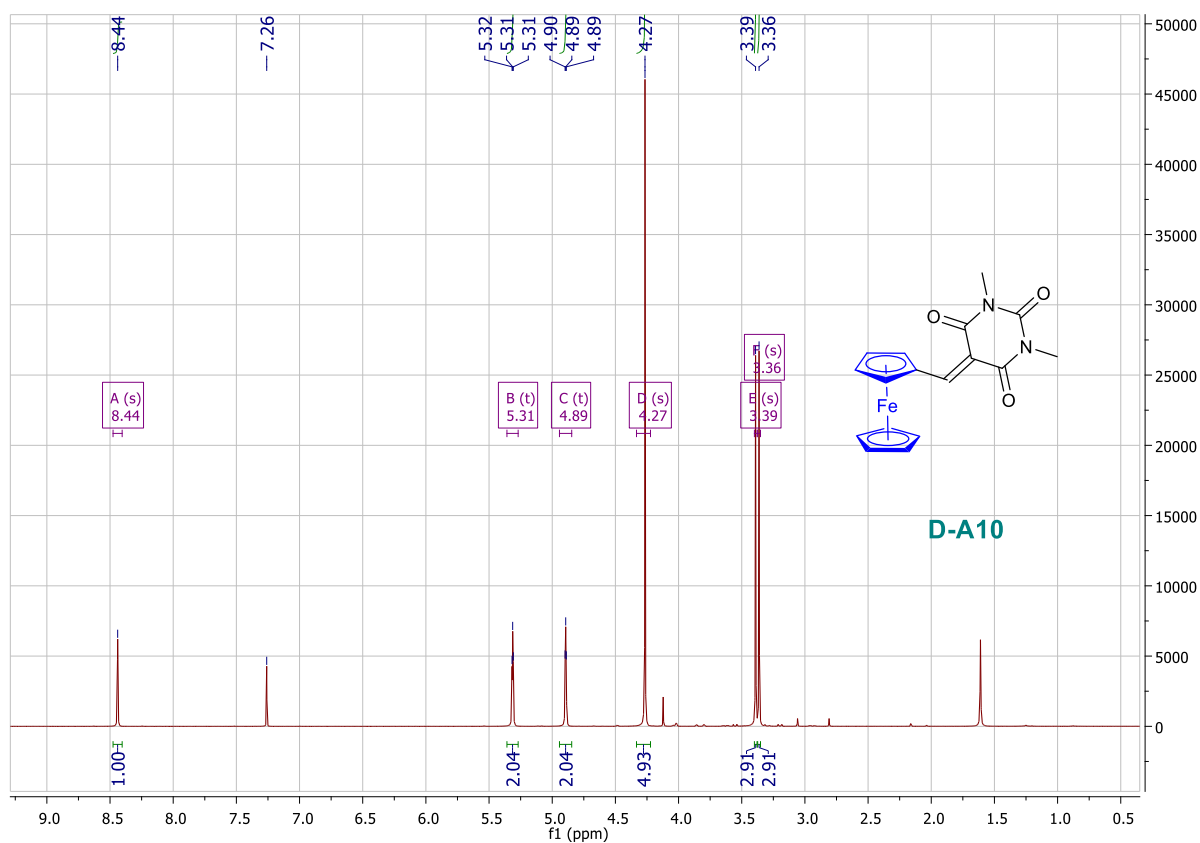
### <sup>1</sup>H NMR spectrum of D-A9



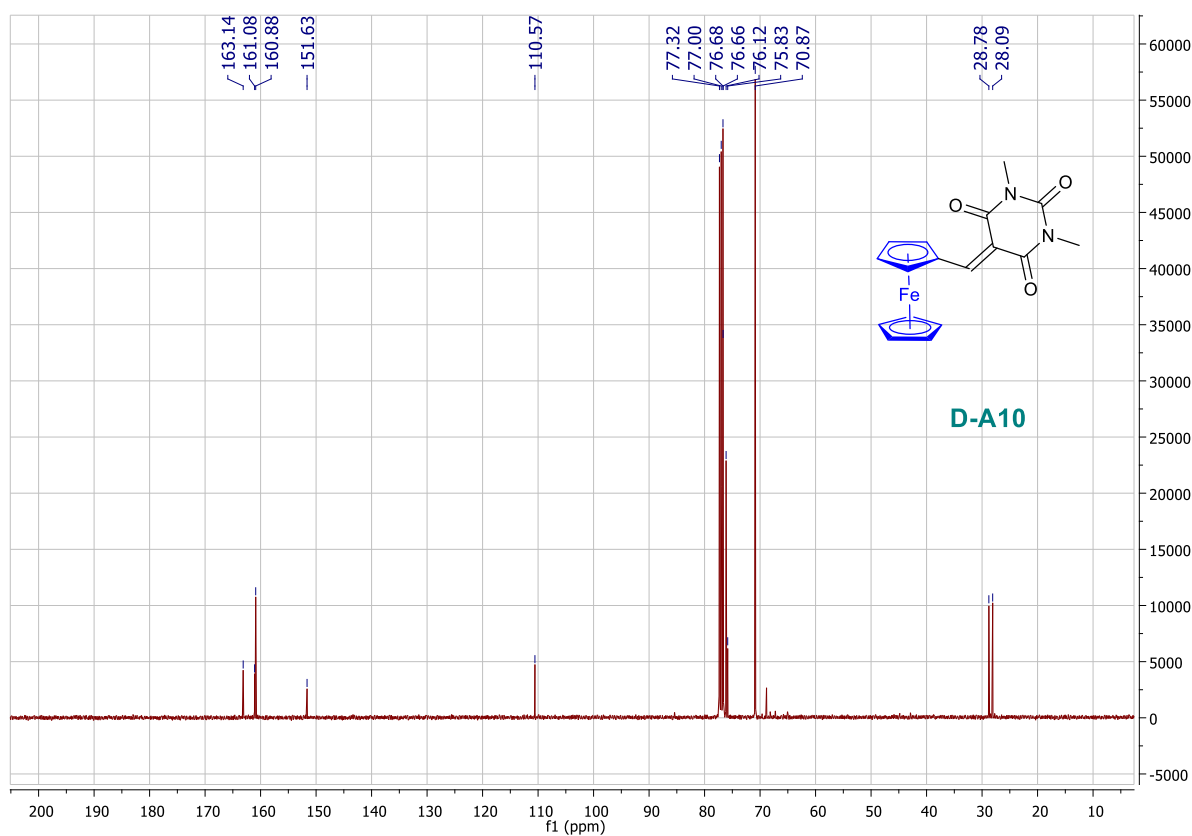
### <sup>13</sup>C NMR spectrum of D-A9



