CHAPTER - IX

SCOPE FOR FUTURE STUDIES

This chapter deals with scope for future studies.

The present study falls within the field of crystal growth and characterization which is a thrust area of research having both scientific and technological importance. Scientific studies on crystalline materials normally involve: (i) nucleation and growth of crystals; (ii) structural and physical characterization; etc. The present research work, reported in this thesis, is of scientific nature.

Several investigations have been made in the present study and several useful results have been obtained. However, several more investigations have to be carried out in the future to understand the full potential of these new composite material crystals.

The pure and ZnS doped Na\(_{x}\)k\(_{1-x}\)Cl crystals grown in the present study are found to be harder than the end member crystals. Also ZnS doped crystals are found to have significantly deviated properties. Hence, their application in device fabrication is expected to have good results in the future.

Impedance measurement and photoluminescence spectral study can be carried out in the future.

In the present study, ZnS has been used as the dopant. In future, the study may be extended by considering other II - VI compounds to prepare nanocomposites.