ACTA CHEMICA IASI, **34_2** (2026)
DOI: 10.47743/achi-2026-2-0012

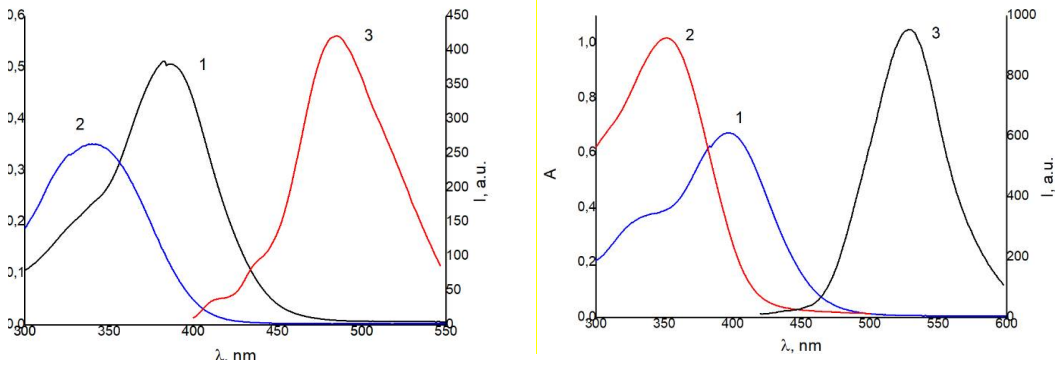
Supplementary information

for

Cyclodextrin-assisted partial disaggregation of zirconium phthalocyanines in aqueous media: synthesis and photophysical characterization

Natalia M. Fedosova[a], Iryna M. Tretyakova[a], Alexandru Rotaru[b], Vazghen Nikolian[c], Victor Ya. Chernii[a*]

[a]*V. I. Vernadsky Institute of General and Inorganic Chemistry of the National Academy of Sciences of Ukraine, 32/34 Acad. Palladin Ave., 03142, Kyiv, Ukraine*
[b]*"Petru Poni" Institute of Macromolecular Chemistry, Romanian Academy, Centre of Advanced Research in Bionanoconjugates and Biopolymers, Grigore Ghica Voda Alley 41 A, 700487 Iasi, Romania*
[c]*WimbleAI Inc. 548 Market St, Unit 55559, San Francisco, California, USA*



a) **b)**

Figure S1. UV-Vis spectra of **L1** (a) and **L2** (b) in DMSO (1), in 0.05 M aqueous $NaHCO_3$ solution (2) ($C = 2 \times 10^{-5}$ mol/L) and fluorescence emission spectra of L1 in DMSO (3).

