Supporting Information

Dyes and Pigments

Synthesis of mono-, di-, tri- and tetracarboxy azaphthalocyanines as potential dark quenchers

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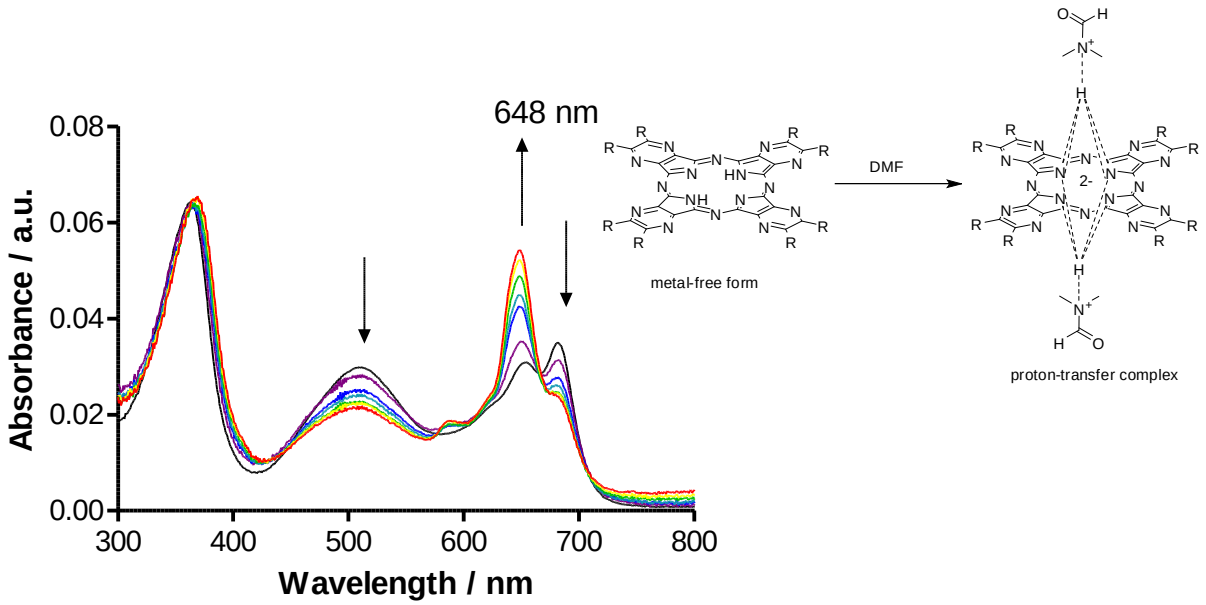

Figure S1. Changes in absorption spectra of AzaPc **7** in time within 1 hour after mixing its MeOH stock solution with DMF (amount of MeOH 1%). Note increasing absorbance of the proton-transfer complex at 648 nm.

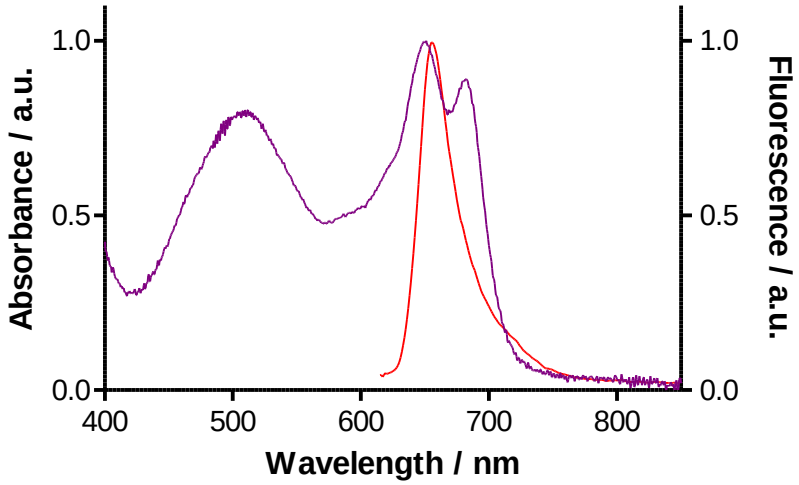

Figure S2. Normalized emission (red) and absorption (purple) spectra of AzaPc **7** in DMF with 1% MeOH. The absorption spectrum is the same as the spectrum of the same color in Figure S1.The emission is most likely due to small amount of the proton-transfer complex that is present at the moment of measurement. It cannot originate from metal-free form because it would lead to negative Stokes shift.

