Supplementary Materials

Self-assembled Nanomaterials Based on Complementary Sn(IV) and Zn(II)-porphyrins, and Their Photocatalytic Degradation for Rhodamine B Dye

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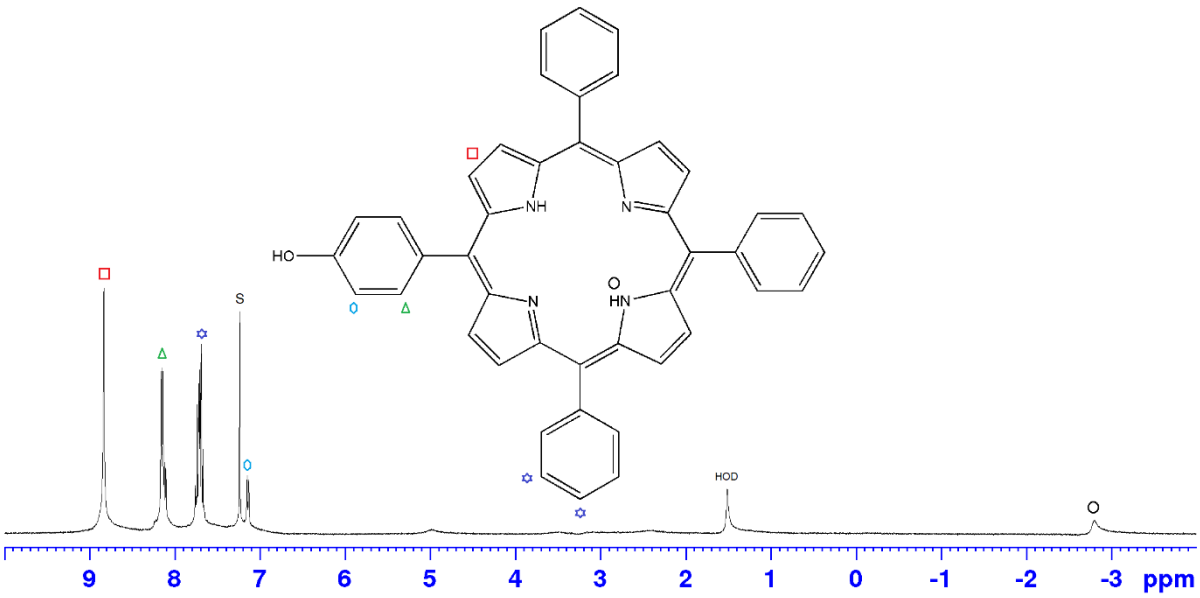


Figure S1. ^{1}H NMR spectrum of *meso*-5-(4-hydroxyphenyl)-10,15,20-tris(phenyl)porphyrin **H_2L^1** in $CDCl_3$.

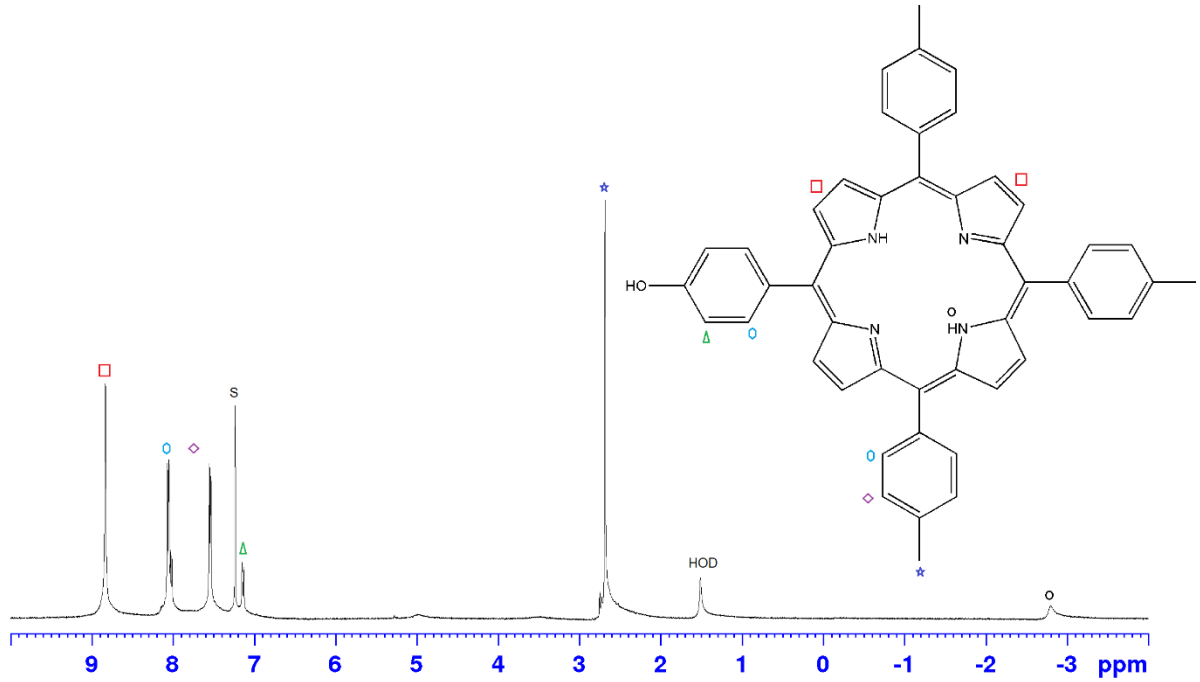


Figure S2. ^{1}H NMR spectrum of *meso*-5-(4-hydroxyphenyl)-10,15,20-tris(4-methyl-phenyl)porphyrin **H_2L^2** in $CDCl_3$.

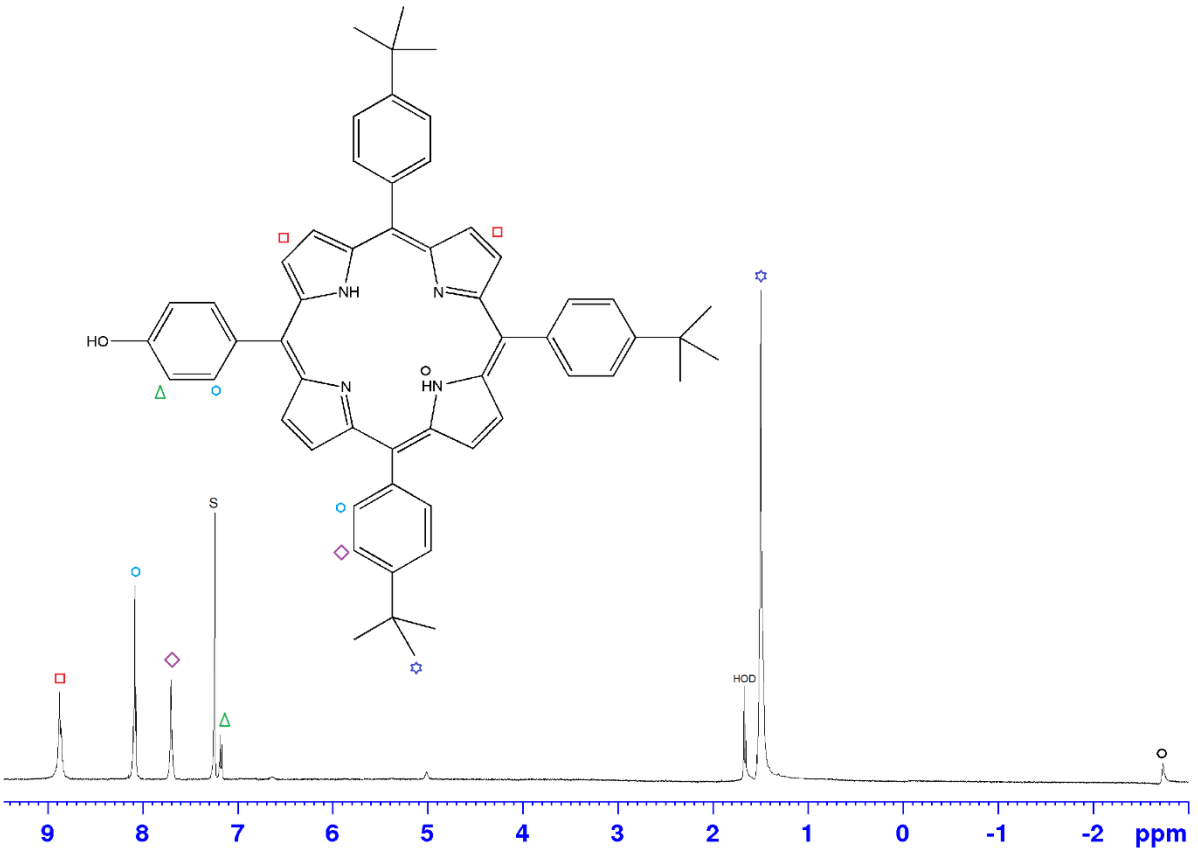


Figure S3. ^{1}H NMR spectrum of *meso*-5-(4-hydroxyphenyl)-10,15,20-tris(4-*tert*-butyl-phenyl)porphyrin **H_2L^3** in $CDCl_3$.

