

## CHAPTER V

### CONCLUSION

- 1.) Most data of modulus and strength can be predicted by Simplex equation.
- 2.) Few data of impact strength and elongation can be predicted by Simplex equation.  
Thus, this equation is not recommended for predicting these properties.
- 3.) Characteristic of unpredictable properties by Simplex equation :
  - a.) Maximum excess property does not occur at about 50:50 composition of blends.
  - b.) Mechanical properties are complex function of compositions.
  - c.) Properties as a function of composition is an S-curve.
- 4.) Interaction parameter( $\beta_{12}$ ) of HDPE/PP blends increases with molecular weight of HDPE.
- 5.) For HDPE/PP blends in which HDPE with melt index closed to that of PP, the Simplex equation can predict their properties accurately.
- 6.) Crystallinity directly effect to the mechanical behavior of these HDPE/PP blends.