

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

The interfacial polymerized PANI-PSS solution which adjusted to pH 10 with 2M NaCl was the best condition for PANI-PSS/PDADMAC multilayer thin film assembling and silver was synthesized into the film resulted in a changing of conductivity and optical sensing properties of PANI. The conductivity increased from 0.007 to 0.011 S/cm and 0.004 to 0.012 S/cm for 31 and 51 layers film, respectively. For Multi Silver loading, the film became more metallic and more shiny at higher silver reduction cycle but the conductivity of the film increased at the early silver reduction cycle and decreased at higher cycle due to the oxidation and reduction state of PANI.

5.2 RECOMMENDATIONS

The interfacial polymerized PANI-PSS did not give a high conductivity because of its granule structure so it would be better to change the synthesis method in order to get a higher conductivity structure.