Electronic Supplementary Material (ESI) for Dalton Transactions.

Supporting Information

Optical limiters with improved performance based on nanoconjugates of thiol substituted phthalocyanine with CdSe quantum dots and Ag nanoparticles

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Figure S1. ^{1}H-NMR spectrum of the phthalocyanine **3** in $CDCl_3$

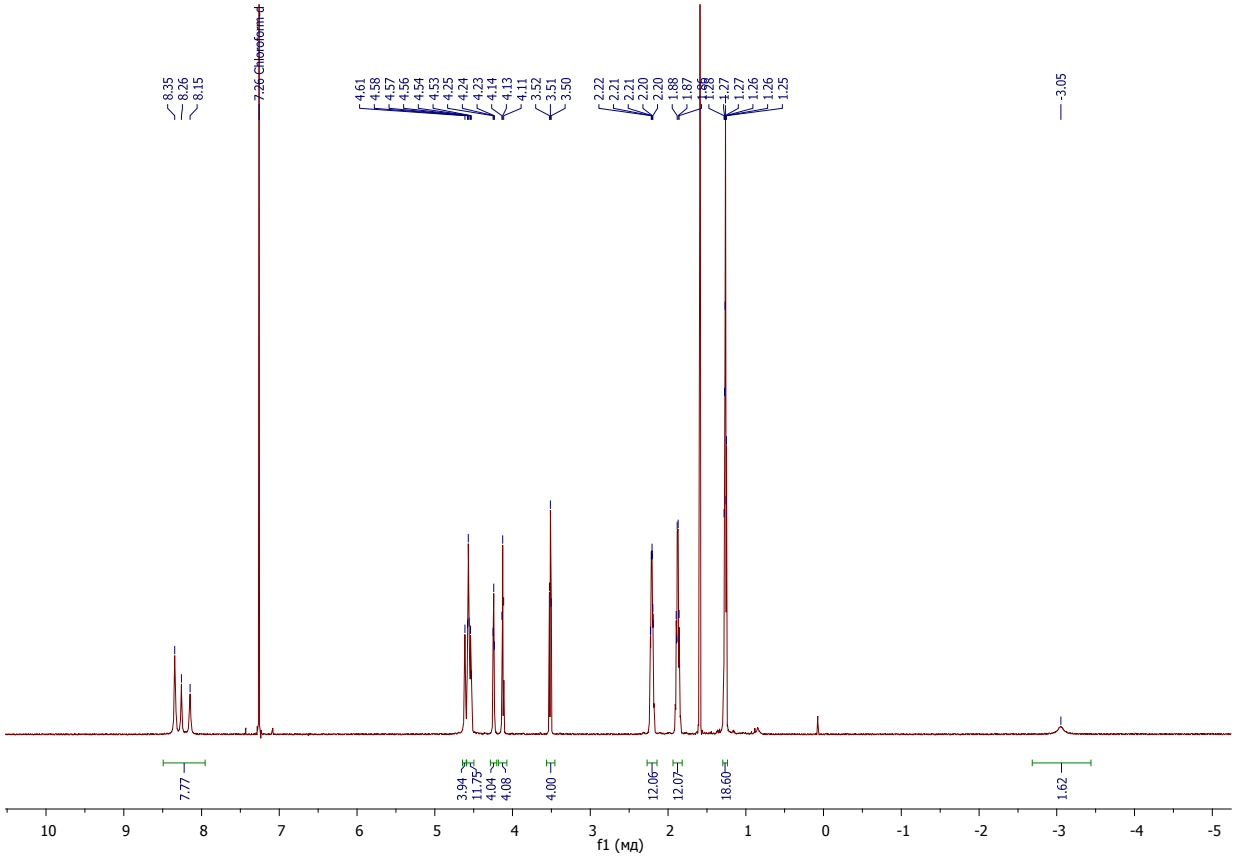


