Interaction of nanoparticles and colloid particles in rock masses

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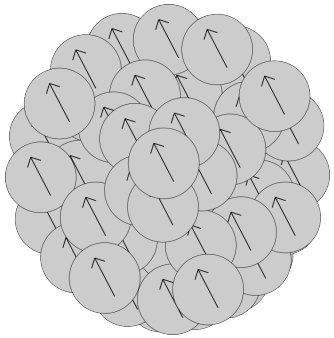
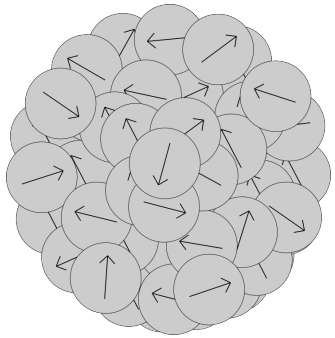
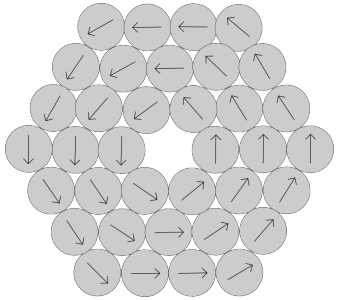
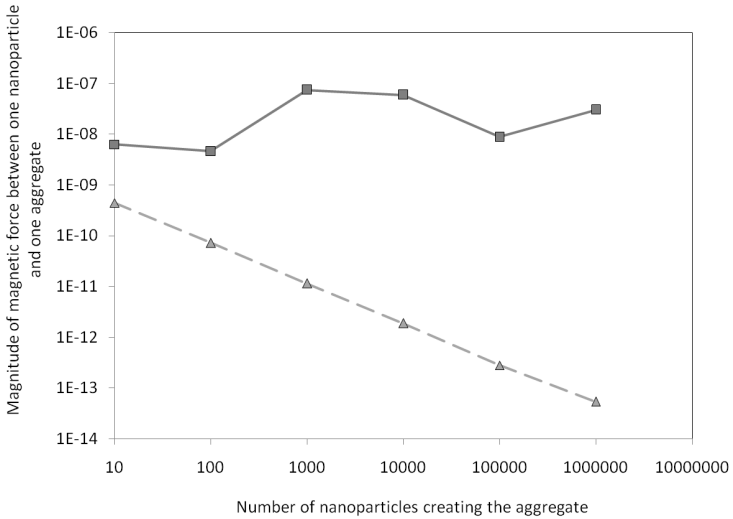
Influence of structure of iron nanoparticles in aggregates on their magnetic properties

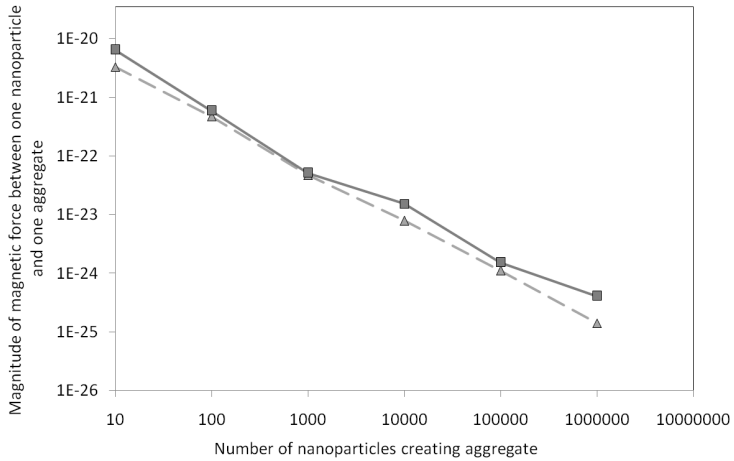






Comparison of computation methods of magnetic forces between aggregates





Charging and stability of anionic latex particles in the presence of linear poly(ethylene imine)

Linear Polyethyleneimine (LPEI)

- synthetic polymer
- surface coating
- improving of stability properties of colloids
- precursor base layer in polyelectrolyte multilayer films
- $pK \sim 7$, weak electrolyte at $pH = 4$ $\sim 65\%$ protonated
- $MW = 2\ 500$ Da, 25 000 Da, 250 000 Da

