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Silicon(IV) Corroles

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Supporting Information

Silicon(IV) Corroles

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Author Contributions

M.B. NMR Studies: Lead.

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Table S1. Synthetic protocols of PluS NPs with non covalently embedded 1, 3 and 5

Sample	Pluronic F127 (mg)	TEOS (μmol)	Si-corrole	Nominal doping ratio (vs. mol TEOS)	Si-corrole (μmol)	Si-corrole (mg)
NP1L	100	800	**1**-Low%	0.1%	0.73	0.45
NP1H	100	800	**1**-High%	0.25%	2.00	1.25
NP3L	100	800	**3**-Low%	0.1%	0.48	0.4
NP3H	100	800	**3**-High%	0.25%	2.98	2.5
NP5L	100	800	**5**-Low%	0.1%	0.39	0.5
NP5H	100	800	**5**-High%	0.25%	1.8	2.3

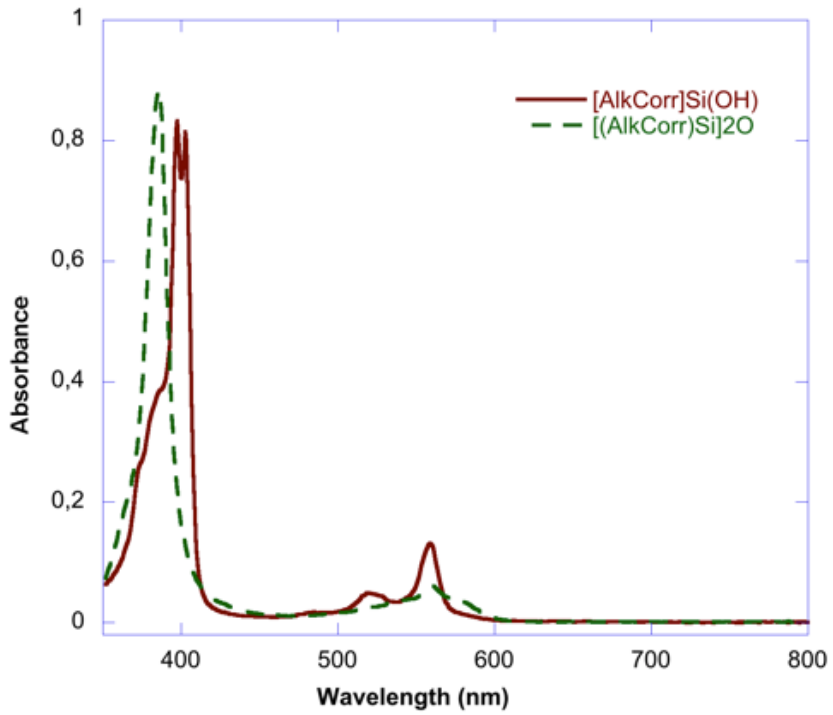

Figure S1. UV-vis spectra of monomer **4** (red full line) and dimer **5** (green dashed line).

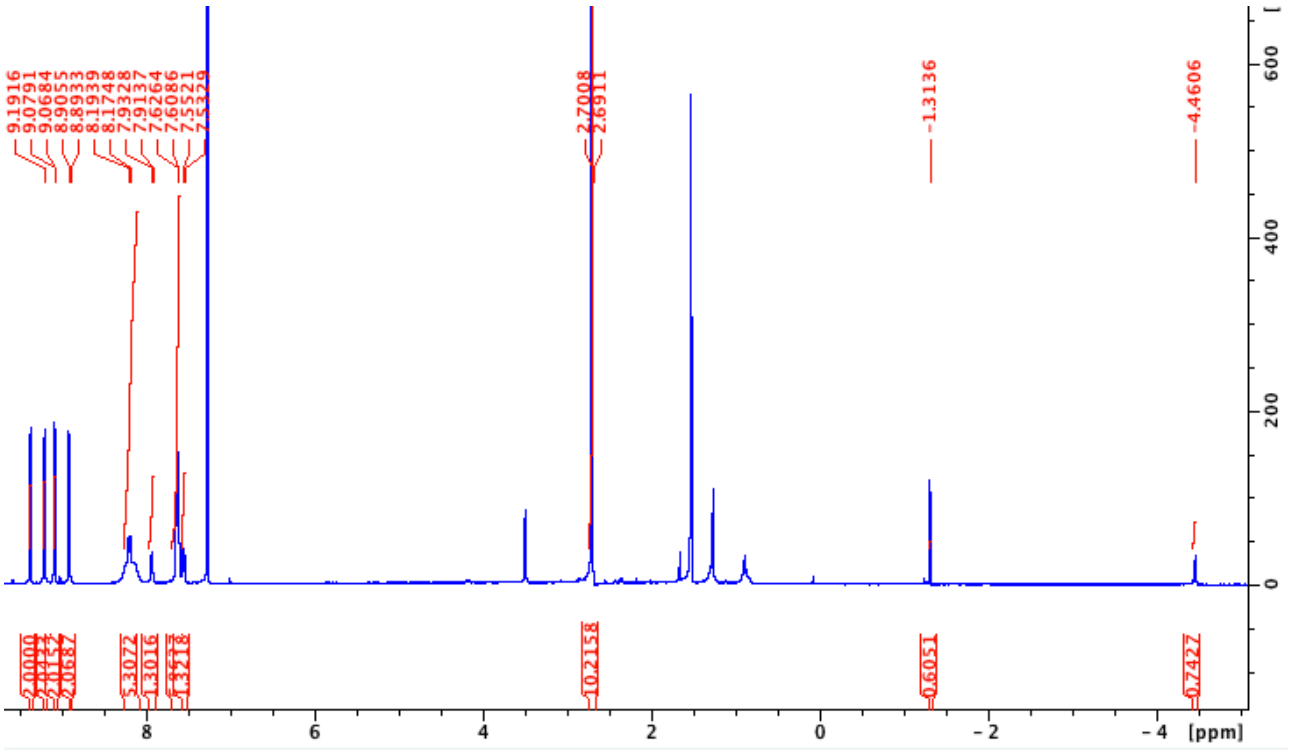

Figure S2. ^{1}H NMR spectrum of **1** in $CDCl_3$.

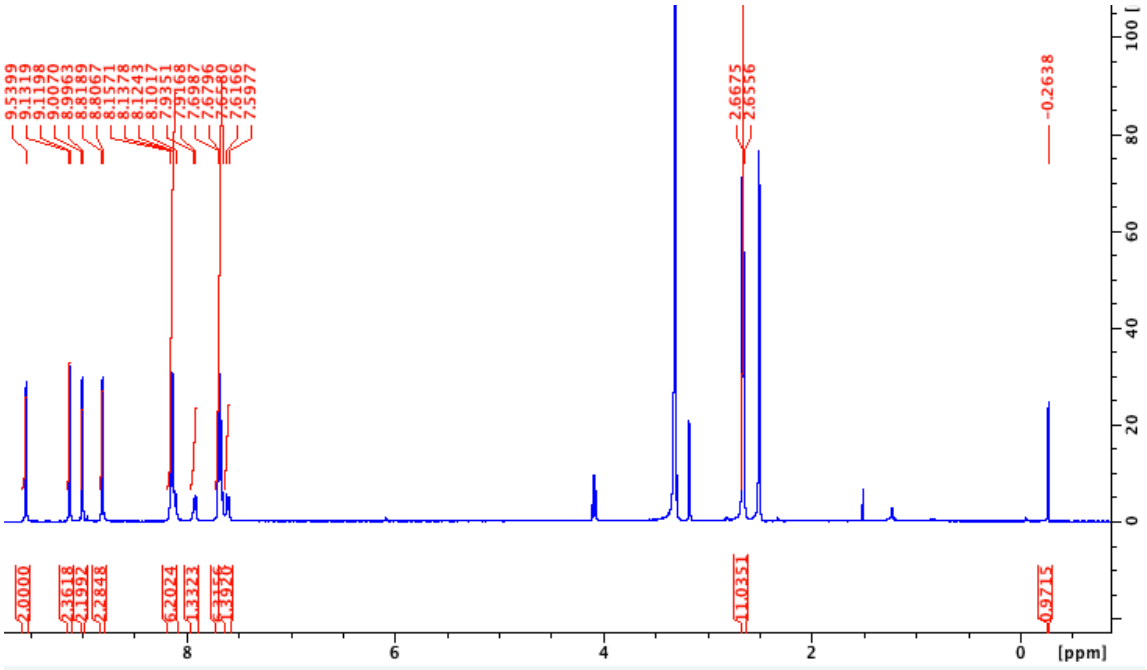

Figure S3. ^{1}H NMR spectrum of **1** in DMSO.

