

## **Growth, structural, spectral and nonlinear optical studies on potassium hydrogen phthalate single crystals with glycine as additive**

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Glycine added potassium hydrogen phthalate single crystals were grown at different glycine concentrations by aqueous slow evaporation technique. Powder diffraction studies indicate that the crystal belongs to orthorhombic system with space group  $Pca2_1$ . The grown crystals were found to be transparent in the entire visible region with a low cut off wavelength of 300 nm. The presence of second harmonic generation (SHG) effect in the pure and doped KHP crystal confirms the nonlinear optical property.

Keywords: Nonlinear optical material, crystal growth, FT-IR, optical properties, refractive index.