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Chemically bound Prussian blue in sodium alginate hydrogel for enhanced removal of Cs ions

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Highlights

- Sodium alginate beads containing chemically bound PB beads were prepared.
- The beads showed improved adsorption of Cs ions compared to conventional sodium alginate beads containing PB.
- The beads showed efficient adsorption in a fixed bed column as well as in a batch with good stability.
- The beads exhibited high removal efficiency toward radioactive ¹³⁷Cs.

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