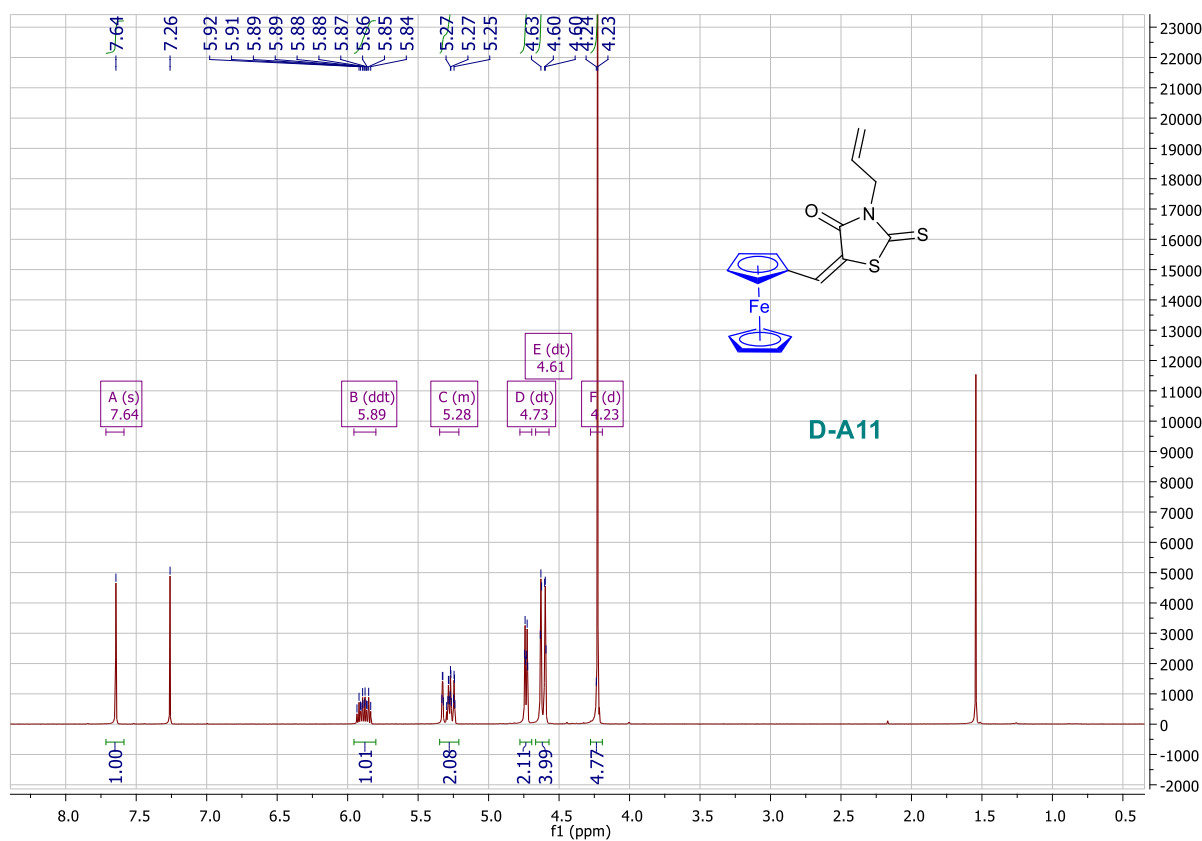
### $^1\text{H}$ NMR spectrum of D-A10



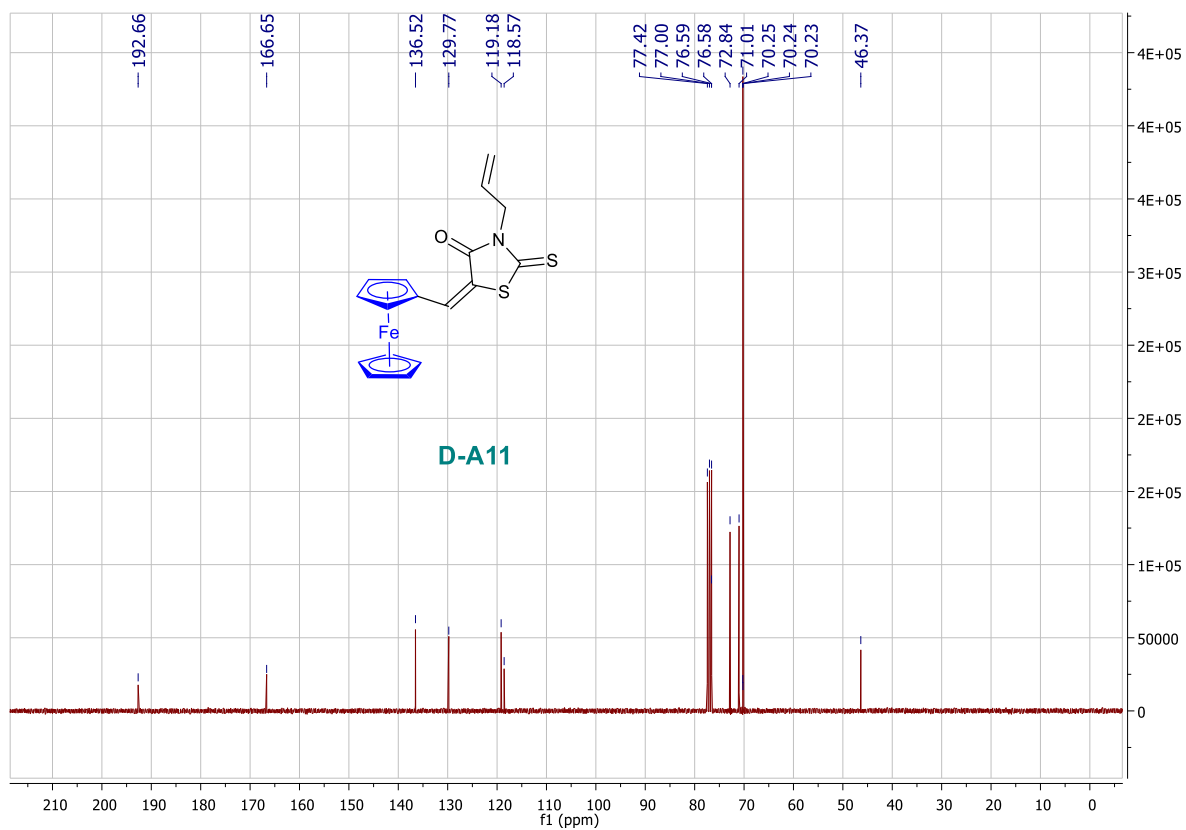
### $^{13}\text{C}$ NMR spectrum of D-A10



