Answer on Question #64429, Chemistry / Inorganic Chemistry

a current passed through three electrolytic cells in series containing silver salt, copper II salt and brine respectively.If 12.7g of copper are deposited in the second cell. calculate
i. the mass of silver deposited in the first cell
ii. the volume of chlorine liberated in the third cell at 17 degree celcius and 800mmHg
(Ag =108, 1F = 96500, Cu = 64, molar volume of gas at S.T.P is 22.4dm3

Answer

$m=\frac{Meq*Q}{F}$; $Q=\frac{m*F}{Meq}$;

$Q=\frac{m(Cu)*F}{Meq}=\frac{12,7*96500}{32}=38298$

$m(Ag)=\frac{108*38298}{96500}=42,86g$