

CHAPTER V

CONCLUSIONS

The present work proposed a novel design and synthesis of star-shaped molecule based on the basic knowledge from synthesis of benzoxazine macrocyclic compound and benzoxazine dimer supramolecule. However, model reaction, reaction between **1** and phenol, and the reaction between **1** and **2** confirmed that, instead of tetra-substitutional four-armed star product, the di-substitutional two-armed star product was inevitably obtained. Furthermore, based on the systematic study, this work also proposed the mechanism of this phenomenon dealing with the steric hindrance of di-substituted phenol products and the strength of base catalyst.