

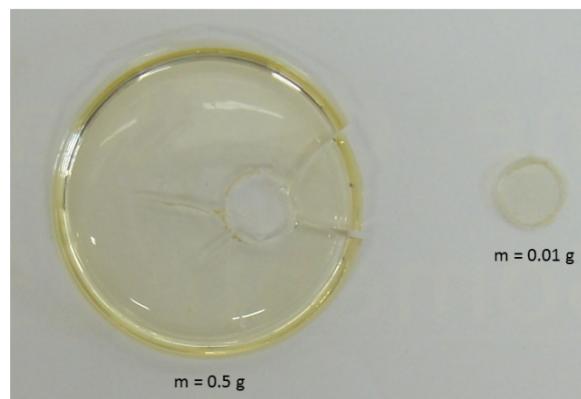
**Supporting Information Material for:**

**Influence of the hydrophilic/hydrophobic nature of polyetheramines on the interaction between amine-alcohol-silicate hybrids and anionic dye for effective water cleaning.**

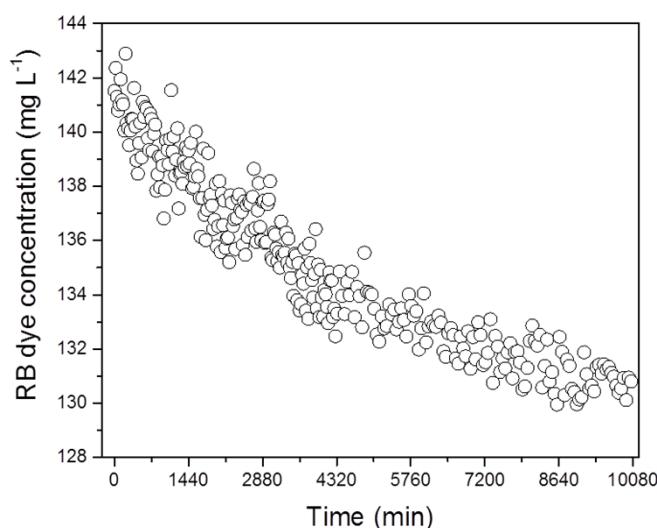