Figure S2. MALDI TOF mass-spectrum of the phthalocyanine **3**

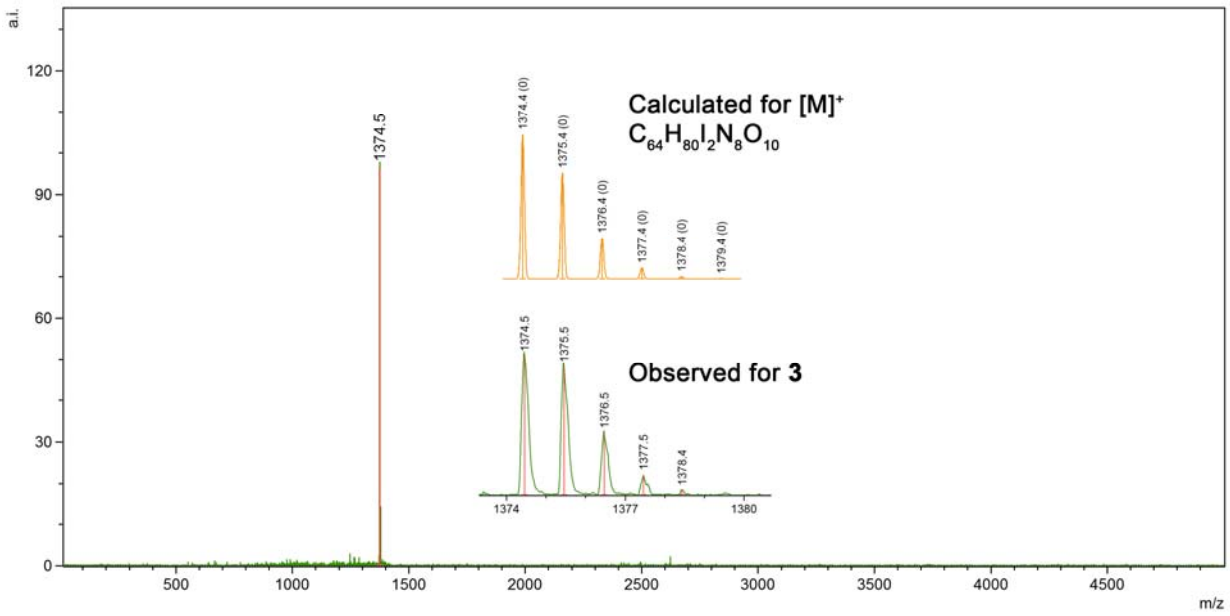


Figure S3. UV-Vis spectrum of the phthalocyanine **3** in chloroform

