

Supporting Information

Reversible Oxygen Addition on a Triplet Sensitizer Molecule: Protection from Excited States Depopulation

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NMR and mass spectra

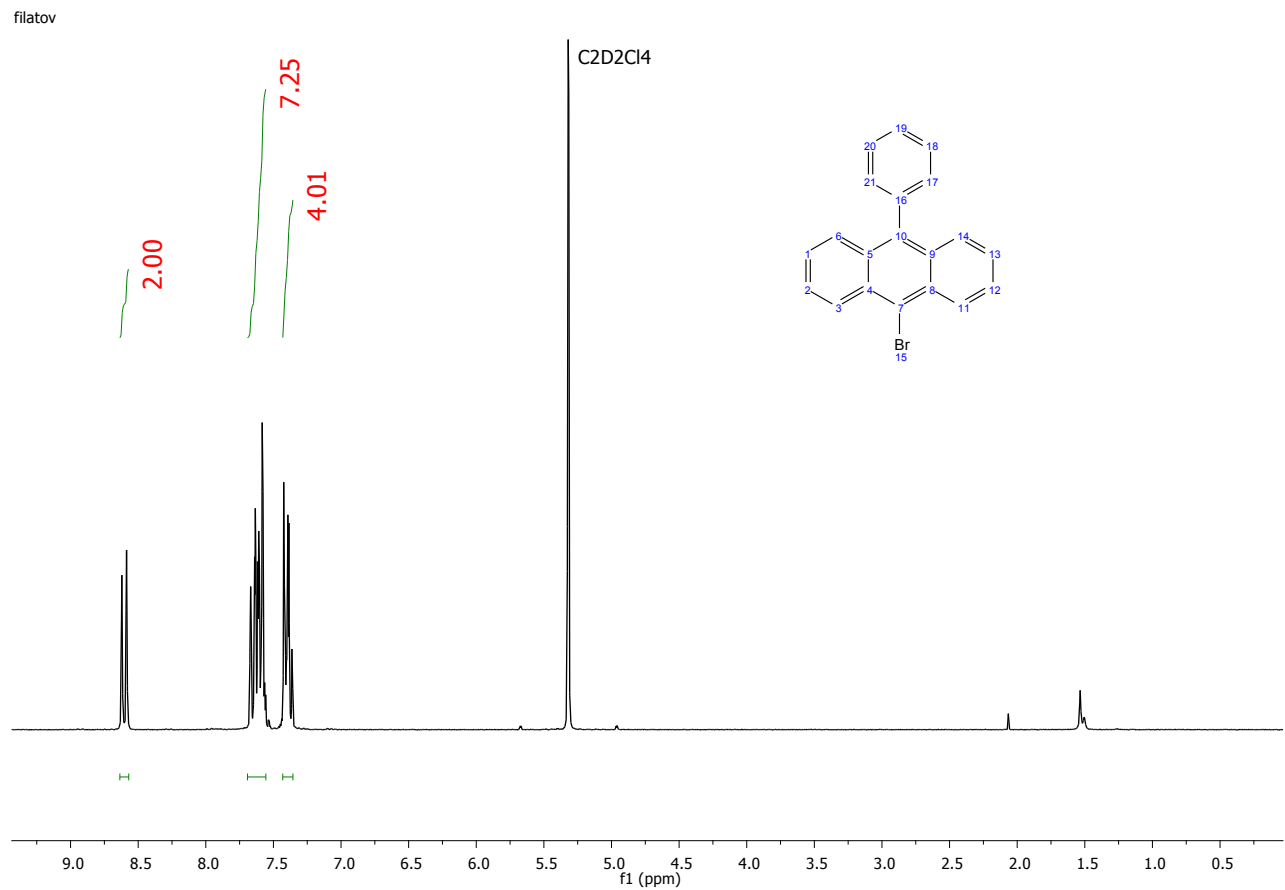


Figure S1. ^1H NMR spectrum of compound **3**.

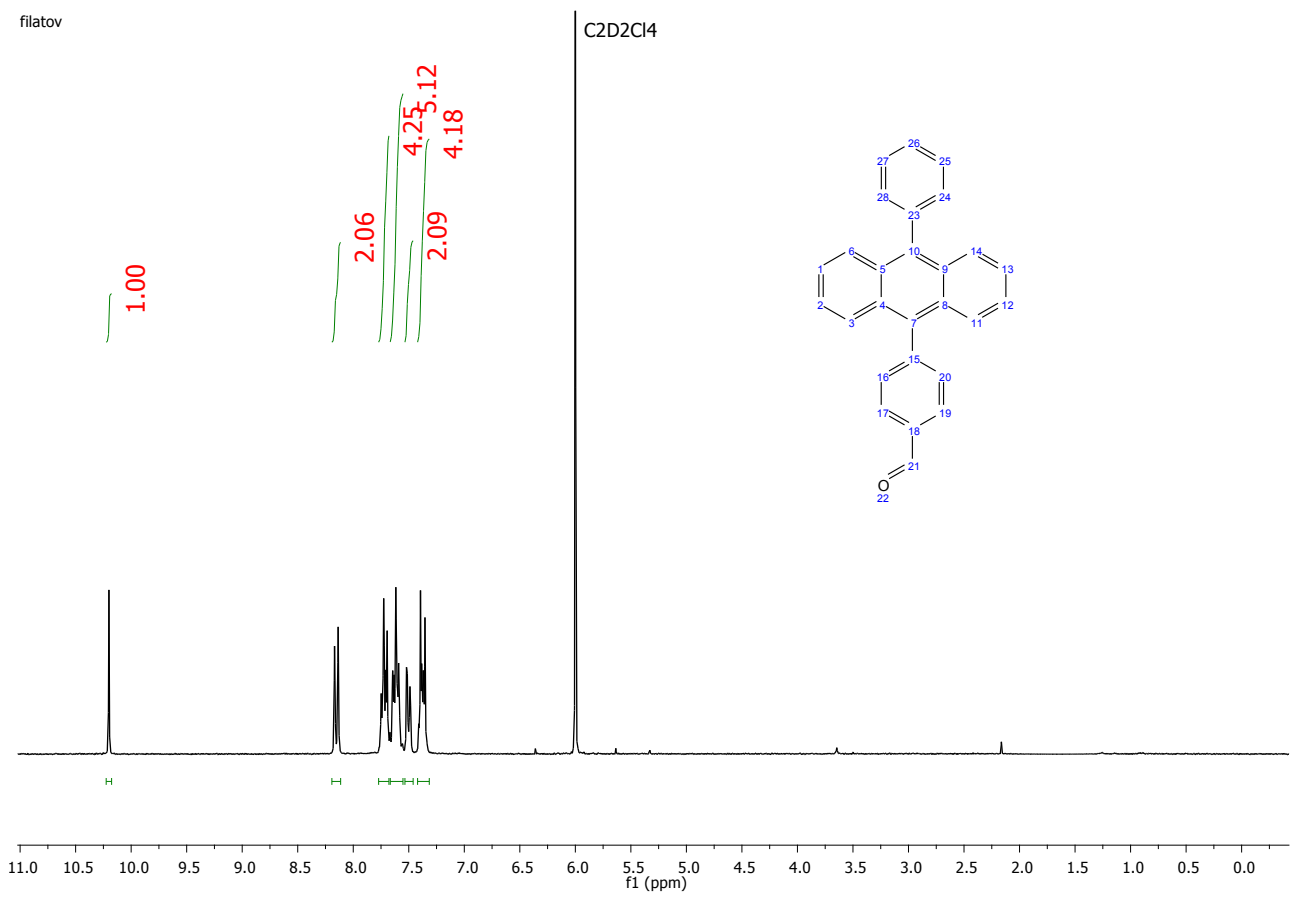


Figure S2. ^1H NMR spectrum of compound **8**.

