



CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Surfactant diffusivity of SDS, CTAB and Triton X-100 was measured by the transient capillary rise method. In order to obtain the diffusivity, a mathematical model was developed using the theory of capillary force, Gibbs plot (surface tension versus concentration), and mass transport of the surfactant in the tube. The conclusions drawn from the experimental results are indicated as follows:

1. The transient capillary rise method cannot be applied for cationic surfactant, CTAB.
2. The SDS diffusivity and Triton X-100 diffusivity obtained from this method is in good agreement to those reported literatures.

5.2 Recommendations

1. The experimental set-up should be adjusted in order to maintain a constant level of bulk liquid as the level affects the transient capillary rise rapidly.
2. To measure CTAB diffusivity, using a plastic capillary is worth a try.