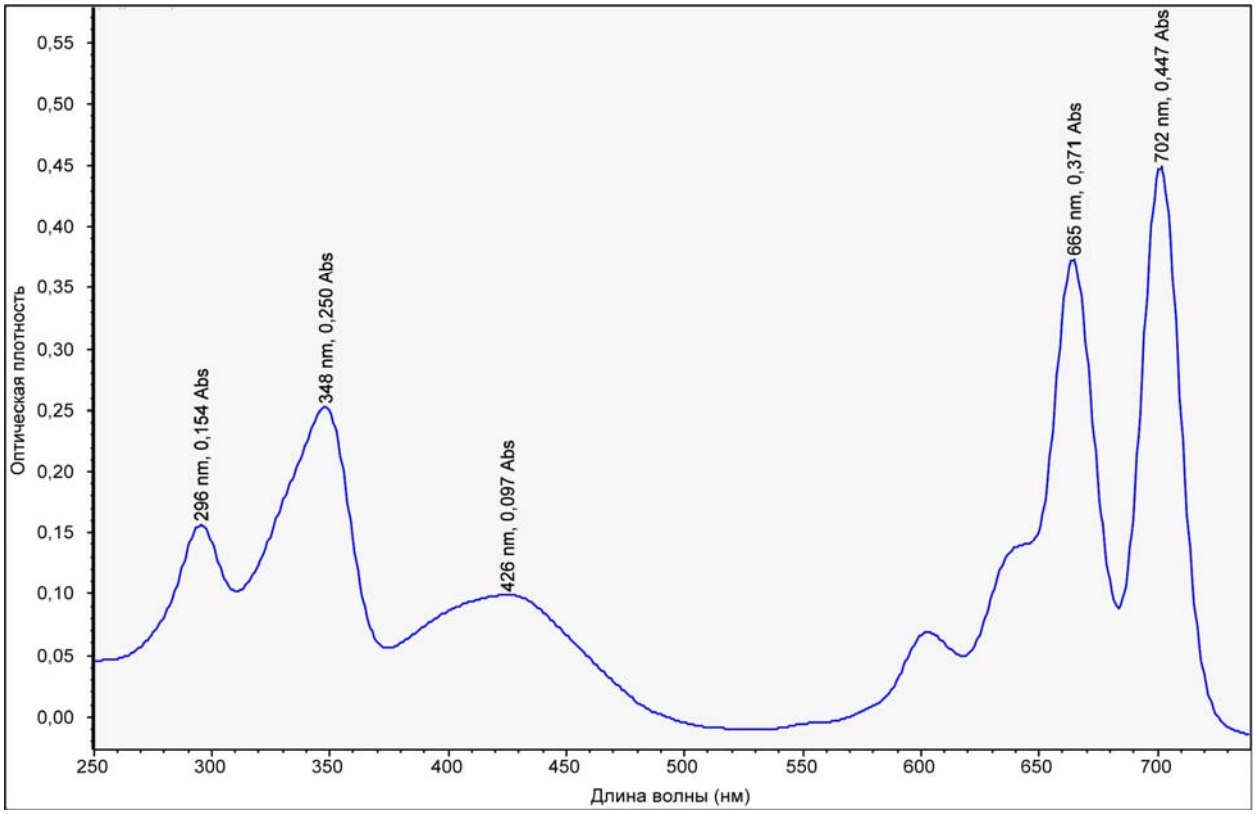


Figure S4. FT-IR spectrum of the phthalocyanine **3**

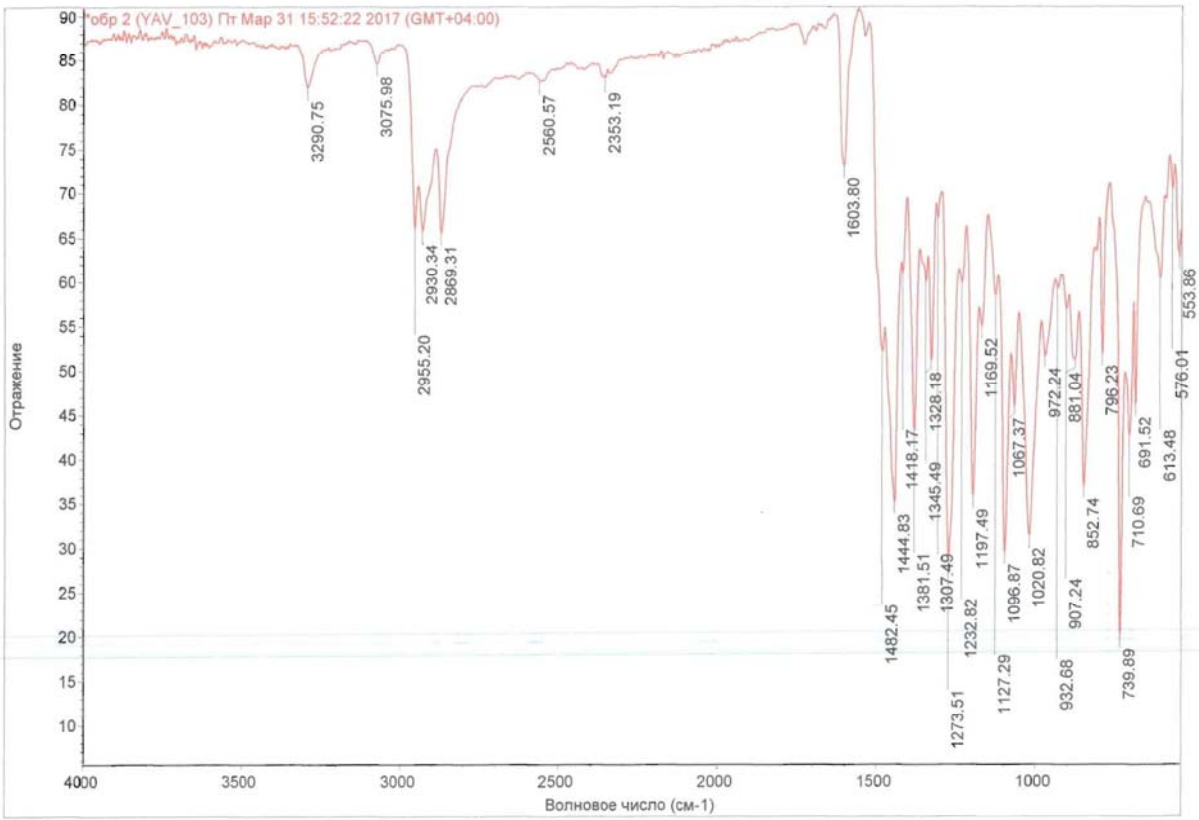


Figure S5. ^{1}H-NMR spectrum of the phthalocyanine **5** in $CDCl_3$