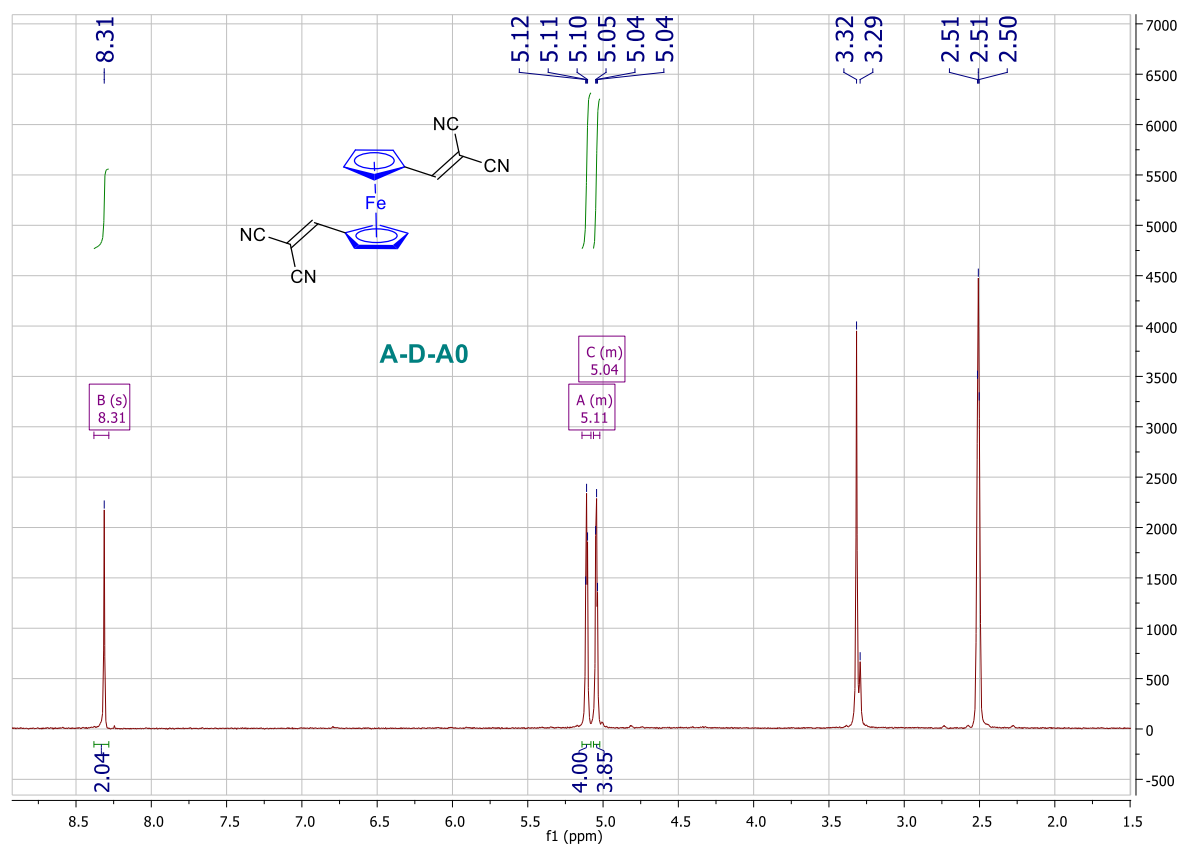
### <sup>1</sup>H NMR spectrum of D-A11



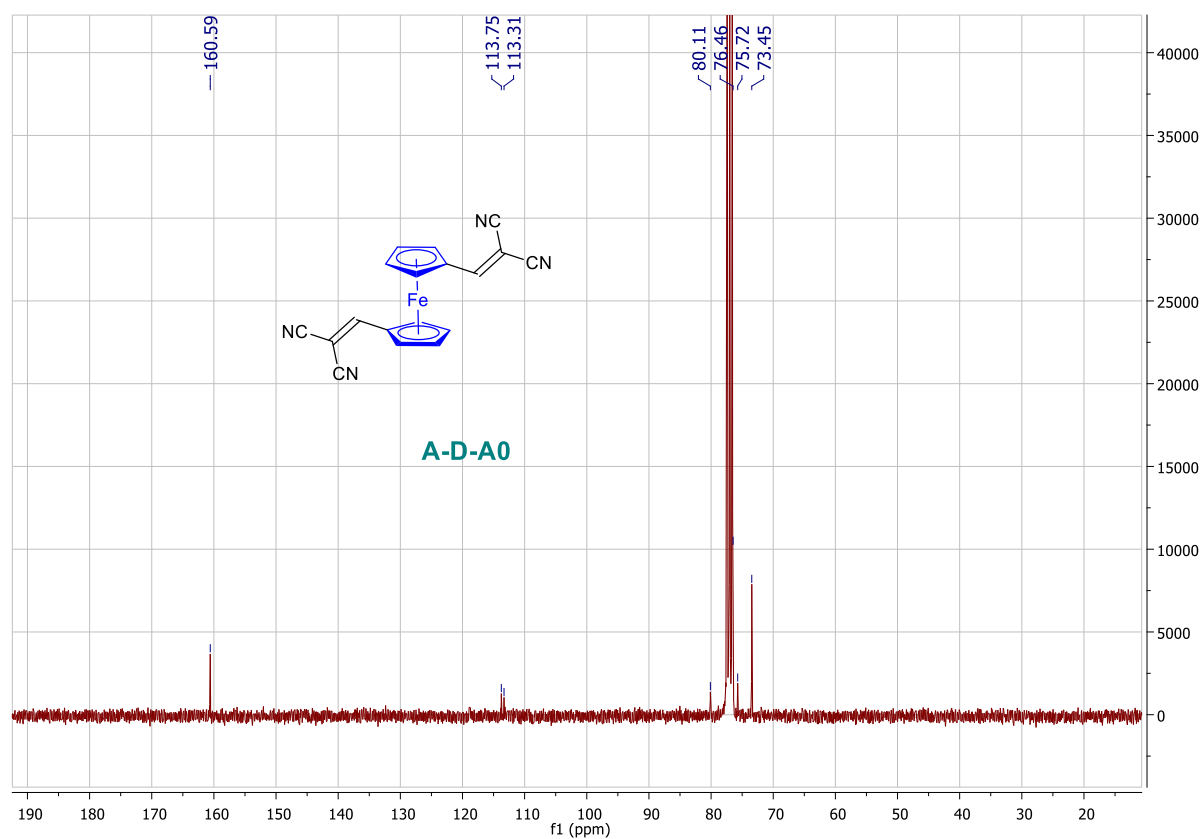
### <sup>13</sup>C NMR spectrum of D-A11