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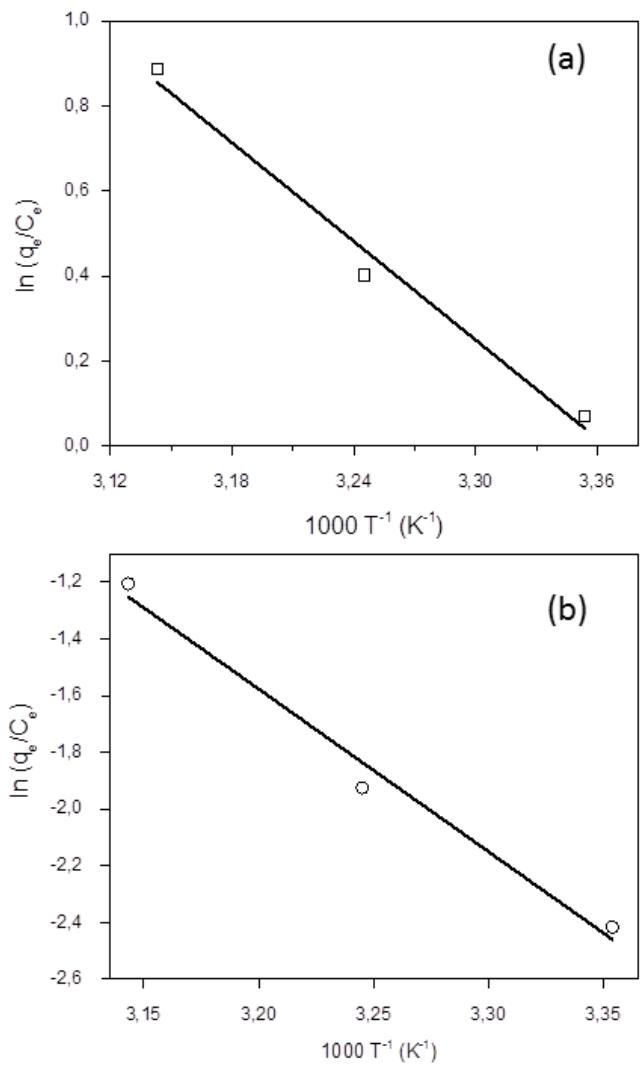
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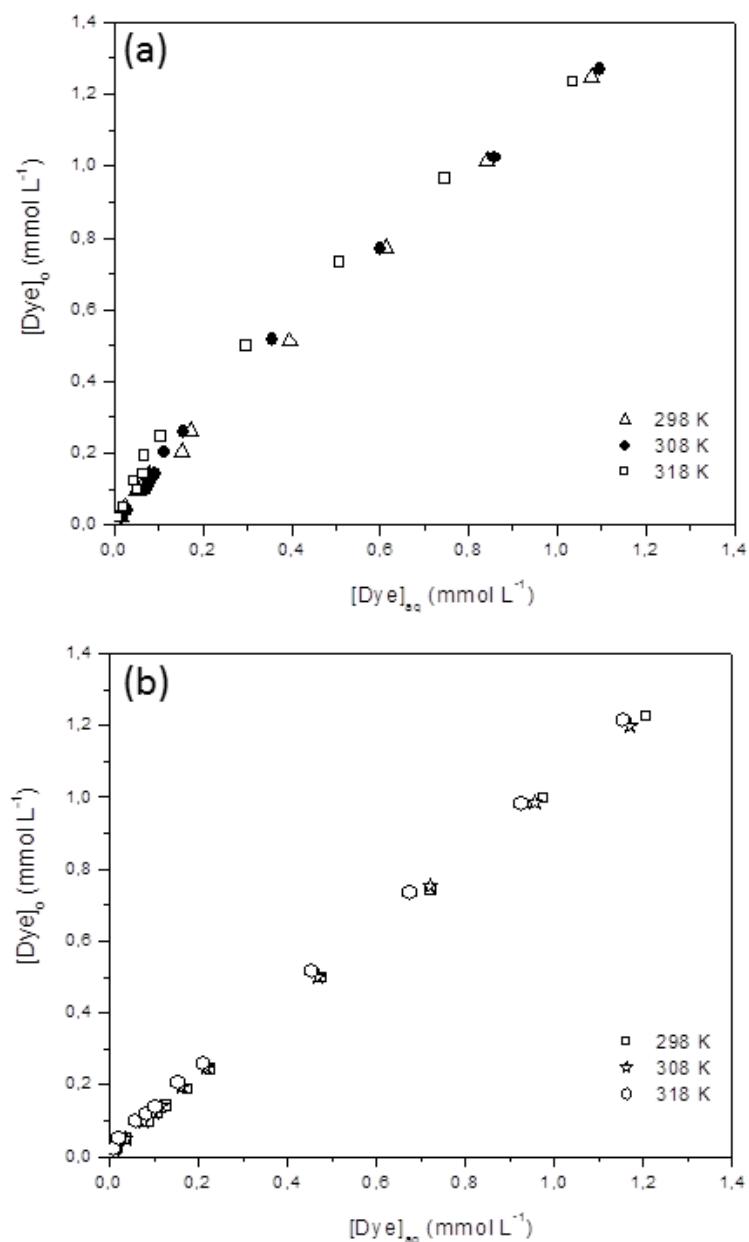
**Figure S1.** Images of PEO500-GPMS hybrid.



