



Letter to the editor

Response to the Letter to the Editor that was published in Dyes and Pigments 77 (2008) 481–482

This letter comprises a correction to the paper "Removal of Congo Red from aqueous solution by anilinepropylsilica xerogel" by FA Pavan, SLP Dias, EC Lima and EV Benvenutti, which was published in Dyes and Pigments 76 (2008) 64–69.

The paper concerned the use of organomodified silica obtained by the sol-gel method as an adsorbent for the removal of Congo Red from aqueous solution but contained an error related to the parameters of the Redlich-Peterson isotherm exponent, as reported by Kumar and Porkodi in their letter to the editor [1]. In this context, we herewith include corrected values of the Redlich-Peterson parameters, which were described in Table 3 of our original paper [2].

The Redlich-Peterson Equation:

$$q = \frac{K_{RP}Ce}{1 + a_{RP}Ce^{\beta}} \quad 0 \leq \beta \leq 1 \quad (1)$$

where K_{RP} and a_{RP} are Redlich-Peterson constants, with the respective units: L g^{-1} and $(\text{mg L}^{-1})^{-\beta}$ and β is the Redlich-Peterson exponent (dimensionless).

The Average relative error

$$F_{\text{error}} = \frac{100\%}{n} \times \sum_i^n \left| \frac{q_{i \text{ model}} - q_{i \text{ exp}}}{q_{i \text{ exp}}} \right| \quad (2)$$

where $q_{i \text{ model}}$ is each value of q predicted by the fitted model, $q_{i \text{ experimental}}$ each value of q measured experimentally and n the number of experiments performed.

Correction to Table 3 of [1]

Redlich-Peterson isotherm parameter for the adsorption of Congo Red on anilinepropylsilica xerogel

Isotherm	Value
Redlich-Peterson	
$K_{RP} (\text{L g}^{-1})$	0.3455
$a_{RP} (\text{mg L}^{-1})^{-\beta}$	0.00846
β	1.00
R^2	0.9829
Average relative error (%)	12.71

We thank very much Dr. Kumar and Dr. Porkodi, for their valuable suggestion [1].

References

- [1] Kumar KV, Porkodi K. Dyes and Pigments 2008;77:481–2.
- [2] Pavan FA, Dias SLP, Lima EC, Benvenutti EV. Dyes and Pigments 2008;76: 64–9.

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