

Self-assembly of a helical zinc-europium complex: speciation in aqueous solutions and luminescence

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Supplementary Information

6 pages

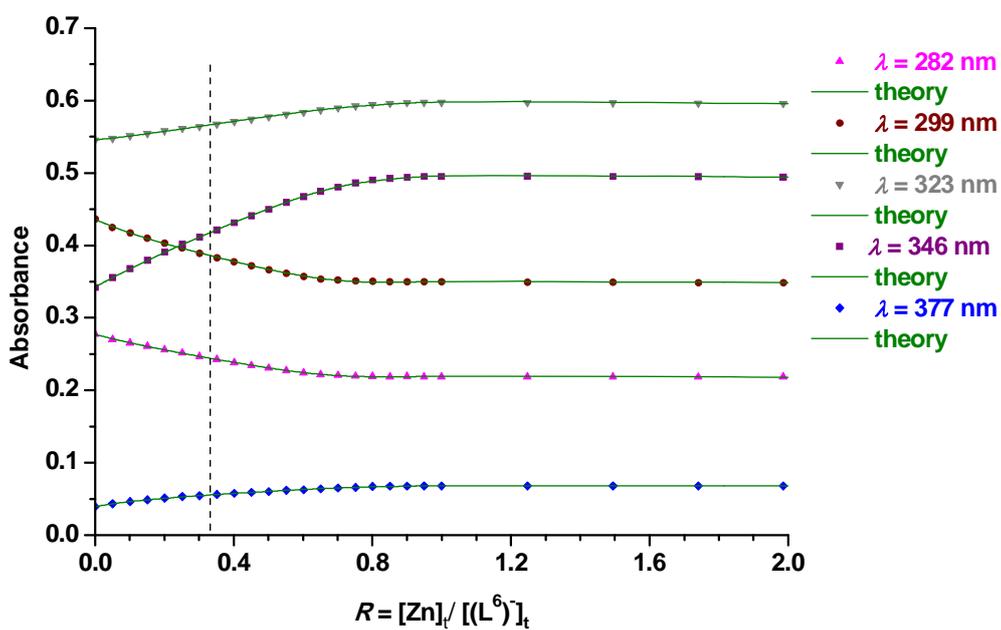
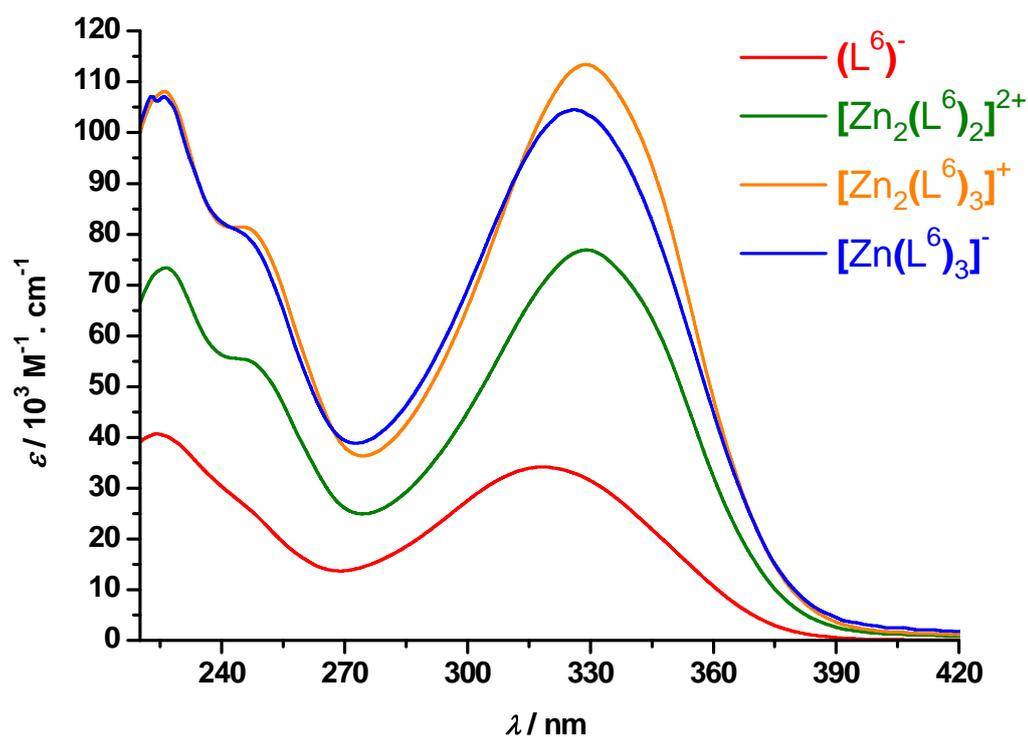


