



CHAPTER V

CONCLUSIONS

H-chitosan/PCL blend films could be prepared by solution casting technique using chloroform as a co-solvent. The resulting films exhibited many interesting properties. It is noteworthy that H-chitosan enhanced the oxygen barrier property of PCL film. However, the crystalline structure and thermal stability of PCL were not changed after blending with H-chitosan. Result from DSC analysis showed that H-chitosan/PCL blend films were immiscible. From mechanical properties, the minimum tensile strength and the minimum elongation at break of blend films were obtained for the blend film with 60% H-chitosan content. These were attributed to the large agglomerated of PCL particles dispersing in H-chitosan matrix which was observed in scanning electron micrographs.