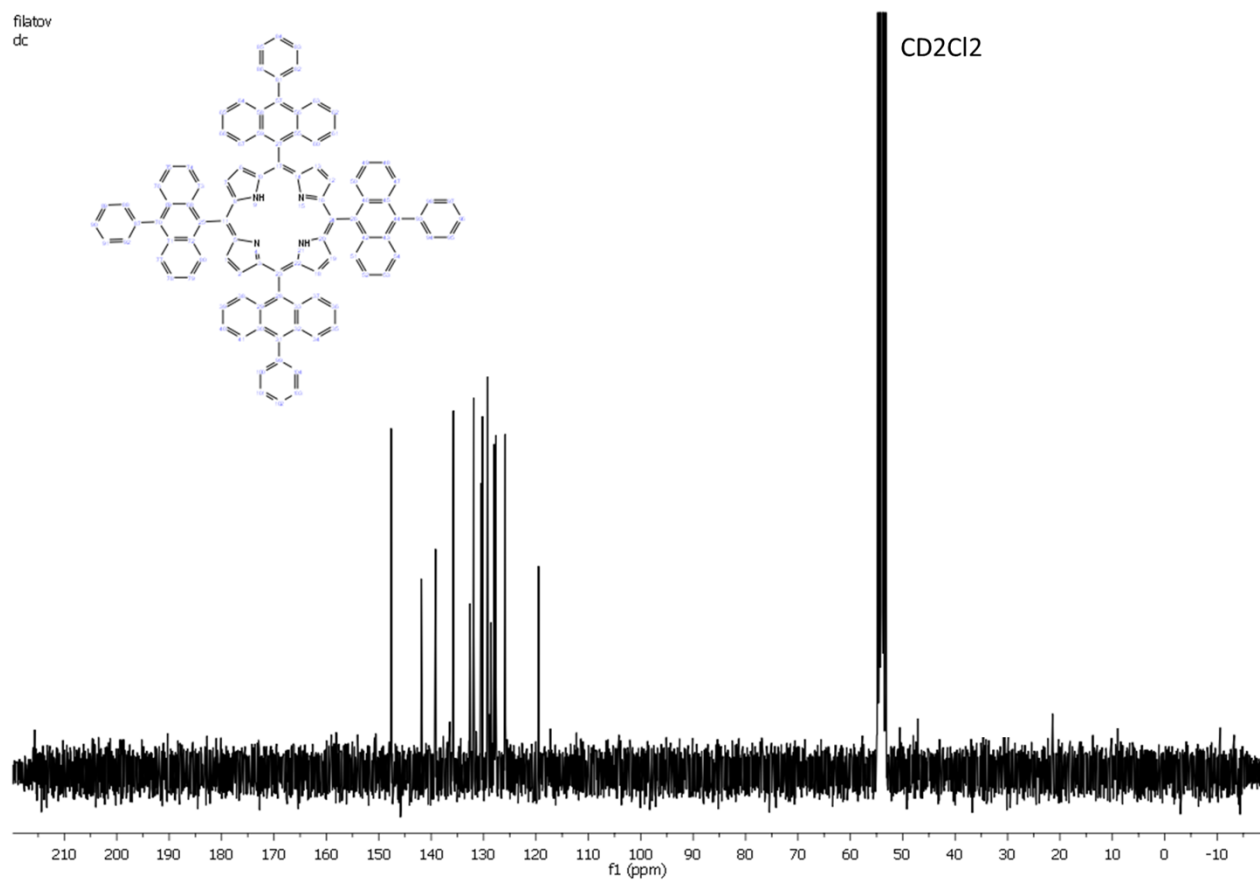
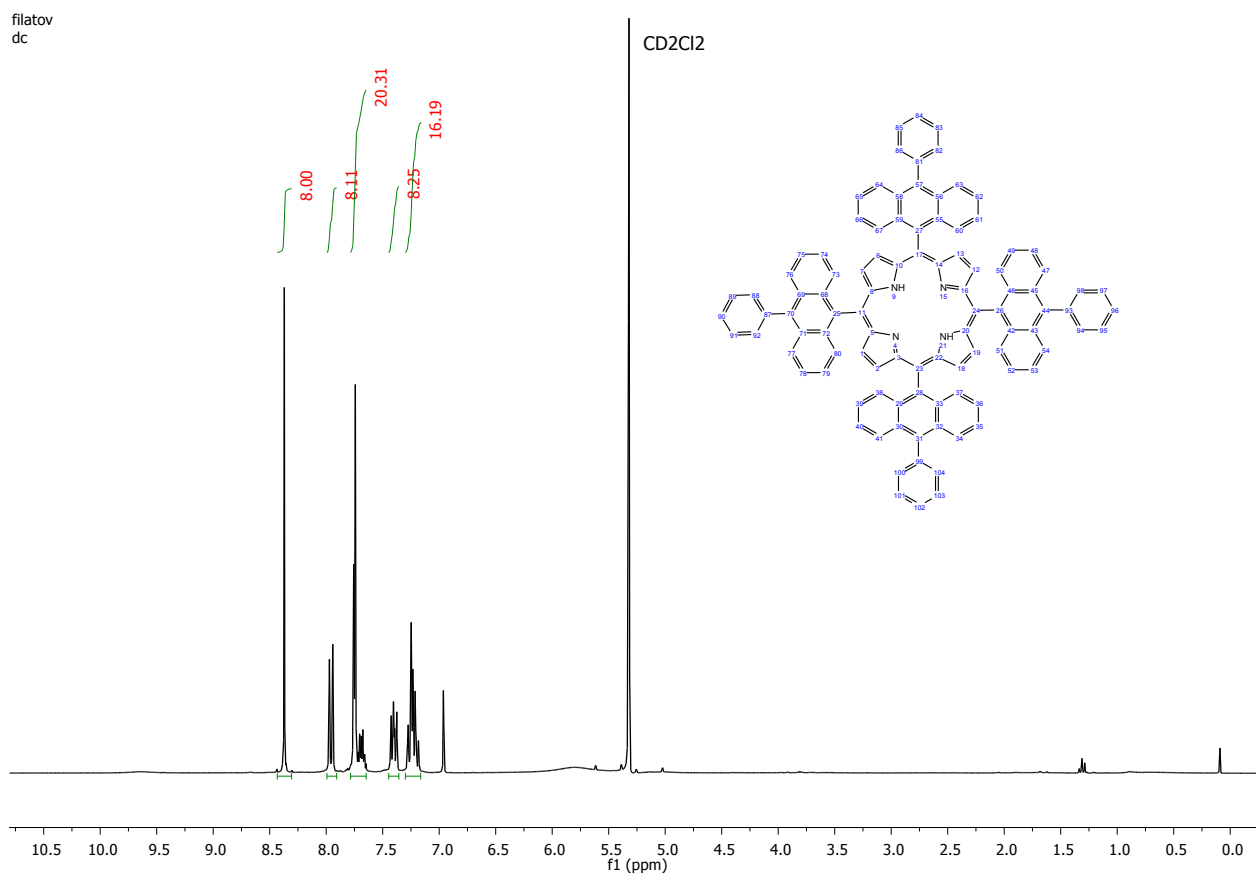


Figure S3. ^1H and ^{13}C NMR spectra of compound **6**.

