**Abstract**

Thin films of In2Se3 were prepared by thermal evaporation. X-ray diffraction indicated that the as grown films were amorphous in nature and became polycrystalline gamma-In2Se3 films after annealing. Optical properties of the films, investigated by using spectrophotometer transmittance spectra in the wavelength range 200-2500 nm. The increase in the value of Eg (opt) with annealed treatment is interpreted in terms of the density of states model as proposed by Mott and Davis.