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## **Influence of dextran hydrogel characteristics on adsorption capacity for anionic dyes**

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### **Highlights**

- Cationic amphiphilic dextran hydrogels were prepared and used for dye adsorption
- Hydrogels' hydrophobicity, cationic group content and swelling porosity were varied
- Adsorption data were evaluated by kinetic, equilibrium and thermodynamic analyses
- Hydrogel hydrophobicity increased significantly its affinity for dyes
- Swelling porosity increased adsorption rate and favored adsorption of bulky dyes

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