

## CHAPTER V

### CONCLUSIONS

From the results discussed in the previous chapter. It can be concluded that:

1. The higher ethylene content results in a significant decrease of isotacticity of copolymer. The same effect is also found in commercial plants.
2. An increase in electron donor (CHMDMS) in the catalyst system causes an increase in isotactic index. High levels of electron donor can improve the isotacticity of copolymer.
3. Increasing of ethylene content significantly affect the melting temperature. While a reduction in crystallization temperature, affected from the presence of ethylene, can be seen at ethylene content above 2.3 mol%.
4. Addition of electron donor only slightly affects the melting temperature and crystallization temperature.
5. The copolymer produced with ethylene content below 2.3 mol% has rather the same quality in terms of weight average molecular weight, number average molecular weight, polydispersity.
6. A broader molecular weight distribution is achieved at anethylene content above 2.3 mol%.