

# **ROLE OF TEMPERATURE IN THE FORMATION OF ZnSe NANOMATERIALS BY CHEMICAL REDUCTION METHOD**

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## **ABSTRACT**

ZnSe nanorods are grown by varying temperature and keeping ratio of reagent constant. The samples are characterized using electron diffraction techniques. Simultaneously optical absorption, photoluminescence and longtime photorelaxation of these samples are studied at room temperature. An increase in band gap is observed in each case as compared to bulk ZnSe. Also the formation of nanorods is found to be favourable at particular temperature. An attempt is made to explain the growth & correlate the structural, optical & electrical properties

**KEYWORDS:** Synthesis of nanomaterials, Structural properties, Optical properties.