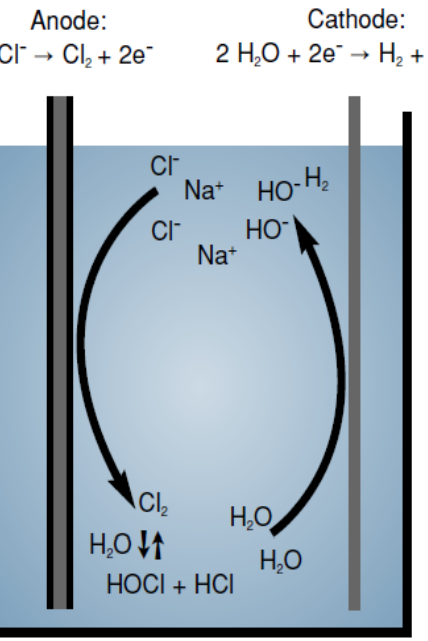
Development of HOCl generator



Dissolution of NaCl	$NaCl \rightarrow Na^+ + Cl^-$
Anode Reactions	Electrochemical process $2H_2O \rightarrow O_2 + 4H^+ + 2e^-$, $E^0 = 1.23$ V $2Cl^- \rightarrow Cl_2 + 2e^-$, $E^0 = 1.36$ V Chemical process $Cl_2 + H_2O \rightarrow HCl + HOCl$
Cathode Reactions	$2Na^+ + 2H_2O + 2e^- \rightarrow H_2 + 2NaOH$, $E^0 = -0.83$ V

chematic representation of the electrochemical processes at
ode and cathode

Photograph of the unit developed jointly by BTDG and CG

1. The EW is produced from electrolysis of 0.1% NaCl solution.
2. The HOCl content in EW is 100-200 ppm and pH range 5.5 to 6.5.
3. The anti-bacterial action of above mentioned EW has been tested by FTD, BSG and instantaneous anti-bacterial action has been observed.