

Corroles as anions chemosensors: exploiting their fluorescence behaviour from solution to solid-supported devices

Carla I. M. Santos¹, Elisabete Oliveira^{2,3}, Joana F. B. Barata¹, M. Amparo F. Faustino¹, José A. S. Cavaleiro¹, M. Graça P. M. S. Neves^{*1}, Carlos Lodeiro^{*2,4}.

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¹Chemistry Department and QOPNA, University of Aveiro, Campus Universitário Santiago, 3810-193 Aveiro, Portugal. E-mail: gneves@ua.pt

²BIOSCOPE Group, Faculty of Science, Physical-Chemistry Department, Ourense Campus, University of Vigo, 32004, Ourense, Spain. E-mail: clodeiro@uvigo.es.

³Veterinary Science Department, (CECAV), University of Trás-os-Montes and Alto Douro, 5001-801, Vila Real, Portugal. E-mail: e.oliveira@uvigo.es

⁴REQUIMTE-CQFB, Chemistry Department, Faculty of Science and Technology, University Nova of Lisbon, 2829-516, Monte de Caparica, Portugal. E-mail: cle@fct.unl.pt.

Supporting Information

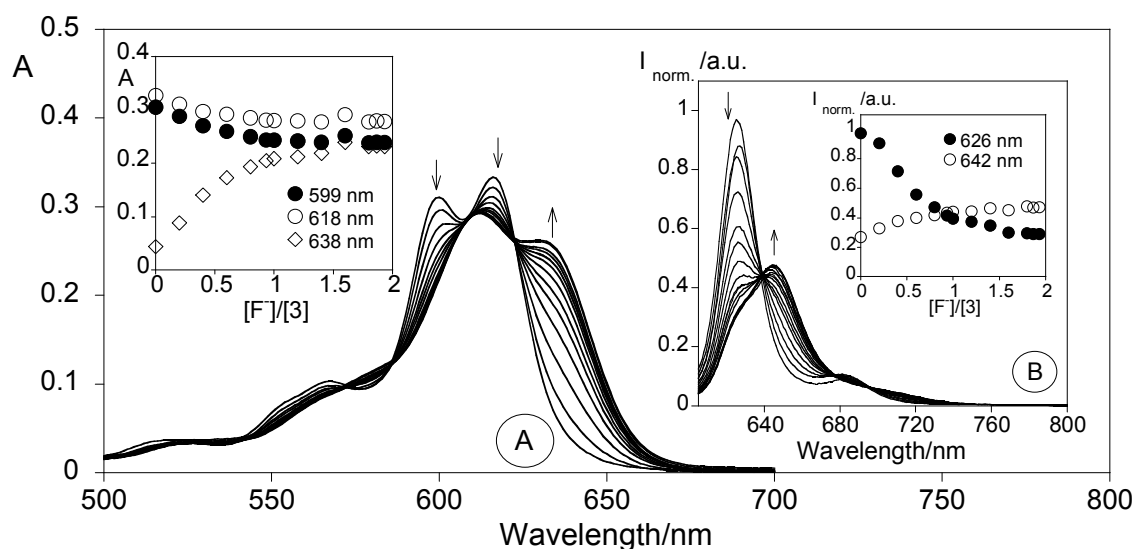


Figure SN1 - Spectrophotometric (A) and spectrofluorimetric (B) titration of compound **3** with the addition of F^- in toluene. The inset represents the absorption (A) and the emission intensity (B) as a function of $[F^-]/[3]$ at 599 nm, 618 nm, and 638 nm for (A) and 626 nm and 642 nm for (B). ($[3] = 1 \times 10^{-5}$ M, $\lambda_{\text{exc}} = 599$ nm, $T = 298$ K).