**Figure S2.** Plot of the RB dye concentration versus time of the PPO400-GPMS.



**Figure S3.** Van't Hoff plots for the adsorption of RB onto (a) PEO500-GPMS and (b) PPO400-GPMS.



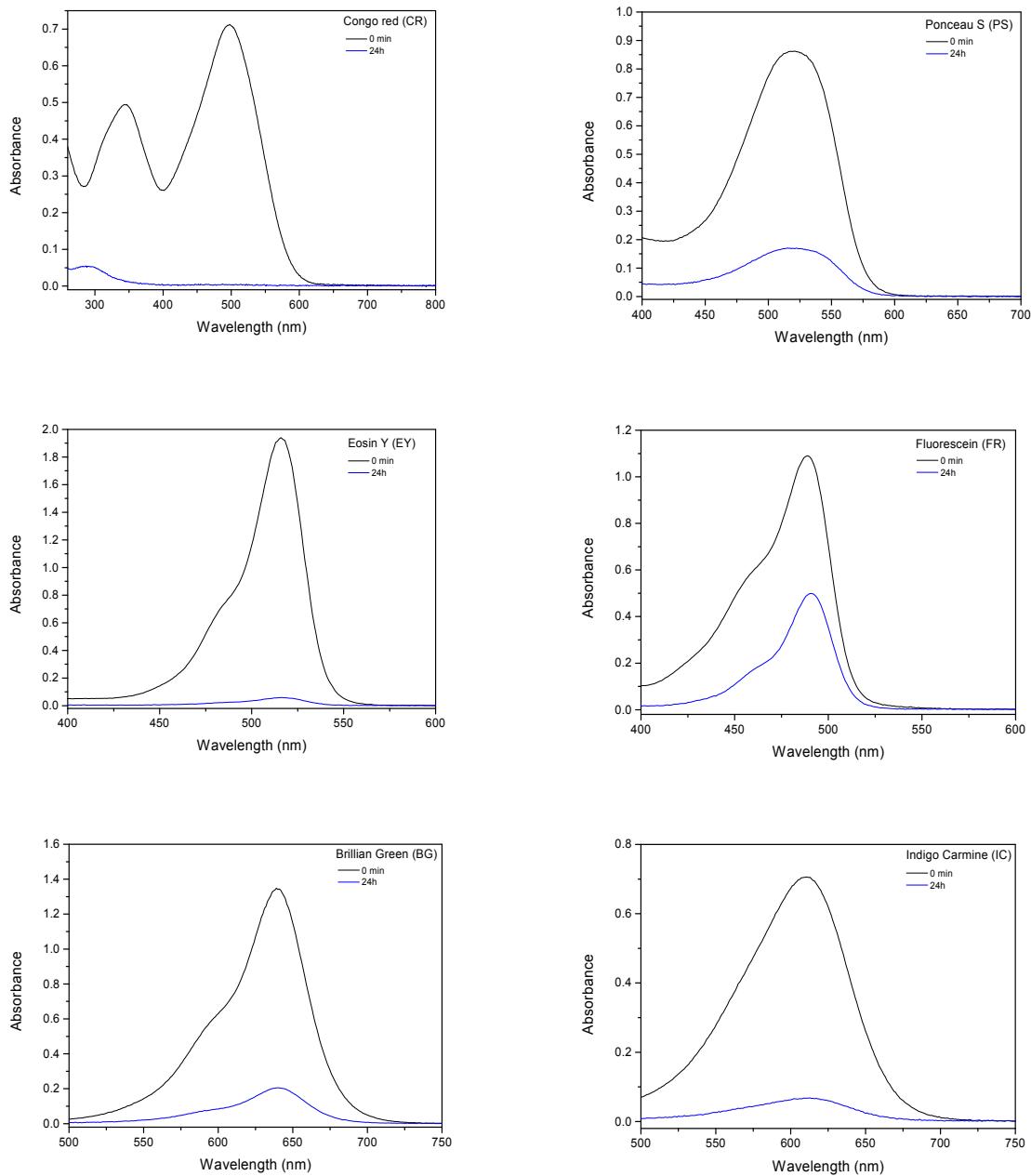
**Figure S4.** Dye concentration in the supernatant ( $[Dye]_{aq}$ ) versus various initial concentrations ( $[Dye]_0$ ) with (a) PEO-GPMS and (b) PPO400-GPMS xerogels at different temperatures. Each plot was determined at the maximum of absorbance ( $\lambda_{max}$ ) of Rose Bengal dye.



