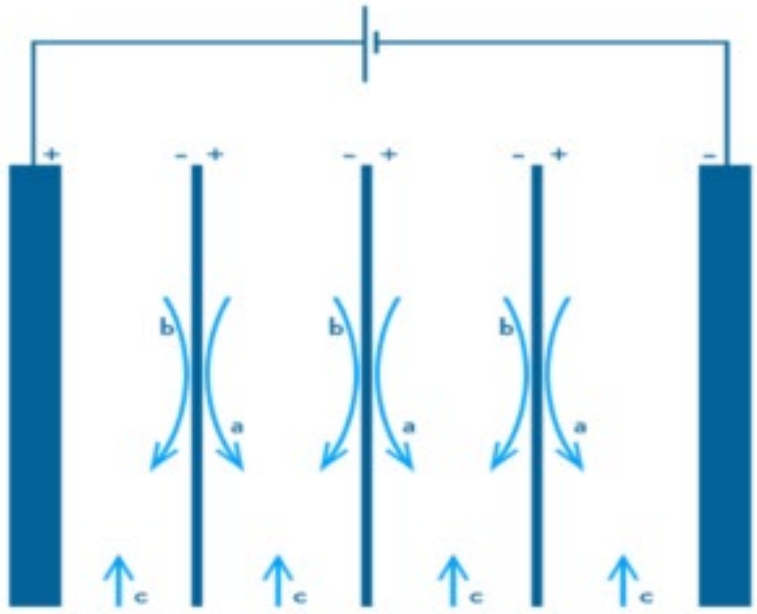
How Electrocoagulation works



REACTION

a) $Al \rightarrow Al^{3+} + 3e^-$

b) $2e^- + 2H_2O \rightarrow H_2 + 2OH^-$

1. DC current passed between the terminal electrodes (usually stainless steel) across a stack of bipolar sacrificial electrodes (usually aluminium or mild steel)
2. Active coagulant ions (Al^{3+} or Fe^{2+}) are produced at the anodes, and react to pull pollutants from solution into semi-solid clusters
3. Gas release on the Cathode integrates into the growing pollutant cluster, making it buoyant and easier to separate physically
4. The active ions do-not produce by-products which add to the total contaminants, unlike chemical dosing systems