

Fig.1 shows the schematic diagram of BPH

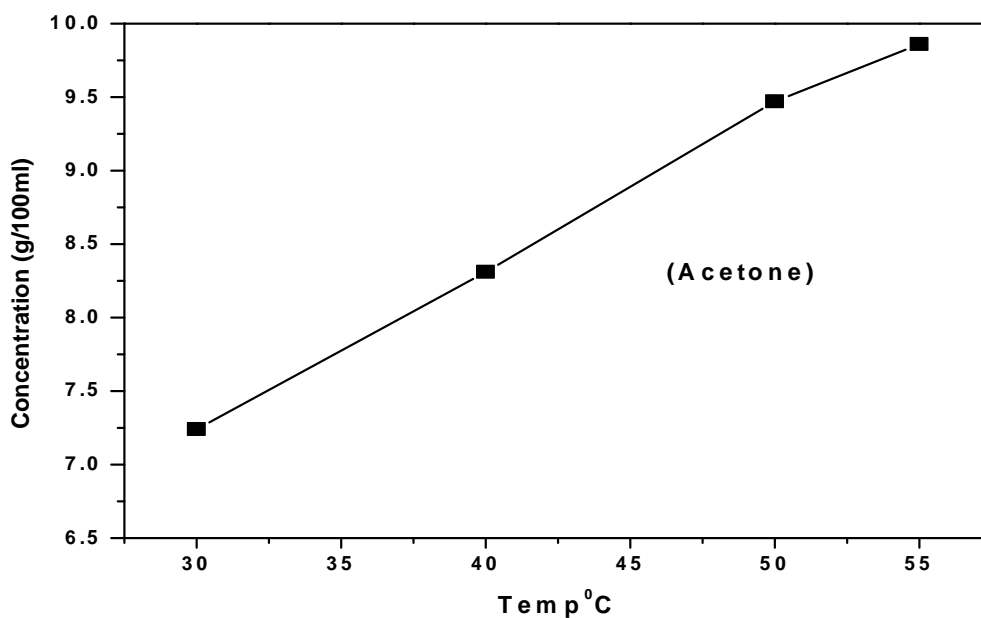


Fig.2 Shows the Solubility diagram of BPH

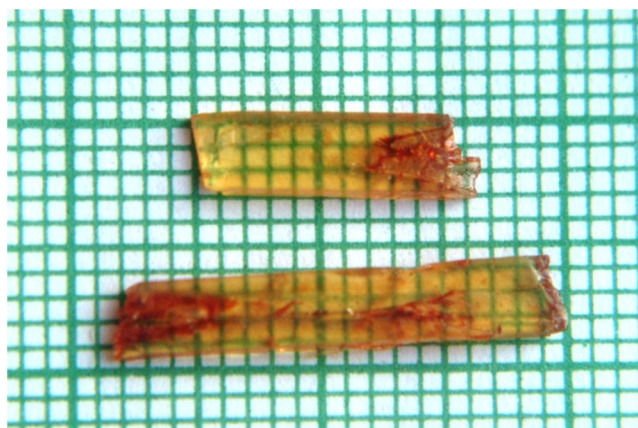


Fig.3. Shows the grown crystals of BPH

Result and Discussion:

X-Ray Diffraction Studies: The structural properties of single crystals of BPH have been studied by Powder X-ray diffraction technique. The indexed X-ray diffraction pattern is shown in Fig.4. The lattice parameters were evaluated by using Powder X software. The evaluated lattice parameter are $a=6.102 \text{ \AA}$, $b = 23.291 \text{ \AA}$, $c = 8.512 \text{ \AA}$. The obtained values are in good agreement with the reported values (Brian Vickery and Willey 1985). The obtained and reported values of lattice parameters are stacked in Table for the ease of comparison.

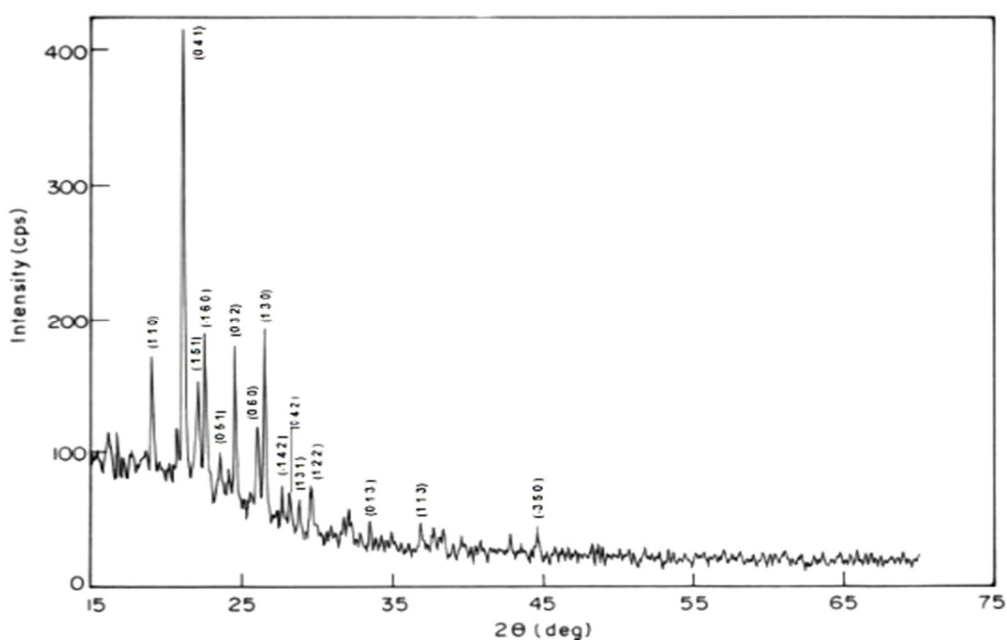


Fig.4 shows the Powder X-ray pattern of BPH

Table 1 Comparison of unit cell parameters of BPH						
a (Å)	b (Å)	c (Å)	α	β	γ	$Volum e \text{ \AA}^3$
6.049	23.320	8.506	90.0°	96.8°	90.0°	1191.4
6.091	23.291	8.512	90.0°	96.4°	90.0°	1207.5

Vibrational Studies OF BPH: The Fourier transform mid infrared spectrum was recorded using Perkin Elmer Spectrum RX1 spectrophotometer. the FTIR spectrum of BPH shown in Fig.5. The FT Raman spectrum was recorded on a BRUKER IFS 66V model interferometer equipped with an FRA-106 FT Raman accessory. The experimental spectrum is shown in Fig. 6.