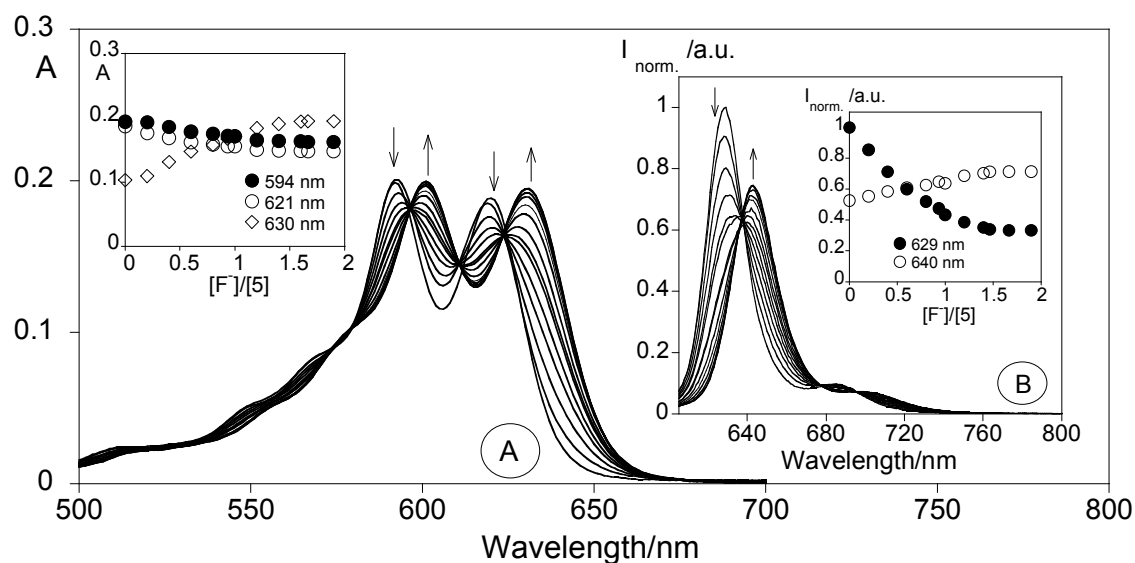


Figure SN2–Spectrophotometric (A) and spectrofluorimetric (B) titration of compound **5** with the addition of F^- in toluene. The inset represents the absorption (A) and the emission intensity (B) as a function of $[F^-]/[5]$ at 594 nm, 621 and 630 nm for (A), and 629 nm and 640 nm for (B). ($[5] = 1 \times 10^{-5}$ M, $\lambda_{\text{exc}} = 599$ nm, $T = 298$ K).

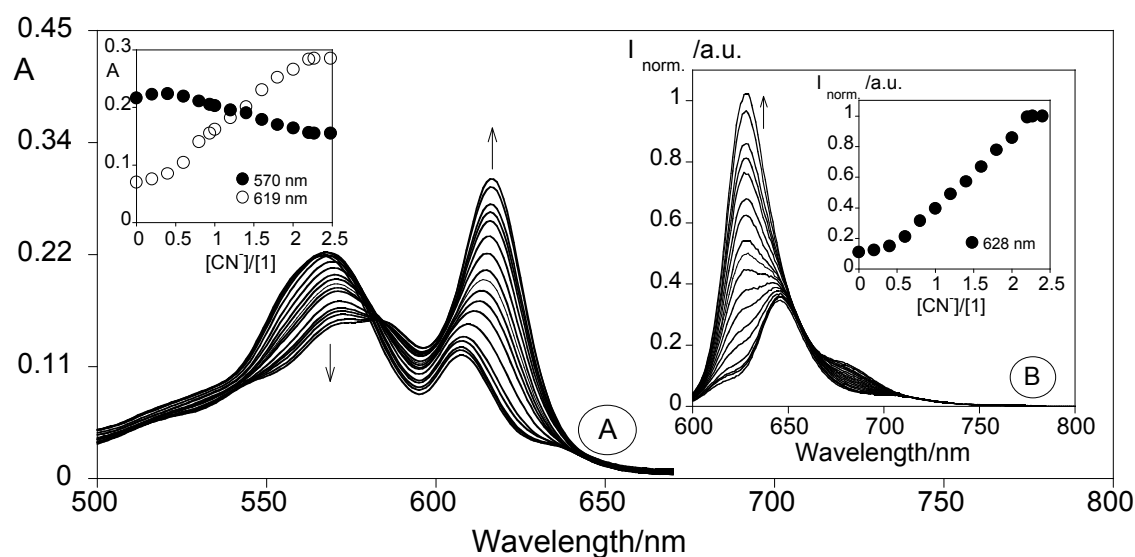


Figure SN3 - Spectrophotometric (A) and spectrofluorimetric (B) titration of compound **1** with the addition of CN^- in toluene. The inset represents the absorption (A) and the emission intensity (B) as a function of $[CN^-]/[1]$ at 570 nm and 619 nm for (A) and 628 nm for (B). ($[1] = 1 \times 10^{-5}$ M, $\lambda_{\text{exc}} = 565$ nm, $T = 298$ K).