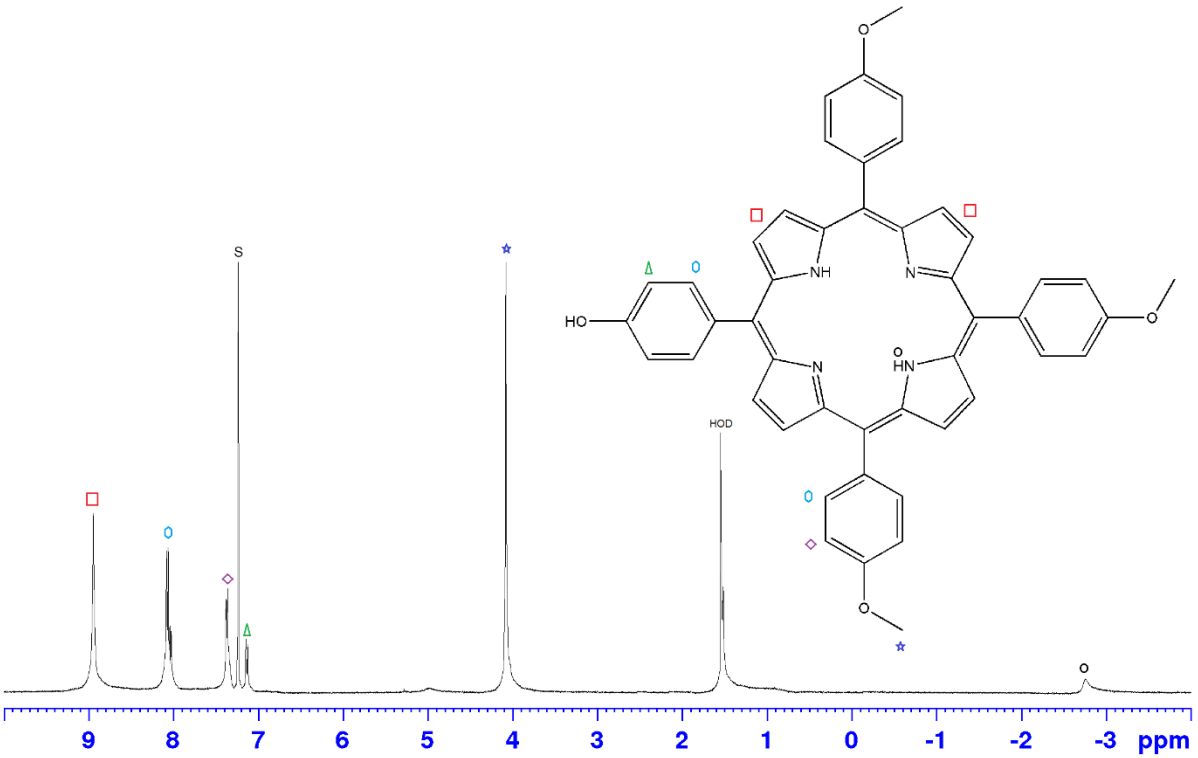


Figure S4. ^{1}H NMR spectrum of *meso*-5-(4-hydroxyphenyl)-10,15,20-tris(4-methoxy-phenyl)porphyrin **H_2L^4** in $CDCl_3$.

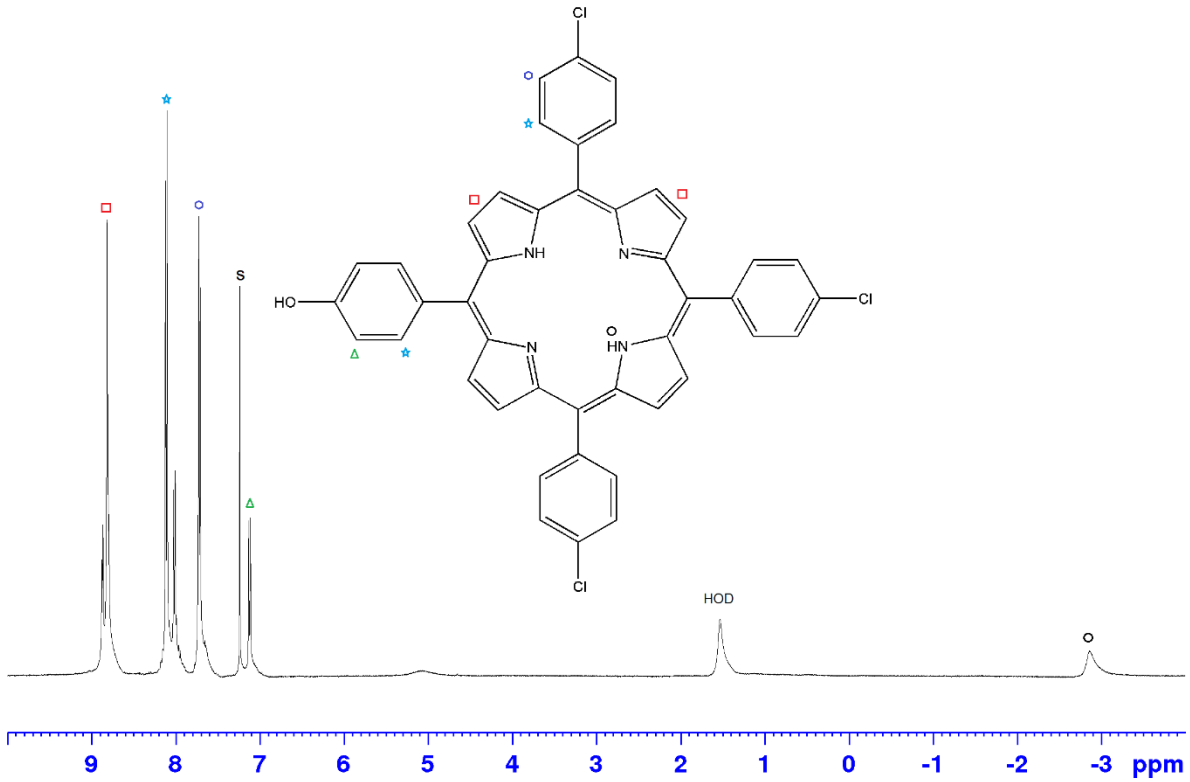


Figure S5. ^{1}H NMR spectrum of *meso*-5-(4-hydroxyphenyl)-10,15,20-tris(4-chloro-phenyl)porphyrin **H_2L^5** in $CDCl_3$.

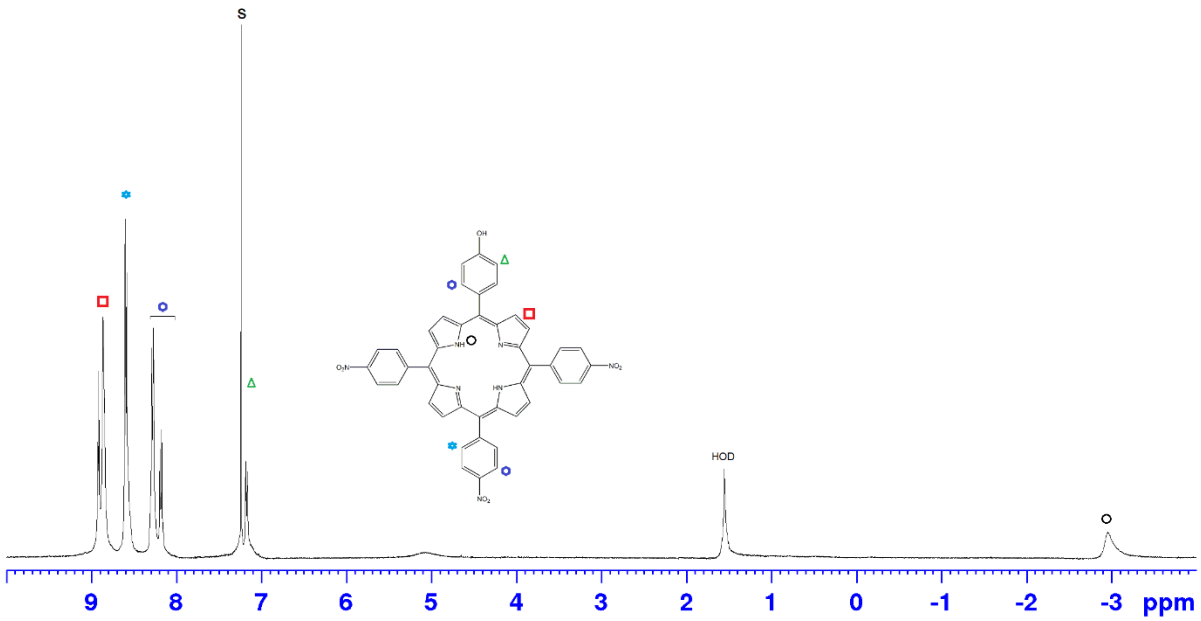


Figure S6. ^{1}H NMR spectrum of *meso*-5-(4-hydroxyphenyl)-10,15,20-tris(4-nitro-phenyl)porphyrin **H_2L^6** in $CDCl_3$.