UV-vis absorption spectra of AzaPc in HPLC mobile phase acetonitrile/tetrahydrofuran/water 50:20:30, pH of water phase was adjusted to value 5.5 with help of 0.1 M acetic acid and triethylamine. Spectra were taken during HPLC. Red full line – pure standard. Blue dotted line – analyzed sample from precursors' reaction ratio 1:1. Spectra were normalized to the same absorption at B-band.

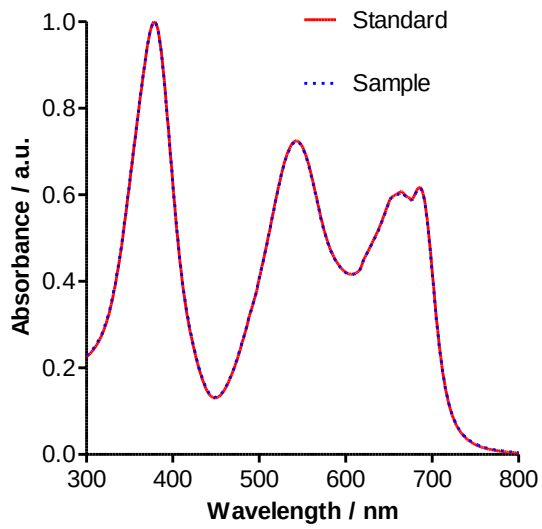

Figure S3. Compound **3**. Spectra were taken at time 13.6 min.

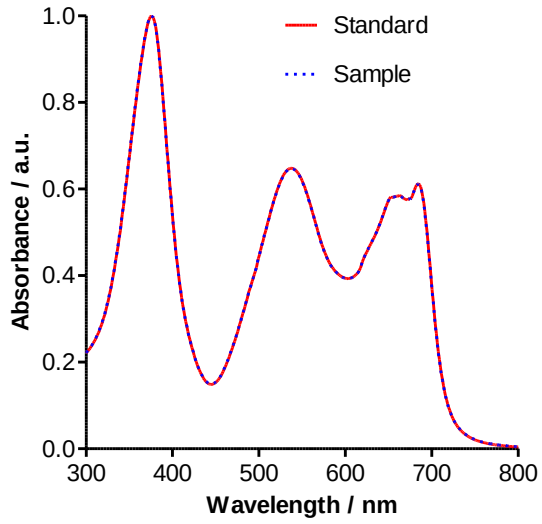

Figure S3. Compound **4**. Spectra were taken at time 5.9 min.

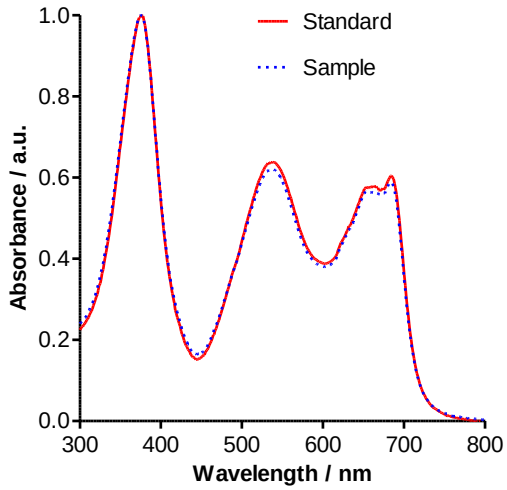

Figure S5. Compound **5**. Spectra were taken at time 5.3 min.

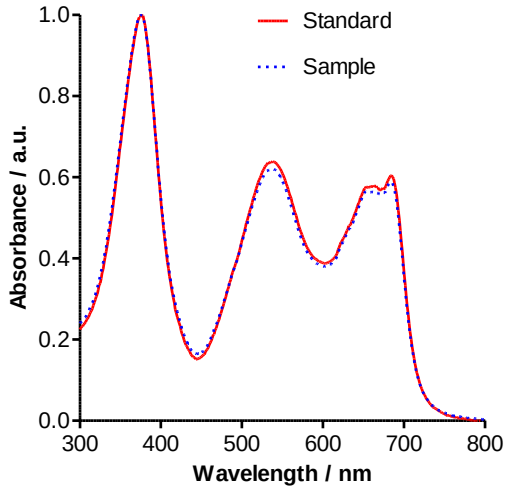

Figure S6. Compound **6**. Spectra were taken at time 1.5 min.

