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Correlation and prediction of adsorption capacity and affinity of aromatic compounds on carbon nanotubes

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#### **Graphical abstract**

### **Prediction model:**

$$\log q_{\rm e} = \log \mathbf{Q}^{0} - (\varepsilon/\mathbf{E})^{l}$$

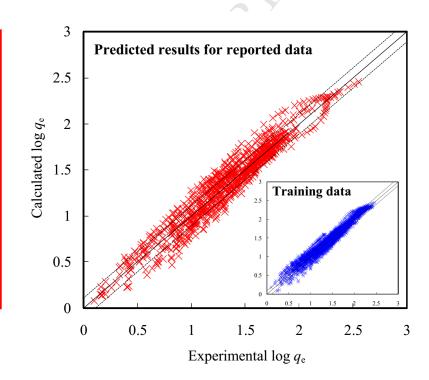
$$\log q_e = \log \mathbf{Q}^0 - (\varepsilon/\mathbf{E})^b$$
$$\mathbf{Q}^0 = f(\mathbf{A}, \mathbf{R}_{\text{meso}}, \mathbf{MP}, \mathbf{N})$$

$$\boldsymbol{E} = f(\alpha_{\rm m}, \boldsymbol{R}_{\rm meso}, \pi^*)$$

$$\boldsymbol{b} = f(\alpha_{\rm m}, \boldsymbol{R}_{\rm meso}, \boldsymbol{\pi}^*)$$

$$\varepsilon = -RT\ln(C_{\rm e}/C_{\rm s})$$

$$\varepsilon = -RTln(C_e/C_s)$$





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