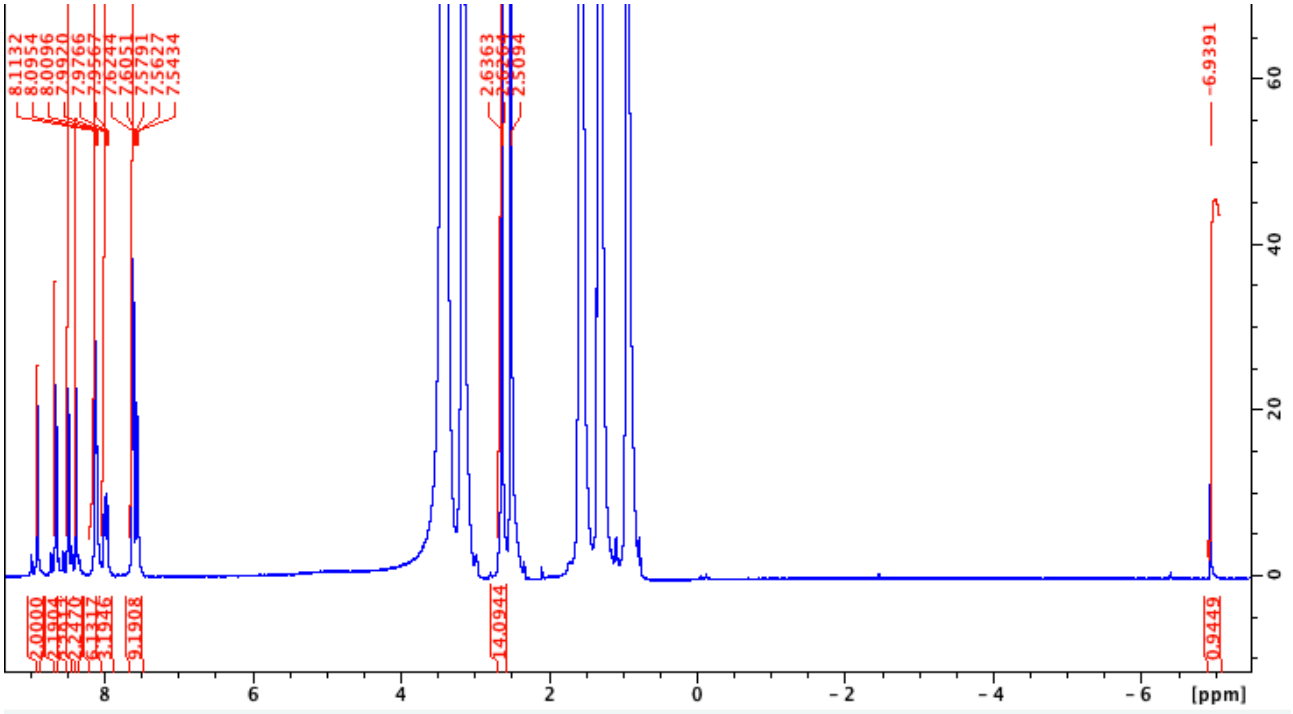

Figure S4. ^{1}H NMR spectrum of **1** in DMSO + Fluoride anion.

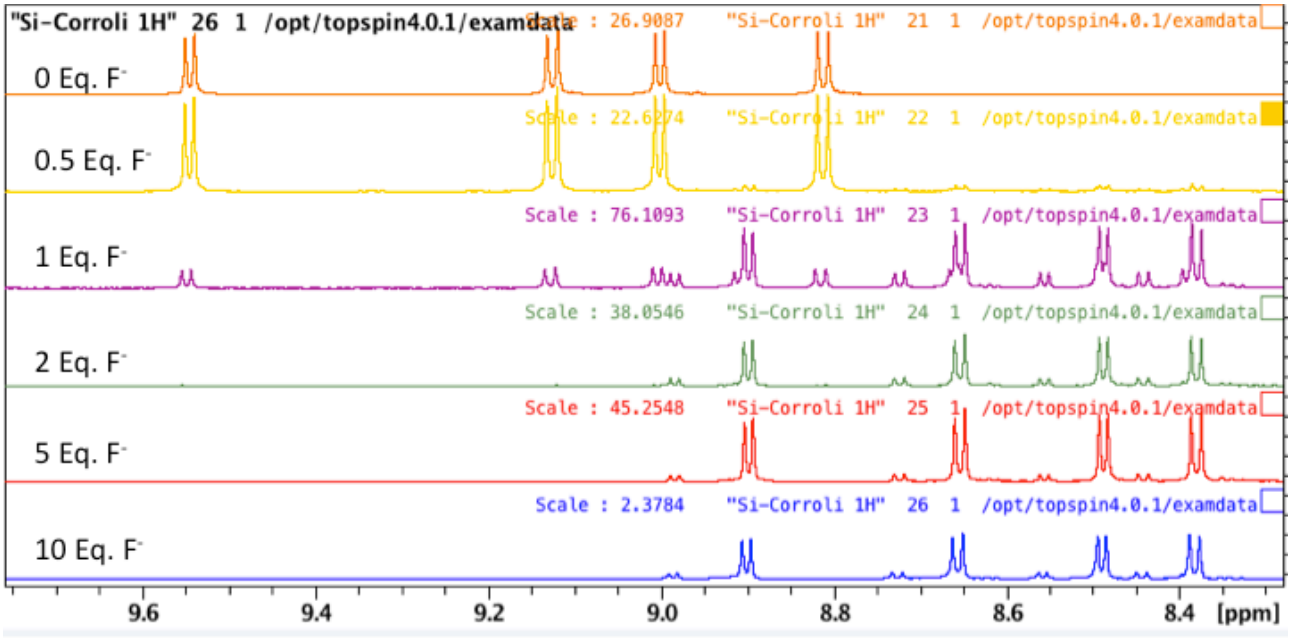

Figure S5. ^{1}H NMR Titration of **1** in DMSO with Fluoride ion: β-pyrrolic region.

