

CHAPTER V

CONCLUSIONS

The measured advancing contact angles for several surfactant solutions did not substantially change with varying surfactant/counterion ratios, therefore, the precipitating counterion concentration (e.g., water hardness) will have little effect on wettability. The second subsaturated surfactant can act as a wetting agent in saturated surfactant solution containing a second subsaturated surfactant. Greasiness is not necessarily related to hydrophobicity. Even if the dewetting mechanism of a soap's antifoam behavior is correct, then is there some special characteristic besides wetting which makes a fatty acid a particularly effective defoamer and antifoam?