

## 50. Synthesis and Characterization of Blue Emitting Phosphor

### $\text{CaAl}_2\text{B}_2\text{O}_7: \text{Eu}^{2+}$

P. A. Nagpure, S. K. Omanwar

#### **ABSTRACT**

Polycrystalline samples of  $\text{Eu}^{2+}$  activated  $\text{CaAl}_2\text{B}_2\text{O}_7$  phosphor has been prepared by a combustion technique with urea as fuel. Photoluminescence (PL) of this phosphor studied over 210 - 410 nm excitation range for different concentration of activators. The excitation spectra of  $\text{CaAl}_2\text{B}_2\text{O}_7: \text{Eu}^{2+}$  monitored at 462 nm emission consists of two broad bands with their peaks at about 280 and 350 nm and emission spectra monitored at 254 nm consists of broad band peaking at 462 nm..