

## Optical properties of erbium doped borotellurite glass system

### ABSTRACT

Erbium doped zinc borotellurite glasses were prepared by using melt-quenching method. The structural properties of the glass samples were determined by using x-ray diffraction (XRD) method and was confirmed its amorphous nature. The density and molar volume is shown to be increased with increasing content of erbium. The refractive index is found to be increased with increasing content of erbium.

**Keyword:** Optical absorption; Optical materials; Refractive index