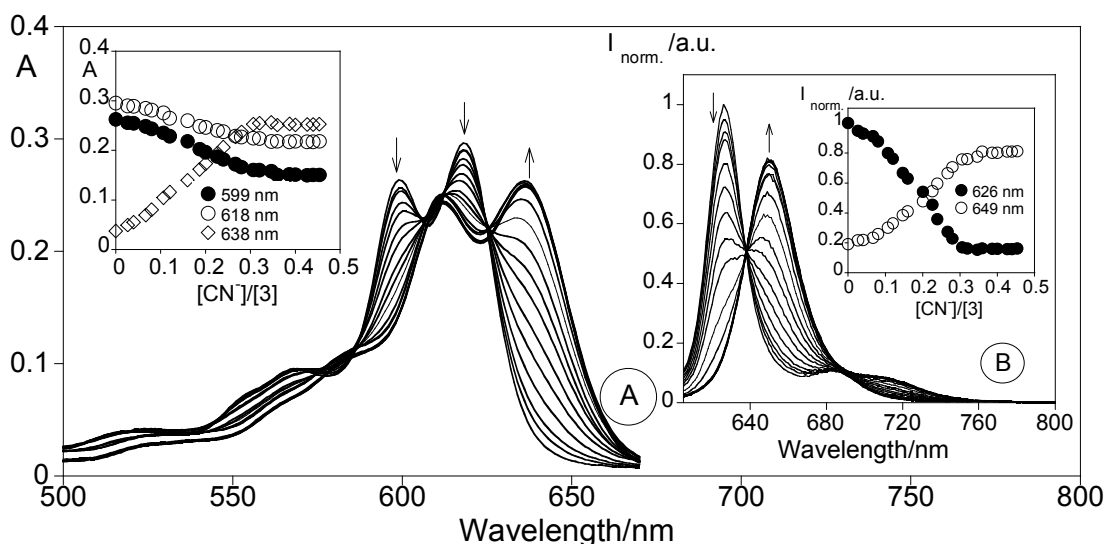


Figure SN4 - Spectrophotometric (A) and spectrofluorimetric (B) titration of compound **3** with the addition of CN^- in toluene. The inset represents the absorption (A) and the emission intensity (B) as a function of $[\text{CN}^-]/[\text{3}]$ at 599 nm, 618 nm and 638 nm for (A) and 626 nm and 649 nm for (B). ($[\text{3}] = 1 \times 10^{-5} \text{ M}$, $\lambda_{\text{exc}} = 599 \text{ nm}$, $T = 298 \text{ K}$).