Figure S1. (Top) Re-calculated spectra from the titration of HL^6 with zinc perchlorate at 295 K and pH 7.4. (Bottom) Absorbance values extracted at different wavelengths during the titration compared with theoretical prediction from the stability extracted from the fit procedure (Table 1).

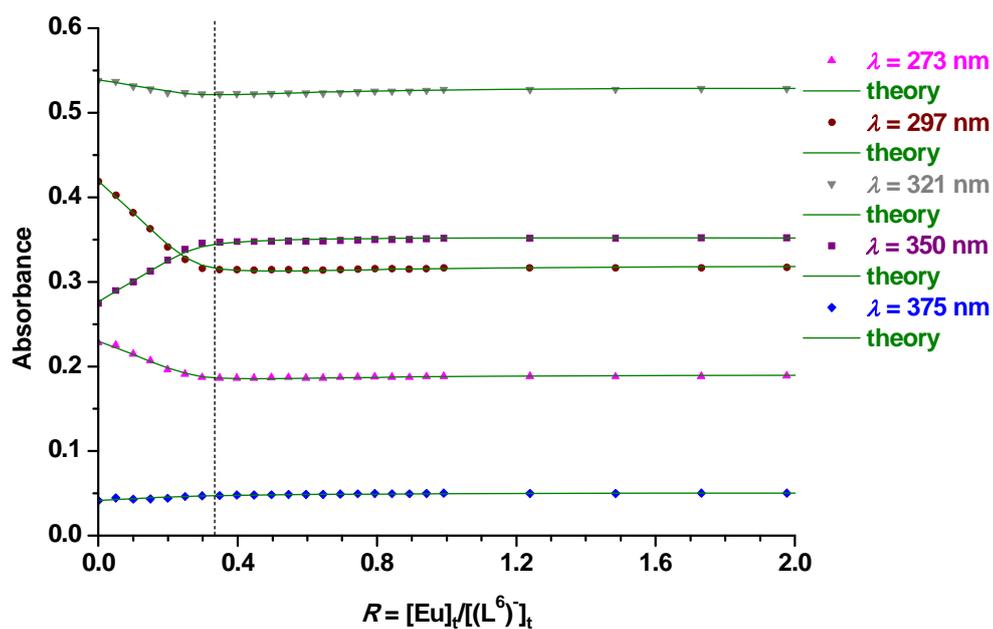
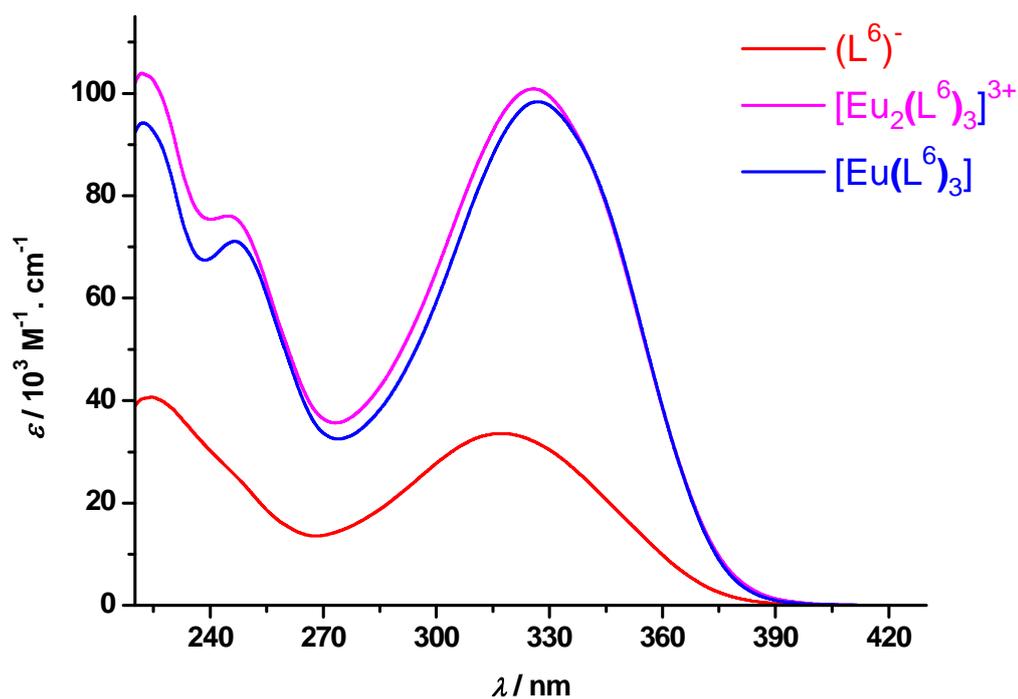


