

Supplementary information

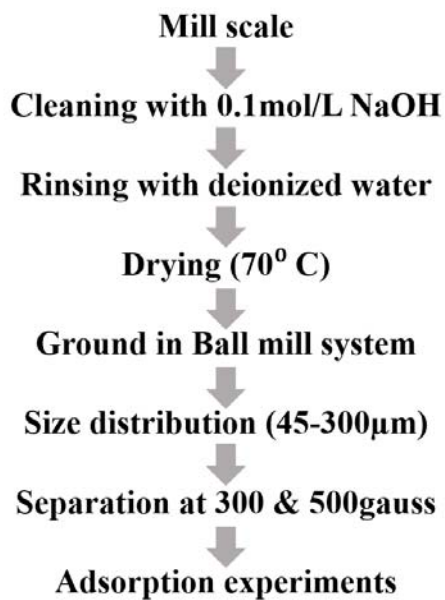


Fig. S1 Operational scheme for the separation of MEP from mill scale

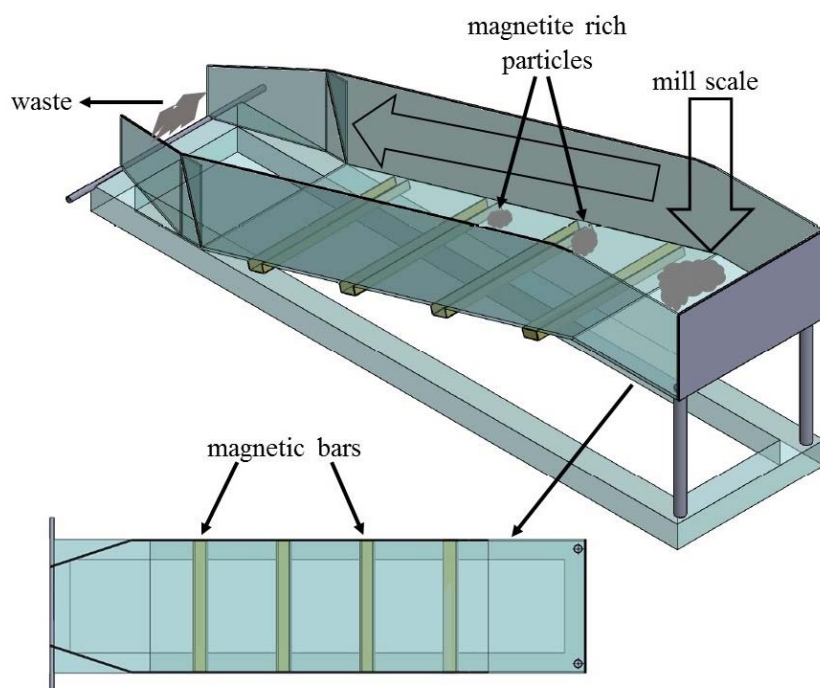


Fig. S2 Operational device for the separation of MEP from mill scale

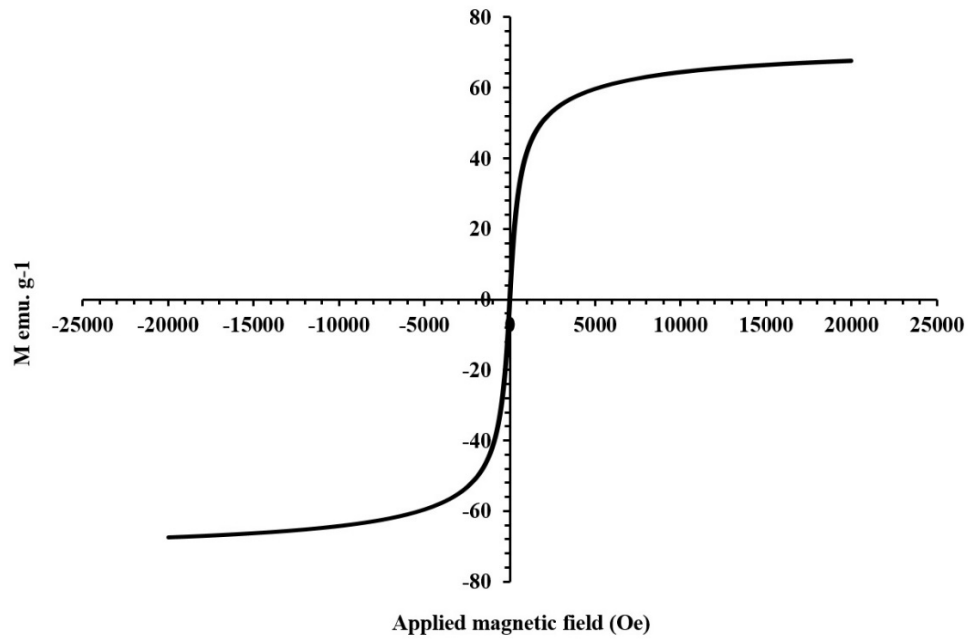