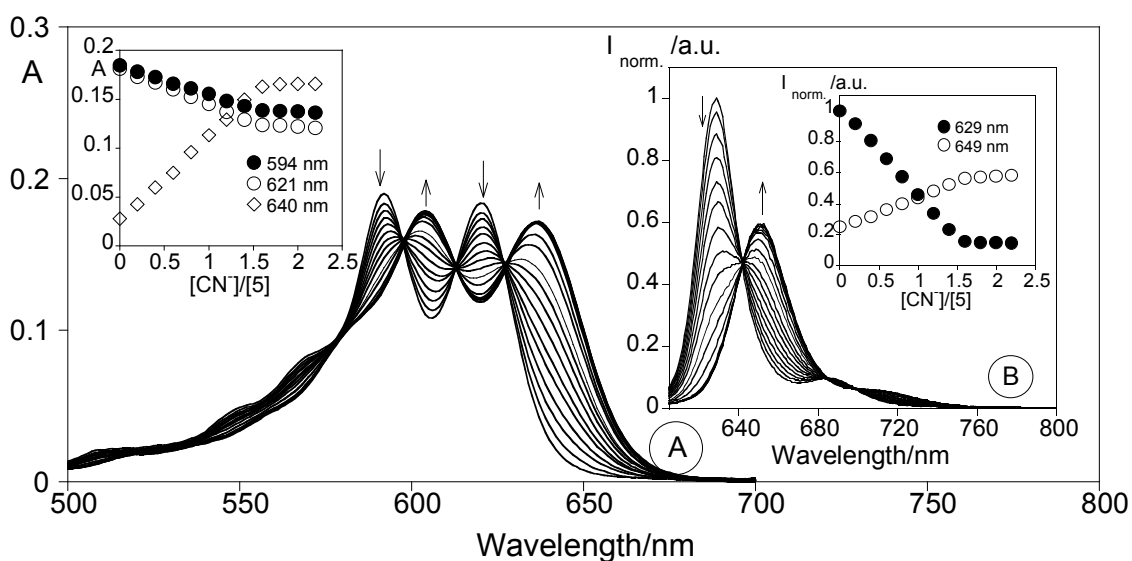


Figure SN5 - Spectrophotometric (A) and spectrofluorimetric (B) titration of compound **5** with the addition of CN^- in toluene. The inset represents the absorption (A) and the emission intensity (B) as a function of $[\text{CN}^-]/[\text{5}]$ at 594 nm, 621 nm and 640 nm for (A) and 629 nm and 649 nm for (B). ($[\text{5}] = 1 \times 10^{-5} \text{ M}$, $\lambda_{\text{exc}} = 590 \text{ nm}$, $T = 298 \text{ K}$).

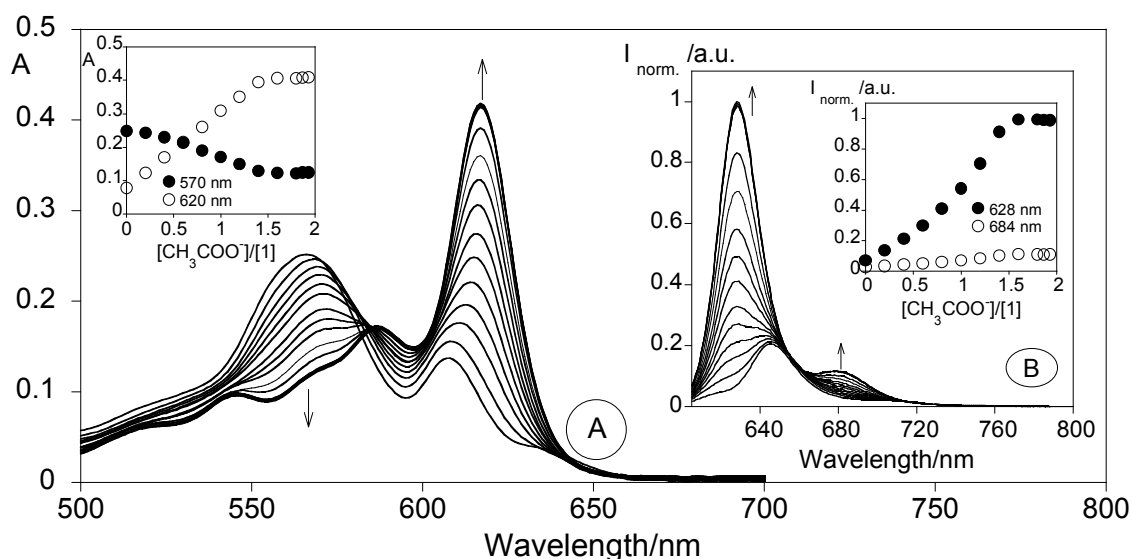


Figure SN6 - Spectrophotometric (A) and spectrofluorimetric (B) titration of compound **1** with the addition of CH_3COO^- in toluene. The inset represents the absorption (A) and the emission intensity (B) as a function of $[\text{CH}_3\text{COO}^-]/[\text{1}]$ at 570 nm and 620 nm for (A) and 628 nm and 684 nm for (B). ($[\text{1}] = 1 \times 10^{-5} \text{ M}$, $\lambda_{\text{exc}} = 565 \text{ nm}$, $T = 298 \text{ K}$).