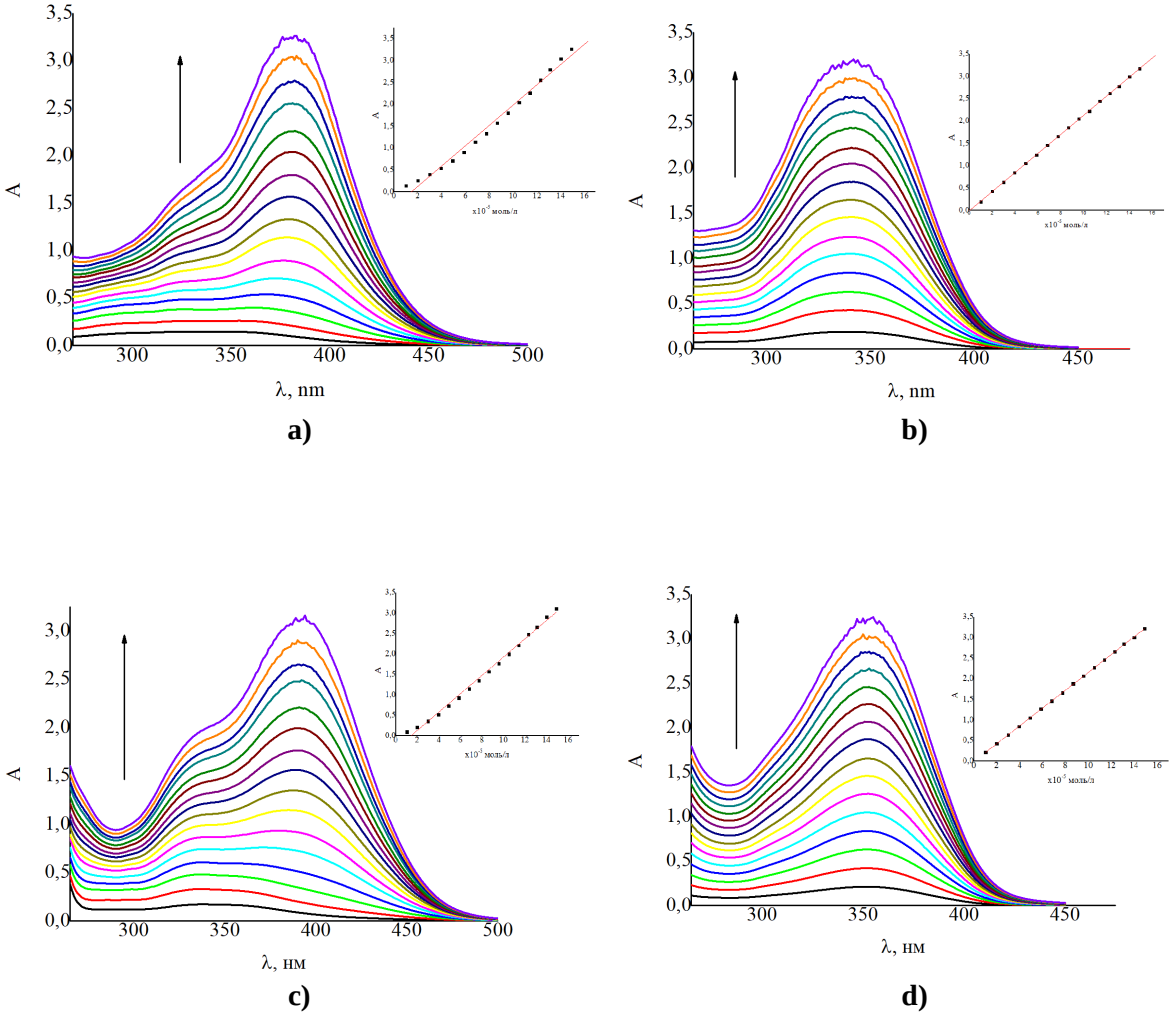


Figure S2. Changes in the UV-Vis absorption spectra of compound **L1** in DMSO (a) and in 0.05 M aqueous $NaHCO_3$ solution (b); **L3** in DMSO (c) and in 0.05 M aqueous $NaHCO_3$ solution (d) within the concentration range of $1.0 \times 10^{-5} – 1.5 \times 10^{-4}$ mol/L. Insets: plots showing compliance of the solutions with the Beer–Lambert law.

