

CHAPTER V

FUTURE ASPECT

Through this work, it can be clarified that benzoxazine is a novel type of host compounds. Considering benzoxazine as an ionophore, it is found that this inclusion compound shows the ion responsive structure and induces the ion interaction with all type of ions. In other words, in order to accomplish the ion selectivity beyond the guest responsive structure of ionophores, it is necessary to control the conformation of host compounds. As known in the case of calixarene, the ring formation is the key to establish the specific property as a host compound. Thus, in this case, it can be expected that when the ring conformation of the benzoxazine is controlled, specific property will be induced systematically. With the basic knowledge of inclusion phenomena on the benzoxazine from the present work, it will be an interesting topic to study at the molecular level of the host compounds. Ishida, H. and Krus, C.M. (1995) proposed the synthesis of trimer, tetramer and some oligomers of benzoxazine which can be applied as a background for the preparation of those oligomers in the future work. It can be expected that by controlling the host compounds at the molecular level, the specific properties of inclusion phenomena could be accomplished significantly.