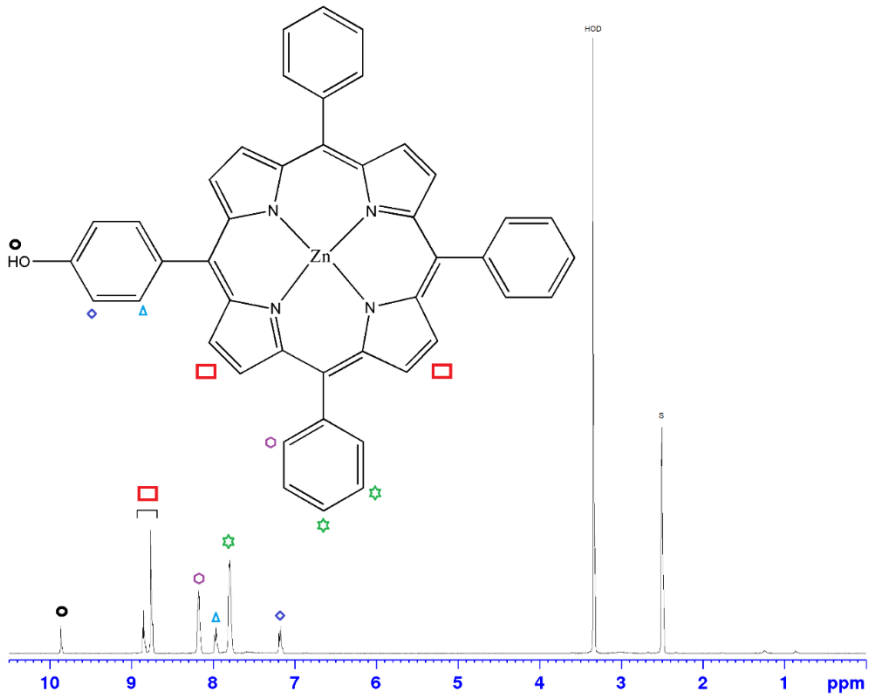


Figure S7. ^{1}H NMR spectrum of *meso*-5-(4-hydroxyphenyl)-10,15,20-tris(phenyl)porphyrinato)zinc(II) **ZnL^{1}** in DMSO-d$_6$.

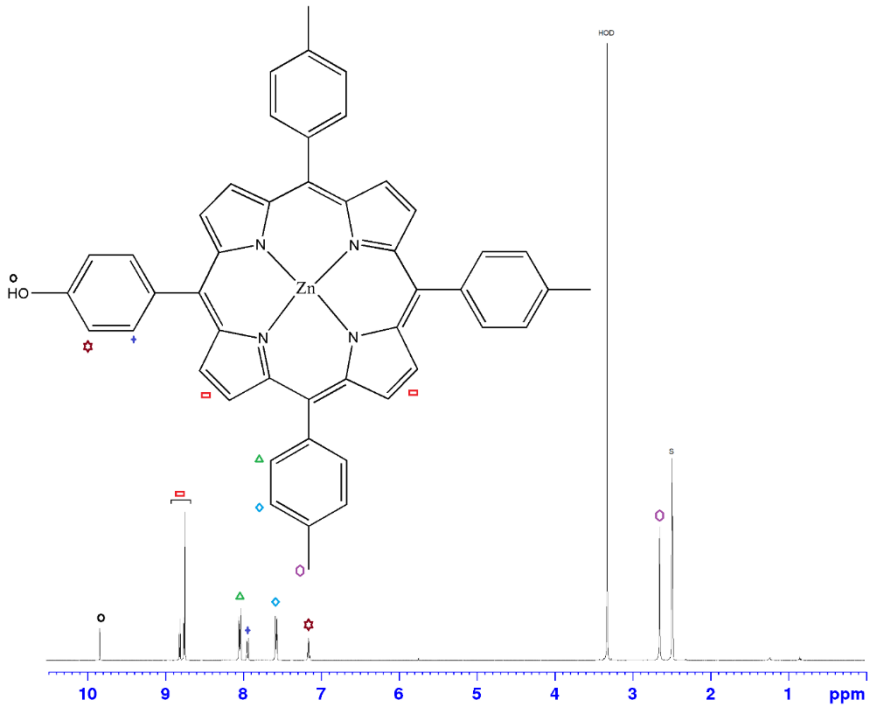
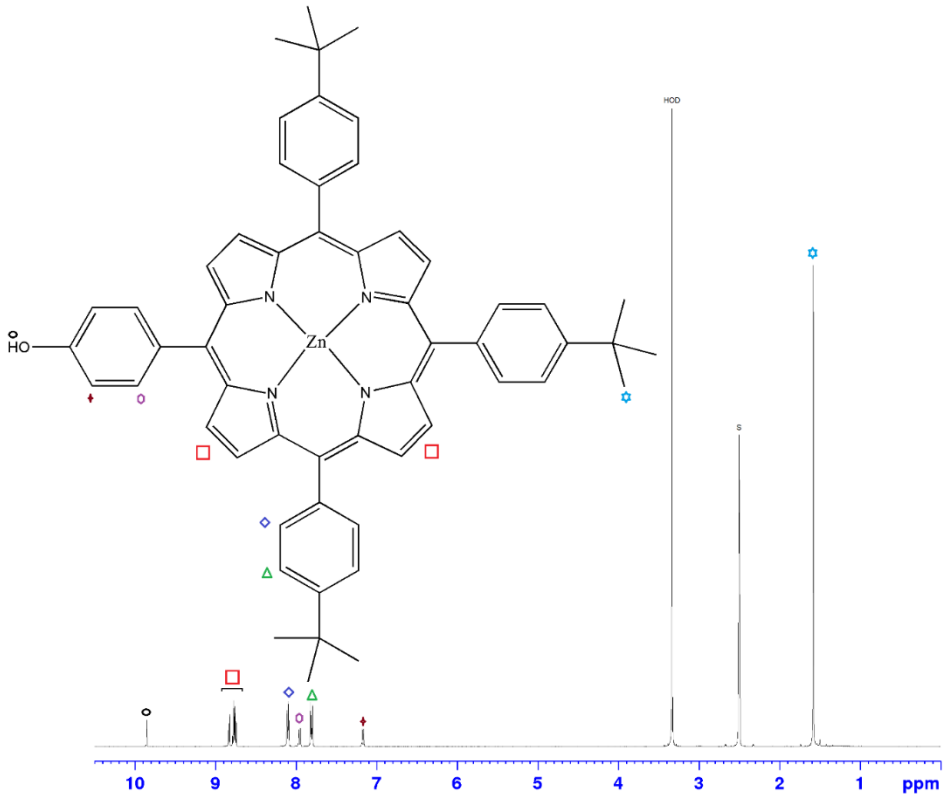


Figure S8. ^{1}H NMR spectrum of *meso*-5-(4-hydroxyphenyl)-10,15,20-tris(4-methyl-phenyl)porphyrinato)zinc(II) **ZnL^{2}** in DMSO-d$_6$.



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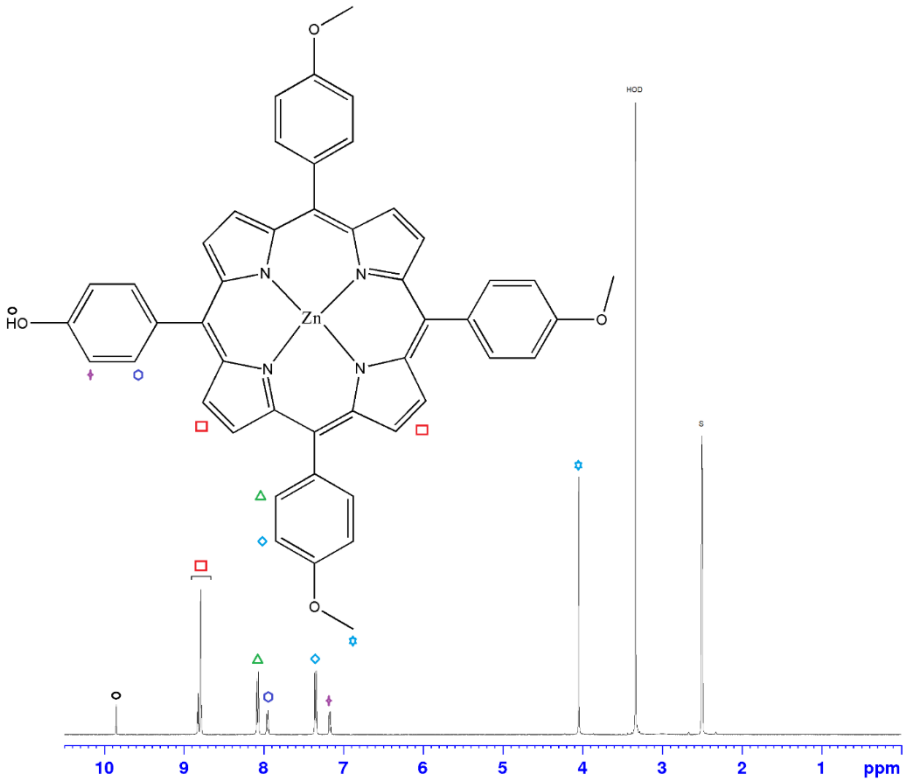
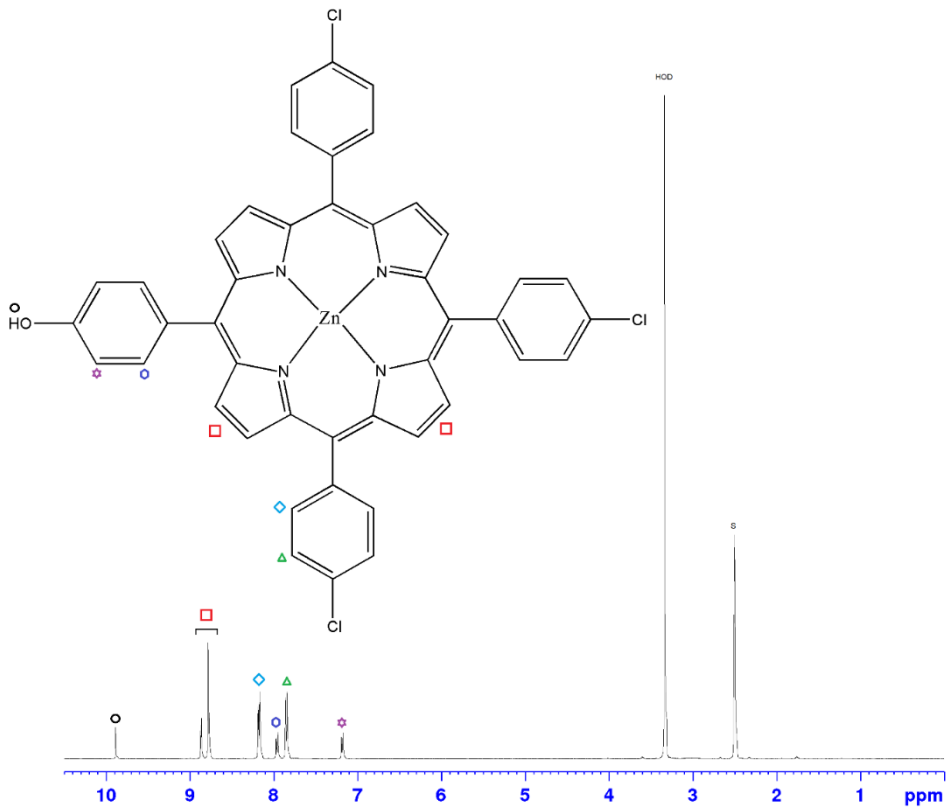


Figure S10. ^{1}H NMR spectrum of *meso*-5-(4-hydroxyphenyl)-10,15,20-tris(4-methoxy-phenyl)porphyrinato)zinc(II) **ZnL^{4}** in DMSO-d$_6$.