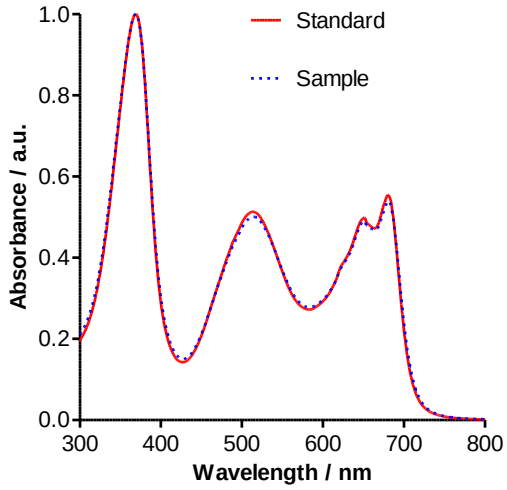

Figure S7. Compound **7**. Spectra were taken at time 0.9 min.

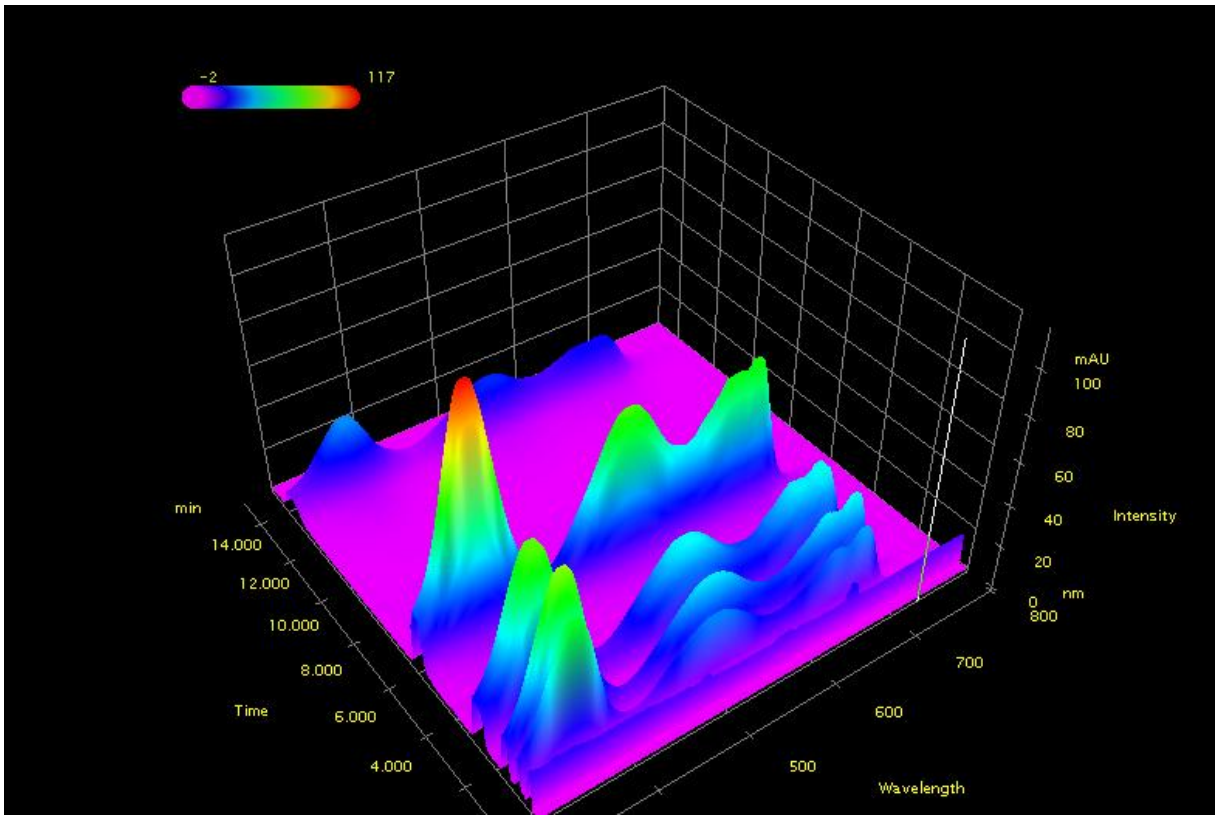

Figure S8. 3D HPLC chromatogram of mix of standards **3-7** under optimal chromatographic conditions.