

## CHAPTER V

### CONCLUSION

1. From mechanical properties studied indicating that most blends show linear relationship between mechanical properties, hardness, tensile properties, and gloss with EAA compositions. Some blends composition present synergistic behavior, which probably the result of higher crystallinity in these samples. This is because both materials can be crystallized and also from stronger interaction between themselves. Whereas some blends show values below a linear relationship, which is probably due to immiscible two phases exist in that blends.

2. Rheological properties results suggesting that the most suitable composition of ESCOR<sup>®</sup> 320/EAA2 blends to use as damper materials should be at 60 wt% EAA2 content because at this composition, high storage modulus and also high mechanical properties was obtained.

3. Blends are not miscible over the entire composition range since there were two separate  $T_g$  peaks observed in dynamic mechanical properties (DMTA) results. It can be generally state that the miscible polymer blend compositions are as follow:

- ESCOR<sup>®</sup> 320/EAA1 at 0, 80, and 100 wt% EAA1
- ESCOR<sup>®</sup> 320/EAA2 at 0, 90, 95, and 100 wt% EAA2
- ESCOR<sup>®</sup> 320/EAA4 at 0, 20, and 100 wt% EAA4
- ESCOR<sup>®</sup> 320/EAA5 at 0, 80, and 100 wt% EAA5