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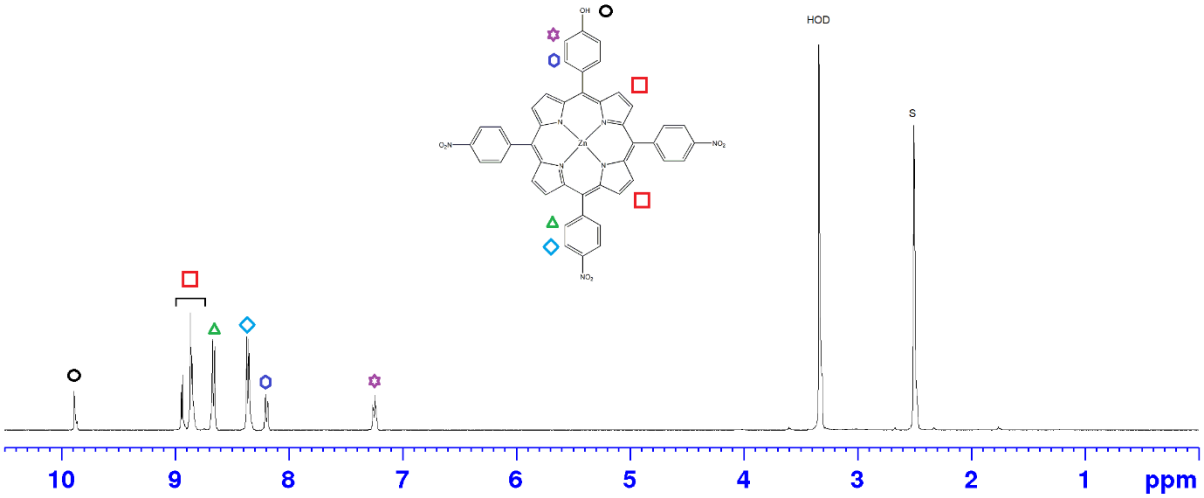

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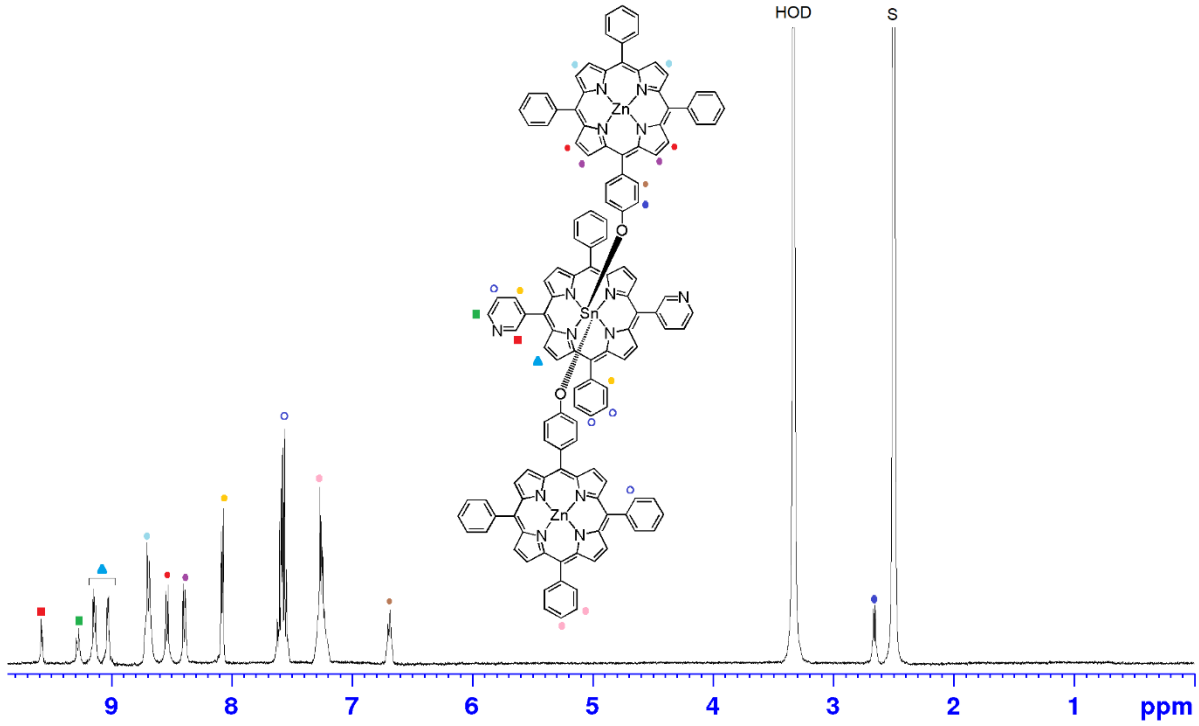

Figure S13. ^{1}H NMR spectrum of triad **1** in DMSO-d_6.

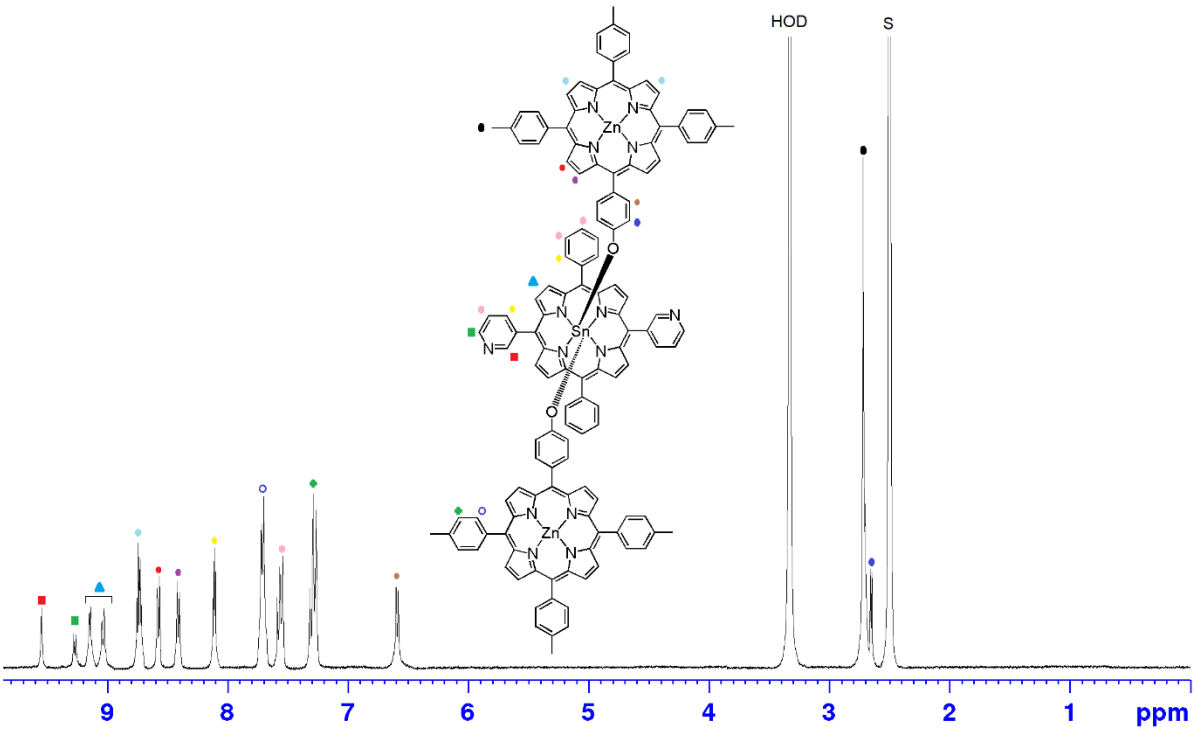

Figure S14. ^{1}H NMR spectrum of triad **2** in DMSO-d_6.