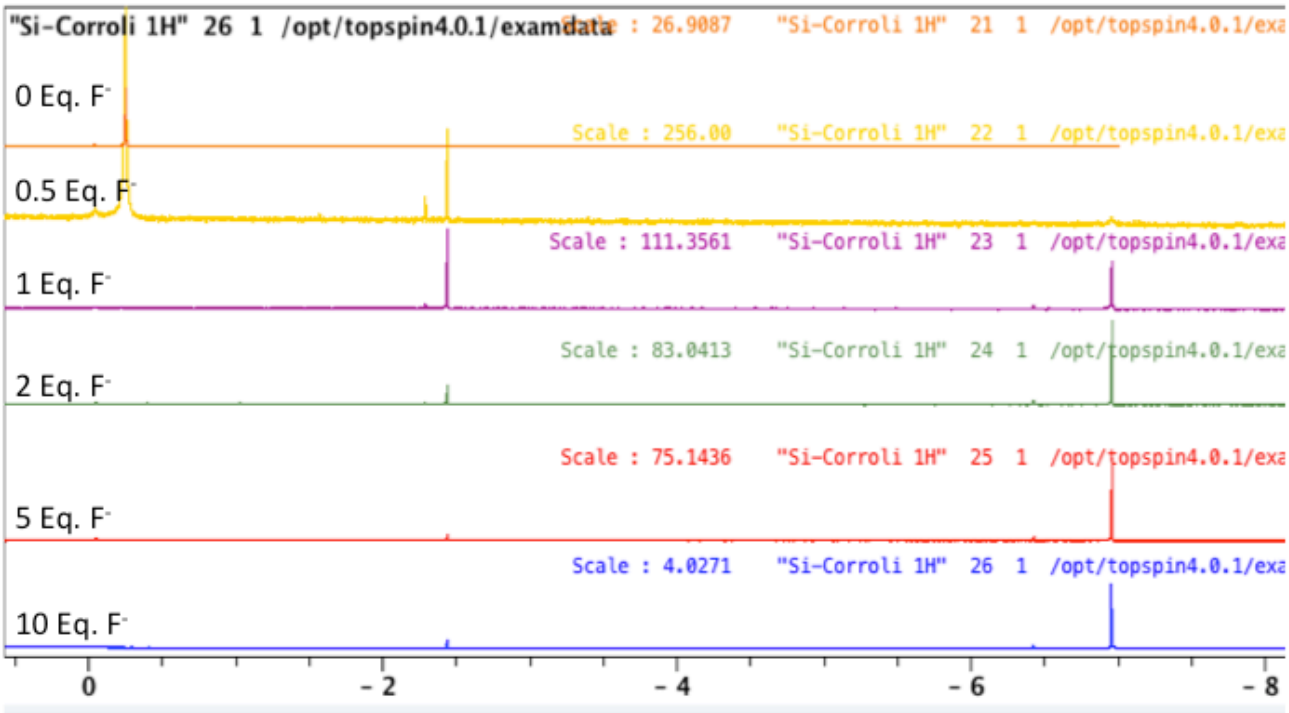

Figure S6. ^{1}H NMR Titration of **1** in DMSO with Fluoride ion: axial –OH region

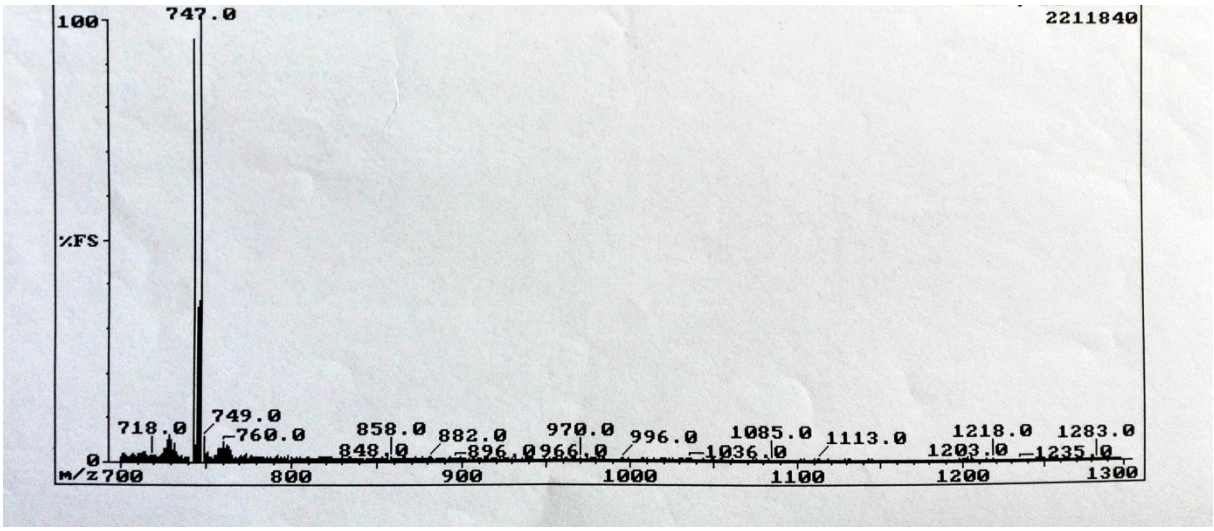

Figure S7. FAB mass spectrum of **1**.

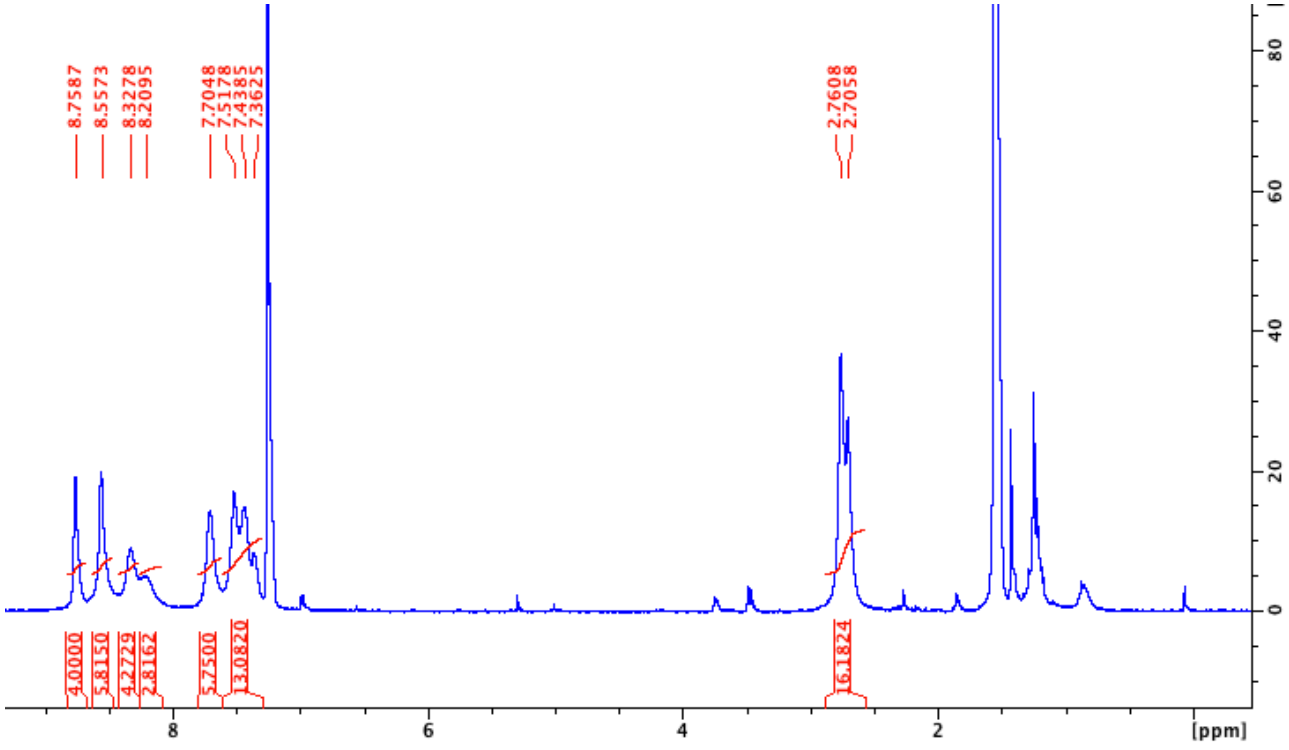

Figure S8. ^{1}H NMR spectrum of **2** in $CDCl_3$.

