

Fostering protein-calixarene interactions: from molecular recognition to sensing

José V. Prata^{a,b*} and Patrícia D. Barata^{a,b}

SUPPLEMENTARY DATA

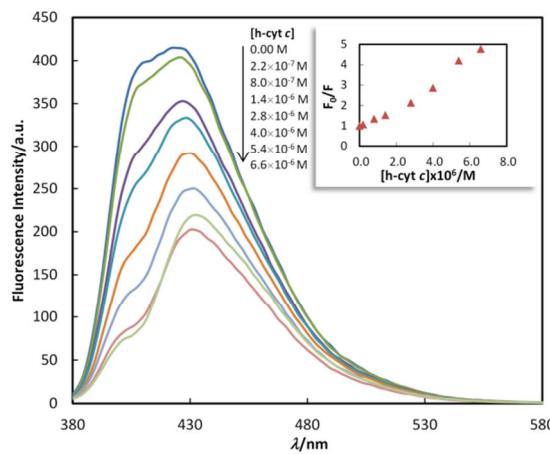


Fig. S1 Fluorescence spectra of CCC-2 (1.0×10^{-7} M) in the presence of increasing amounts of h-cyt c at 25°C in DMF ($pH_{app} \sim 7$). Inset: Stern-Volmer plot after monitoring the fluorescence intensity at 404 nm ($\lambda_{exc} = 360$ nm).

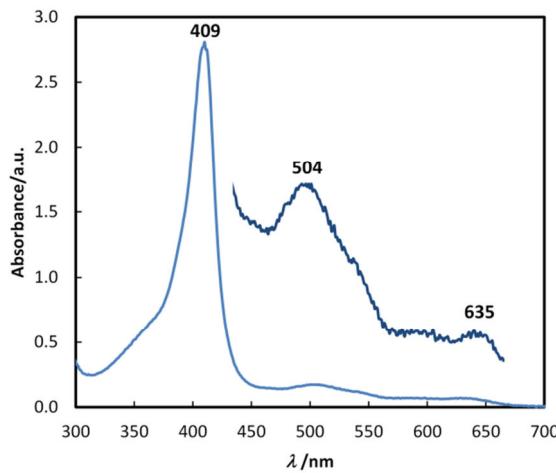


Fig. S2 Absorption spectrum of metmyoglobin ($c = 2.5 \times 10^{-5}$ M) at 20°C in H₂O. Inset: amplification between 450-650 nm.

^a Laboratório de Química Orgânica, Departamento de Engenharia Química and Centro de Investigação de Engenharia Química e Biotecnologia, Instituto Superior de Engenharia de Lisboa, Instituto Politécnico de Lisboa, R. Conselheiro Emídio Navarro, 1, 1959-007, Lisboa, Portugal.

^b Centro de Química-Vila Real, Universidade de Trás-os-Montes e Alto Douro, 5000-801, Vila Real, Portugal.

* E-mail: jvprata@deq.isel.ipl.pt

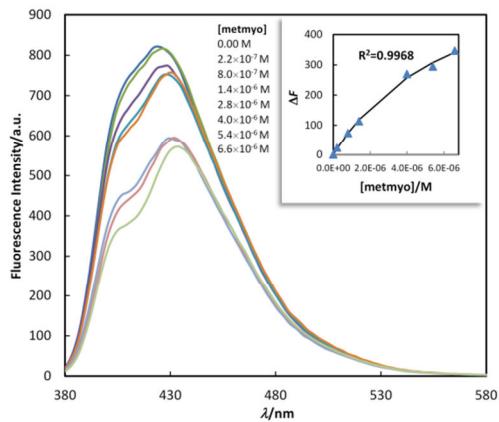


Fig. S3 Fluorescence spectra of CCC-2 (1.0×10^{-7} M in DMF) upon addition of metmyo at 25°C ($\text{pH}_{\text{app}} \sim 7$). Inset: Binding isotherm monitored at 404 nm ($\lambda_{\text{exc}} = 360$ nm).

