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Authors: Karthik Rathinam, Swatantra Pratap Singh, Christopher J. Arnusch, Roni Kasher



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An environmentally-friendly chitosan-lysozyme biocomposite for the effective removal of dyes and heavy metals from aqueous solutions

Karthik Rathinam, Swatantra Pratap Singh, Christopher J. Arnusch*, and Roni Kasher*

Department of Desalination and Water Treatment, The Zuckerberg Institute for Water Research, The Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev, Sede Boqer Campus, 84990, Israel.

Highlights:

- An environmentally-friendly chitosan-lysozyme biocomposite (CLC) was synthesized
- Chitosan-lysozyme was an effective adsorbent for organic dye and Cr(VI) ions
- Concurrent removal of dye and heavy metals Cr(VI), Cd(II) and Ni(II) from mixtures
- Reduction of Cr(VI) to Cr(III) was evidenced by XPS analysis

*Corresponding authors e-mail: arnusch@bgu.ac.il (CJA) and kasher@bgu.ac.il (RK).

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