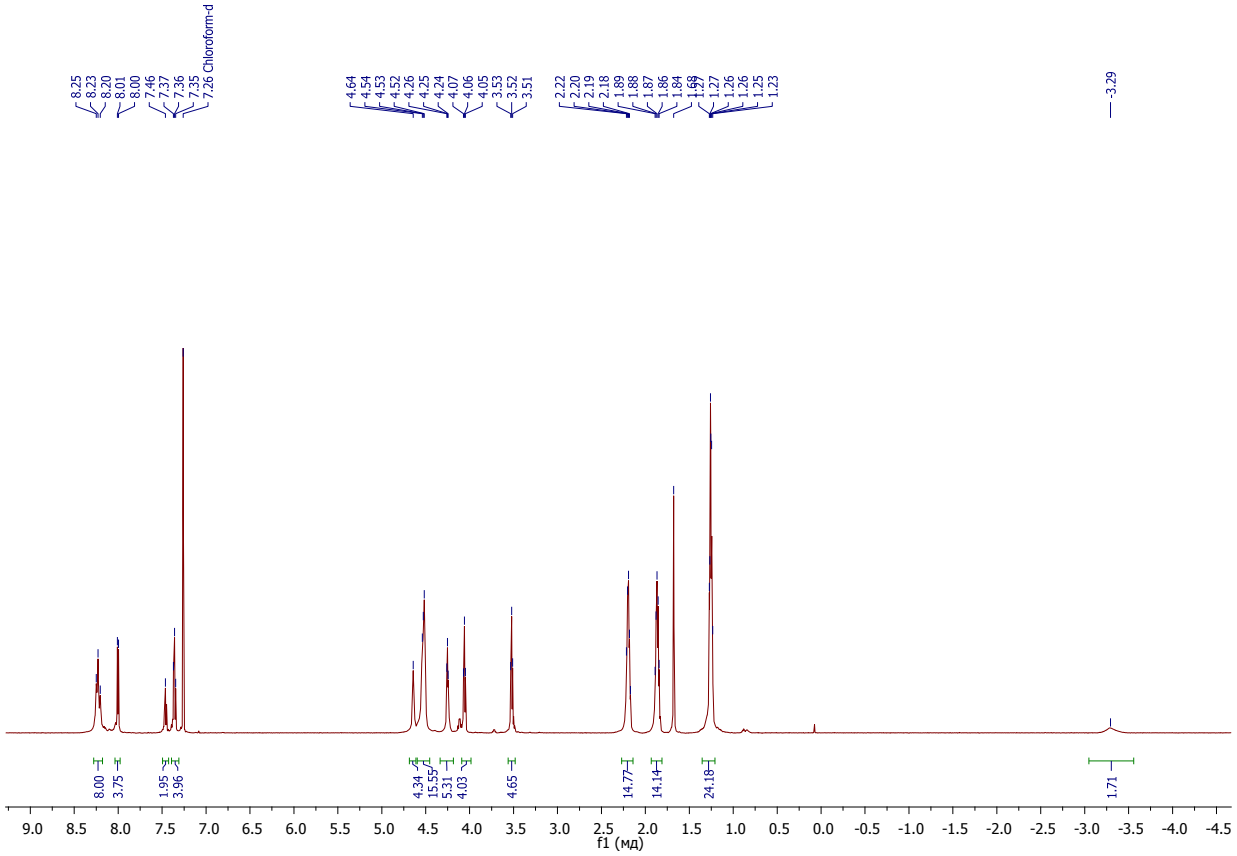


Figure S6. MALDI TOF mass-spectrum of the phthalocyanine **5**

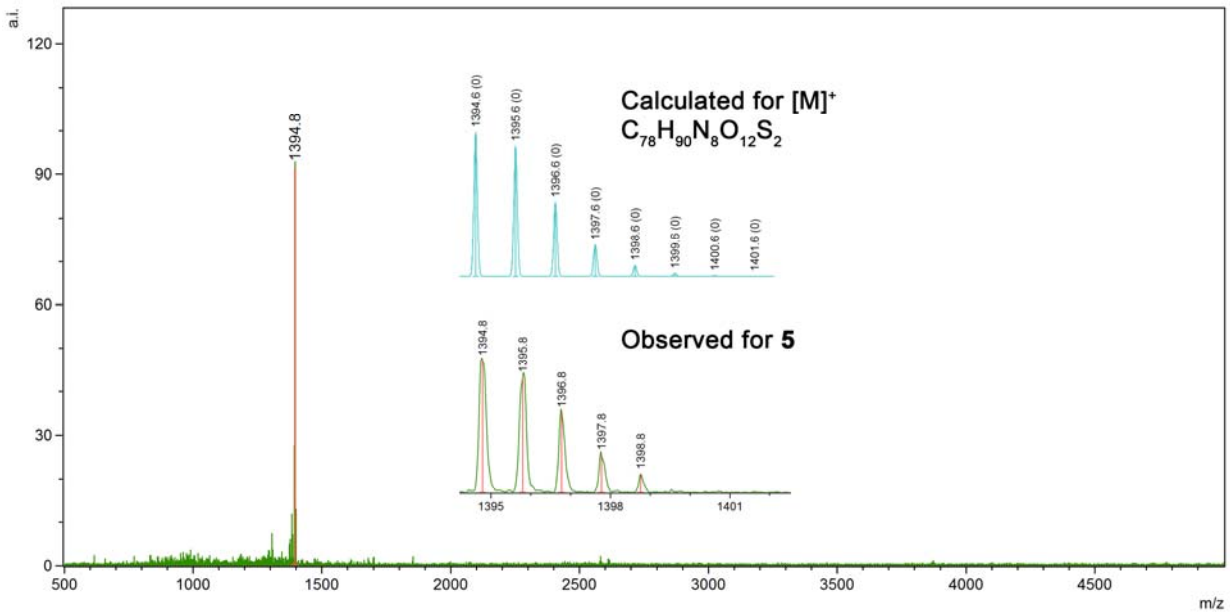


Figure S7. FT-IR spectrum of the phthalocyanine **5**