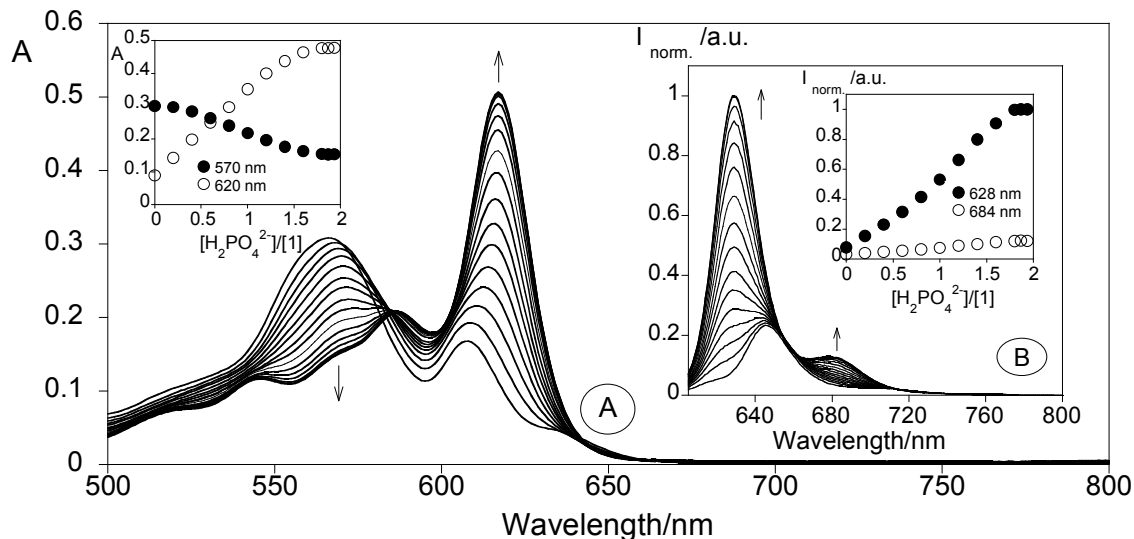


Figure SN7 - Spectrophotometric (A) and spectrofluorimetric (B) titration of compound **1** with the addition of H_2PO_4^- in toluene. The inset represents the absorption (A) and the emission intensity (B) as a function of $[\text{H}_2\text{PO}_4^-]/[\text{1}]$ at 570 nm and 620 nm for (A) and 628 nm and 684 nm for (B). ($[\text{1}] = 1 \times 10^{-5} \text{ M}$, $\lambda_{\text{exc}} = 565 \text{ nm}$, $T = 298 \text{ K}$).

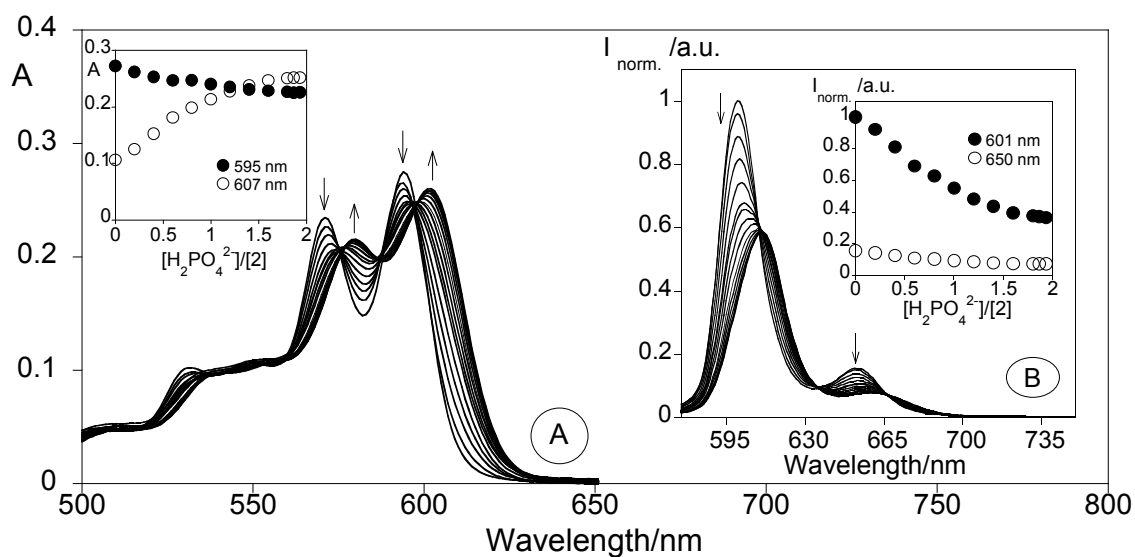


Figure SN8 - Spectrophotometric (A) and spectrofluorimetric (B) titration of compound **2** with the addition of H_2PO_4^- in toluene. The inset represents the absorption (A) and the emission intensity (B) as a function of $[\text{H}_2\text{PO}_4^-]/[\text{2}]$ at 595 nm and 607 nm for (A) and 601 nm and 650 nm for (B). ($[\text{2}] = 1 \times 10^{-5} \text{ M}$, $\lambda_{\text{exc}} = 570 \text{ nm}$, $T = 298 \text{ K}$).