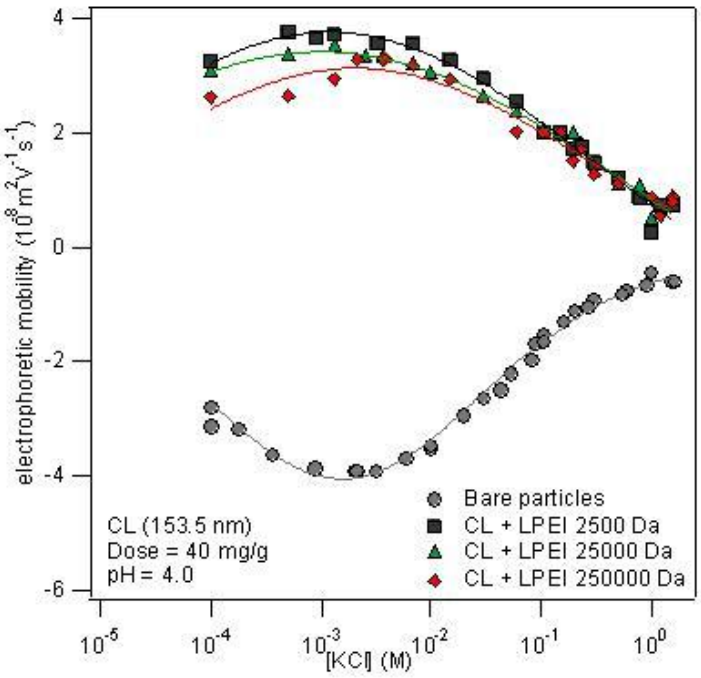
Carboxyl Latex particles (CL)

- negatively charged particles
- $R_H = 153.5$ nm

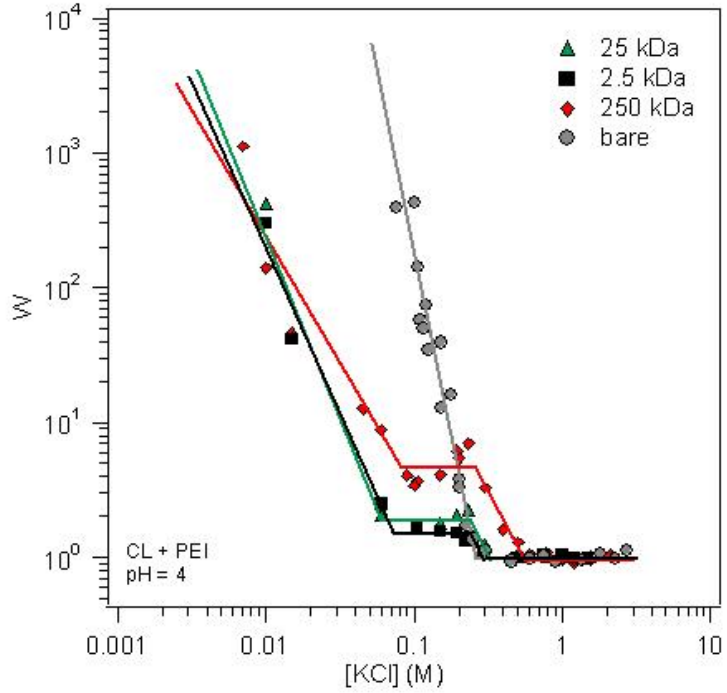
Sulfate Latex particles (SL)

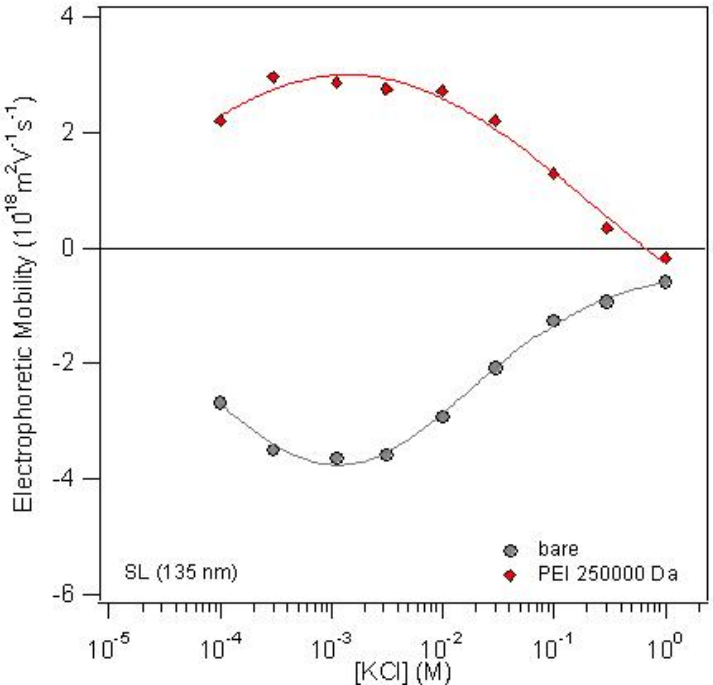
- negatively charged particles
- $R_H = 135$ nm

Electrophoretic mobility and stability ratio of covered particles



CL





SL