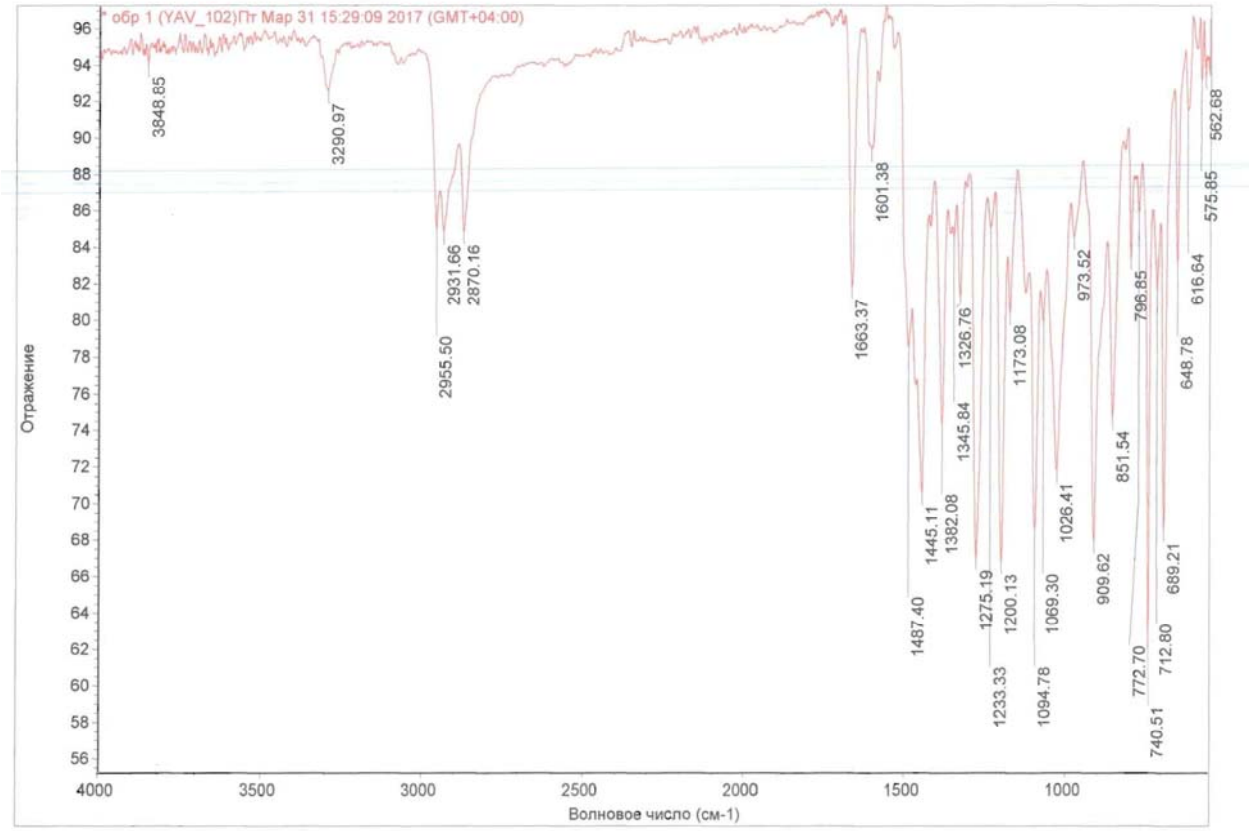


Figure S8. UV-Vis spectrum of the phthalocyanine **5** in chloroform

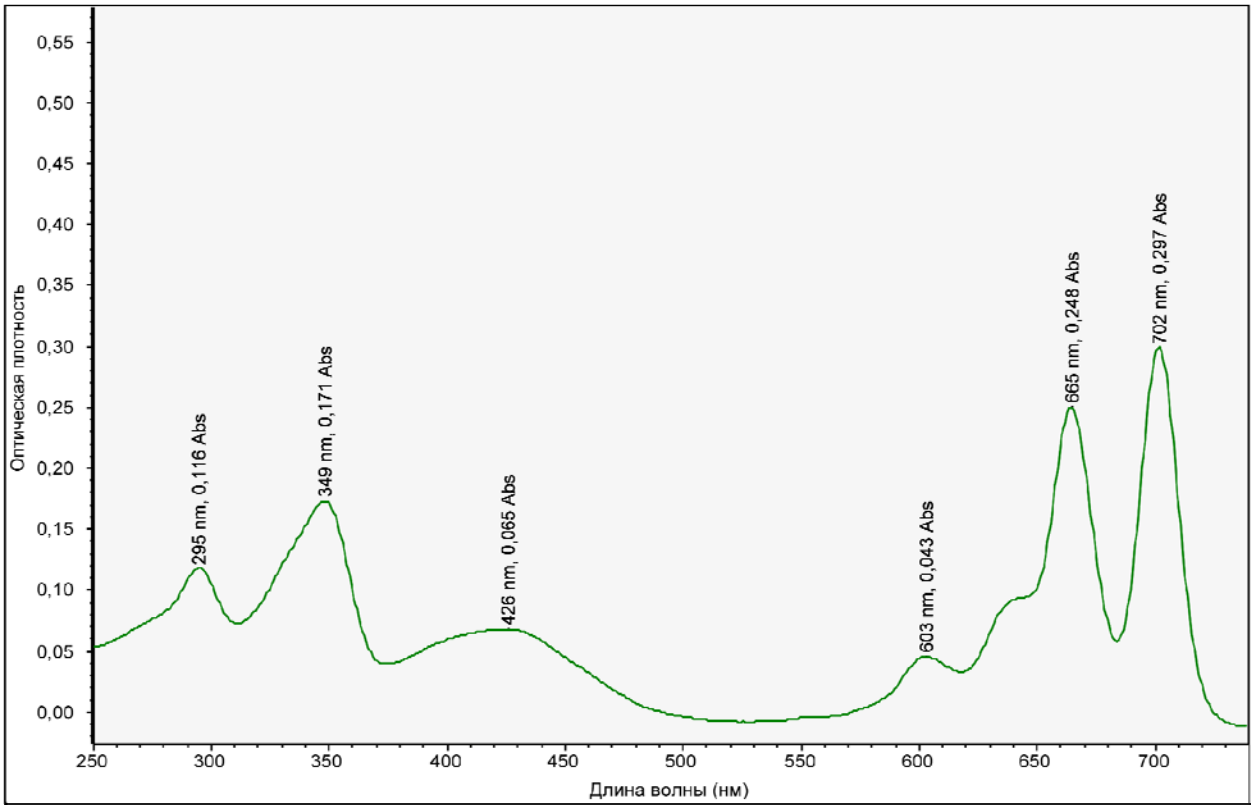
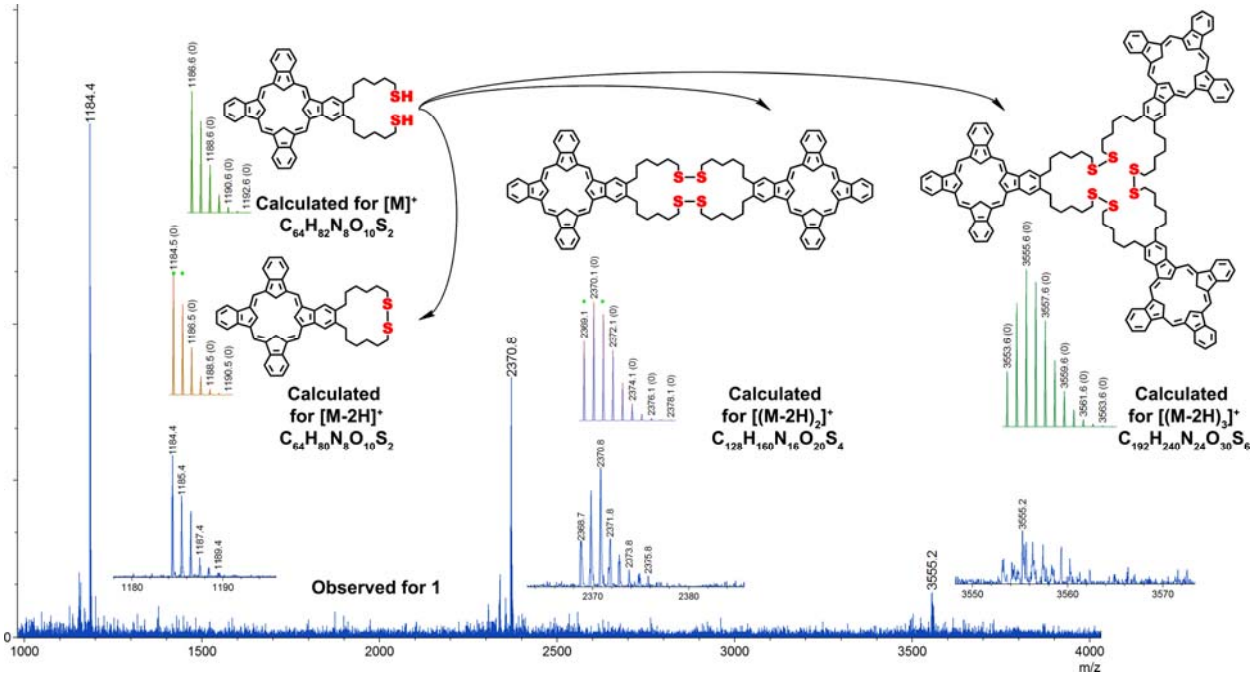