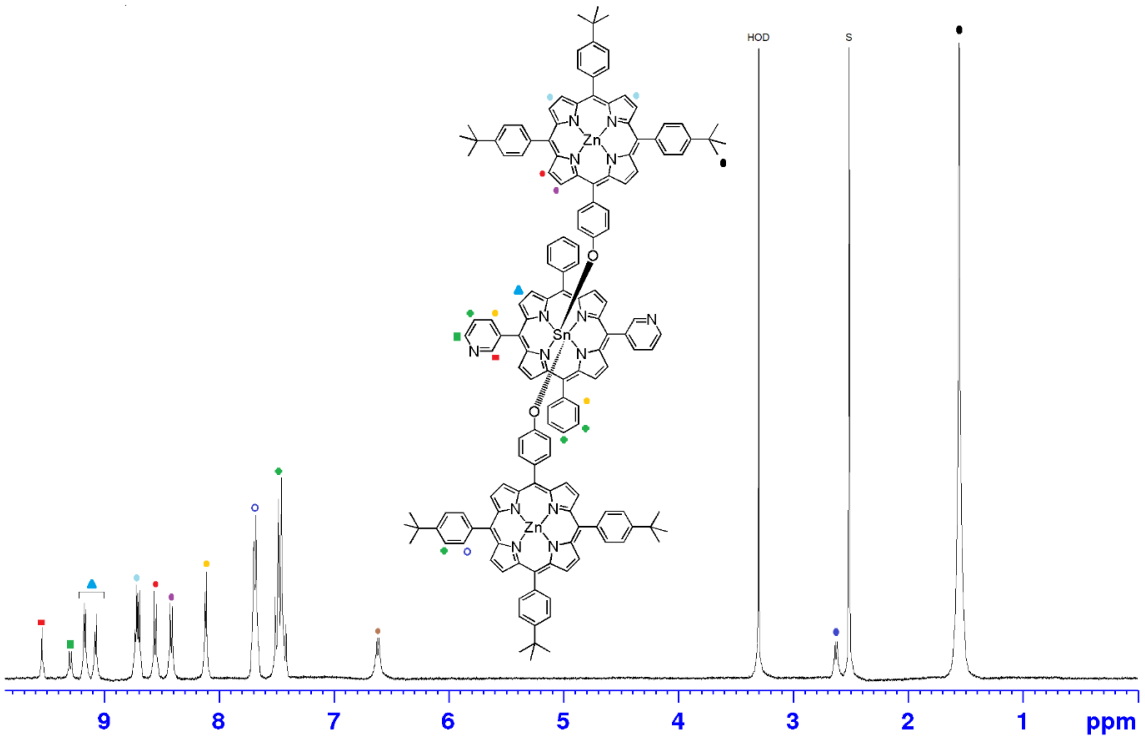

Figure S15. ^{1}H NMR spectrum of triad **3** in DMSO-d_6.

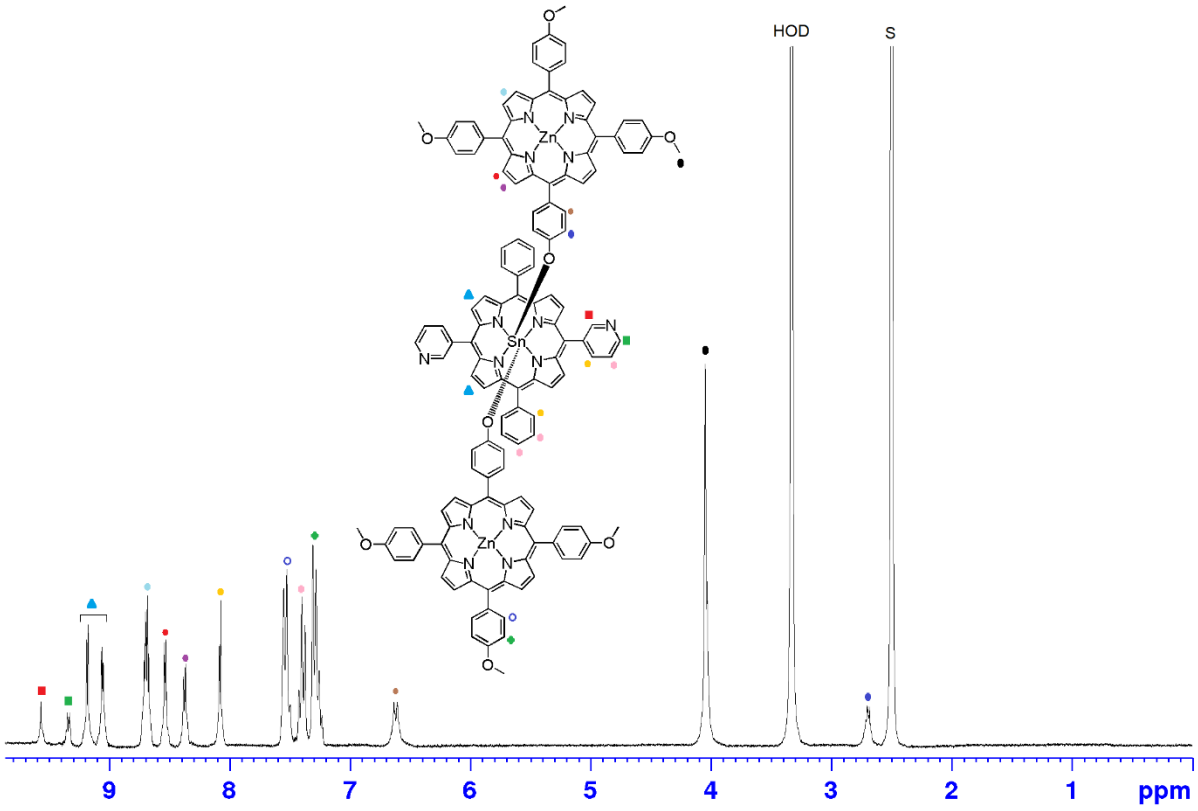

Figure S16. ^{1}H NMR spectrum of triad **4** in DMSO-d_6.

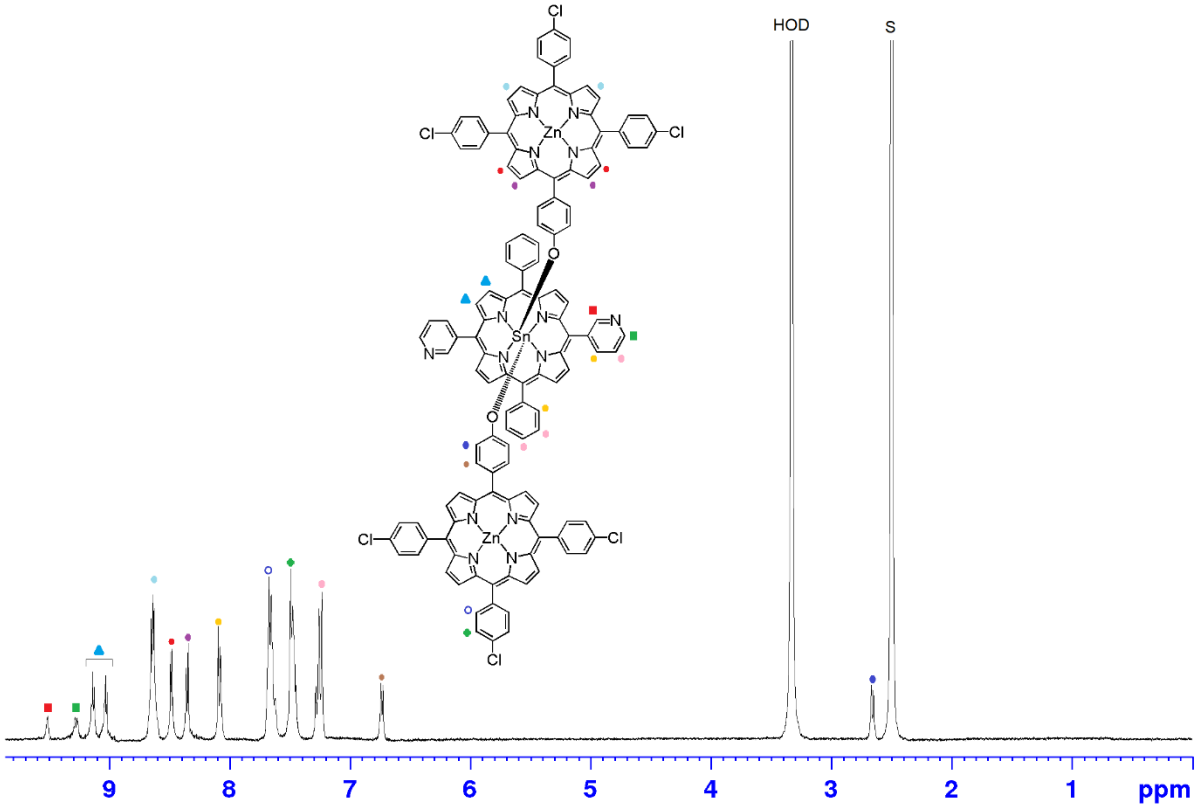

Figure S17. ^{1}H NMR spectrum of triad **5** in DMSO-d$_6$.

