CHAPTER V CONCLUSIONS

From the results of this study, it can be concluded that:

- 1. The cloud point temperature of nonionic surfactants increases with increase in the number of ethylene oxide in the surfactant molecule.
- 2. The foamability of nonionic surfactants decreases sharply above the cloud point.
- 3. The foam stability of nonionic surfactants decreases sharply with increase in temperature above 30 $^{\rm o}$ C.
- 4. The coacervate phase acts as an antifoam above the cloud point by the bridging mechanism.
- 5. The dehydration of the ethylene oxide group leads to a sharp increase in foam height of $NP(EO)_9$ and $NP(EO)_{10}$ at the cloud point temperature.