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Title: Graphene oxide encapsulated in alginate beads for enhanced sorption of uranium from different aquatic environments

Authors: Hirakendu Basu, Rakesh Kumar Singhal, Mehzabin Vivek Pimple, Sudeshna Saha



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Graphene oxide encapsulated in alginate beads for enhanced sorption of uranium from different aquatic environments

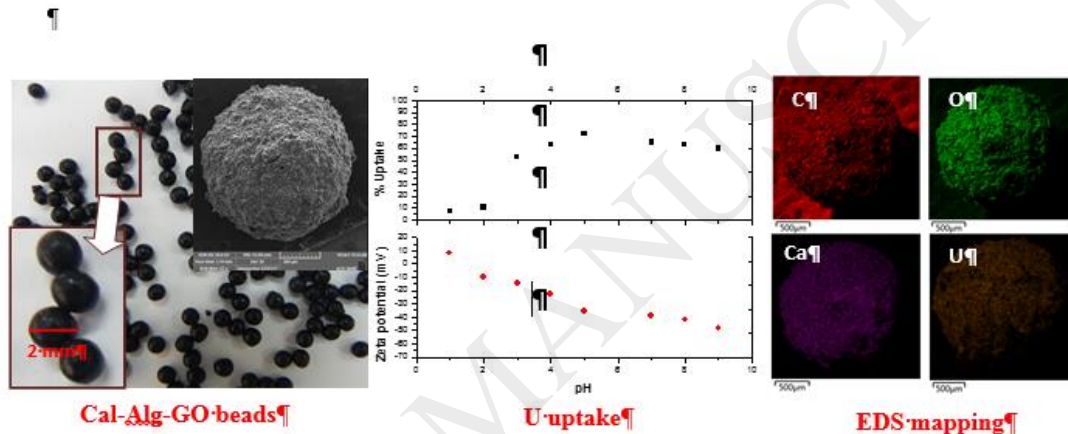
Hirakendu Basu, Rakesh Kumar Singhal, Mehzabin Vivek Pimple, Sudeshna Saha

Analytical Chemistry Division

Bhabha Atomic Research Centre, Trombay, Mumbai -400085, India

E mail: rsinghal@barc.gov.in ;Tel:91-22-25592233 fax No 91-22-25505151

Graphical abstract



Highlights

- New hybrid material [graphene oxide impregnated calcium alginate: Cal-Alg-GO beads] was synthesised.
- Cal-Alg-GO beads were used efficiently for uranium decontamination from potable water at pH 4-5.
- Sorption capacity was evaluated as 29.4 mg g^{-1} from Langmuir isotherm model.
- Mechanism: Interaction of various species of uranium at different pH with functional groups of GO.

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