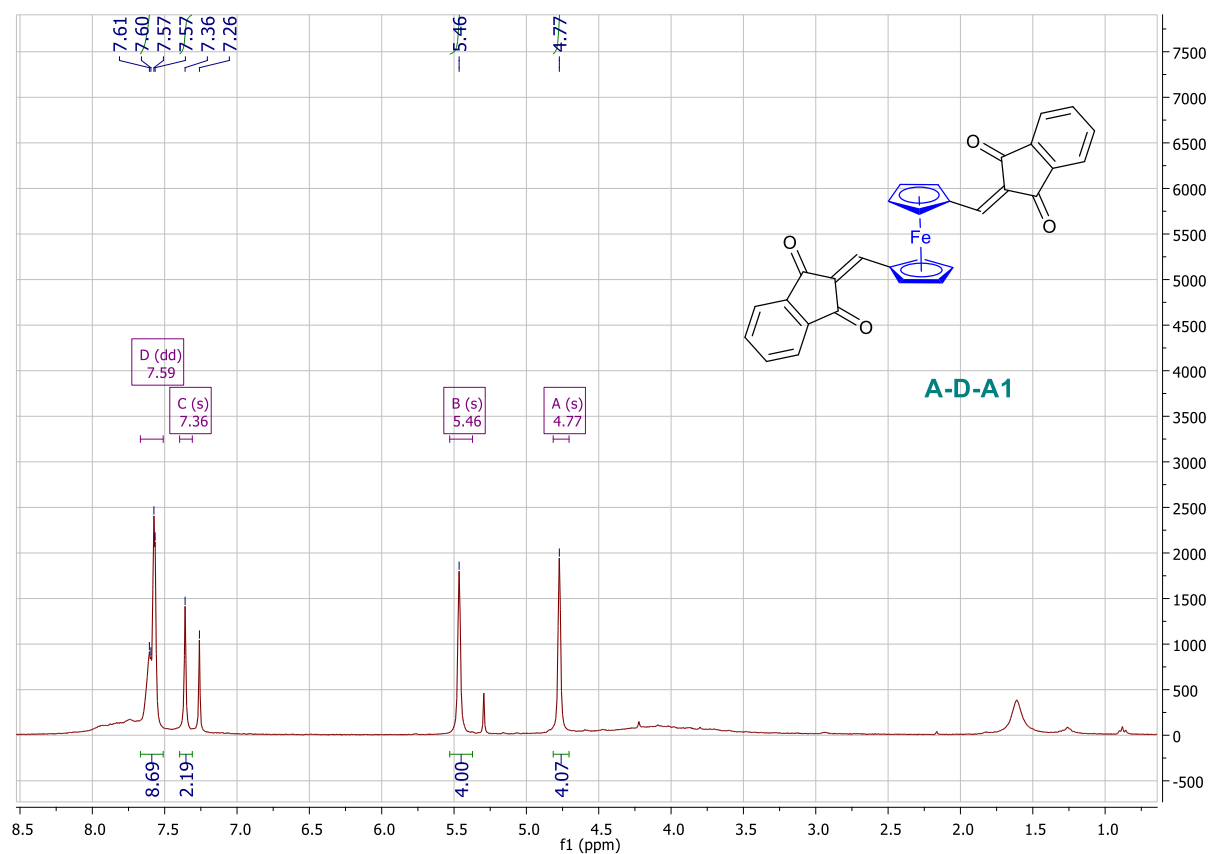
<sup>1</sup>H NMR spectrum of A-D-A0



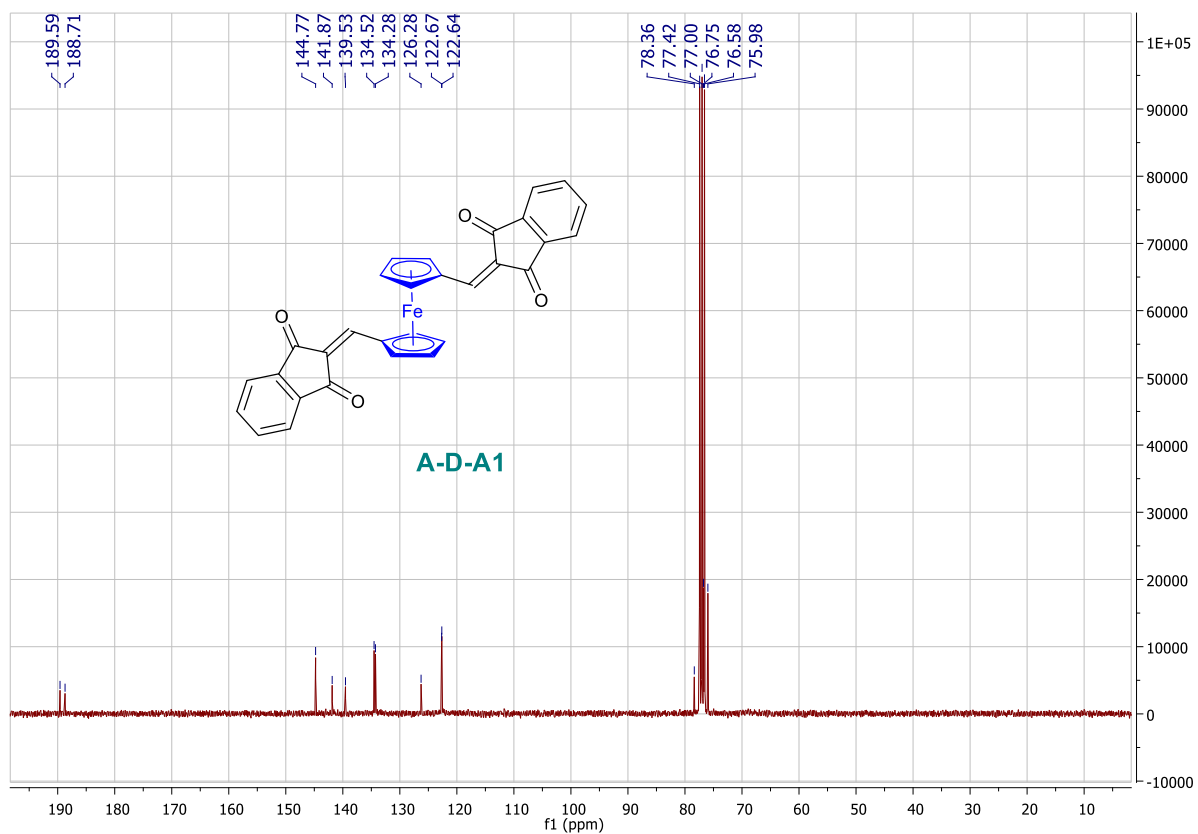
<sup>13</sup>C NMR spectrum of A-D-A0



### <sup>1</sup>H NMR spectrum of A-D-A1



### <sup>13</sup>C NMR spectrum of A-D-A1



$^1\text{H}$  NMR spectrum of **A-D-A2**

**NOT SUFFICIENTLY SOLUBLE**

$^{13}\text{C}$  NMR spectrum of **A-D-A2**

**NOT SUFFICIENTLY SOLUBLE**

$^1\text{H}$  NMR spectrum of **A-D-A3**

