

Double electric layer is made from potential determining ions that are tightly bound by the solid surface, and the equivalent amount of oppositely charged ions (counter ions). $\{m\text{AgI}^{n-} - (n - x)\text{K}^+\} - x\text{K}^+$
 $\{\text{aggregate} \rightarrow \text{PDI} \rightarrow \text{counter ions from adsorption layer}\} \rightarrow \text{diffuse layer} \{\text{nucleus} \rightarrow \text{counter ions from adsorption layer}\} \rightarrow \text{diffuse layer} \{\text{granule}\} \rightarrow \text{diffuse layer}$ In this scheme "m" shows the number of units of AgI in the aggregate; "n" shows the number of potential determining ions; "x" shows the number of counter ions in the diffusion layer. The charge of a granule in this scheme is equal to "-x". As an example we can take a sol formed after the reaction between water solutions of two salts: the excess of potassium iodide (KI) and relatively low amount of silver nitrate (AgNO₃). The layer of counter ions is divided into two parts: the first layer is called adsorption layer and it is made from oppositely charged ions interacting with ions from potential determining layer; the second layer is called diffusion layer since those ions are not directly adsorbed on a surface. Aggregate and the layer of potential determining ions form a nucleus of colloid particle. $\text{KI} + \text{AgNO}_3 \rightarrow \text{KNO}_3 + \text{AgI}$