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# **An investigation on biosorption of nitrate from water by chitosan based organic-inorganic hybrid biocomposites**

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## ***Highlights***

- Biosorption of nitrate was investigated using chitosan based organic-inorganic biocomposite
- Adsorption capacity increased with decrease in crosslinker volume ratio
- The biosorption of nitrate by well described by Freundlich isotherm model
- Adsorption of nitrate onto biocomposites is endothermic and spontaneous.
- Adsorption kinetics were found to fit well with pseudo-second-order model

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