**NOT SUFFICIENTLY SOLUBLE**

$^{13}\text{C}$  NMR spectrum of **A-D-A3**

**NOT SUFFICIENTLY SOLUBLE**

$^1\text{H}$  NMR spectrum of **A-D-A4**

**NOT SUFFICIENTLY SOLUBLE**

$^{13}\text{C}$  NMR spectrum of **A-D-A4**

**NOT SUFFICIENTLY SOLUBLE**

$^1\text{H}$  NMR spectrum of A-D-A5

**NOT SUFFICIENTLY SOLUBLE**

$^{13}\text{C}$  NMR spectrum of A-D-A5

**NOT SUFFICIENTLY SOLUBLE**

$^1\text{H}$  NMR spectrum of A-D-A6

**NOT SUFFICIENTLY SOLUBLE**

$^{13}\text{C}$  NMR spectrum of A-D-A6

**NOT SUFFICIENTLY SOLUBLE**

$^1\text{H}$  NMR spectrum of A-D-A7

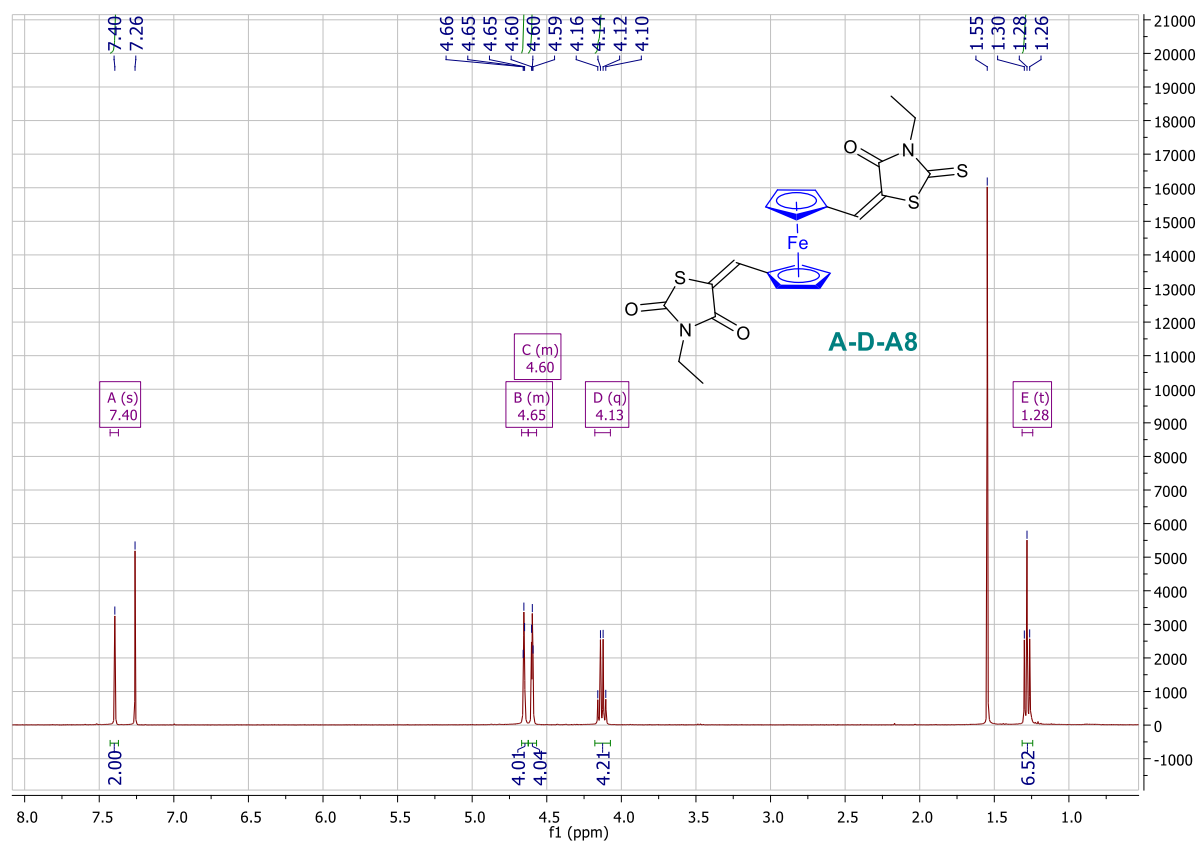
**NOT SUFFICIENTLY SOLUBLE**

$^{13}\text{C}$  NMR spectrum of A-D-A7

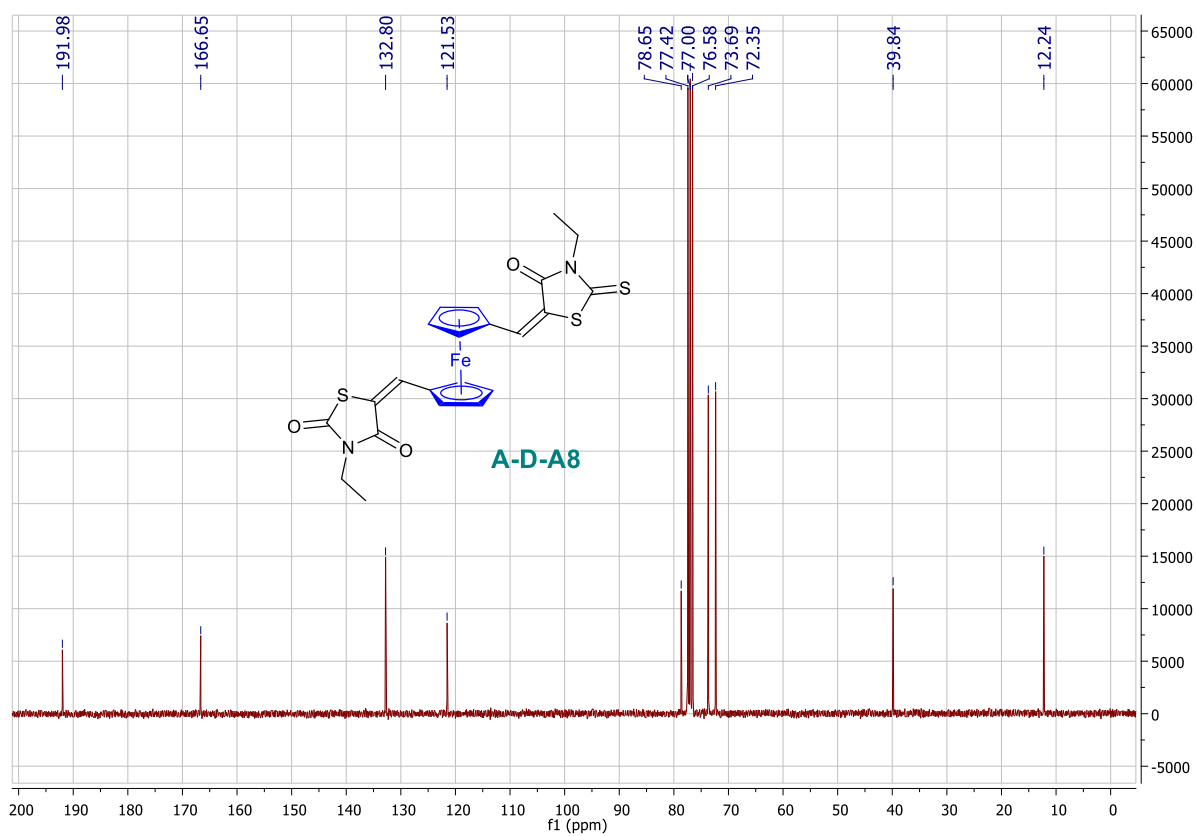
**NOT SUFFICIENTLY SOLUBLE**



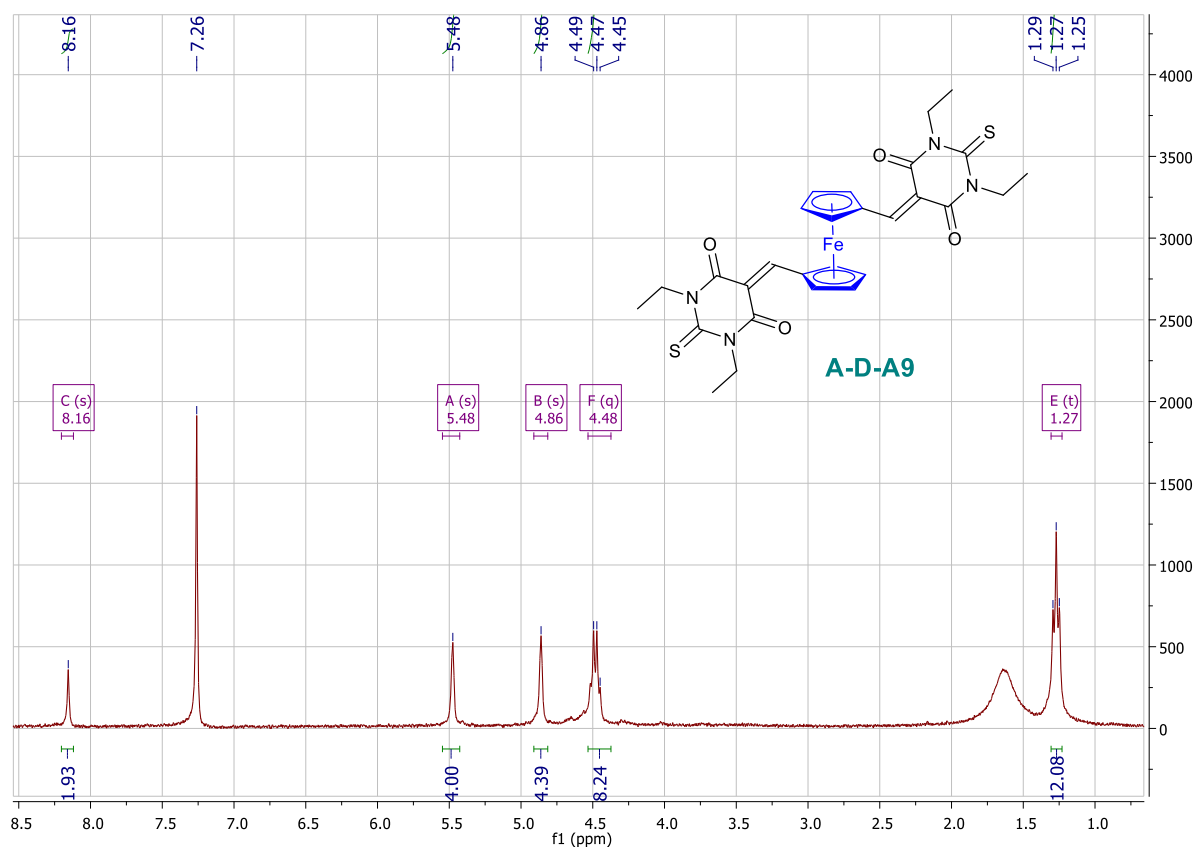
### <sup>1</sup>H NMR spectrum of A-D-A8