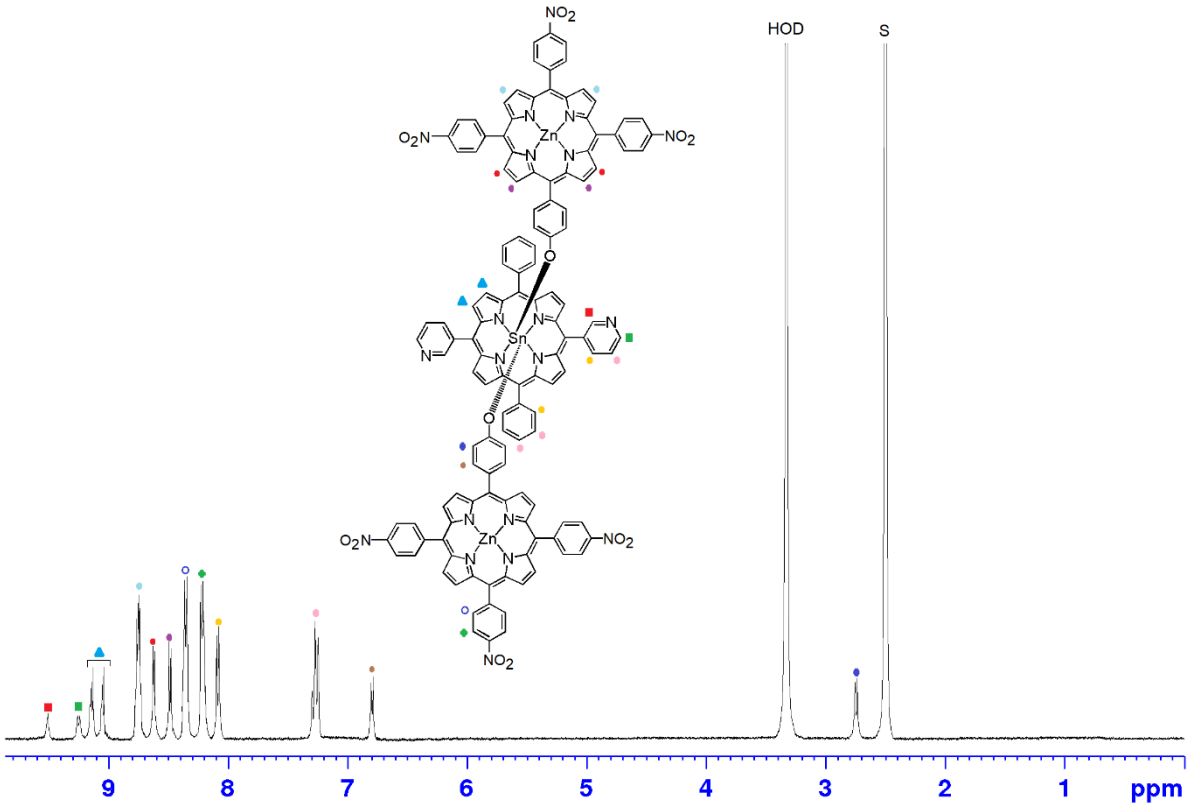

Figure S18. ^{1}H NMR spectrum of triad **6** in DMSO-d$_6$.

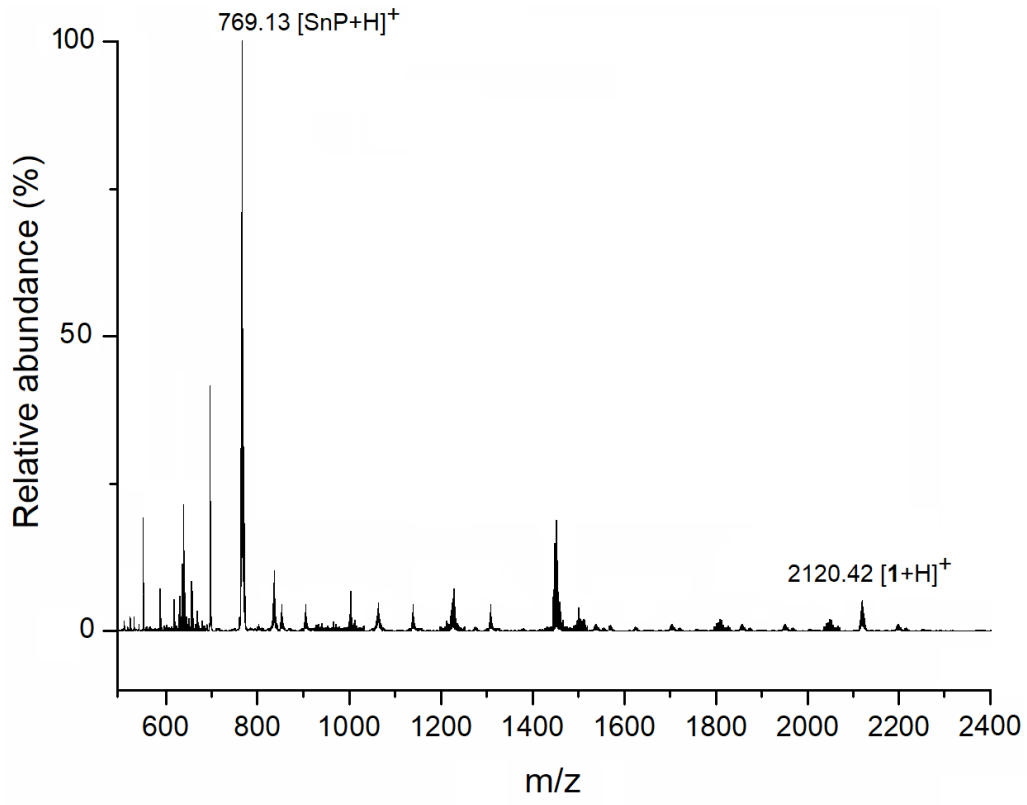

Figure S19. ESI-MS spectrum of triad **1**.

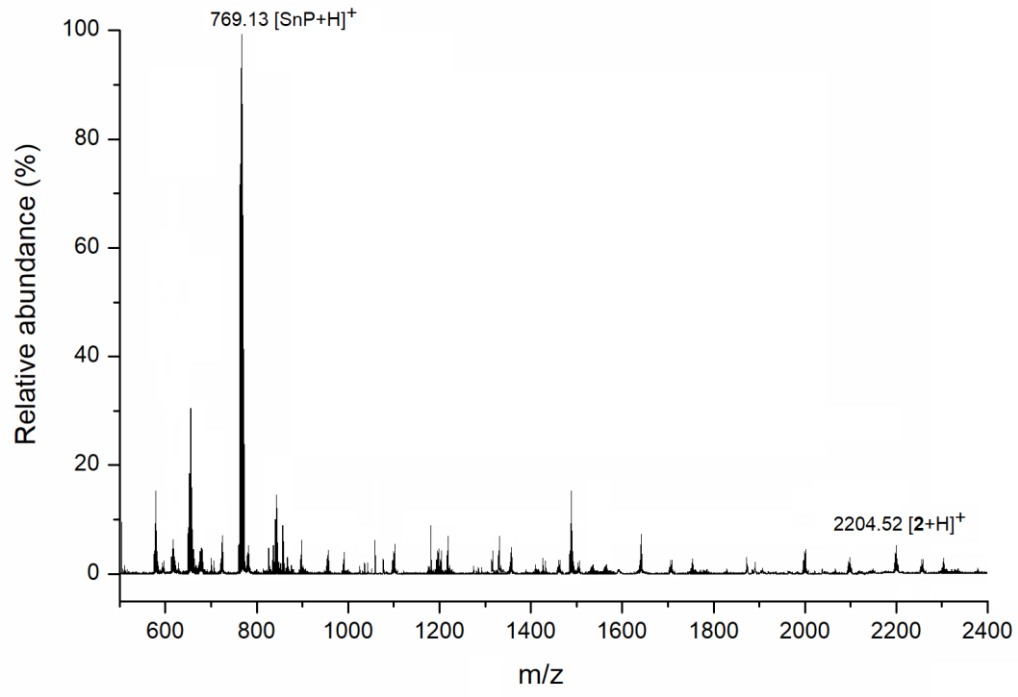

Figure S20. ESI-MS spectrum of triad **2**.

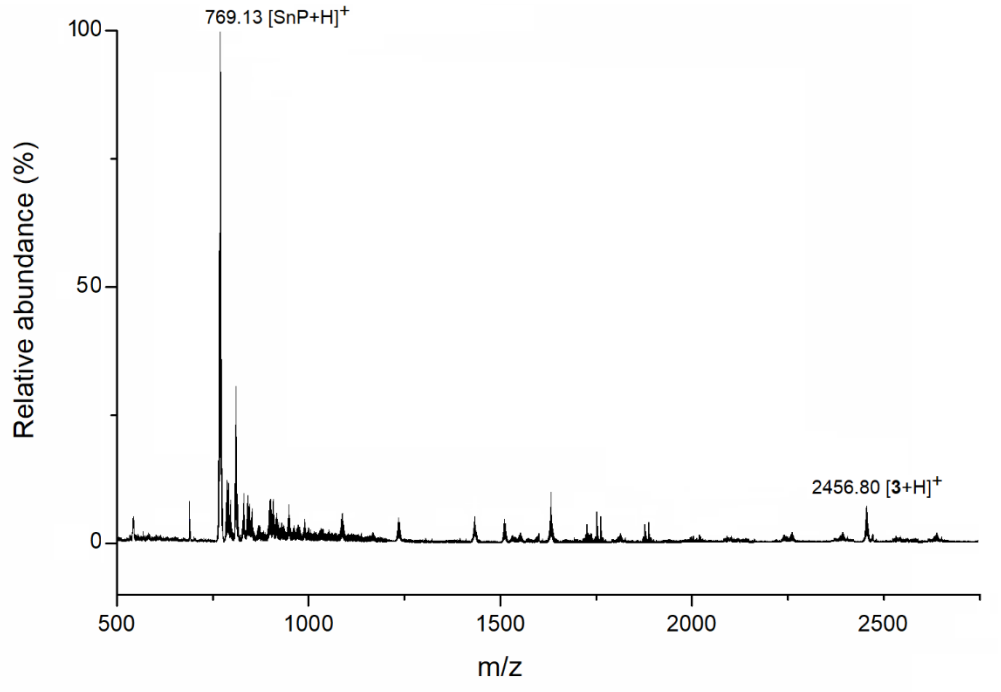

Figure S21. ESI-MS spectrum of triad **3**.