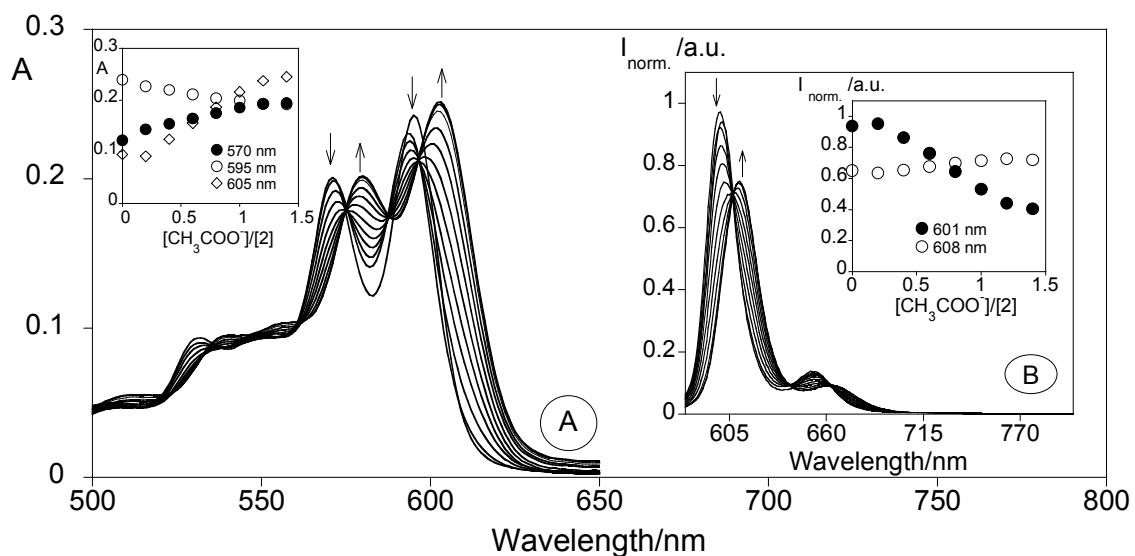


Figure SN9 - Spectrophotometric (A) and spectrofluorimetric (B) titration of compound **2** with the addition of CH_3COO^- in toluene. The inset represents the absorption (A) and the emission intensity (B) as a function of $[\text{CH}_3\text{COO}^-]/[\text{2}]$ at 570 nm, 595 nm and 605 nm for (A) and 601 nm and 608 nm for (B). ($[\text{2}] = 1 \times 10^{-5} \text{ M}$, $\lambda_{\text{exc}} = 570 \text{ nm}$, $T = 298 \text{ K}$).

