

intend to carry out similar experiments with benzene, carbon disulphide, etc., to see whether these substances resemble chloroform from this point of view.

**Copper sulphide, water, ether, alcohol**

A very dilute solution of copper acetate was used in place of the arsenious acid. No distribution was observed, the sulphide remaining in the lower layer although the plait-point was approached very closely. This agrees with Linder and Pieton's opinion that colloidal solutions of copper sulphide are much further removed from the state of 'true' solution than are those of arsenious sulphide.

**Summary**

The occurrence of distribution of colloids between two immiscible solvents is not *a priori* impossible either from the point of view of the phase rule or from that of the electrified suspension theory of colloidal solutions. It may probably be easiest observed in the case of colloids with marked power of diffusion, and "immiscible solvents" which approach each other closely in properties and composition such as those near the 'critical solution temperature' in two component systems, or the solutions at the plait-point of the binodal curve in three component systems.

The Winkelblech effect interferes with the observation of such cases of equilibrium, for instance in the case of silver hydrosol and phenol, amyl alcohol, or isobutyl alcohol. Two experiments show the dependence of the Winkelblech effect on capillary forces.

Chloroform and alcohol do not coagulate the hydrosol of arsenious sulphide; but no distribution was observed even at the plait-point; this is not due to 'passive resistance.' The same is true when the alcohol is replaced by acetone, but if ether or ethyl acetate be substituted for the chloroform distribution readily occurs, whether the consolute liquid be alcohol, acetone, or propyl alcohol.

In this connection a rapid method of approximately