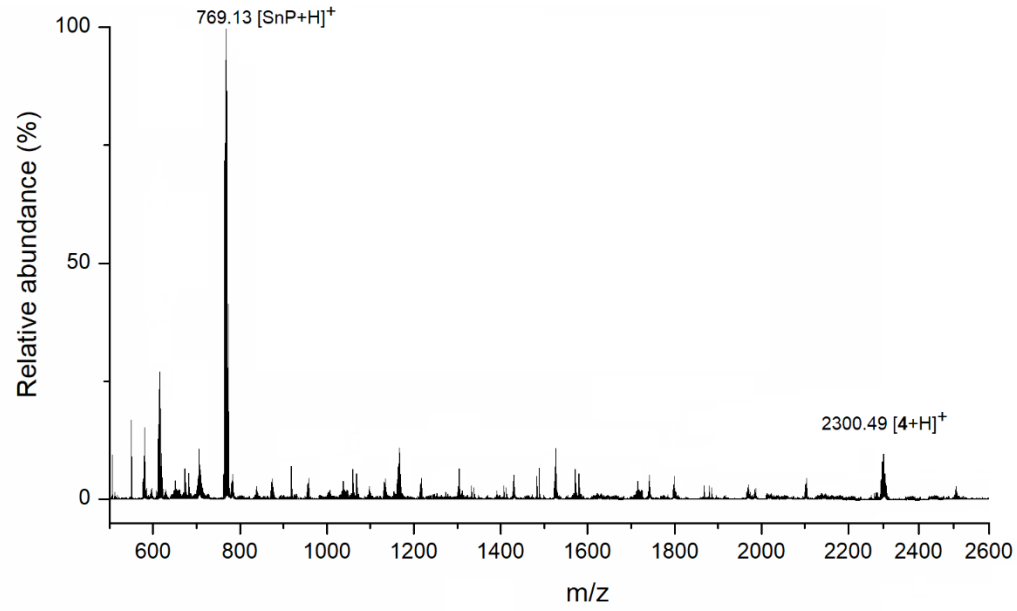

Figure S22. ESI-MS spectrum of triad **4**.

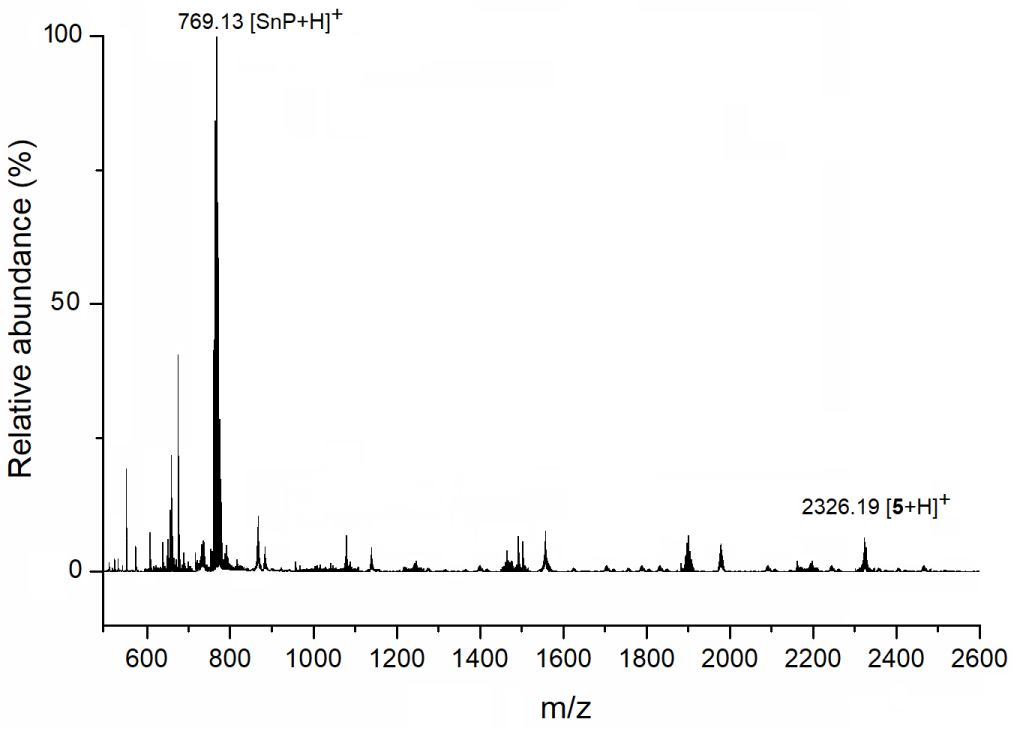

Figure S23. ESI-MS spectrum of triad **5**.

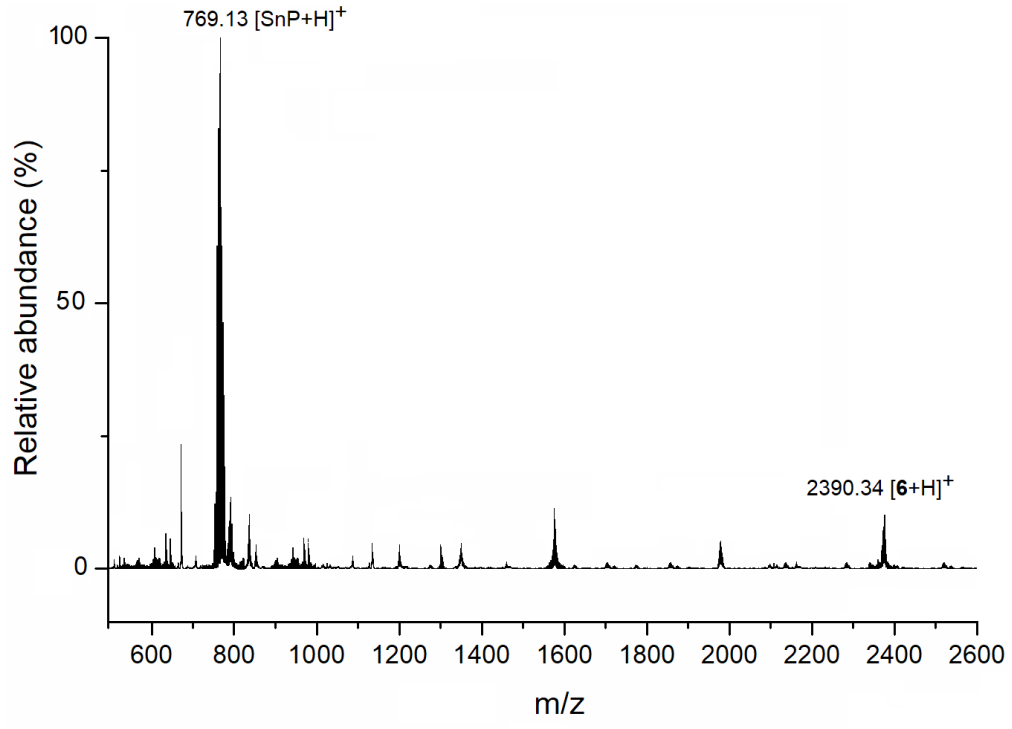

Figure S24. ESI-MS spectrum of triad **6**.

