

hydrosol is completely coagulated by shaking with commercial amyl alcohol or with isobutyl alcohol (traces of either of which much reduce the surface-tension of water); *shaking* however is necessary, merely pouring a layer of the alcohol over the hydrosol does not cause coagulation.

The 'isobutylalcosol' and 'amylalcosol' of silver by shaking with water, likewise are completely coagulated.

Silver, water, phenol

When phenol liquefied by a few drops of water is added to the hydrosol and a homogeneous solution formed by warming, no coagulation takes place even on standing, but if the solution is allowed to cool until it becomes milky from separation into two layers, and is then warmed again until homogeneous, all the silver is precipitated.

These experiments, while not resulting as had been hoped, show the dependence of the Winkelblech effect on the formation of surface, *i. e.*, on capillary forces, and serve to connect it with the separation of fibrin from blood by 'whipping' and with the formation of scum on the surface of streams near waterfalls and rapids.

Silver, water, chloroform, alcohol

When silver hydrosol is shaken with chloroform, very little coagulation takes place and none of the silver goes into the chloroform. Reciprocally, water does not attract silver from the 'chloroformsol.'

On adding alcohol to the systems: hydrosol-chloroform or chloroformsol-water, and shaking to secure equilibrium, most of the silver is coagulated, and what remains in suspension is retained by the layer of liquid in which it was originally present. The chloroform may be replaced by carbon tetrachloride and the silver by gold, without materially modifying the result. These observations seem important, but as it was not found possible to prepare metallic suspensions in chloroform or carbon tetrachloride free from gummy matter, too much stress must not be laid on them.