Figure S2. (Top) Re-calculated spectra from the titration of HL^6 with europium perchlorate at 295 K and pH 7.4. (Bottom) Absorbance values extracted at different wavelengths during the titration compared with theoretical prediction from the stability extracted from the fit procedure (Table 1).

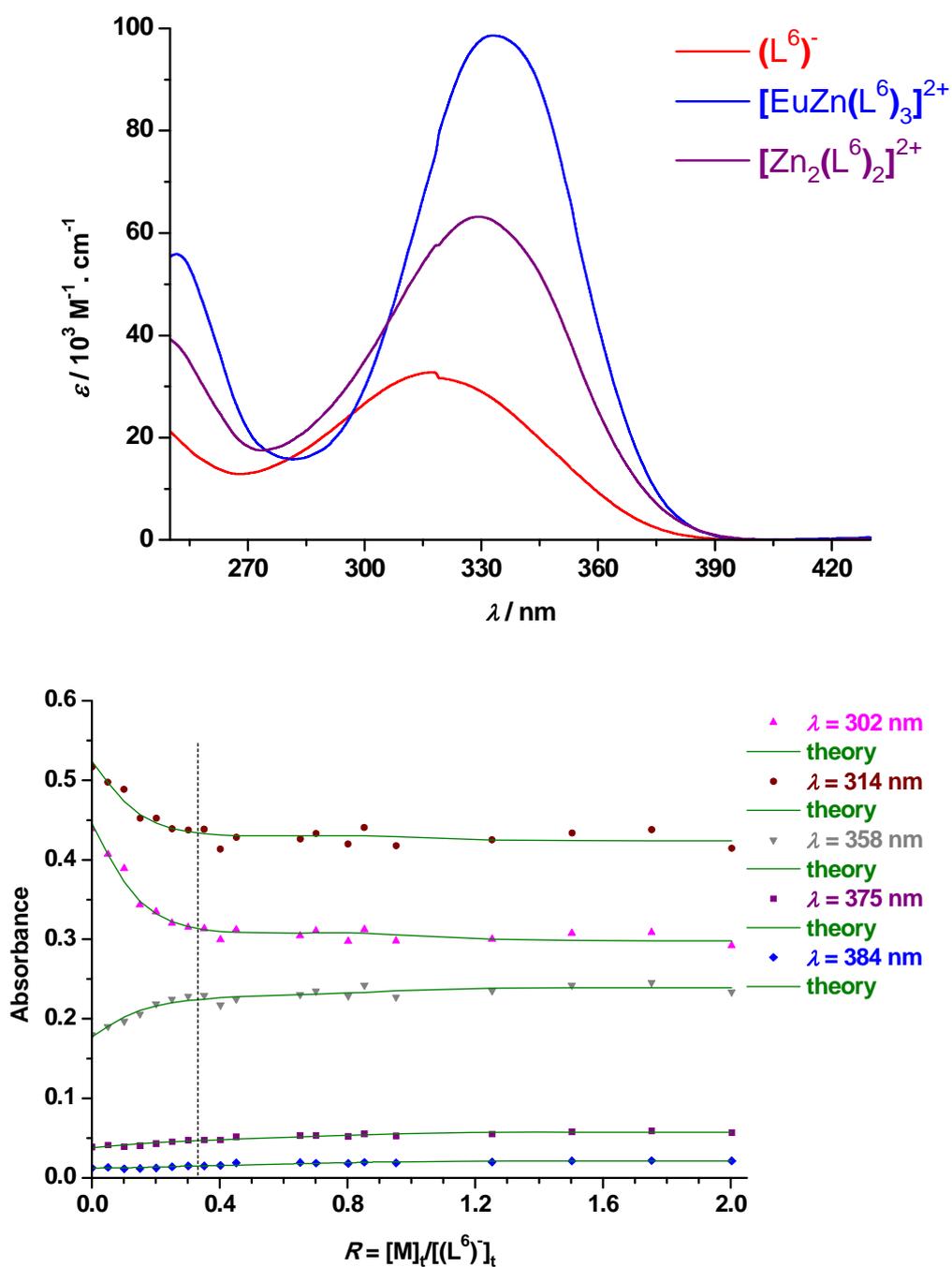


Figure S3. (Top) Re-calculated spectra from the titration of HL^6 with zinc and europium perchlorate (1:1) at 295 K and pH 7.4. (Bottom) Absorbance values extracted at different wavelengths during the titration compared with theoretical prediction from the stability extracted from the fit procedure (Table 1).

