

PREPARATION OF COLLOIDS :-

METHODS OF PREPARATION :- The lyophilic sols are prepared by simply dispersing the substance in a suitable dispersion medium. For example starch can be dispersed in water by adding its suspension in bromine water and stirring it. Sometimes stabilizers are added to make the solutions stable.

For the preparation of lyophobic solutions the following methods are used.

DISPERSION METHOD :- In this method the material in bulk is broken down to colloidal dimension. Some experimental methods are described below.

① MECHANICAL DISPERSION :-

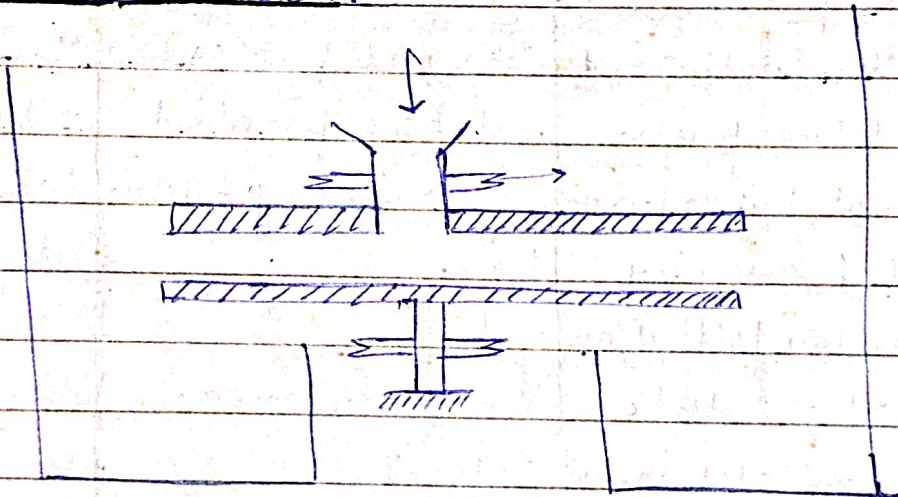
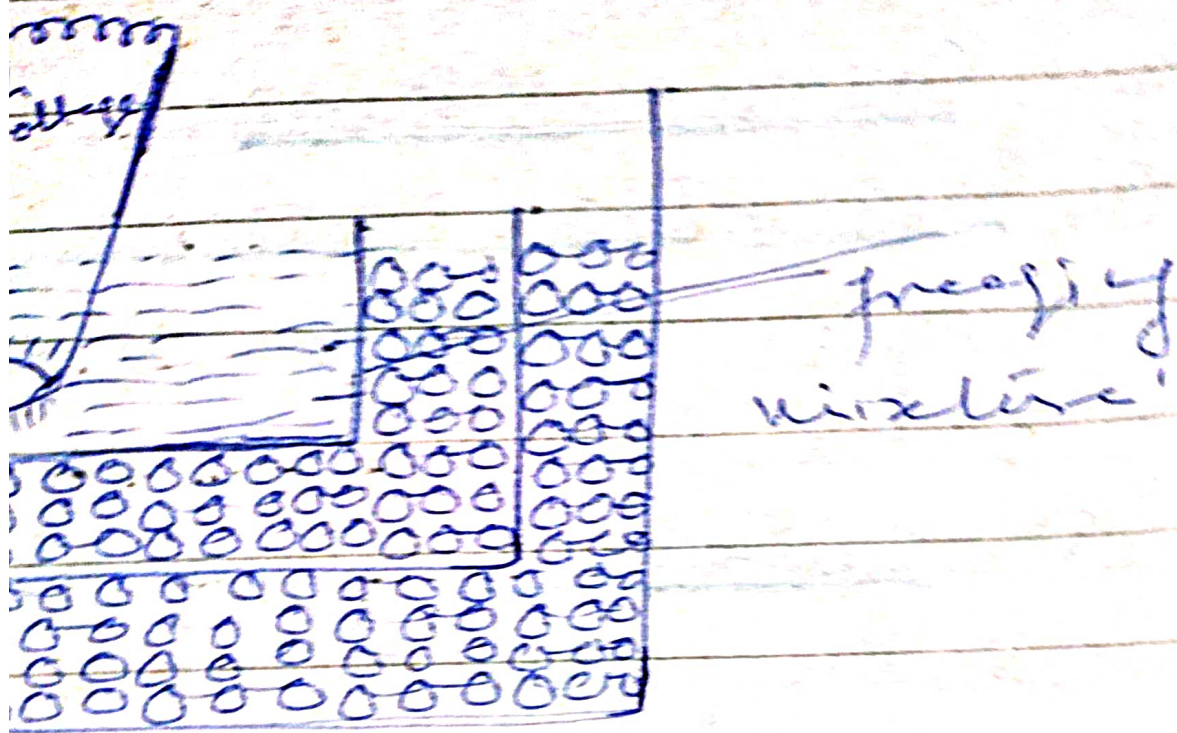


Fig. 1. A colloidal mill.

A critical colloidal mill is shown in the above figure. It consists of two metallic plates rotating at high speeds in the opposite directions. A slurry containing coarse suspension of the material is placed between the rotating plates. Finer dispersion are obtained by using an inert diluent during grinding. The presence of inert diluent prevents the reunion of particles. For example, sulphur solution is prepared by using glucose as diluent.



s method.

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had a ppt is brought back to
lution of an electrolyte. The
suitable ions which are adsor-
icles. The electrolyte added
stirring agent. For e.g. - Freshly
Fe(OH)₂ may be converted
colloids by the addition of

— In these methods the
in solution are allowed to