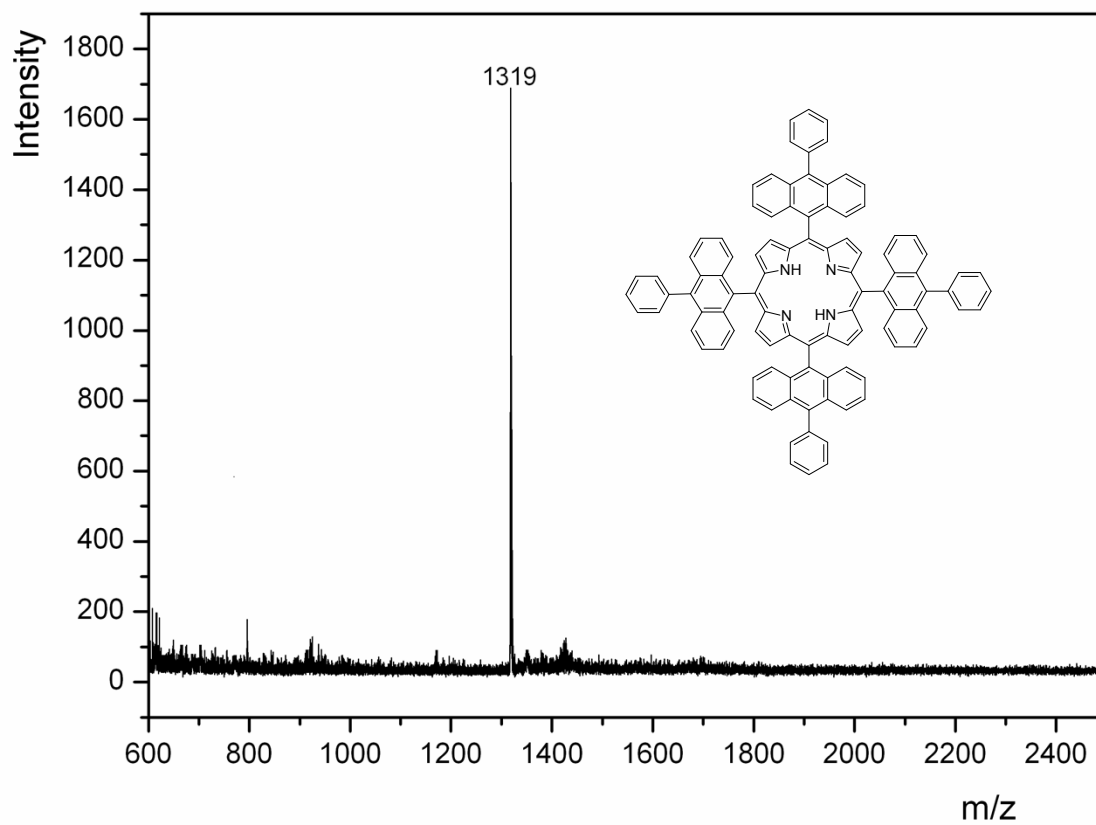


Figure S4. MALDI-TOF spectrum of compound 6.

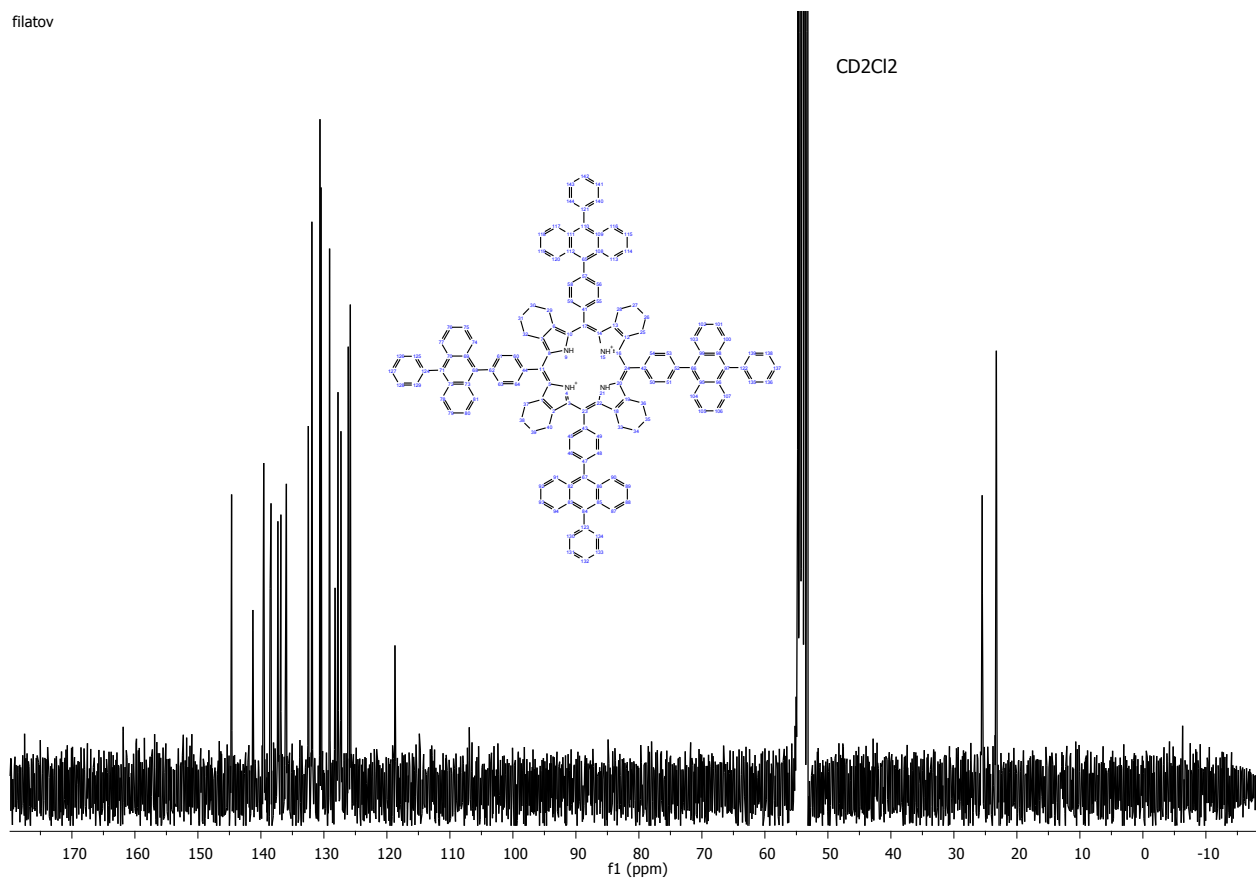
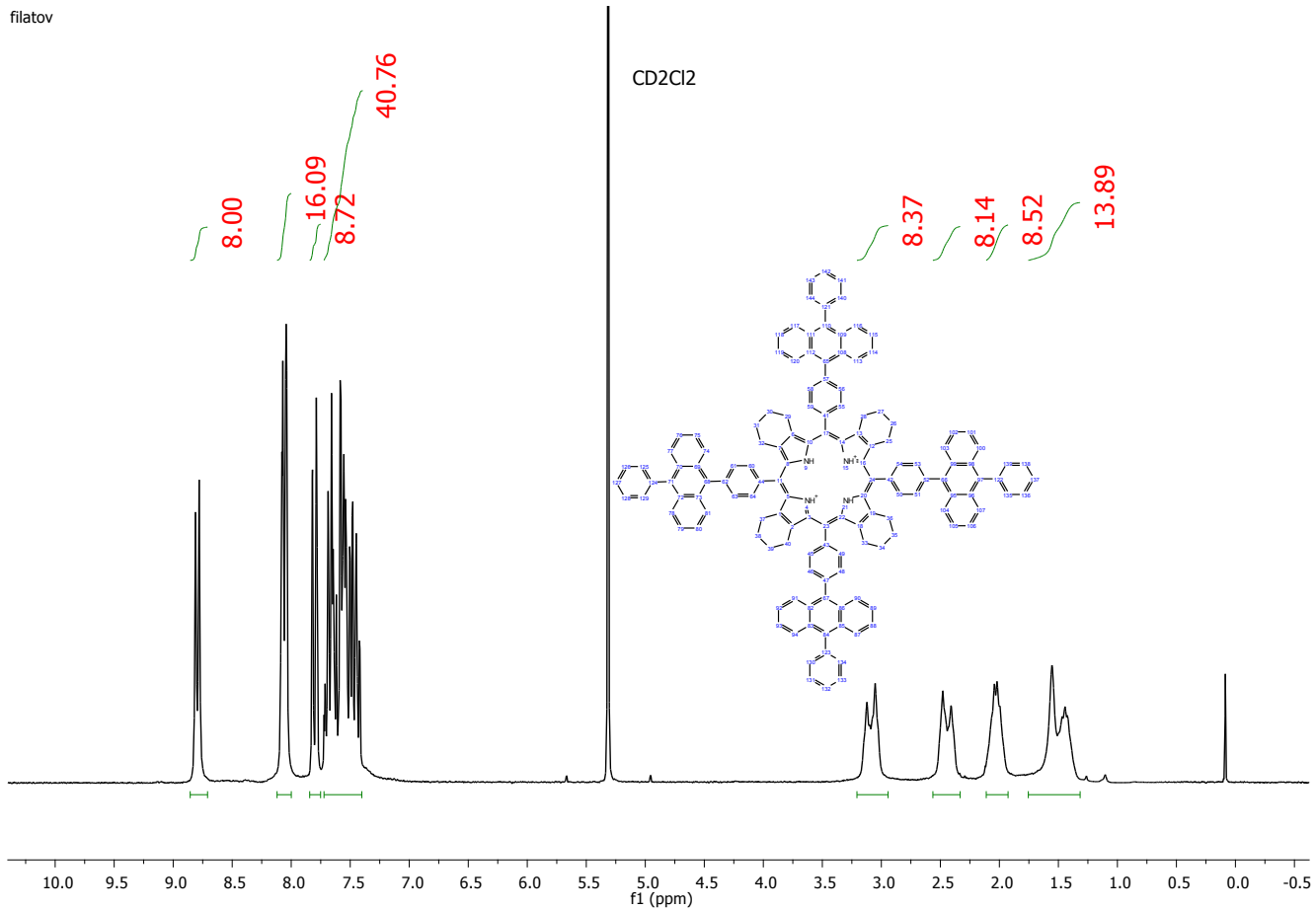