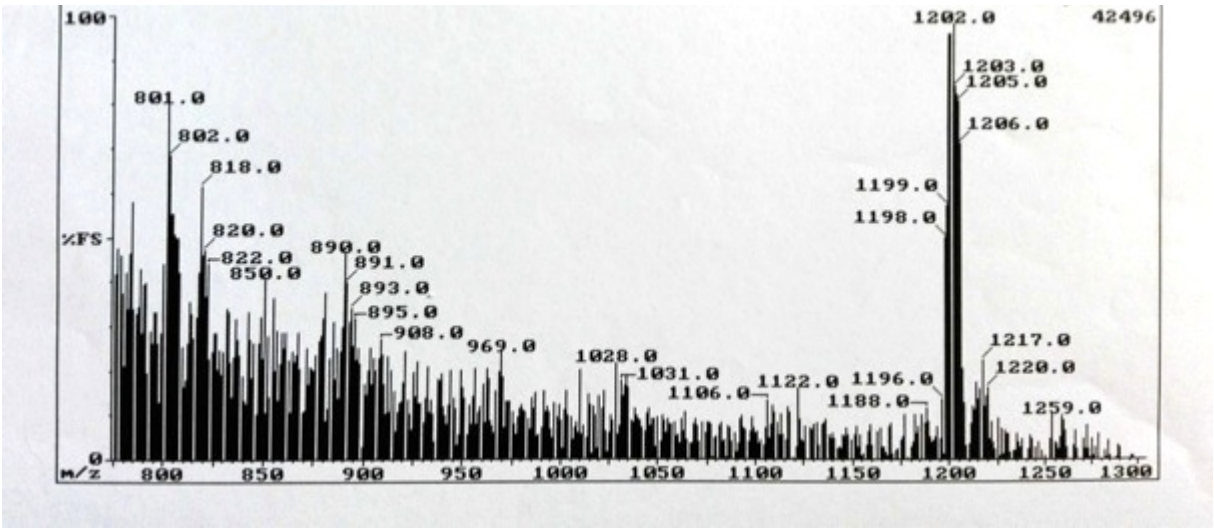

Figure S9. FAB mass spectrum of **2**.

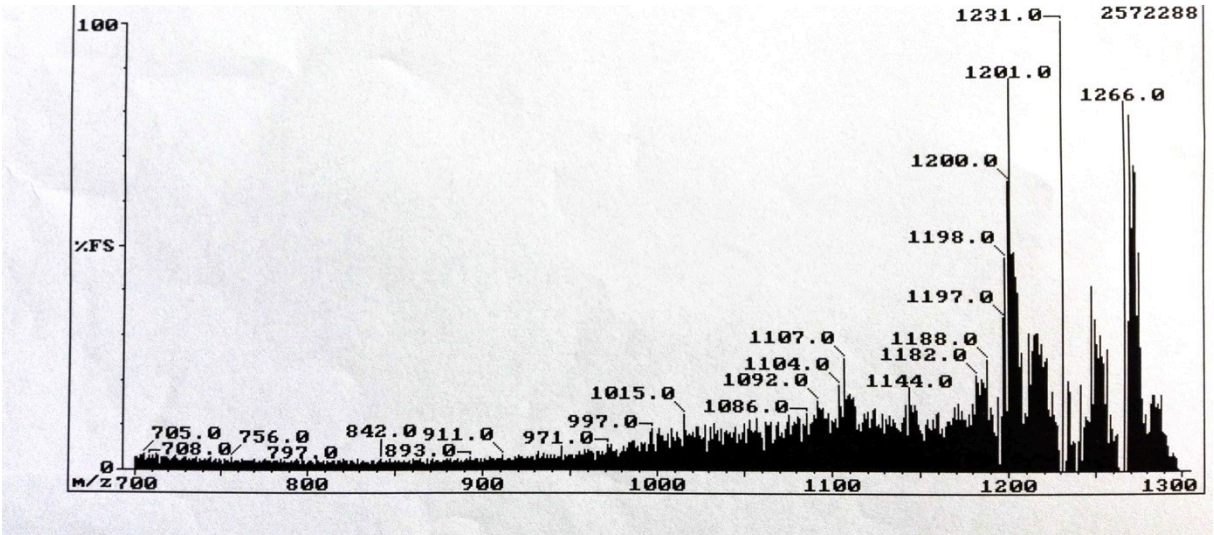

Figure S10. FAB mass spectrum of the products mixture after reaction of **2** with HCl.

