

Electronic Supplementary Information (ESI) for New Journal of Chemistry

Novel Oxazine and Oxazone Dyes: Aggregation Behavior and Physicochemical Properties

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ELECTRONIC SUPPLEMENTARY INFORMATION (ESI)

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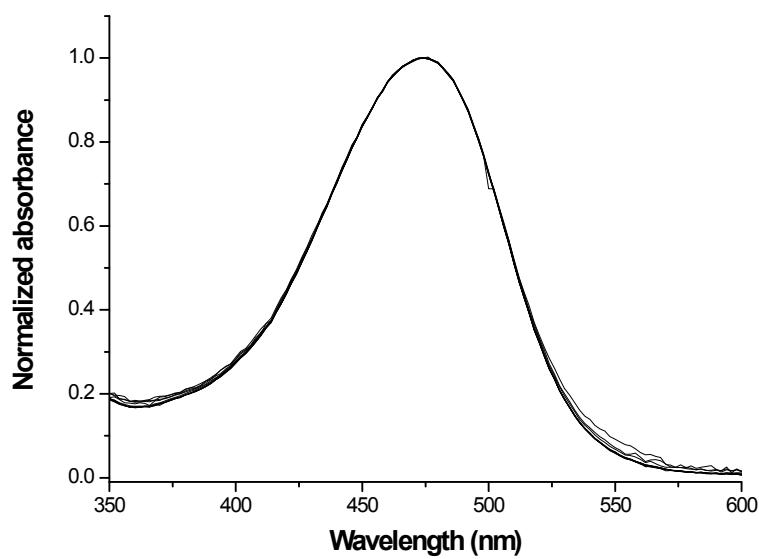


Figure S1: Normalized absorption spectra at 474 nm of CVBr_3 in DMF as a function of concentration, $n=11$. $[\text{CVBr}_3] = 1.79 \times 10^{-6} \text{ M} - 3.23 \times 10^{-5} \text{ M}$.

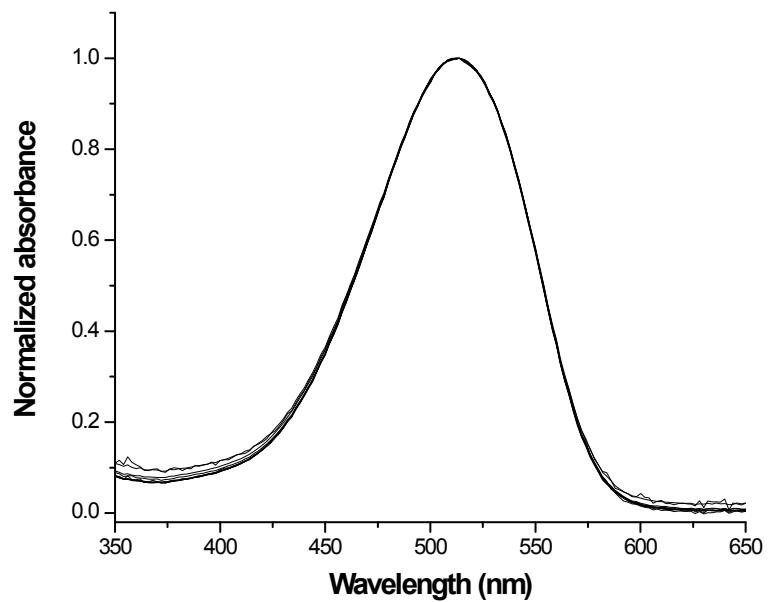


Figure S2: Normalized absorption spectra at 514 nm of CR in DMF as a function of concentration, n=10. [CR]= 1.53×10^{-5} M – 2.13×10^{-4} M.

