

## **CHAPTER V**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **Conclusions**

Surface modification technique improves the interfacial adhesion of WPC. Reactive surface modifier gives a result to properties better than non-reactive coupling agent. High percent of wood flour in WPC can reduce the price of product but too high ratio component have an effect in mix ability. At 50:50 of wood:PP gave the highest Young's Modulus in tensile, impact and flexural testing.

When using coupling agent 2, 6 and 10%wt we found that increase percent of acrylic acid monomer the result in tensile, impact and flexural test, water absorption, degradation temperature and compatibility increase respectively.

#### **Recommendations**

1. Increase the amount of coupling agent to find the maximum mechanical properties.
2. For water absorption test, increase the testing time to investigate the maximum water resistance.