Figure S9. MALDI TOF mass-spectra of the phthalocyanine **1**



Although the phthalocyanine **1** is expected to give one signal in MALDI TOF mass-spectrum with m/z corresponding to the formula $C_{64}H_{82}N_8O_{10}S_2$ (calc. m/z 1186.6 for $[M]^+$) it gives the series of signals with m/z $[(M\text{-}2H)_n]^+$, n=1-3, corresponding to the formation of ditiacrown-appended phthalocyanine $[M\text{-}2H]^+$, as well as cyclic dimer and trimer. It is expected that these species are formed under the conditions of mass-spectrum registration.

Figure S10. UV-Vis spectrum of the phthalocyanines **6m** and **6o** in chloroform

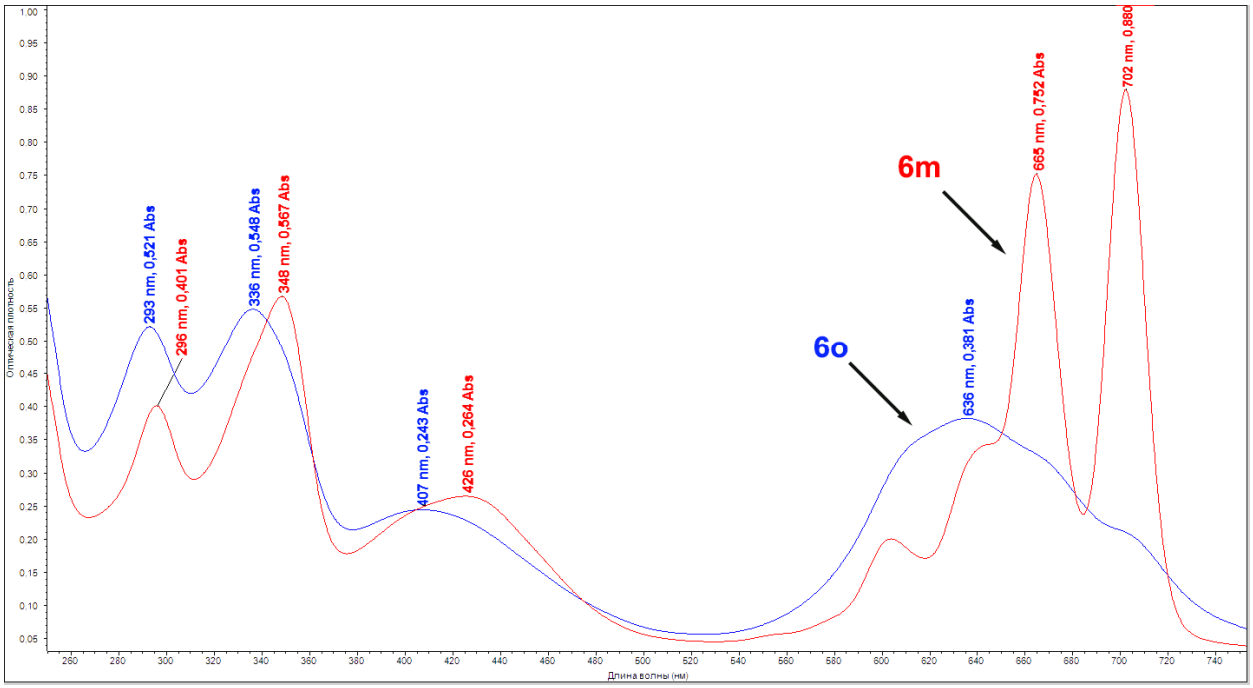
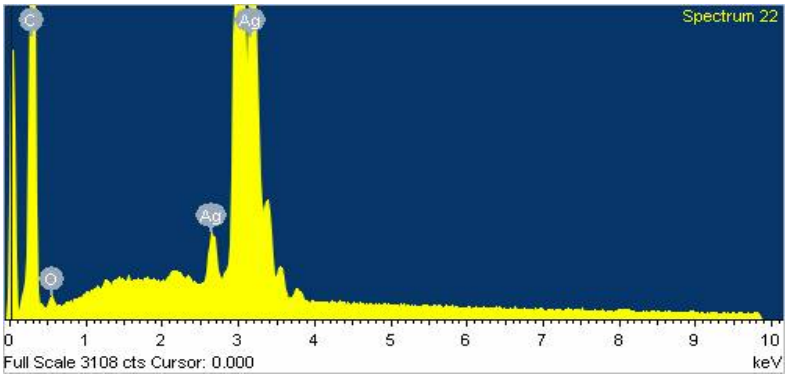
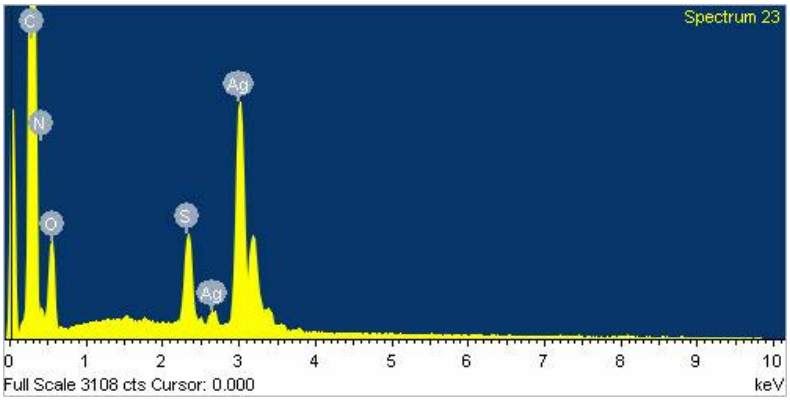


Figure S11. EDX spectra of **Ag-NPs**, **1-Ag**, **1** and **1-CdSe**

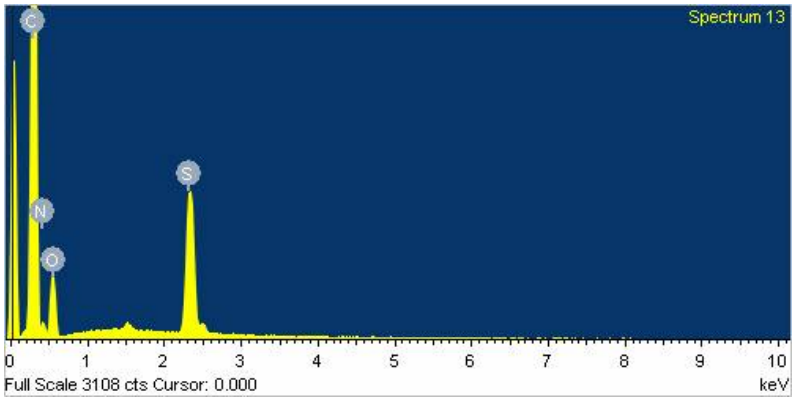
AgNPs



1-Ag



1



1-CdSe