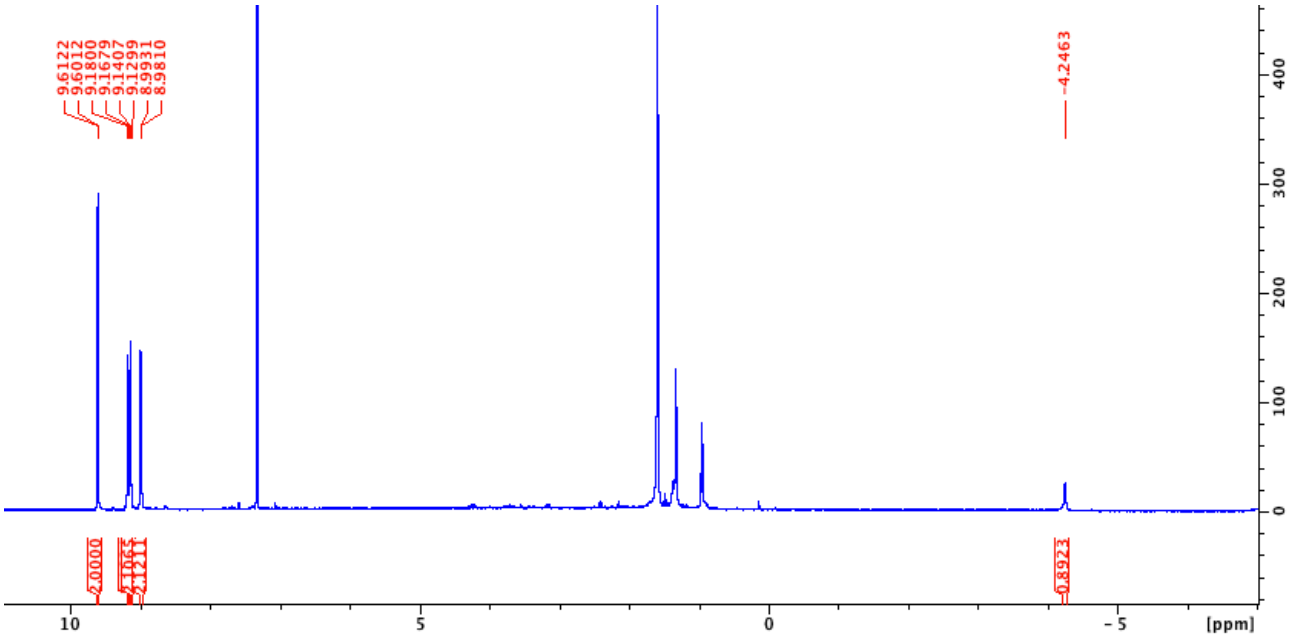

Figure S11. ^{1}H NMR spectrum of **3** in $CDCl_3$

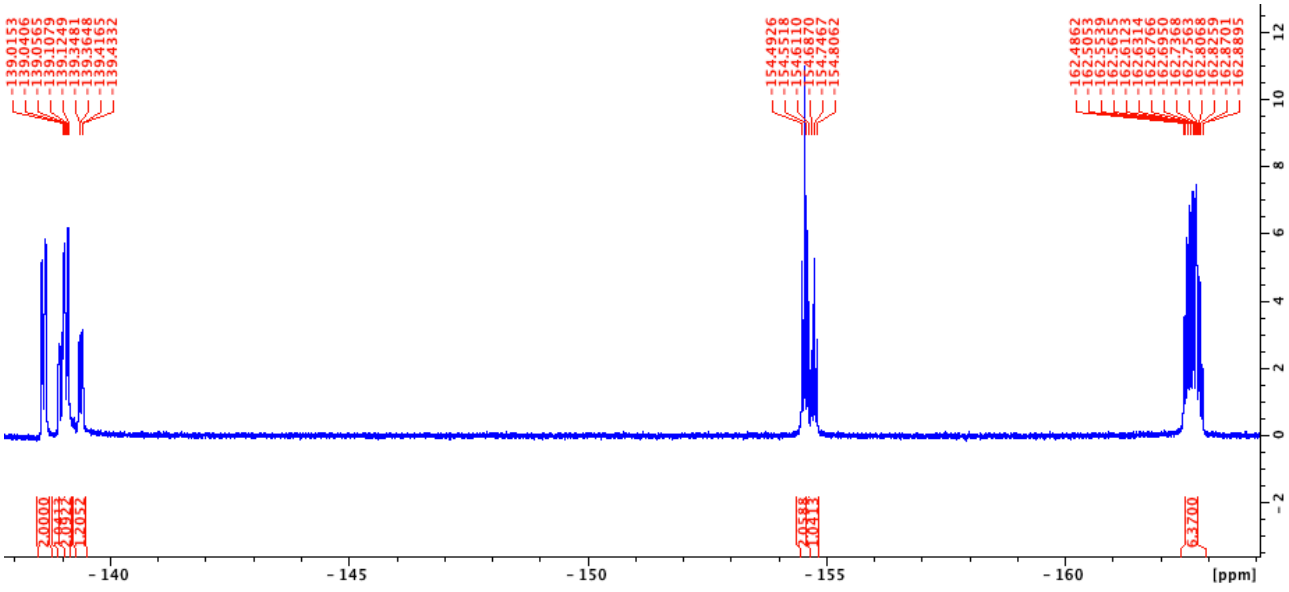

Figure S12. ^{19}F NMR spectrum of **3** in DMSO

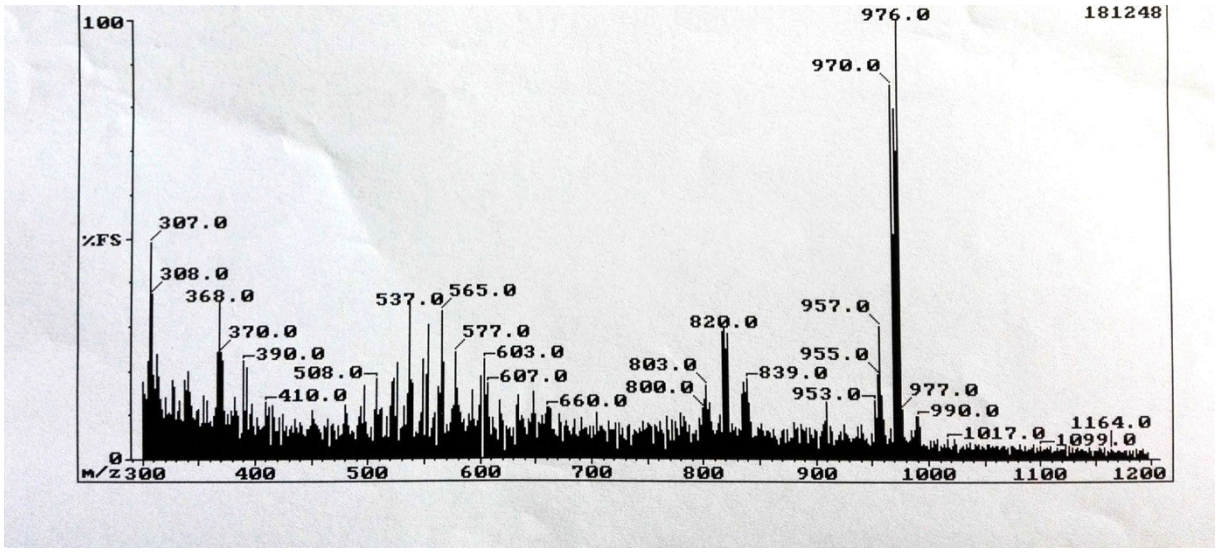

Figure S13. FAB mass spectrum of **3**.

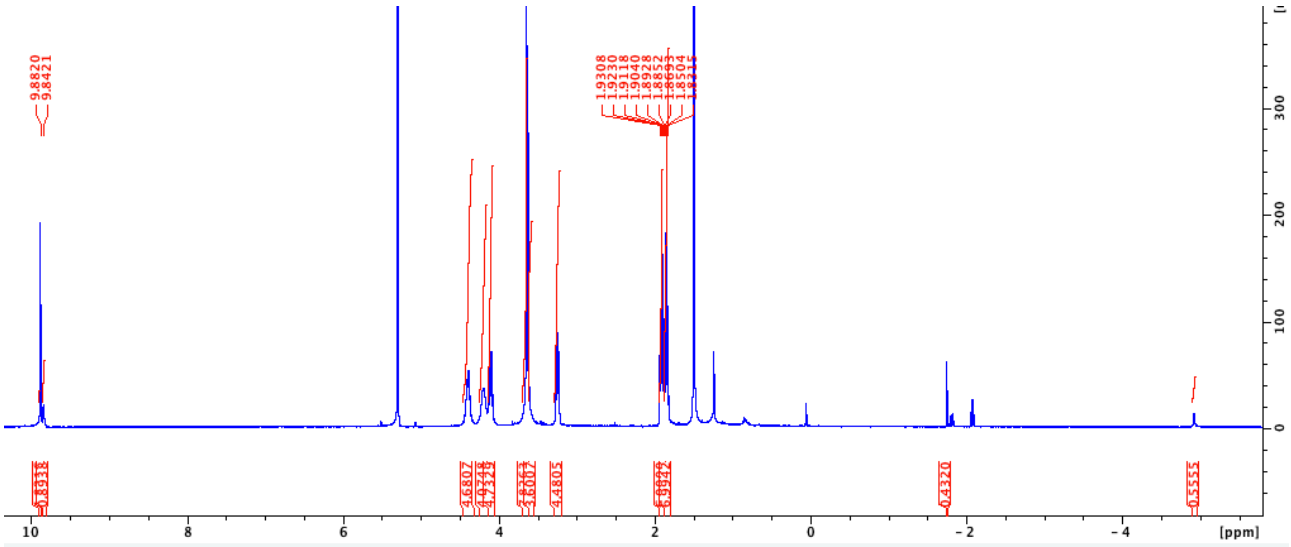

Figure S14. ^{1}H NMR spectrum of **4** in $CDCl_3$.

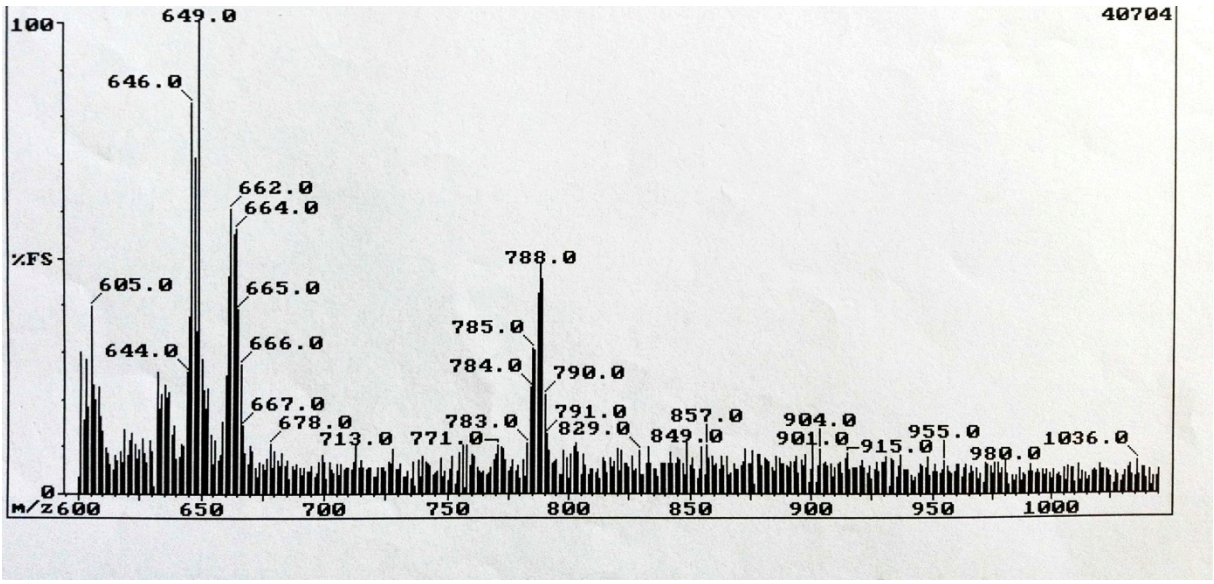

Figure S15. FAB mass spectrum of **4**.