Fig. S3 VSM curve of mill-scale derived magnetite particles

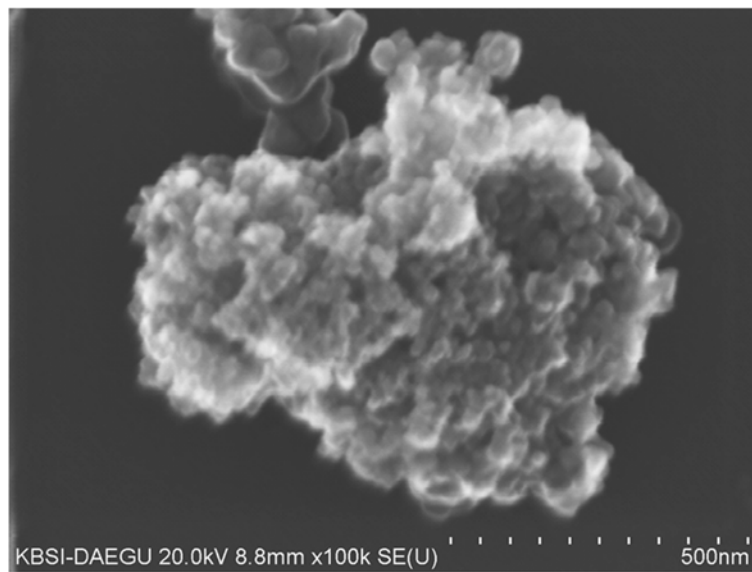


Fig. S4 SEM image of magnetite rich particles at 500 nm scale

The agglomerate porous structure of magnetite rich particles is observed in SEM images taken at 500 nm scale