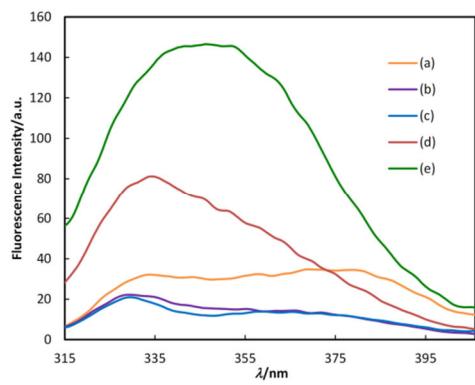


Fig. S4 Fluorescence spectra of h-cyt c ($c = 1.0 \times 10^{-5}$ M) at 25°C in (a) water, (b) 50 mM phosphate buffer, (c) 50 mM phosphate buffer:DMF (9:1), (d) 50 mM phosphate buffer:DMF (8:2), and (e) DMF solutions ($\lambda_{\text{exc}} = 295$ nm).

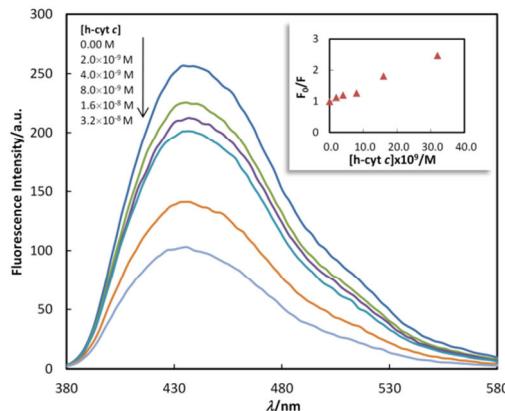


Fig. S5 Fluorescence spectra of CCC-2 (1.0×10^{-6} M) in the presence of increasing amounts of h-cyt c in phosphate buffer:DMF (9:1) solution at 25°C ($\text{pH} = 7.2$). Inset: Stern-Volmer plot after monitoring the change in fluorescence intensity at 436 nm ($\lambda_{\text{exc}} = 360$ nm).

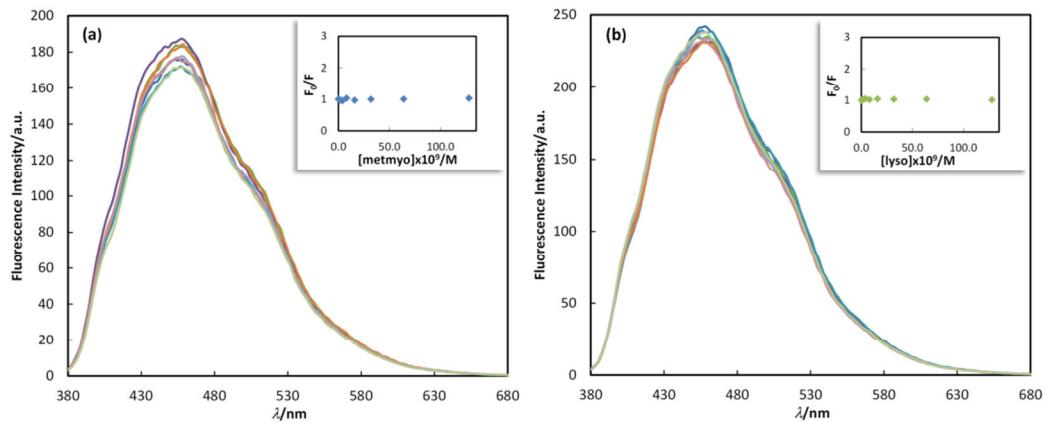


Fig. S6 Fluorescence spectra of CCC-1 (1.0 \times 10⁻⁶ M) in the presence of (a) metmyo and (b) lys in phosphate buffer:DMF (9:1) solution at 25°C (pH = 7.2), in the concentration range 2.0 \times 10⁻⁹ M – 1.3 \times 10⁻⁷ M. Insets: Stern-Volmer plots after monitoring the change in fluorescence intensity at 454 nm ($\lambda_{\text{exc}} = 360$ nm).