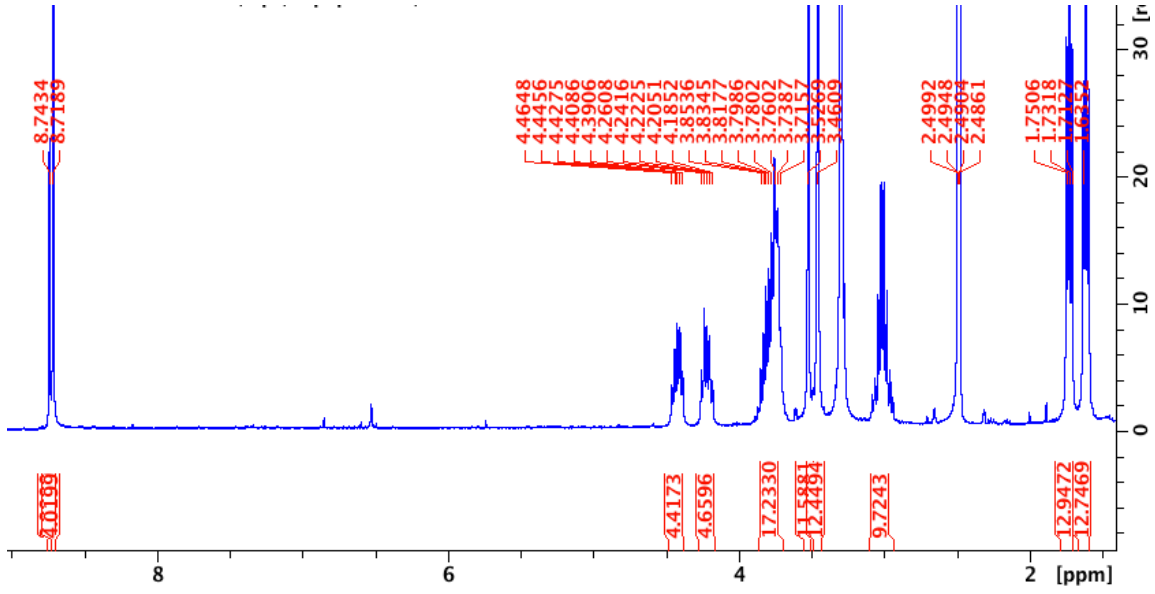

Figure S16. ^{1}H NMR spectrum of **5** in DMSO

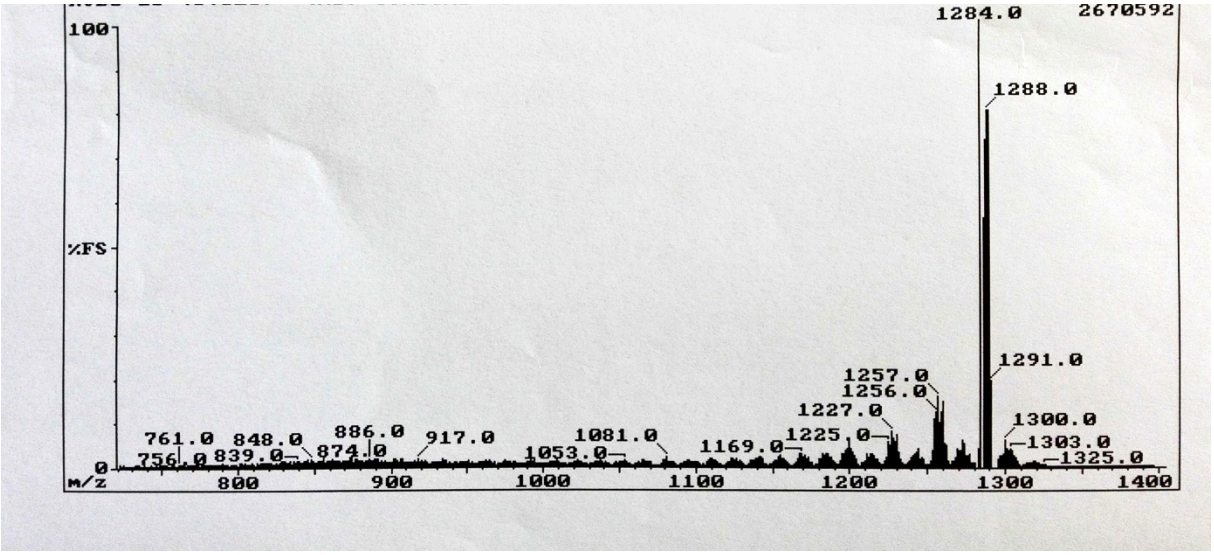

Figure S17. FAB mass spectrum of **5**.

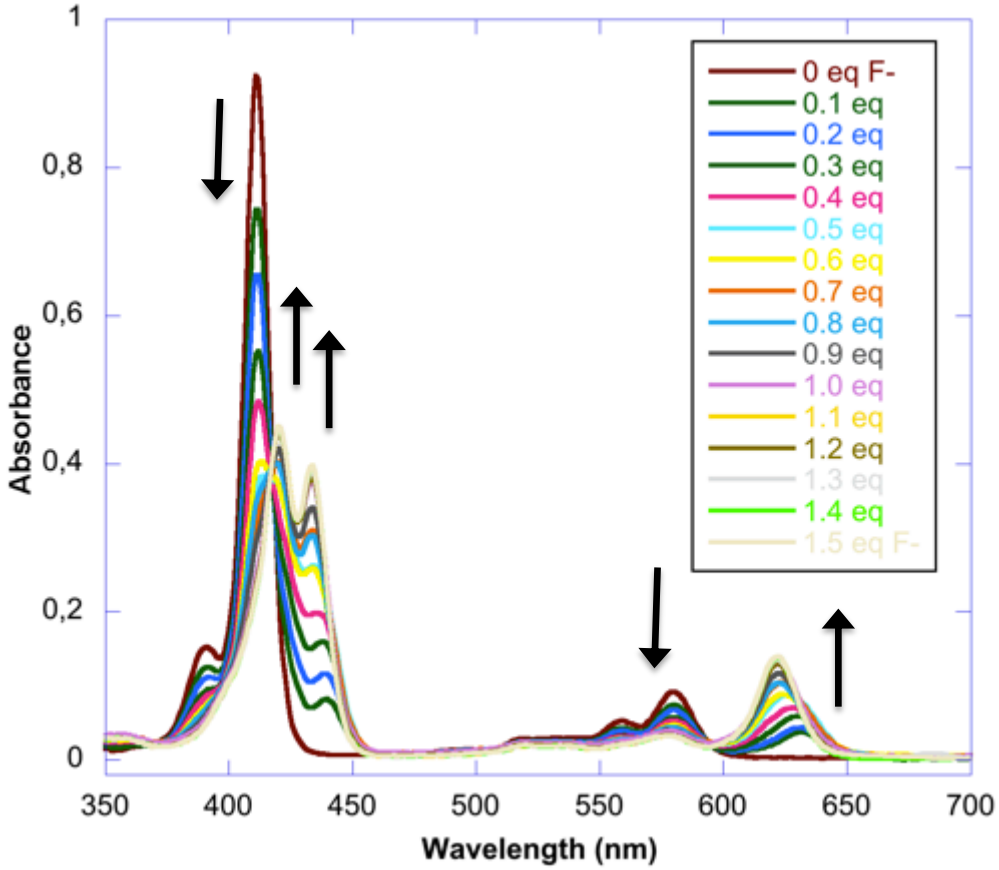

Figure S18. UV-vis spectral variation of **1** upon F^- titration

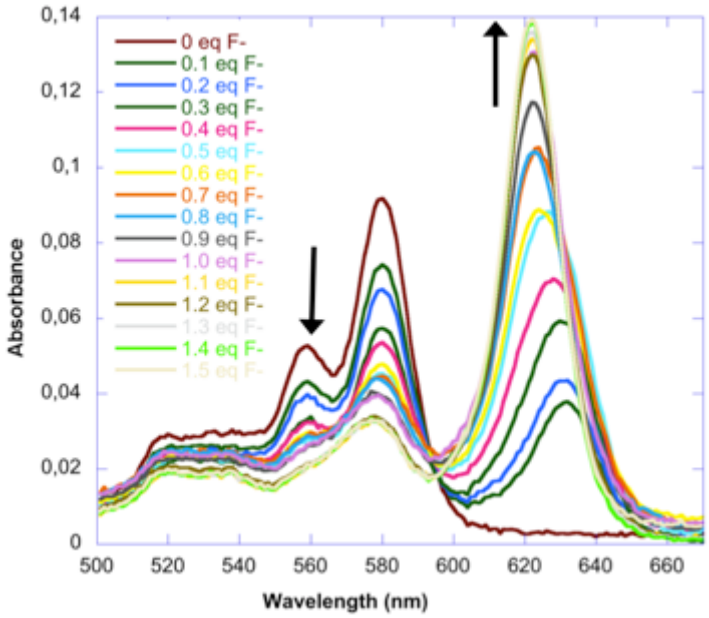

Figure S19. UV-vis spectral variation of **1** in the Q region upon F^- titration