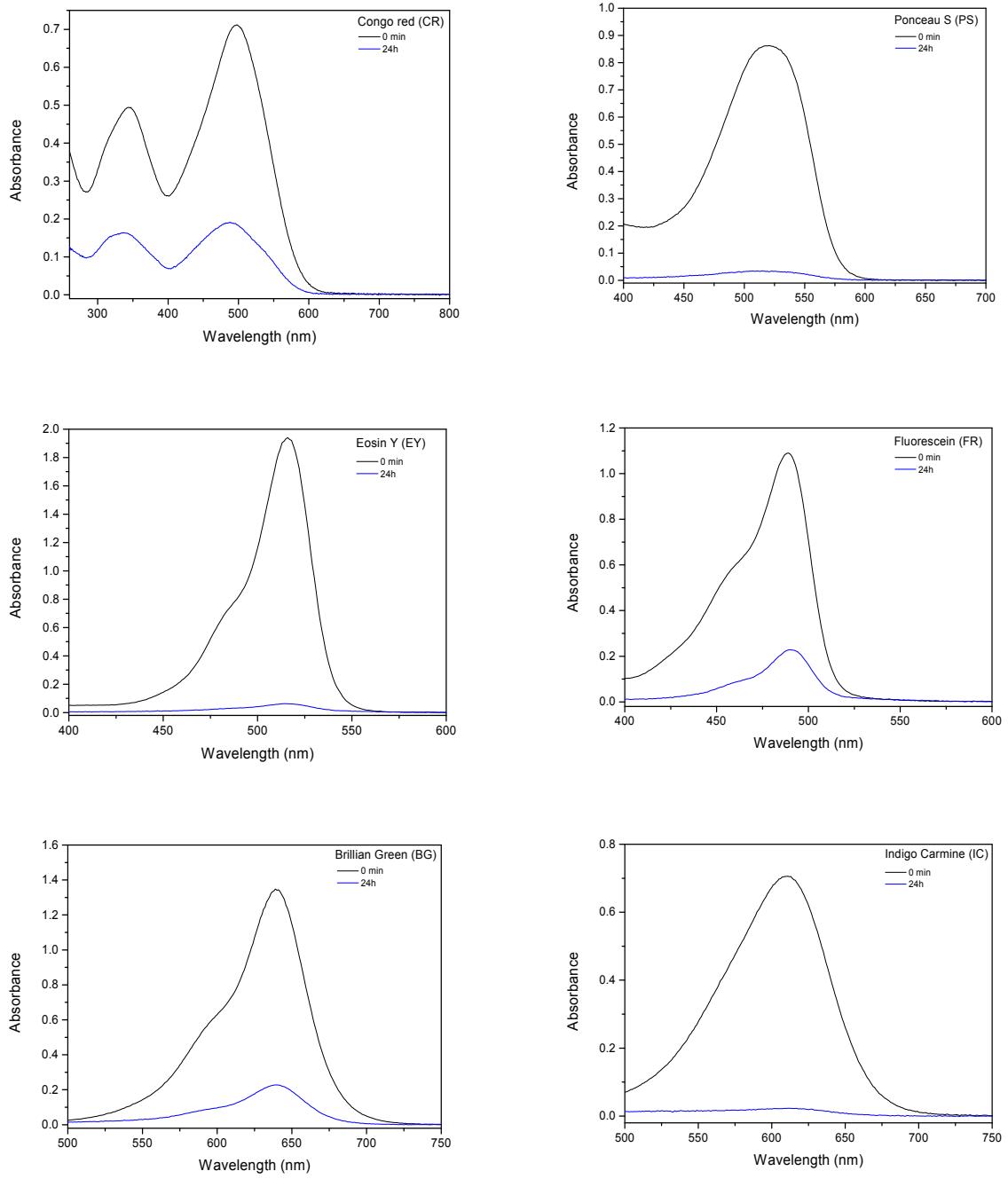
**Figure S5.** Photos of solution of dyes (A) before and (B) after adsorption by PEO500-GPMS.  
Mass of xerogel = 50 mg and initial dye concentration is 100 mg L<sup>-1</sup>.



**Figure S6.** Photos of solution of dyes (A) before and (B) after adsorption by PPO400-GPMS.  
Mass of xerogel = 50 mg and initial dye concentration is 100 mg L<sup>-1</sup>.



**Figure S7.** UV–vis absorption spectra of the aqueous solutions of anionic dyes before and in the presence of PEO500-GPMS xerogel after 24h (Mass of xerogel = 50 mg and initial dye concentration is  $100 \text{ mg L}^{-1}$ ).



**Figure S8.** UV–vis absorption spectra of the aqueous solutions of anionic dyes before and in the presence of PPO400-GPMS xerogel after 24h (Mass of xerogel = 50 mg and initial dye concentration is  $100 \text{ mg L}^{-1}$ ).