

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATION

The results from the present work show that 3,4-dichloro-1-butene can be admicellar polymerized on the cotton surface. The optimum conditions for admicellar polymerization of 3,4-dichloro-1-butene are 1000 $\mu$ M LAS, LAS:monomer ratio 1:15, monomer:initiator ratio 1:4, adsolubilization time 15 hours at 30°C, polymerization 6 hours at 80°C, and NaCl 0.15M. The treated cotton has good water repellency and improved thermal stability.

For NaSS, it can be admicellar polymerized on cotton. The optimum conditions for admicellar polymerization of NaSS are 60000 $\mu$ M NaSS, NaSS:initiator ratio 1:1, polymerization time 2 hours at 80°C, and pH four. The treated cotton can be dyed with a cationic dye at room temperature with no need for salt addition. The dyed fabrics show good washing fastness at 30°C and excellent dry rubbing fastness.