Figure S5. ^1H and ^{13}C NMR spectra of compound **10** (protonated form).

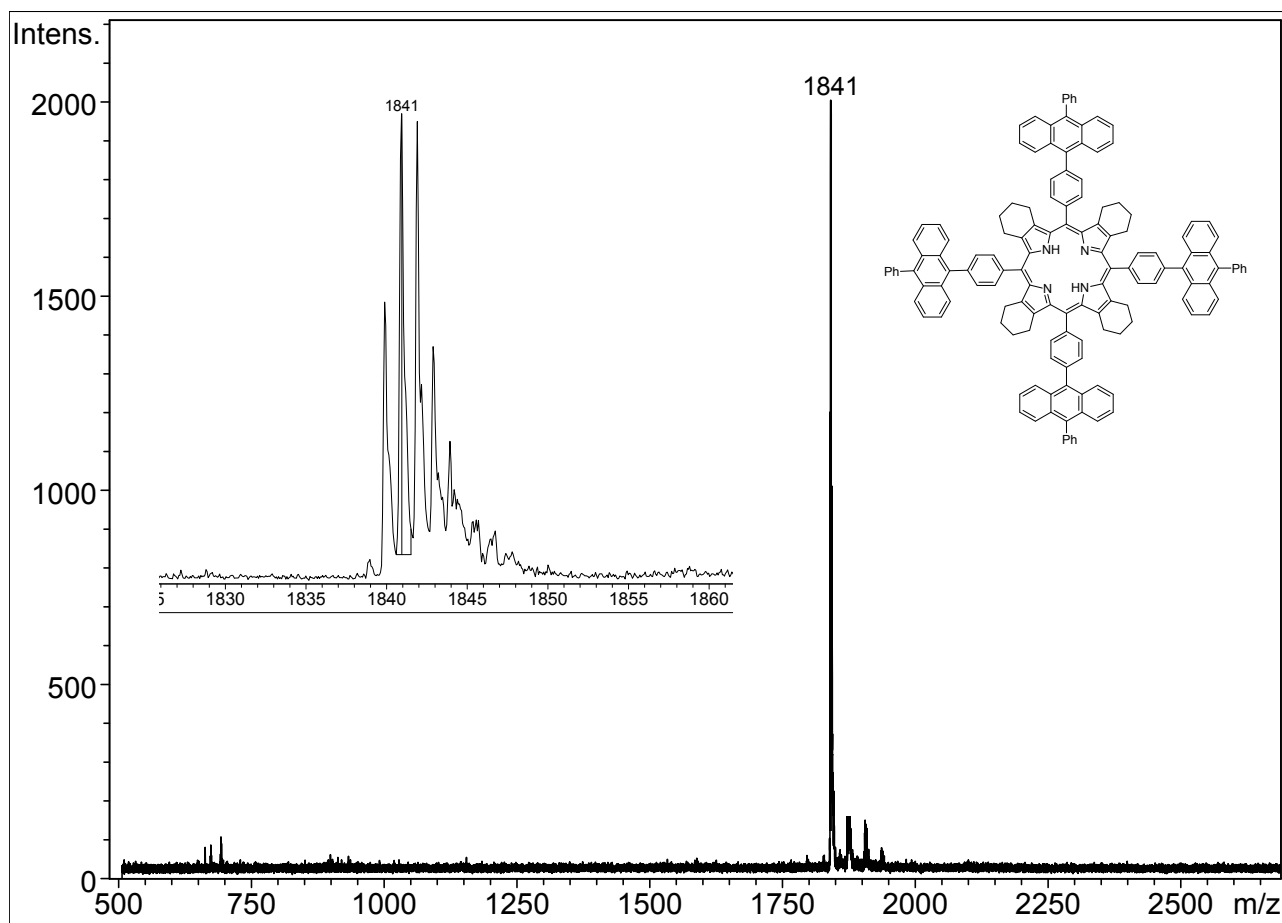
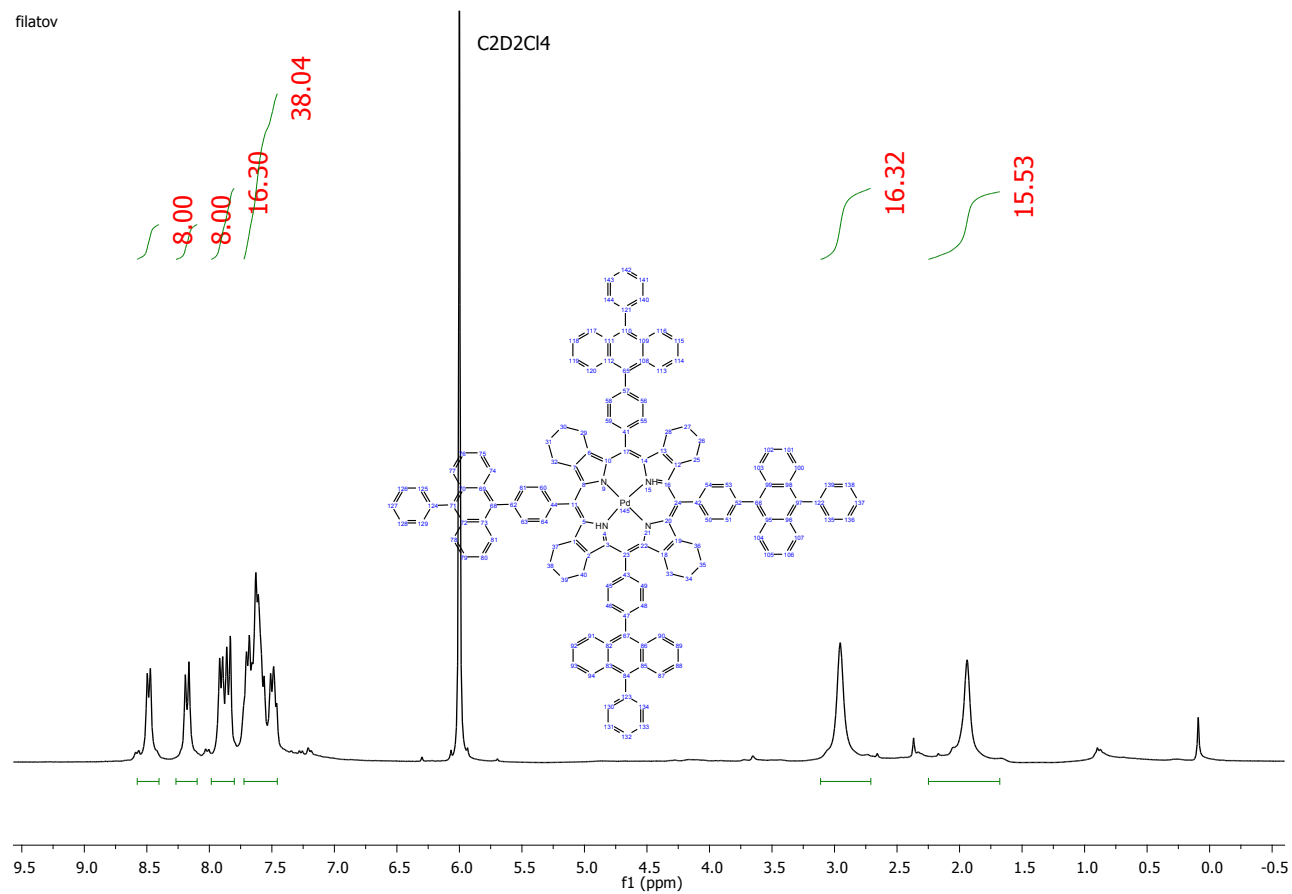