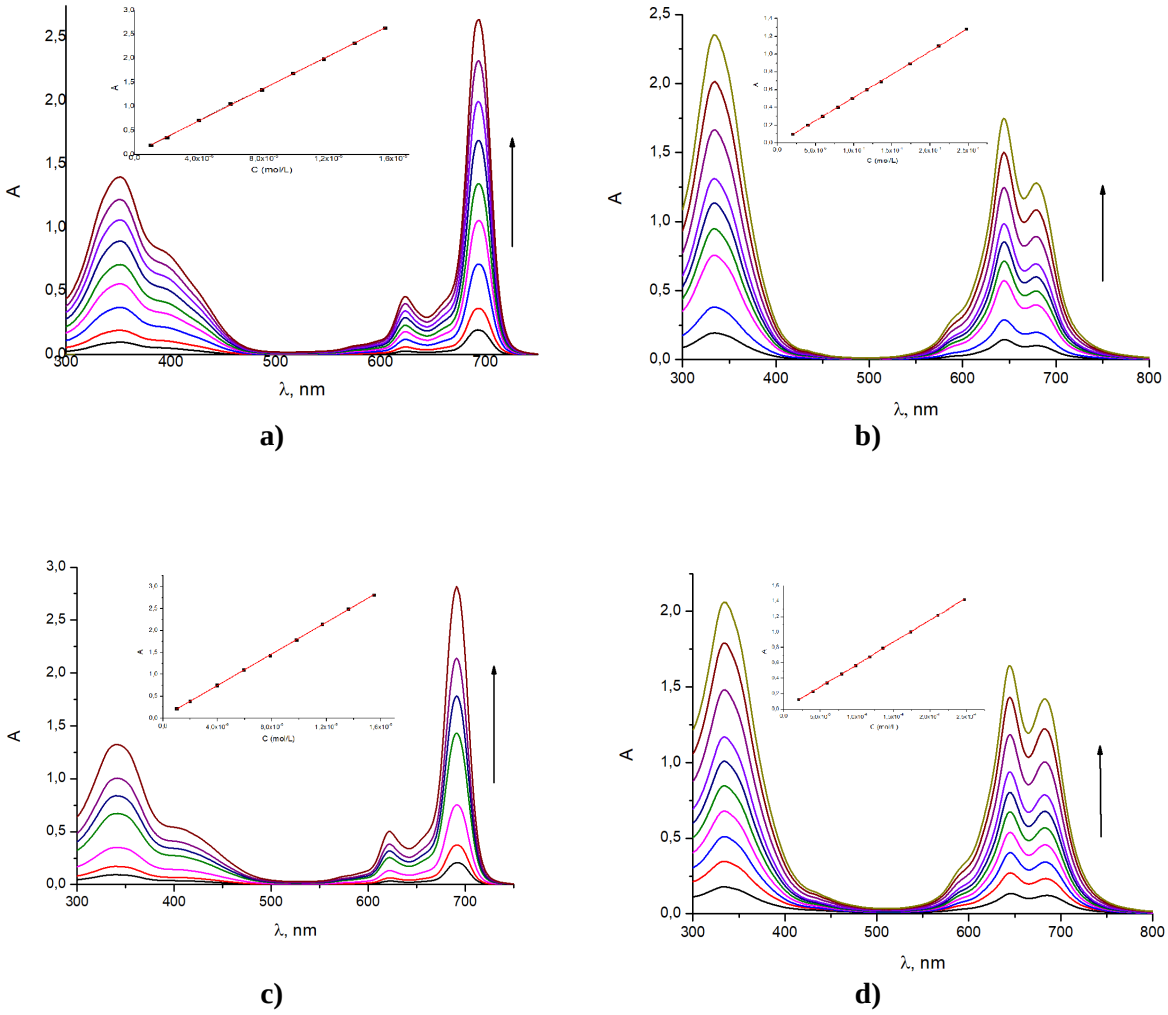


Figure S3. Changes in the UV-Vis spectra of **PcZr(L1)$_2$** in DMSO (a) and in 0.05 M aqueous $NaHCO_3$ solution (b); **PcZr(L3)$_2$** in DMSO (c) and in 0.05 M aqueous $NaHCO_3$ solution (d); over the concentration range from 2×10^{-6} to 1.2×10^{-5} M. Insets: plots demonstrating compliance of the solutions with the Beer–Lambert law.

