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ACCEPTED MANUSCRIPT

Simultaneous and continuous stabilization of As and Pb in contaminated solution and soil

by a ferrihydrite-gypsum sorbent

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Highlights

- A metal sorbent "FIXALL", consisting of ferrihydrite (HFO) and gypsum is developed.
- Arsenic removal is based on making inner-sphere surface complex (ISSC) with HFO.
- Lead removal is based on ISSC with HFO and PbSO4 precipitation at low and high concentrations.
- FIXALL decreases water soluble As and Pb in the soil simultaneously and continuously for 754 days.

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