Figure S6. MALDI-TOF spectrum of compound **10**.

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(DPA)4TCHP-Pd
mf0211 a in tetra bei 373k

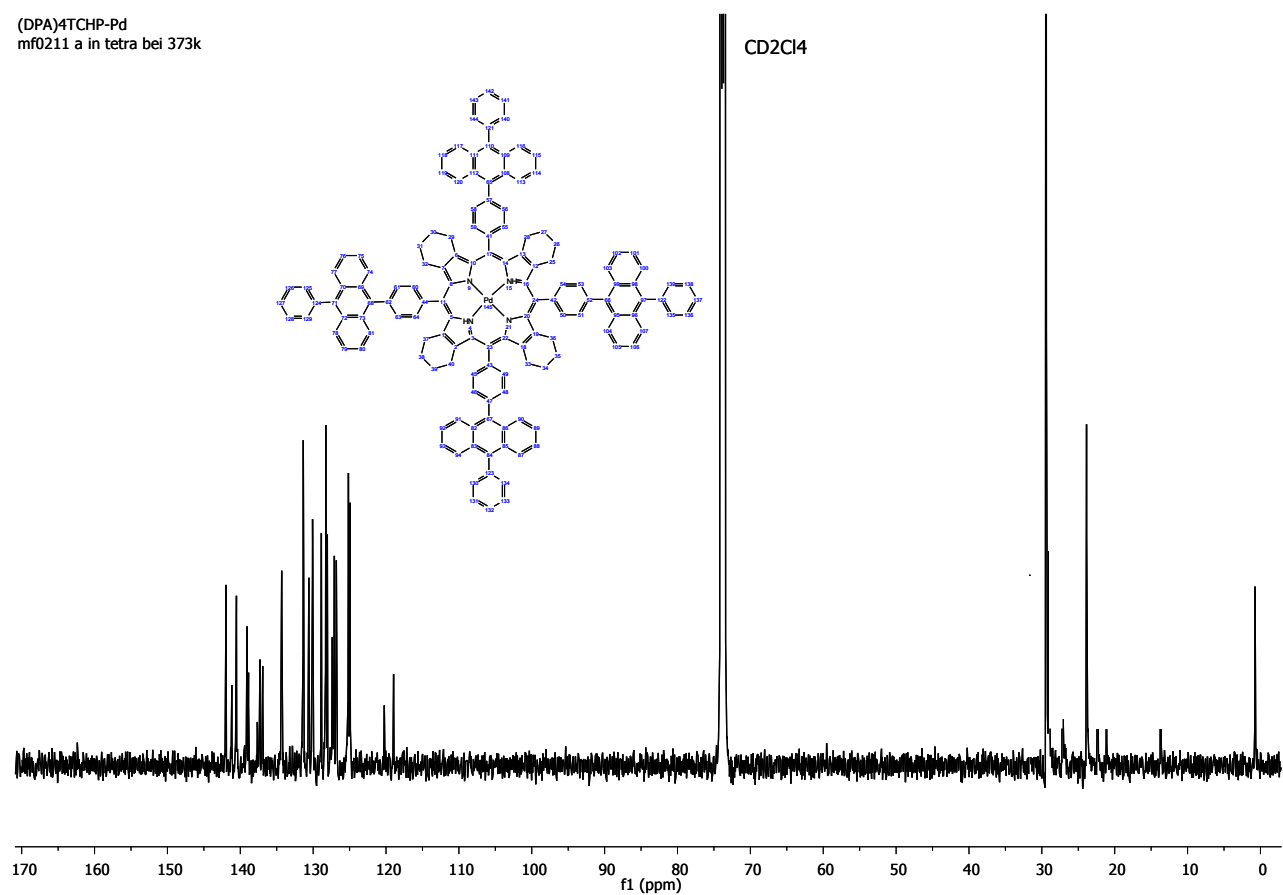


Figure S7. ^1H and ^{13}C NMR spectra of compound **10-Pd**.

