

## **19. Studies on spray deposited Eu Se thin films**

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### **ABSTRACT**

Spray pyrolysis method was employed for deposition of europium selenide (EuSe) thin films on non-conductive bare glass substrates in aqueous precursor medium at increasing substrate temperatures. The synthesized films were studied by XRD, SEM and UV-Visible spectrometry. The effect of substrate temperature on morphological and optical properties has been investigated. The XRD studies reveal that, the films are polycrystalline in nature and the deposited material was europium selenide. The SEM analysis conforms the formation of bunched grains on overall substrate with cracks on flat thin film surface.

**Key words :** band gap; thin films; EuSe; spray pyrolysis; XRD