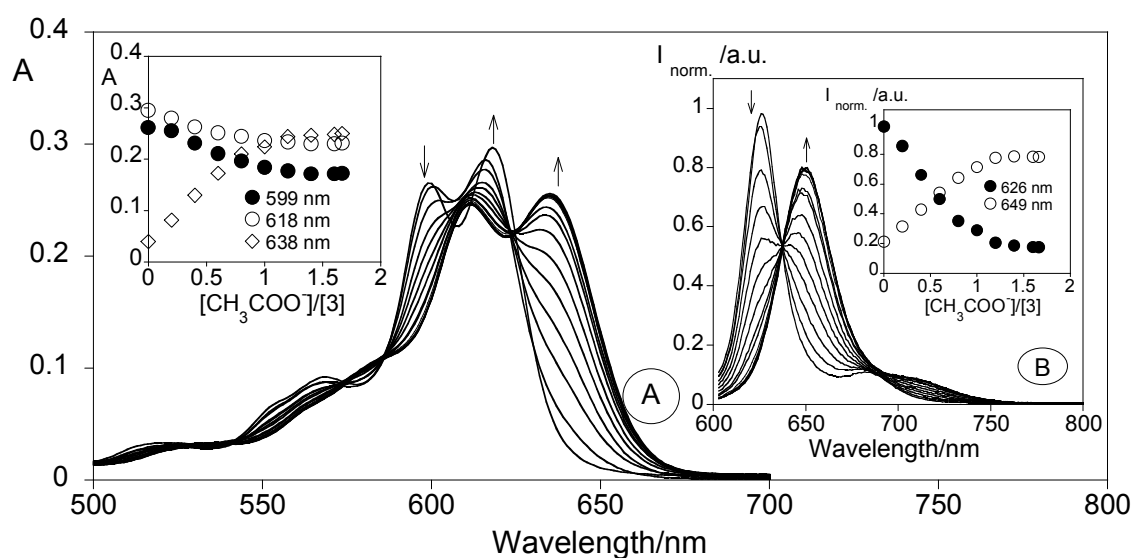


Figure SN10- Spectrophotometric (A) and spectrofluorimetric (B) titration of compound **3** with the addition of CH_3COO^- in toluene. The inset represents the absorption (A) and the emission intensity (B) as a function of $[\text{CH}_3\text{COO}^-]/[\text{3}]$ at 599 nm, 618 and 638 nm for (A) and 626 nm and 649 nm for (B). ($[\text{3}] = 1 \times 10^{-5} \text{ M}$, $\lambda_{\text{exc}} = 599 \text{ nm}$, $T = 298 \text{ K}$).

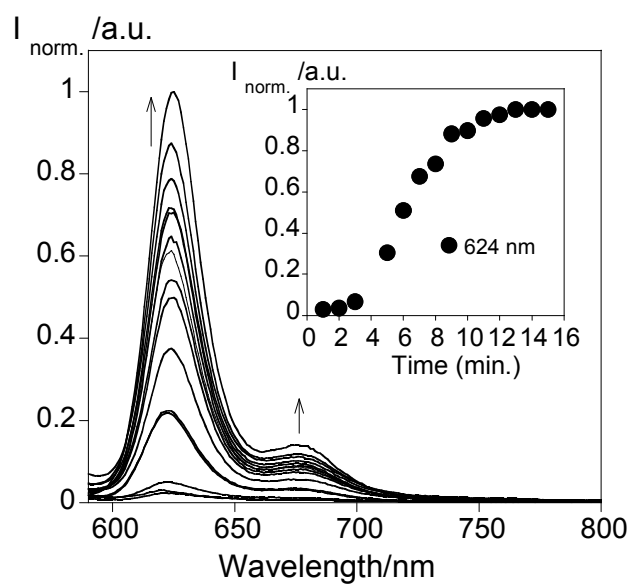


Figure SN11 - Emission spectra of acrylamide gel doped with compound **1** in the presence of cyanide anion with time. ($T = 298 \text{ K}$, $\lambda_{\text{exc}} = 570 \text{ nm}$).

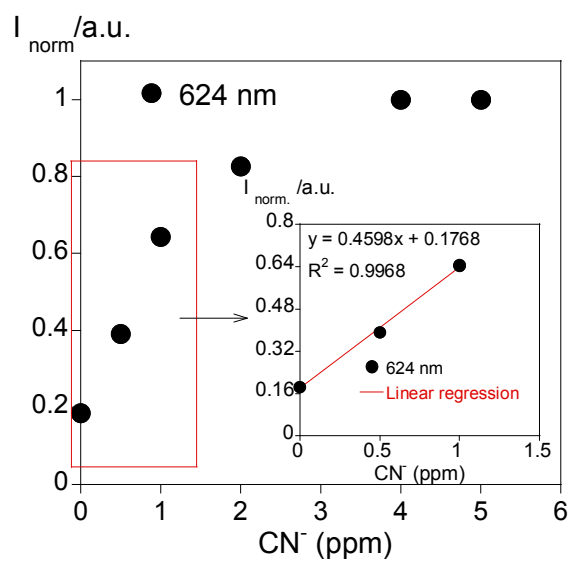


Figure SN12 – Normalized emission intensity of a polyacrylamide gel doped with compound **1** in water upon the addition of 0, 0.5, 1, 2 and 4 ppm of CN^- . ($T = 298 \text{ K}$, $\lambda_{\text{exc}} = 570 \text{ nm}$).