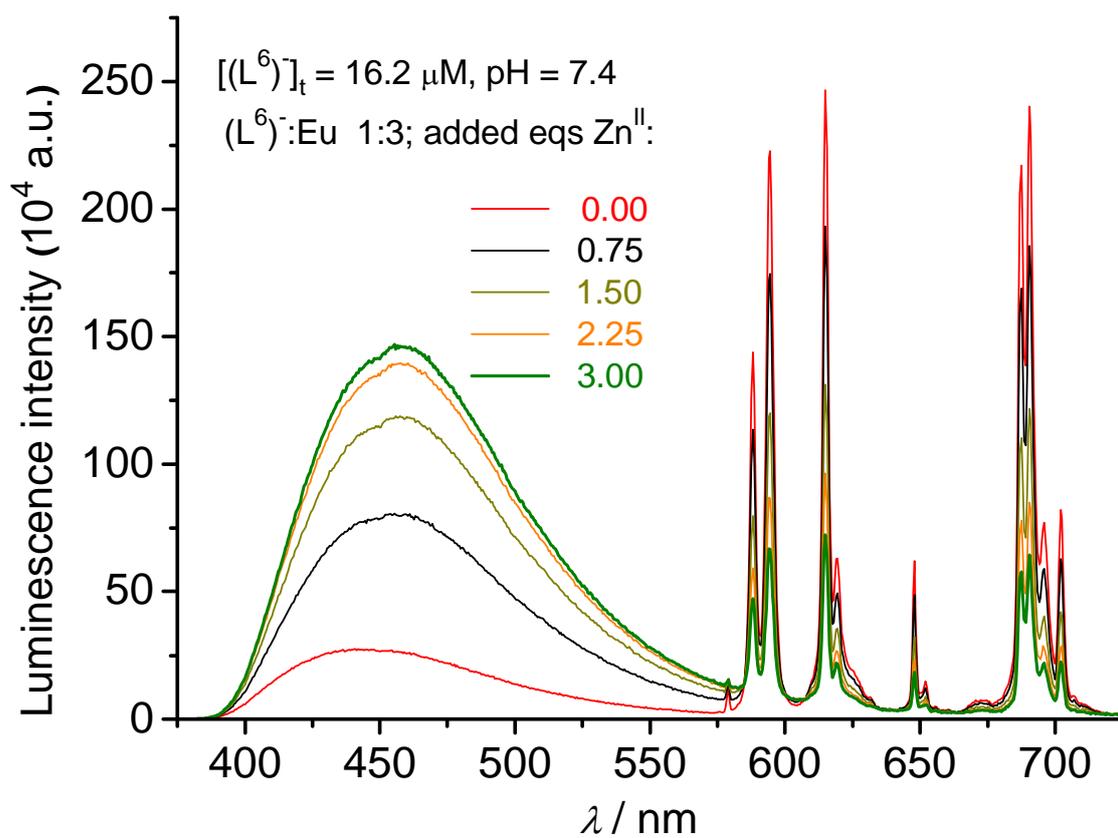


Figure S4. Effect on luminescence spectra of the addition of Zn^{II} to a stoichiometric 1:3 $\text{Eu}^{\text{III}}:(L^6)^-$ solution 16.4 μM in ligand, pH 7.4.

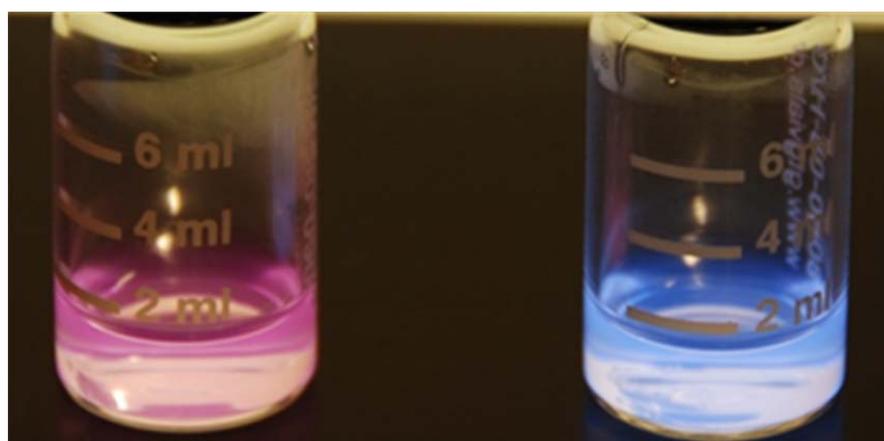


Figure S5. Stoichiometric solution 1:3 $\text{Eu}^{\text{III}}:(L^6)^-$ (left) and 1:1:3 $\text{Eu}^{\text{III}}:\text{Zn}^{\text{II}}:(L^6)^-$ under irradiation at 366 nm; total ligand concentration: 16.4 μM in ligand, pH 7.4.

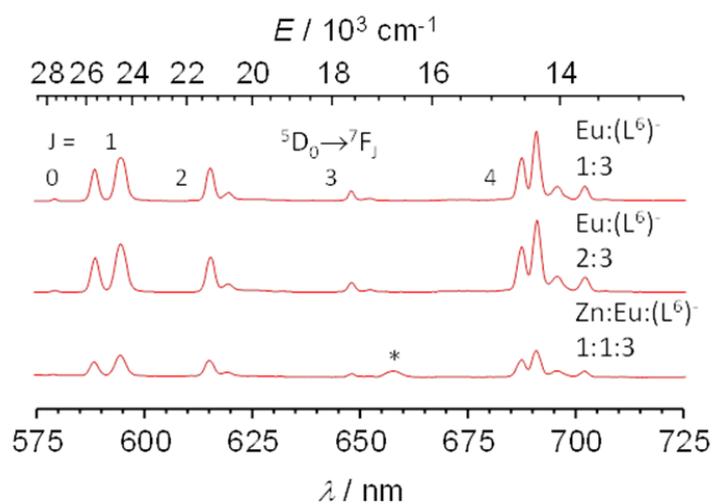


Figure S6. Emission spectra of solutions in Tris-HCl 0.1 M (pH 7.4) with different stoichiometries; $\lambda_{\text{exc}} = 327 \text{ nm}$; $[(L^6)]_t = 16.2 \mu\text{M}$; the star denotes an artefact (2nd order Rayleigh band from excitation beam).