1. **Hypothesis:**

   It is expected that the produced coating materials will be applied as,
   
   - Corrosion preventing coating material,
   
   - This may due to good chemical resistance for individual properties of components.
   
   - The good water resistance. The predominant oil content repels the water and with higher resin content resistance properties are good due to resin. No significant adverse effect will observed on chemical resistance properties of the blends with PU resin concentration, and at higher concentration, the adverse effect is balanced by other components of the blend.
   
   - PU resin, being thermoplastic, is always sensitive to solvent even after curing and increasing concentration of CHF resin in the blend could reduces the solvent resistance of the resultant blend but this is balanced by the good solvent resistance property of alkyd and alkyd-CEs-ICOPU blend and overall solvent resistance of the alkyd-CEs-ICOPU –CHF blend is good.
   
   - Good mechanical property due to,
   
   - Adhesion and flexibility on substrate.
   
   - The alkyd-CE-ICOPU blend already showed better adhesion and flexibility due to oil and epoxy content. Oil imparts better flexibility whereas epoxy influences adhesion as well as flexibility due to long linear aliphatic chain.
   
   - For a particular ICOPU with higher oil content, the hardness of the film is somewhat inferior as the presence of oil makes the film soft but as the concentration of PU resin increases in such blends: gradual increase in hardness is observed.
   
   - The films show significant improvement in hardness in blend with higher resin content in ICOPU and higher concentrating of PU resin in Alkyd-CEs-ICOPU blends. This improvement can be attributed to excellent structural compatibility of components in the blend which form a complex cross linked polymer.
   
   - As compare to alkyds, ketonic resin shows poor impact resistance but when PU resin was blended with alkyd-CEs-ICOPU blend in increasing concentration, gradual increase in impact resistance will observed.