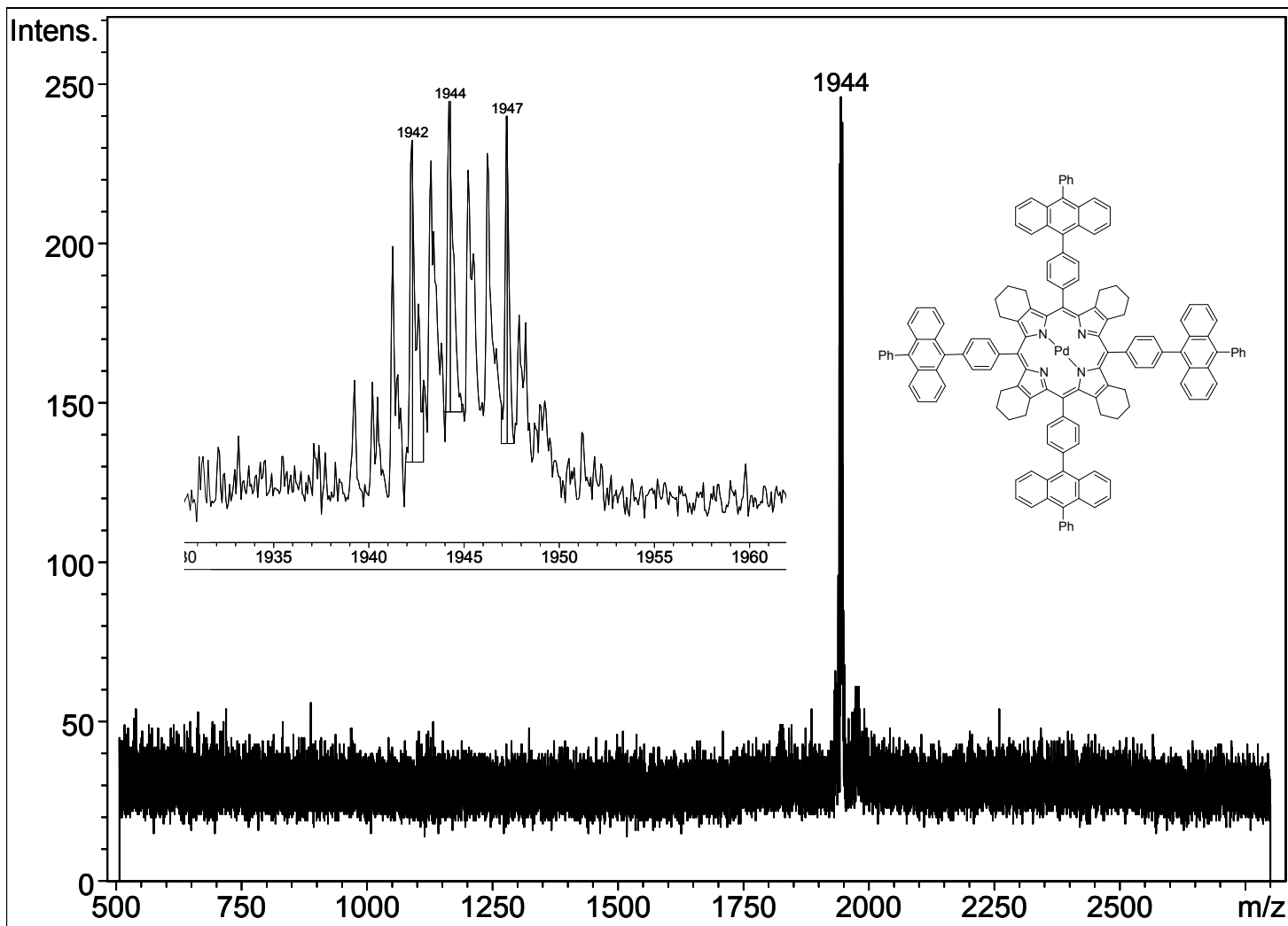


Figure S8. MALDI-TOF spectrum of compound **10-Pd**.

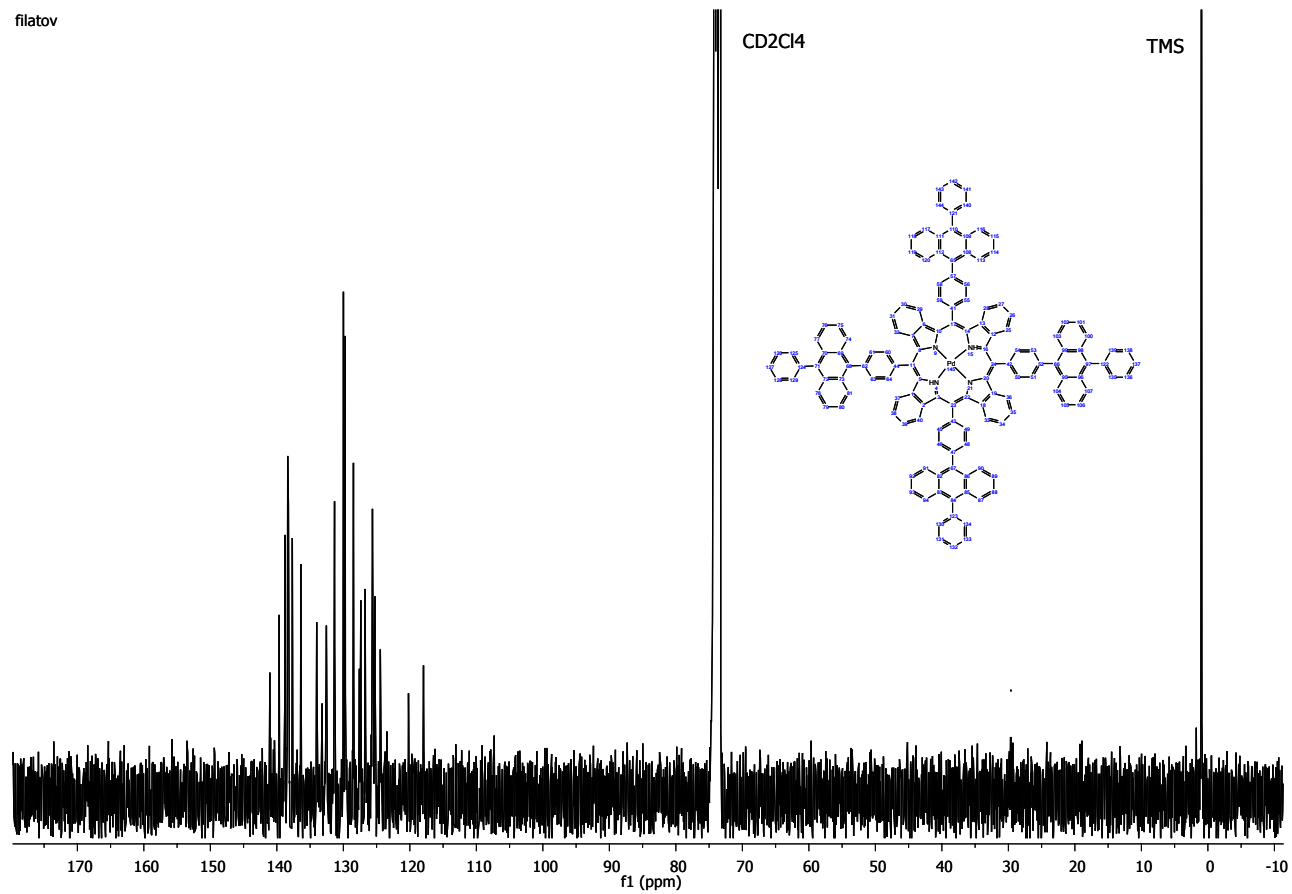
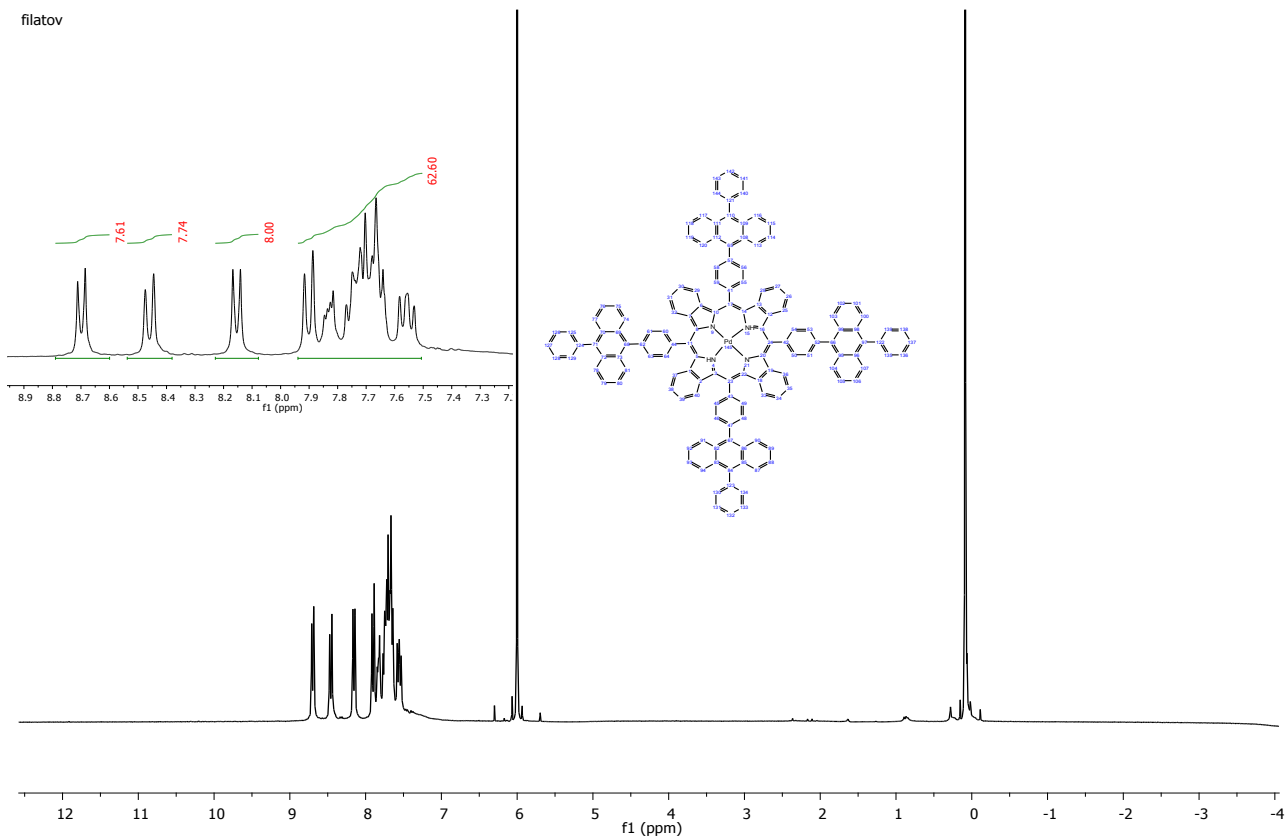