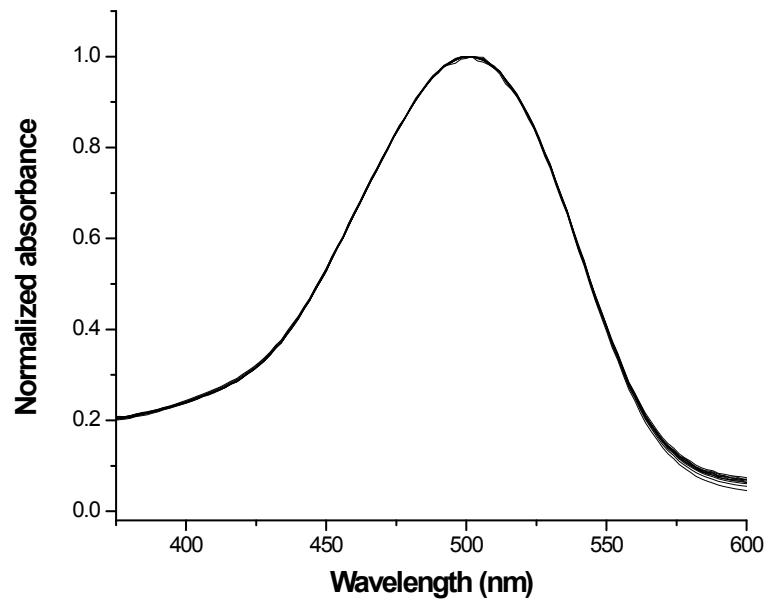


Figure S3: Normalized absorption spectra at 502 nm of CRBr_3 in DMF as a function of concentration, $n=10$. $[\text{CRBr}_3] = 8.07 \times 10^{-5} \text{ M} - 8.02 \times 10^{-4} \text{ M}$.

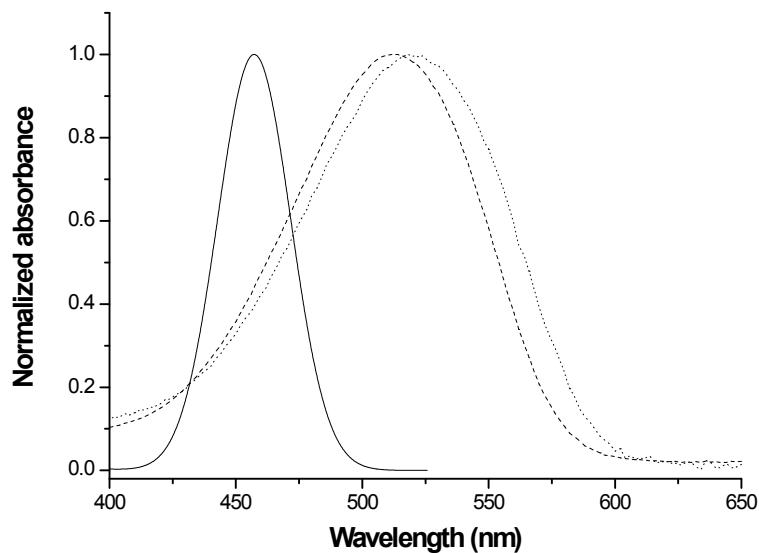


Figure S4: Theoretical and experimental visible absorption band for CR. Solid-line: Theoretical spectrum of monomer in DMF ($\lambda_{ES}= 457.2$ nm); dashed-line: Experimental spectrum of aggregate in DMF ($\lambda_{Exp}= 512$ nm); dotted-line: Experimental spectrum of aggregate in ethanol ($\lambda_{Exp}= 520$ nm).

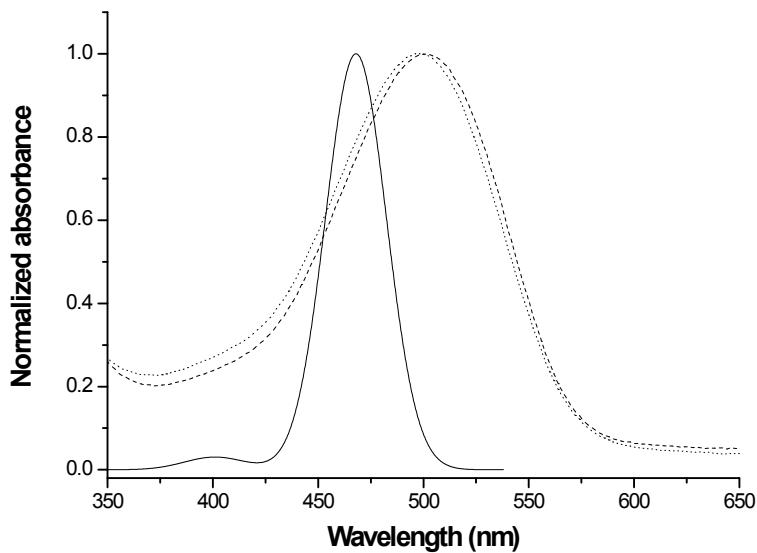


Figure S5: Theoretical and experimental visible absorption band for CRBr₃. Solid-line: Theoretical spectrum of monomer in DMF ($\lambda_{\text{ES}} = 468.0$ nm). Solid-line: Experimental spectrum of aggregate in DMF ($\lambda_{\text{Exp}} = 498$ nm); dashed-line: Experimental spectrum of aggregate in ethanol ($\lambda_{\text{Exp}} = 498$ nm).