



# *Future Scopes*

## **Chapter-7: FUTURE SCOPES**

### **➤ Possible future scopes of work:**

- 1) On KDP (pure and doped), various ion beam irradiation or implantation investigations can be performed to investigate structural, non-linear optical and electrical characteristics changes induced by irradiation. This is an important study due to the possible exposure of devices to radiation during their applications in working fields.
- 2) Using the density functional theory (DFT), it is possible to closely study the hydrogen bonding defect chemistry of amino acid doped and pure KDP crystals.
- 3) The higher order non-linear optical susceptibility may also be explored in the crystal implanted with suitable dopant ions.
- 4) Various properties of KDP doped with relevant nanoform impurities of organic or inorganic dyes, metal ions, etc., can be studied.
- 5) Efforts can be made to grow pure, and doped KDP crystals in the presence of an applied electric field and ultrasound, and possible modifications in the growth and properties of KDP crystals can be studied.