

Crystal growth and dielectric measurement of $\text{KH}_2\text{P O}_4$

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Growth of potassium dihydrogen phosphate ($\text{KH}_2\text{P O}_4$) crystals from a saturated solution by a simple temperature decrease method is presented. The temperature dependence of the dielectric constant for a number of specimens are calculated from capacitance measurements is also presented. Both the overall feature of our results and transition temperatures which were within the range of 118.5°K and 123.5°K are in good agreement with values found in the literature. Using d.c bias fields, the transition temperature has been observed to shift to lower values. Dielectric measurements obtained in the neighbourhood of the transition temperatures indicate a first order transition in potassium dihydrogen phosphate in agreement with recent findings of other workers.