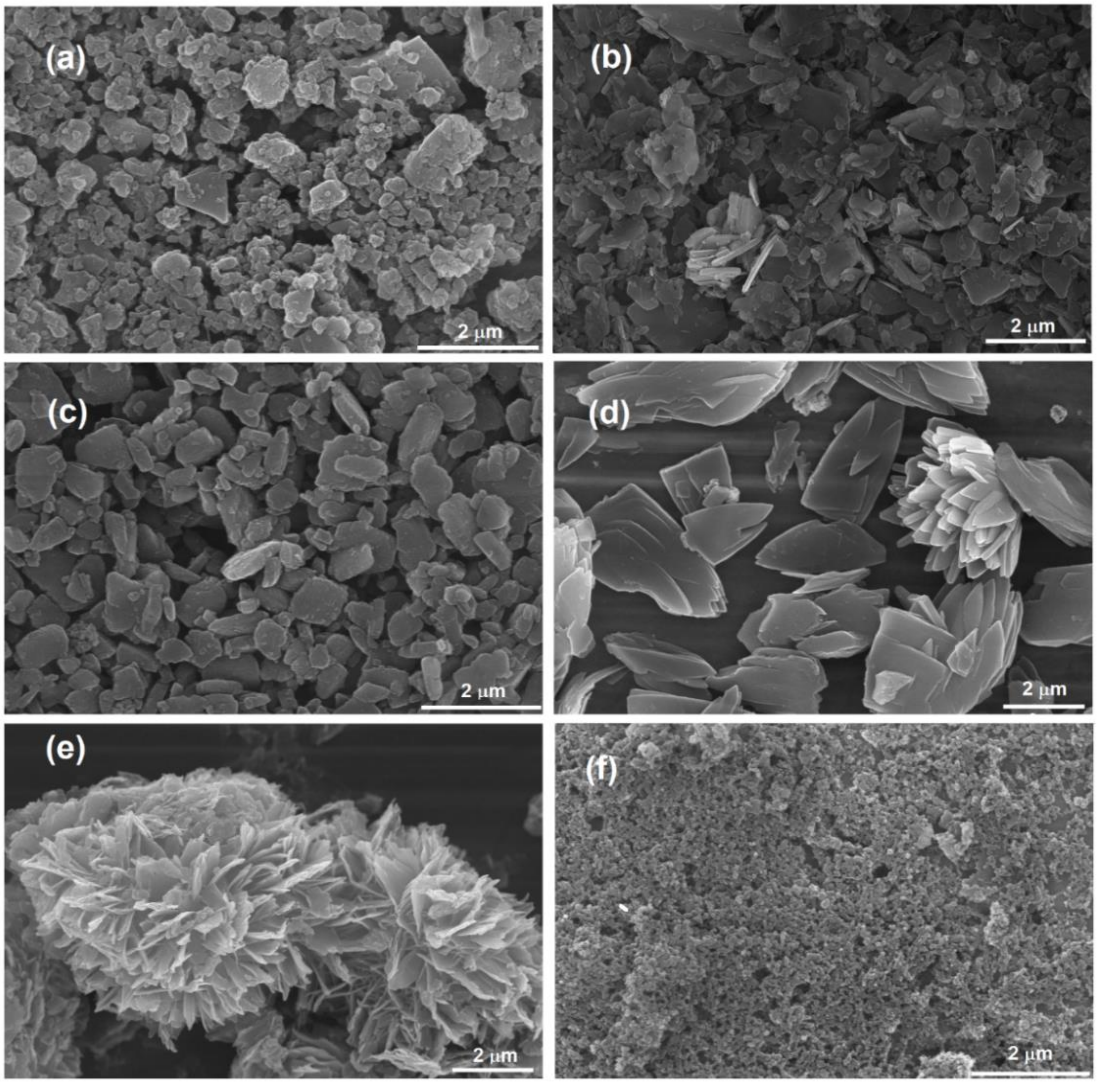

Figure S25. Lower magnification of FE-SEM images for the assembly patterns of triads: (a) **1**; (b) **2**; (c) **3**; (d) **4**; (e) **5**; (f) **6**.

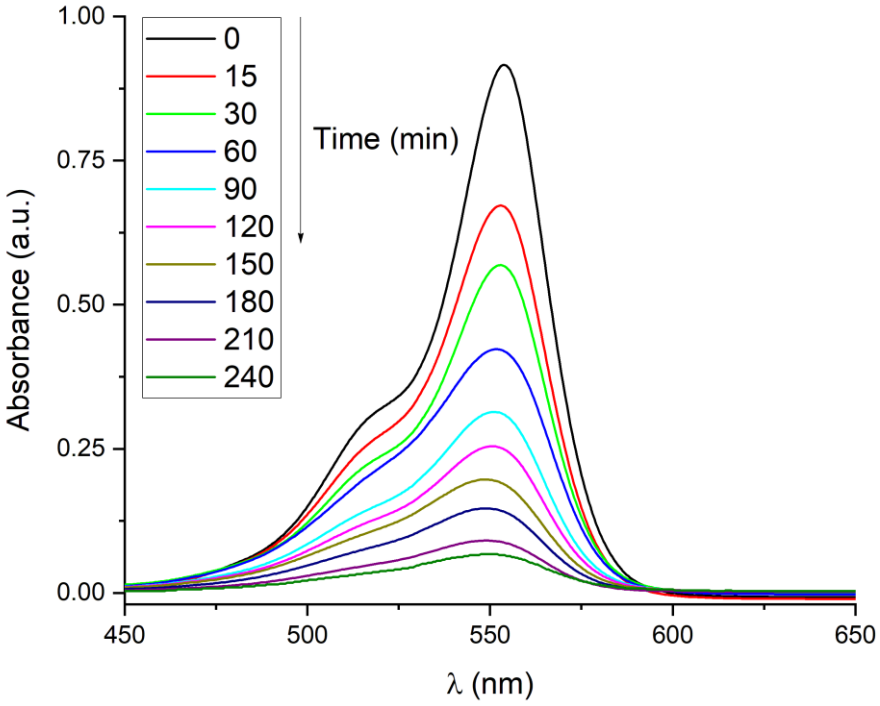

Figure S26. Absorption spectra of RhB in the presence of nano fibers derived from triad **3** under visible light irradiation.

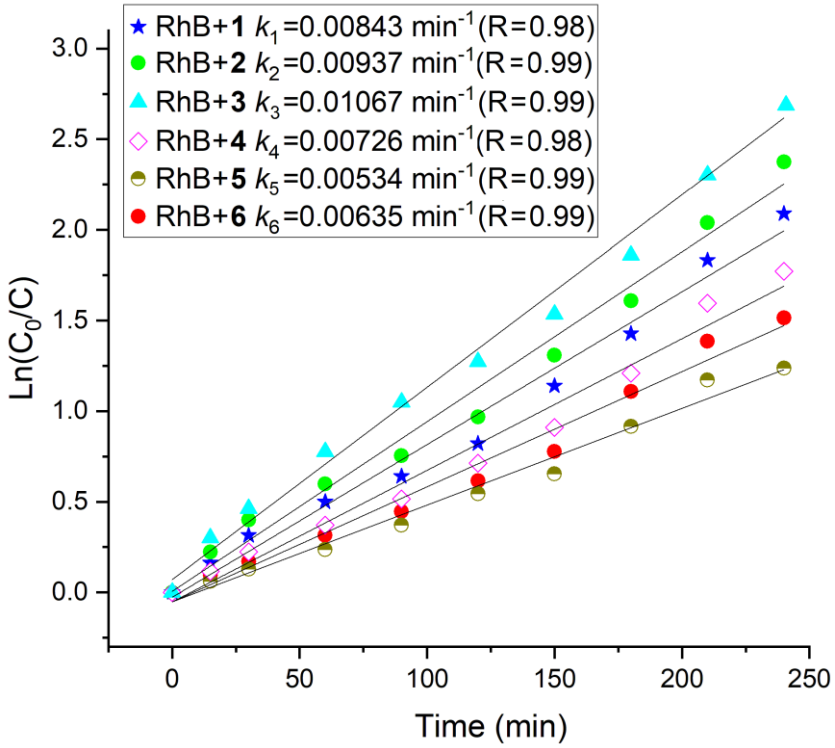

Figure S27. Kinetics for the photocatalytic degradation of RhB under visible light irradiation of the six triads (**1**-**6**).

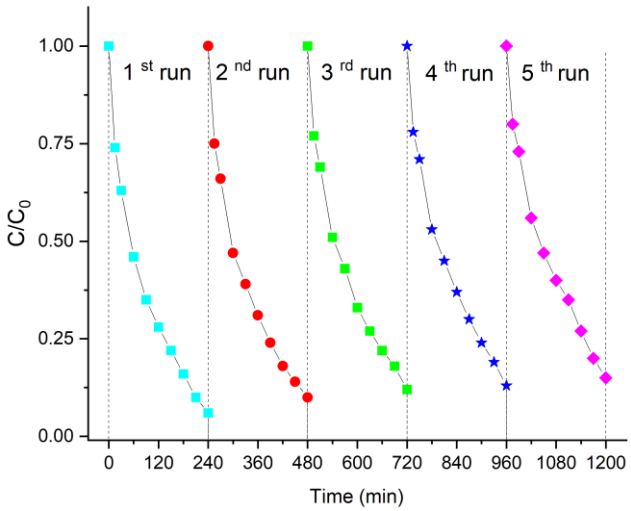

Figure S28. Catalytic cycles (up to 5 cycles) using triad **3** as a photocatalyst for the degradation of RhB.

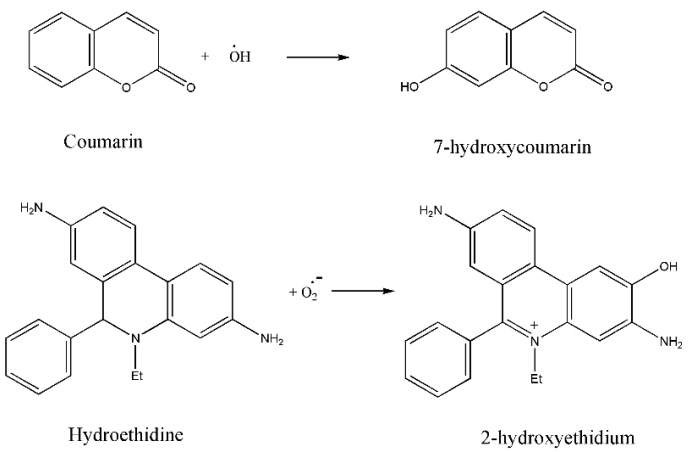

Figure S29. Schematic representation of the detection of the hydroxyl and superoxide radical anion that were generated during the photodegradation experiments.

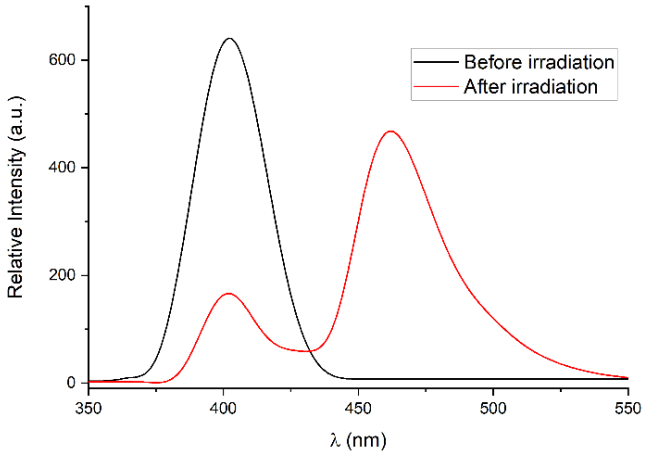

Figure S30. UV-Visible spectra of coumarin in the presence of triad **3** in water. λ_{ex} = 325 nm and light exposure time (30 min).