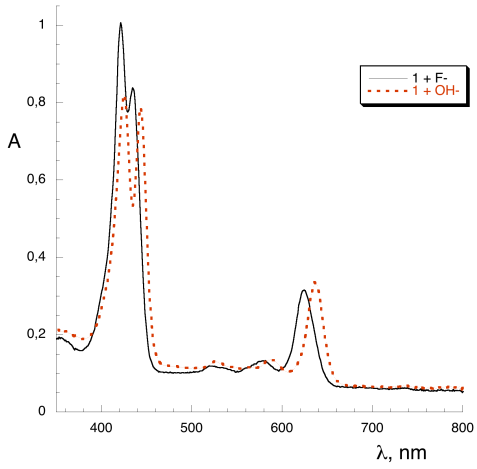

Figure S20. Comparison of the UV-vis spectral variations of **1** upon addition of F^- (black line) and OH^- (red dotted line)

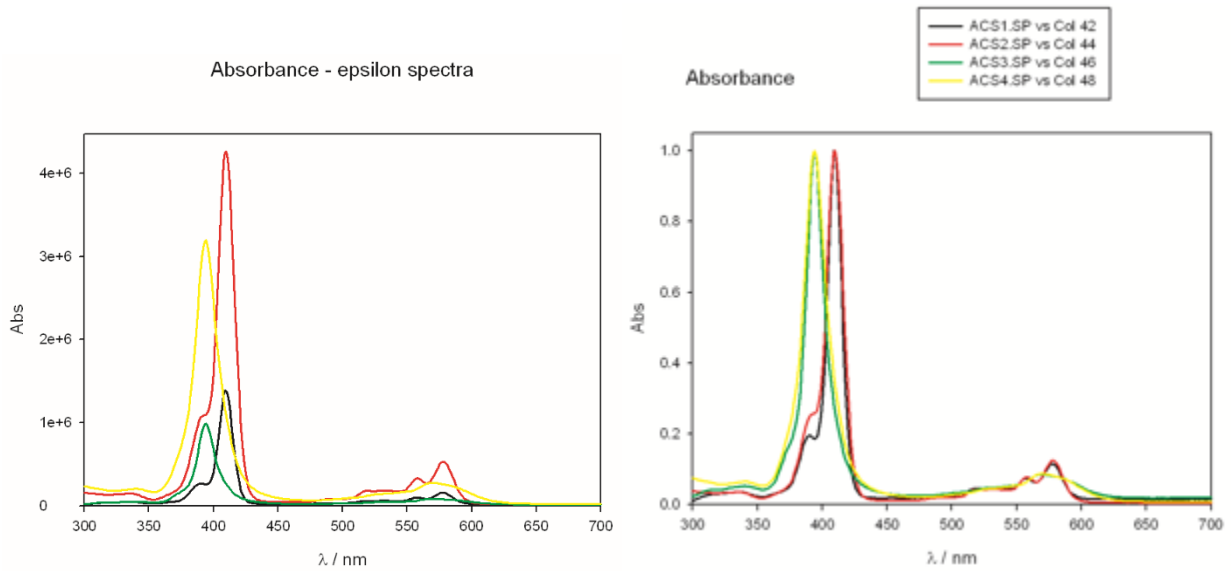

Figure S21. Absorption spectra of PluS NPs doped with **1** and **2** in water (samples **NP1L**, **NP1H**, **NP2L** and **NP2H** in black, red, green and yellow solid lines respectively), expressed as molar extinction coefficients (left) and normalized (right).

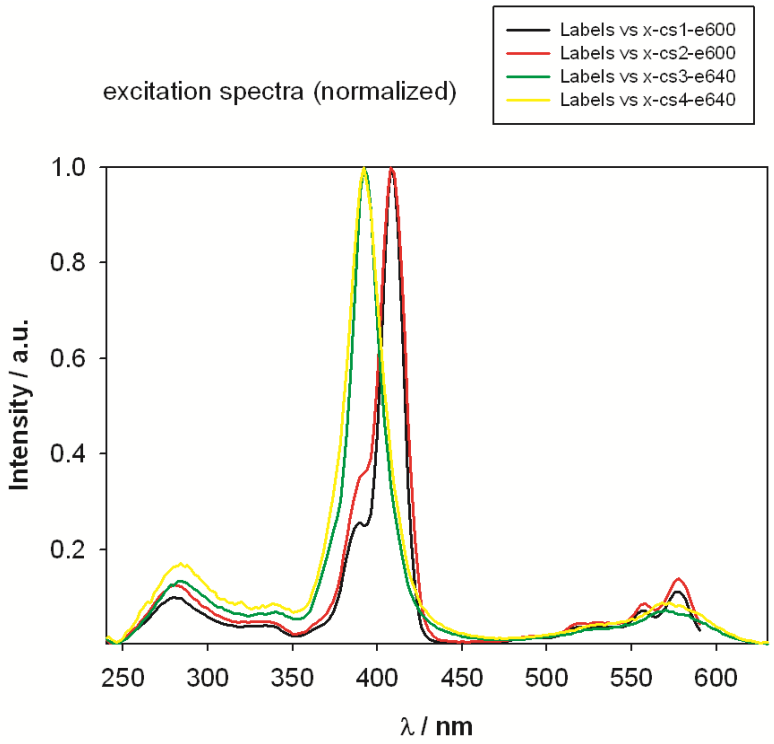

Figure S22. Excitation spectra of PluS NPs doped with corroles **1** and **2** in water (samples **NP1L**, **NP1H**, **NP2L** and **NP2H** in black, red, green and yellow solid lines respectively).

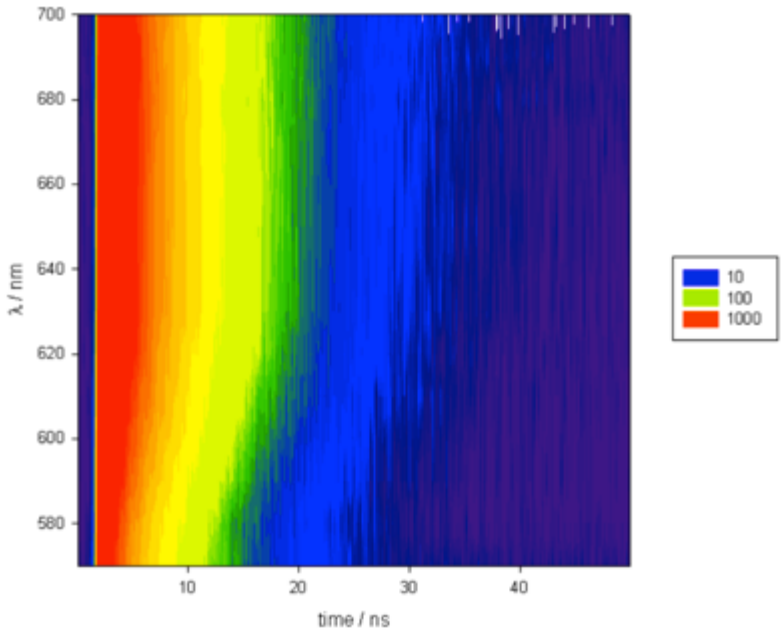

Figure S23. Time Resolved Emission Spectroscopy (TRES) of **NP2L** in bidimensional map (counts vs wavelength vs time). Acquisitions are performed with fixed counts at maximum, in order to obtain TRES normalized vs wavelength. Counts are in log scale.