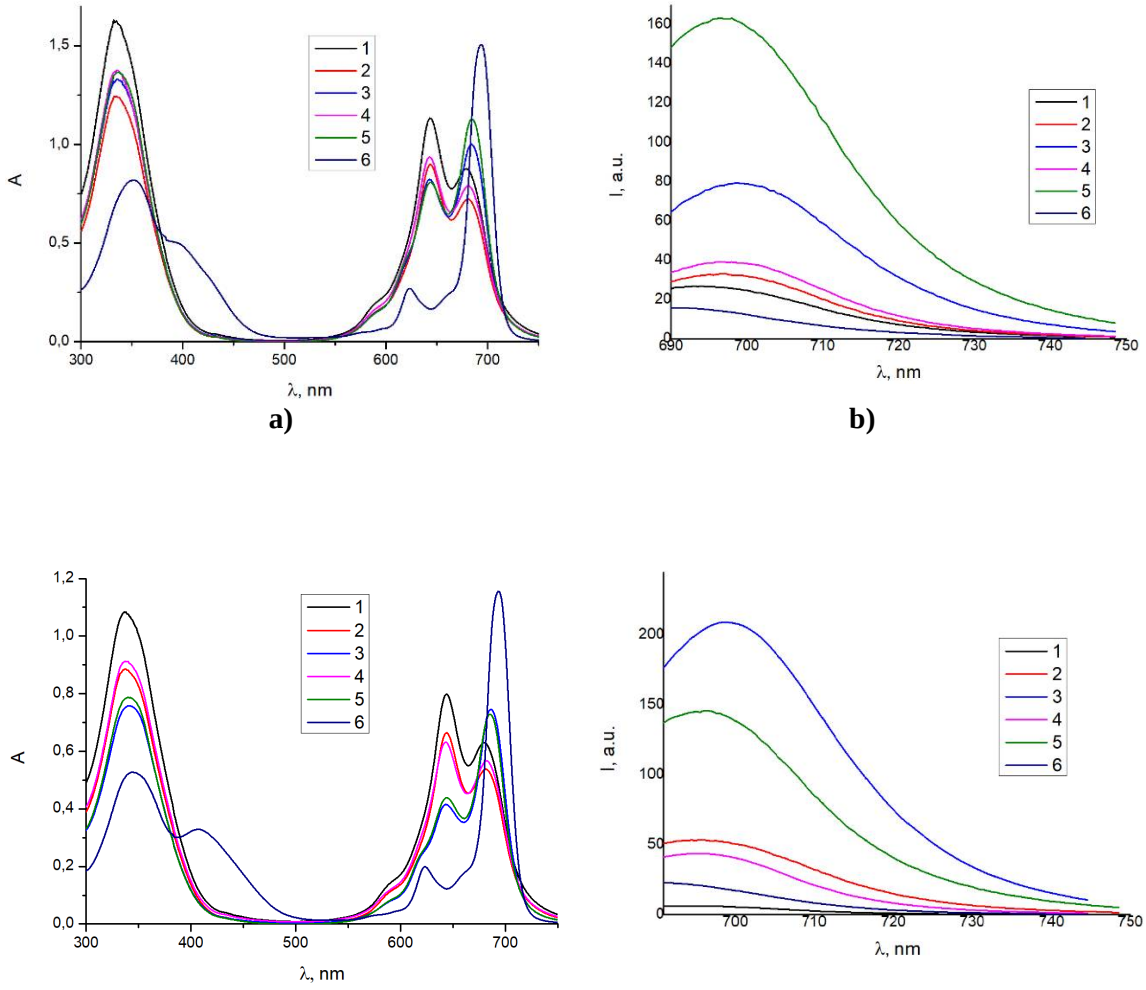


Figure S4. UV-Vis (**a, c**) and fluorescence spectra (**b**, **d**) of **PcZr(L1)$_2$** and **PcZr(L2)$_2$** respectively in 0.05 M aqueous $NaHCO_3$ solution – 1; in aqueous solutions with added cyclodextrins (αCD – 2; βCD -3; γCD – 4; HP-β-CD – 5) and in DMSO – 6.