

CHAPTER V

CONCLUSION

Benzoxazine dimer derivatives acted as hosts for alkaline and alkaline earth metal ions. The host-guest compound can be considered as a molecular assembly controlled by the bulkiness of the dimer structure unit itself. Decreasing intramolecular hydrogen bonding and increasing lone pair electrons in the dimer structure enhances the ion interaction properties. In the modification of benzoxazine dimer with benzoate group, the ion interaction ability is significantly increased, which may be due to the combined effect of lone pair electrons and benzyl stacking conformation. Studies by ¹H-NMR lead to the qualitative analysis of host guest compound and can be expected to quantify the host guest ratio and clarify the conformation in the future work.