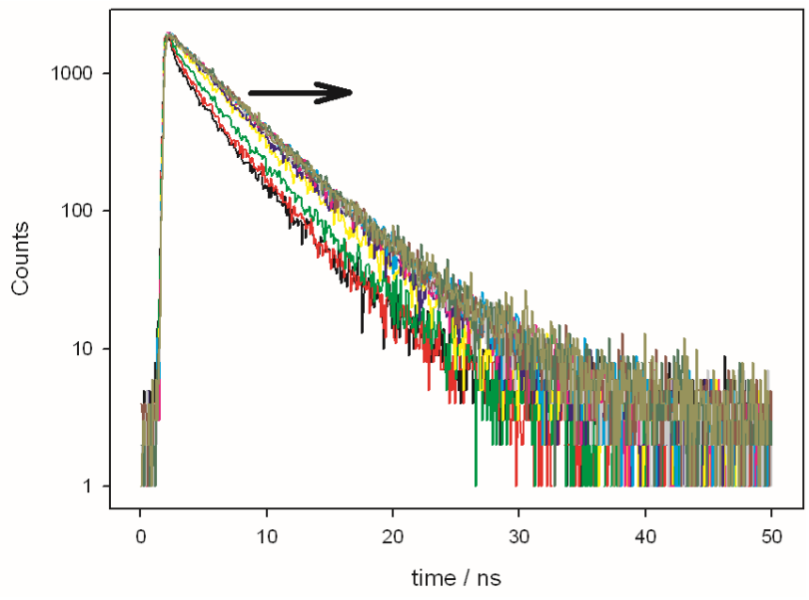

Figure S24. Plot of decays of TRES shown in previous figure

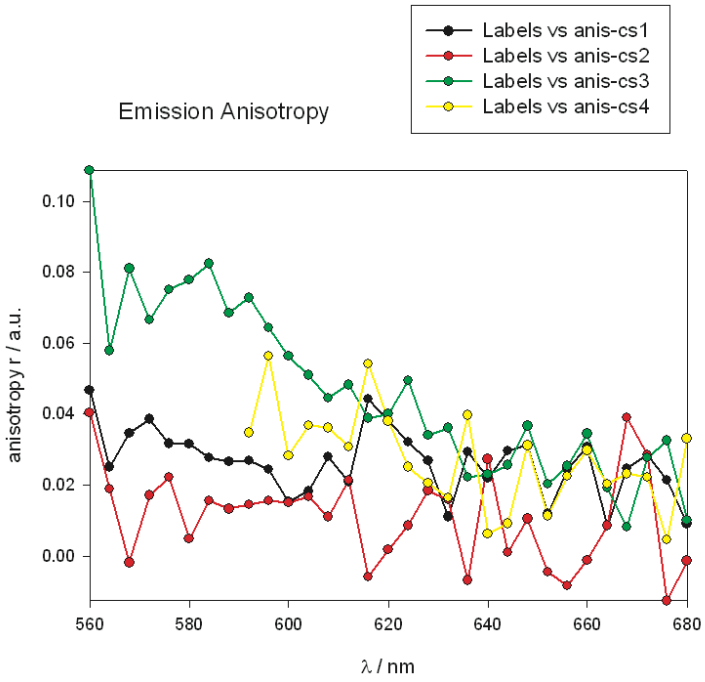

Figure S25. Emission anisotropy of samples **NP1L**, **NP1H**, **NP3L** and **NP3H**. Excitation wavelength 393 nm

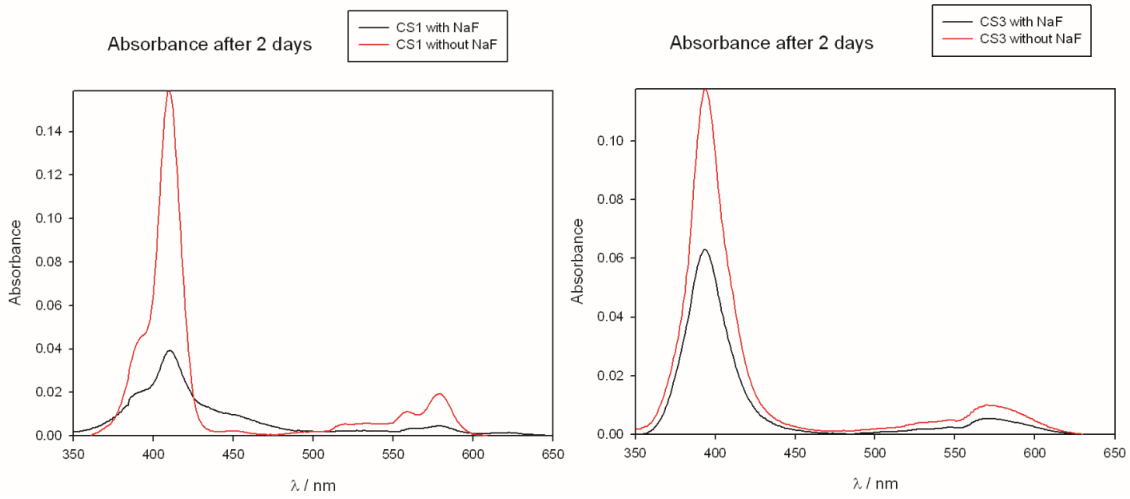

Figure S26. Absorbance spectra of samples **NP1L** (left) and **NP2L** (right) before (red) and 2 days after addition of NaF 50 mM (black).

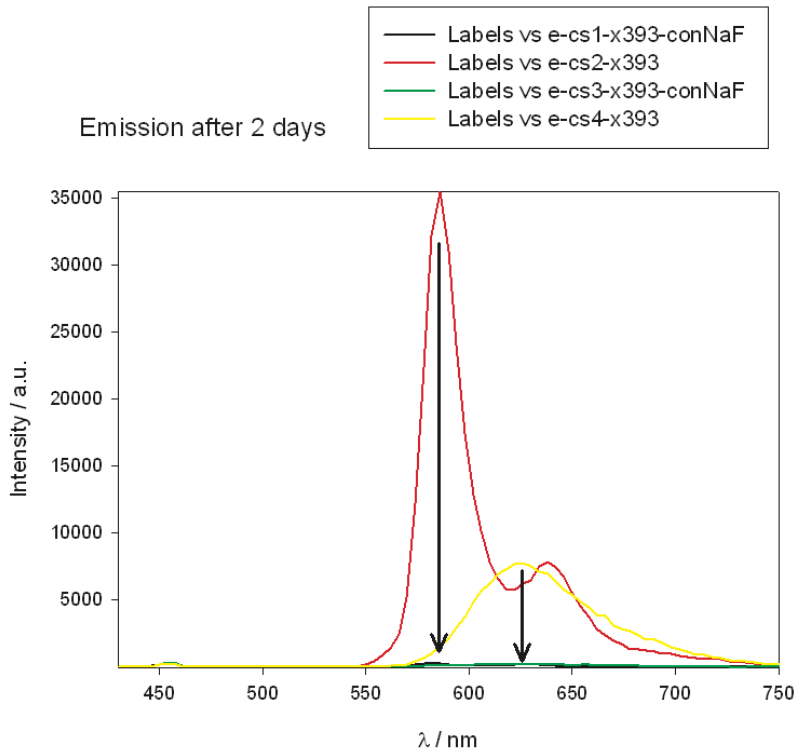

Figure S27. Emission spectra of samples **NP1L** and **NP2L** before (red and yellow) and 2 days after addition of NaF 50 mM (black and green).