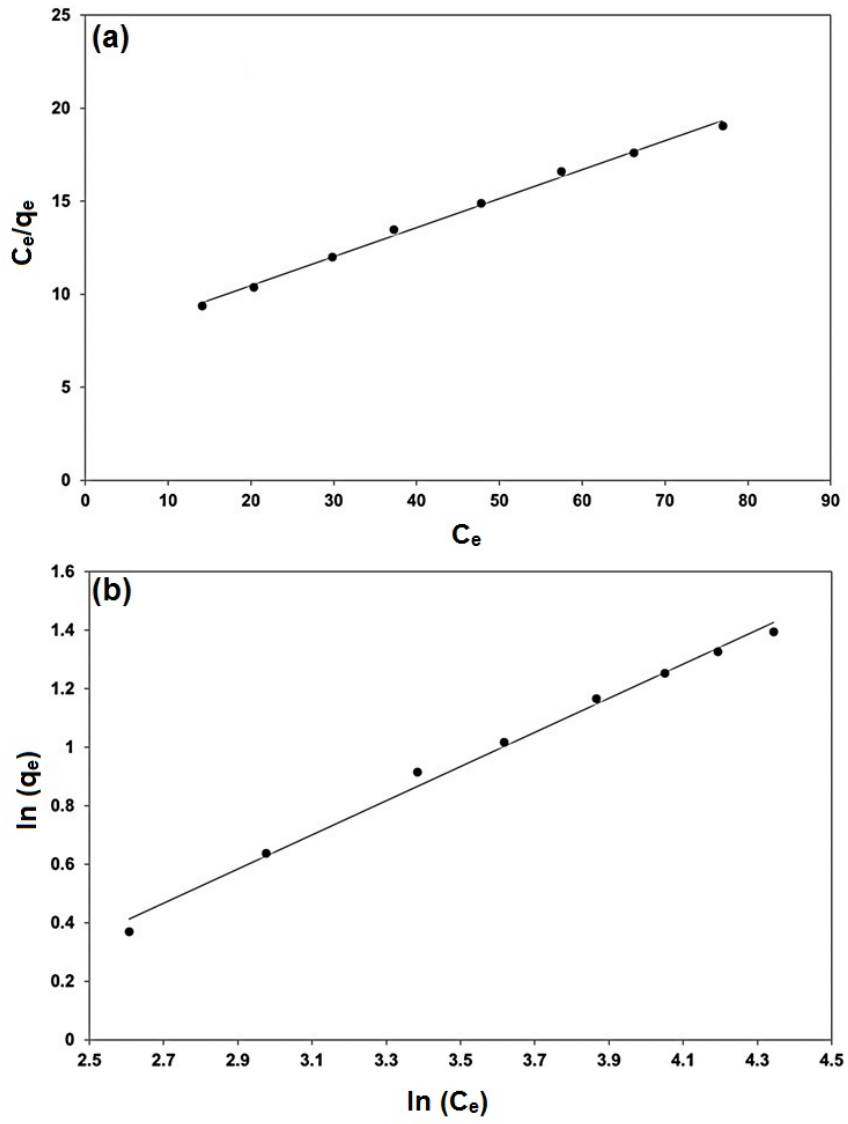


Fig. S5 Langmuir isotherm plot (a) and Freundlich isotherm plot (b) for adsorption of phosphate on MEP

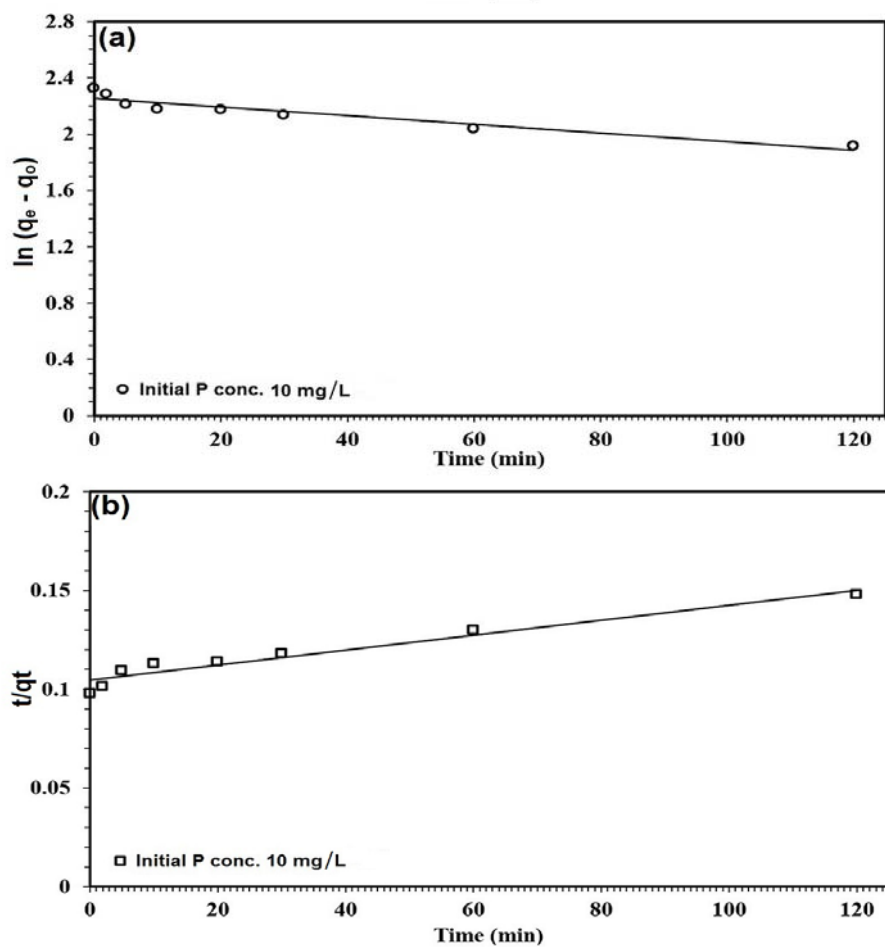


Fig. S6 Pseudo-first-order (a) and pseudo-second-order (b) kinetic plots for phosphate adsorption on MEP