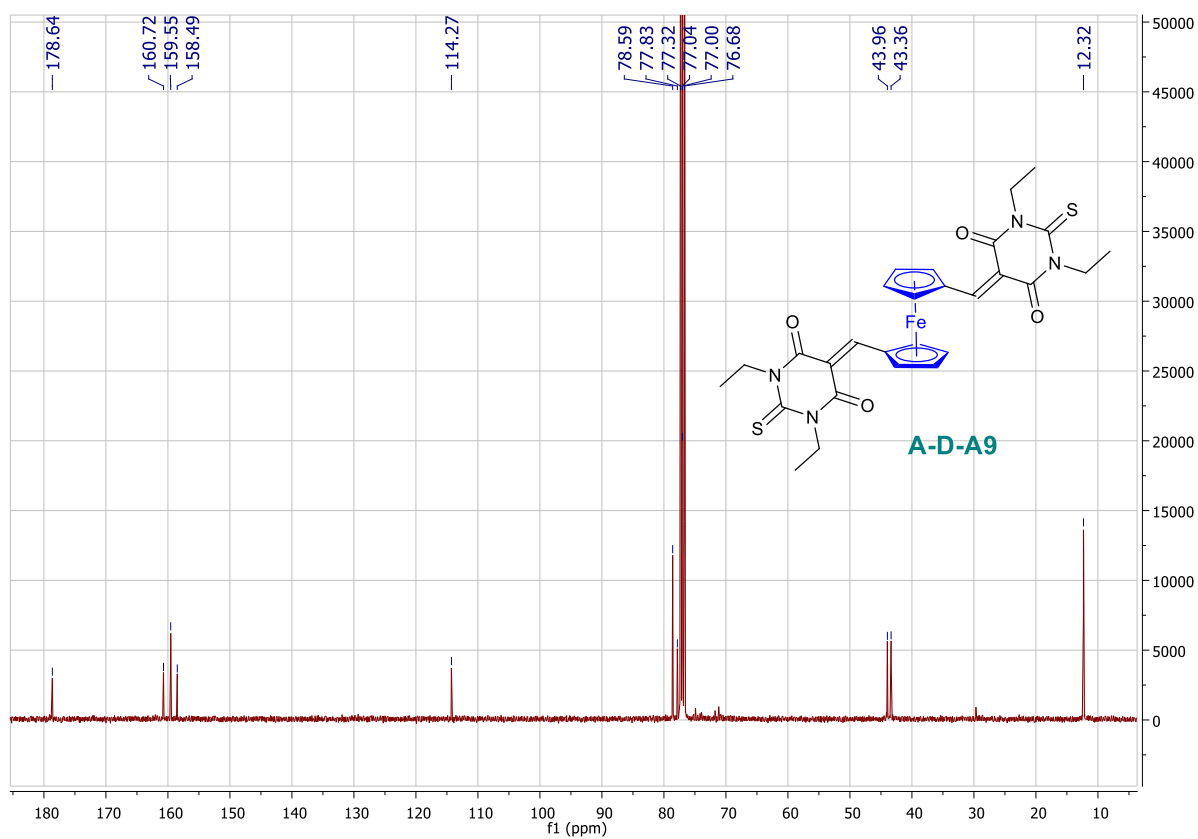
### <sup>13</sup>C NMR spectrum of A-D-A8



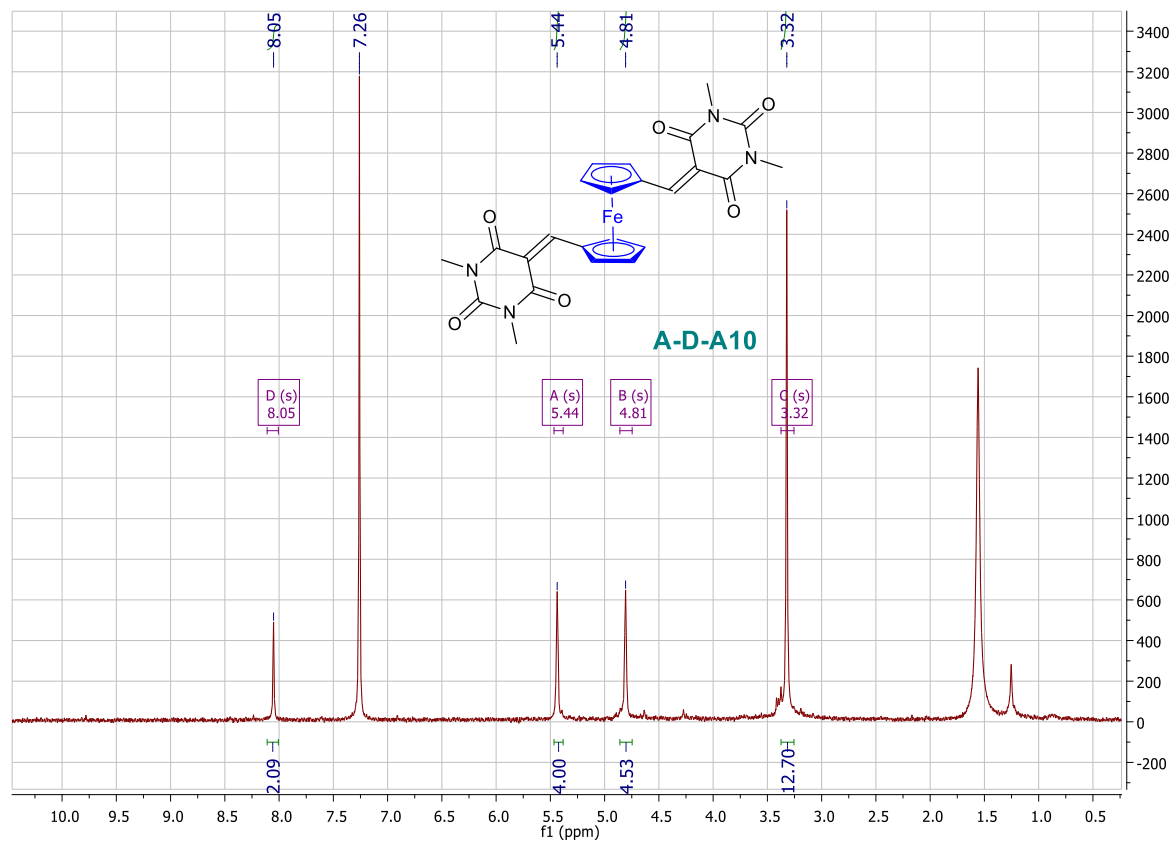
### <sup>1</sup>H NMR spectrum of A-D-A9



