2. ELECTROLYTIC PROCESSES

- Applied electric field to enhance contaminant removal
  - Electro-osmosis
  - Electro-acoustical methods

} primary interests.

Flow, J \ Gradient, X	Hyd. Head	Temperature	Electrical	Chemical
Fluid	Darcy's Law	Thermo-osmosis	Electro-osmosis	Chemical-osmosis
Heat	Therm. advection	Fourier's Law	—	—
Current	Streaming current	—	Ohm's Law	Diffusion
Ion	—	—	—	Ficks (1st) Law.

- Electro-osmotic and chemical-osmotic effects important in fine-grained soils $K < 10^{-7}$ cm/s
- Also in clays the surplus of cations to balance negative charge of clay particles → hydraulic flow

- May mobilize – ionic species e.g. Heavy metals, radionuclides, charged organic compounds.
  DNAPLs are typically non-charged
  ∴ not moved.