Figure S9. ¹H and ¹³C NMR spectra of compound **11-Pd**.

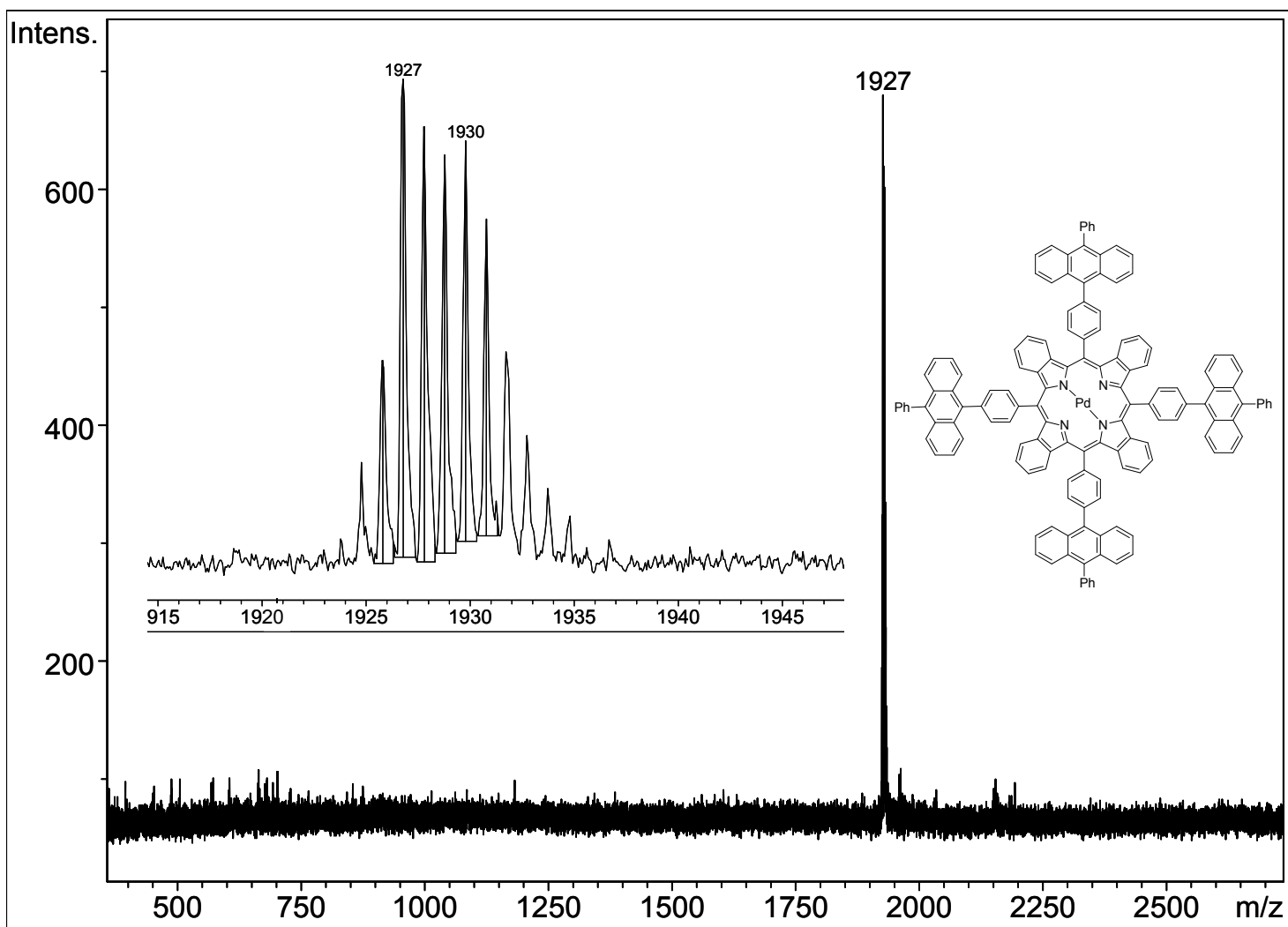


Figure S10. MALDI-TOF spectrum of compound 11-Pd.

