



Showcasing research from Professor Nguyen Thi Kim Thanh's laboratory, Biophysics Group, Department of Physics and Astronomy, University College London and UCL Healthcare Biomagnetics and Nanomaterials Laboratories, UK.

Enhanced detoxification of Cr^{6+} by *Shewanella oneidensis* via adsorption on spherical and flower-like manganese ferrite nanostructures

The integrated adsorption and bio-reduction method can safely remove highly toxic Cr^{6+} . Adding $\text{Mn}_{0.2}\text{Fe}_{2.8}\text{O}_4$ nanoparticles to *S. oneidensis* MR-1 enhanced the bio-reduction of Cr^{6+} 2.66 times compared to the presence of the bacteria alone. This work provides a cost-effective method for removing Cr^{6+} with minimum sludge production.

As featured in:



See Nguyen Thi Kim Thanh *et al.*, *Nanoscale Adv.*, 2023, 5, 2897.