ELECTROCHEMICAL CELL There are two types of electrochemical cells which involve either spontaneous reactions or non-spontaneous reaction. **ELECTROLYTIC CELL GALVANIC CELL** Surroundings Power (Load) supply Anode Cathode Anode Cathode (reduction) (oxidation) (oxidation) (reduction) Energy Energy (+) (-) (+) (-) Electrolyte Electrolyte X⁺ Electrolyte Y⁺ with A⁻ and B⁺

GALVANIC CELL	versus	ELECTROLYTIC CELL
Differences		
Chemical energy converts to Electrical energy	Energy change	Electrical energy converts to Chemical energy
From negative electrode to positive electrode through external circuit	Flow of electrons	From positive electrode to negative electrode through external circuit
Spontaneous redox reactions	Spontaneity of redox reactions	Non-Spontaneous redox reactions
Negative electrode	Anode	Positive electrode
Positive electrode	cathode	Negative electrode
Similarities		
Oxidation at anode		
Reduction at cathode		
Electrons flow through anode to cathode in external circuit		