Optical spectra

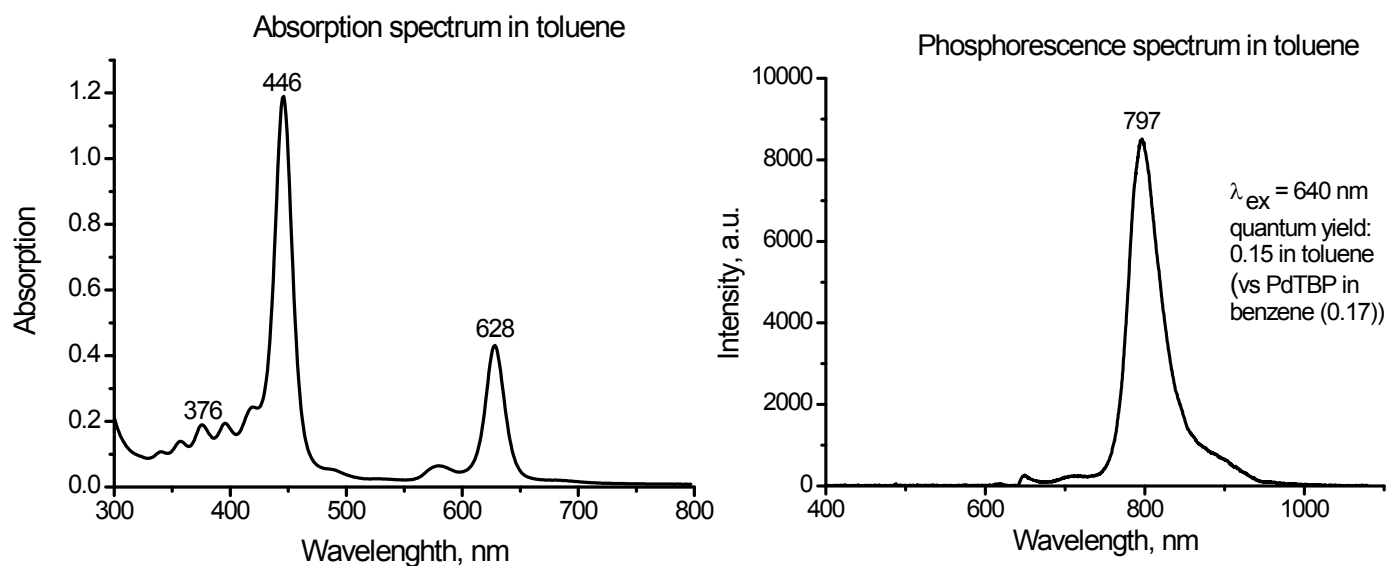


Figure S11. Absorption and phosphorescence spectra of **11-Pd**.

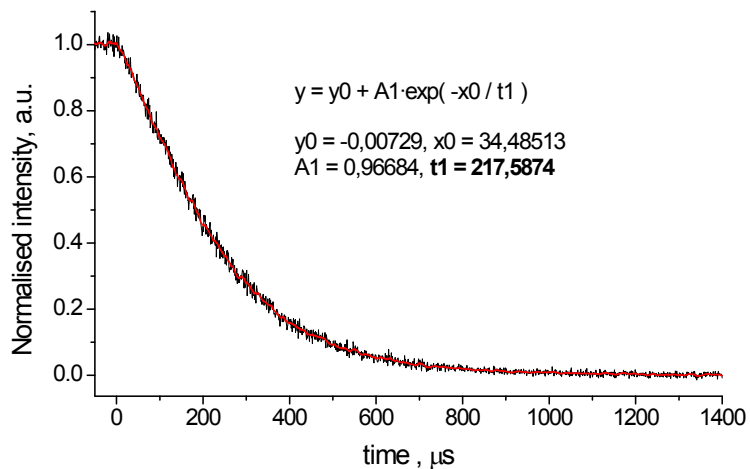


Figure S12. Time-resolved phosphorescence spectrum of **11-Pd**.

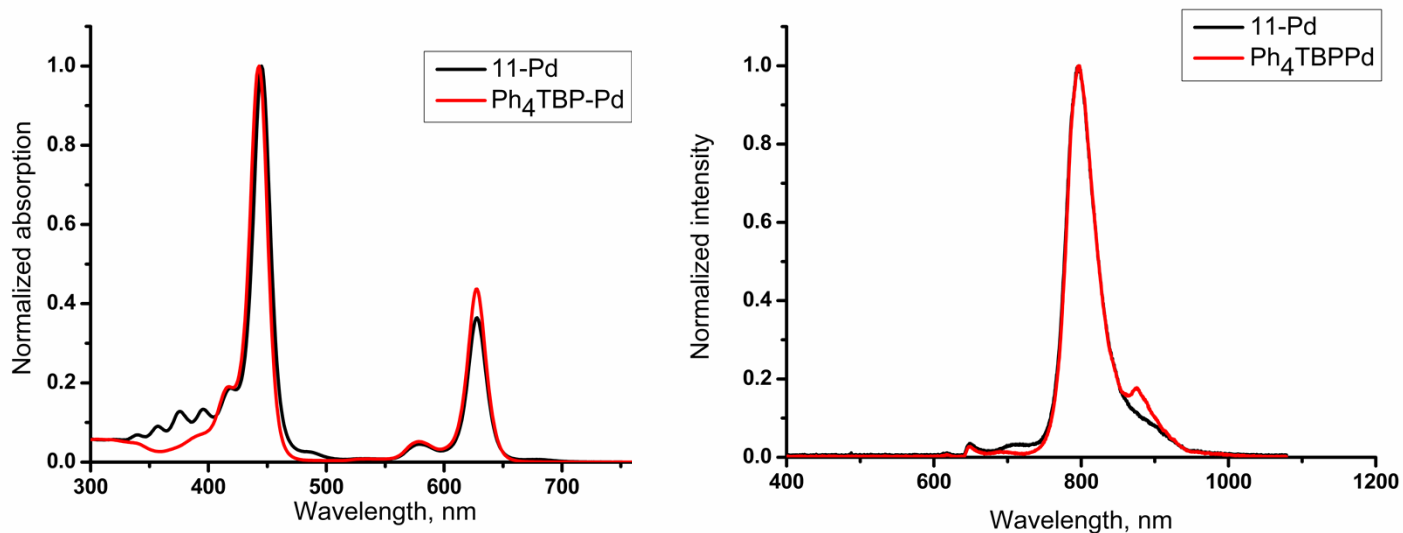


Figure S13. Comparison of absorption and phosphorescence spectra of **11-Pd** meso-tetraphenyltetrabenzoporphyrin palladium.

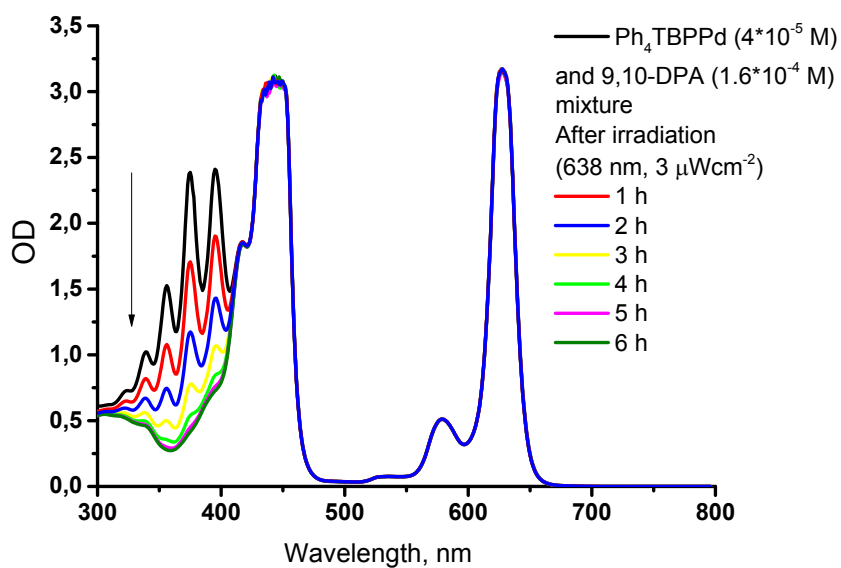


Figure S14. Time profile of oxygen addition to 9,10-diphenylanthracene mixed with meso-tetraphenyltetrabenzoporphyrin palladium in 4:1 ration (toluene) under irradiation with 638 nm light (3 μWcm⁻², broad beam).