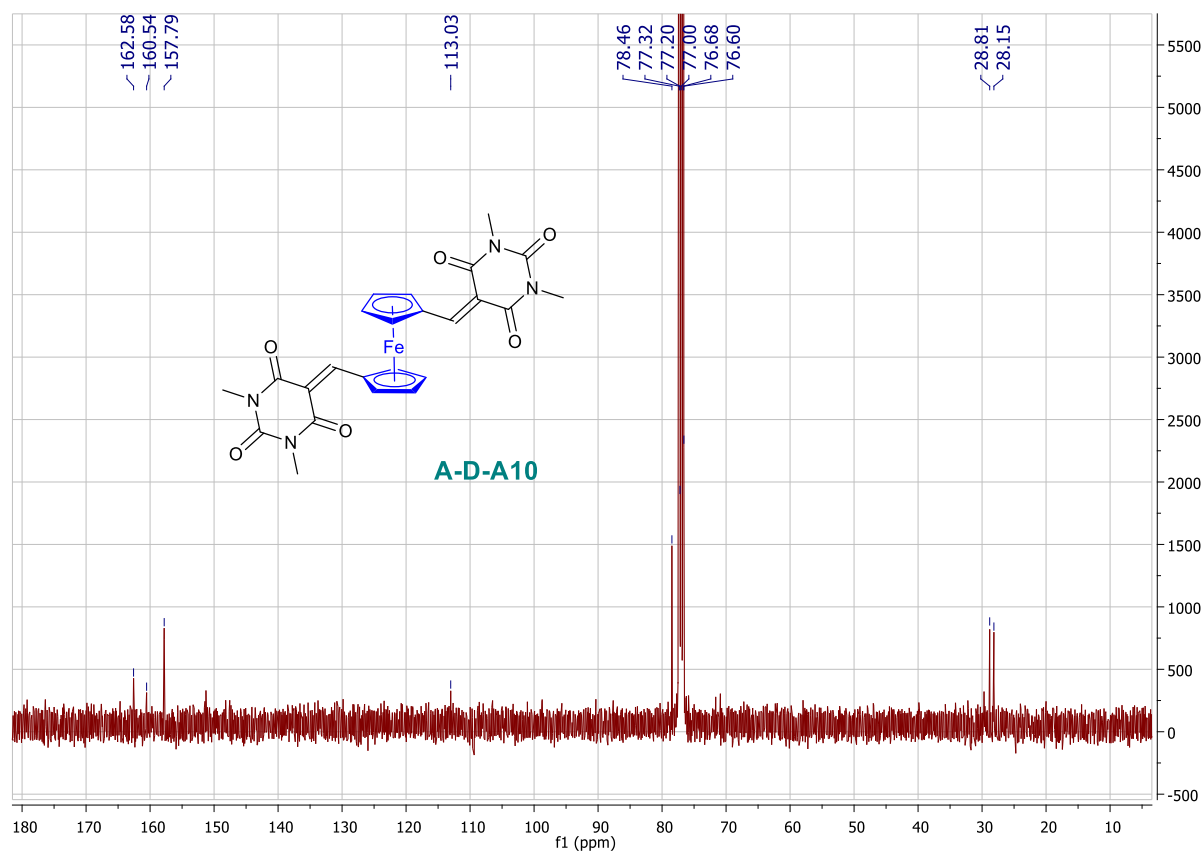
### <sup>13</sup>C NMR spectrum of A-D-A9



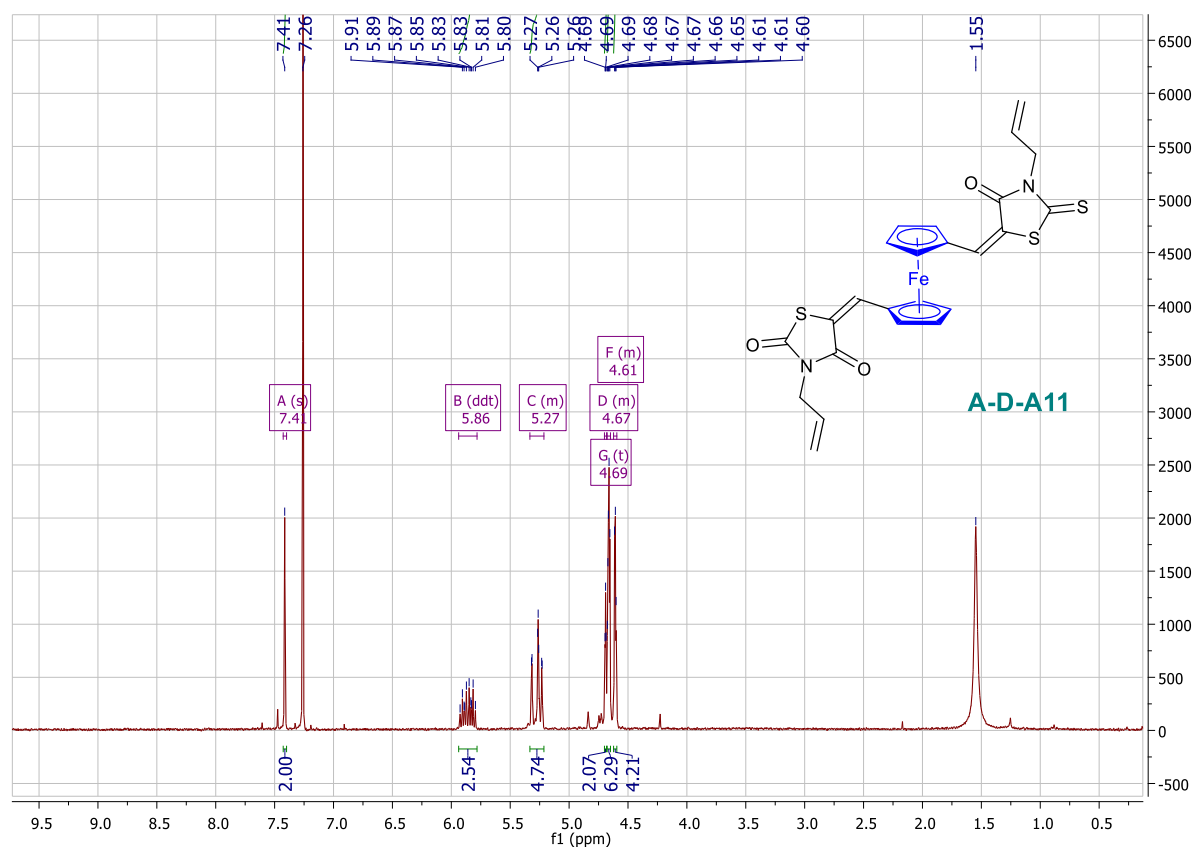
<sup>1</sup>H NMR spectrum of A-D-A10



<sup>13</sup>C NMR spectrum of A-D-A10



### <sup>1</sup>H NMR spectrum of A-D-A11



### <sup>13</sup>C NMR spectrum of A-D-A11

