

# **Synthesis And Investigation Of Properties Of Cerium Doped**

**Calcium Oxide (CaO: Ce<sup>3+</sup>)**

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## **Abstract**

Over the decade's luminescent materials have found their use mostly in production of Light Emitting Diodes (LEDs), where different alkaline earth has been used in production of different colors. Phosphors have been used as the main material in x ray screen, neutron detectors and alpha particles. Europium has a high light conversion for Near Ultraviolet (NUV) thus used mostly in LEDs. Temperature is one factor that affects luminescence. In this research preparation and analysis of the properties of calcium oxide doped with cerium will be observed. Samples of CaO:Ce<sup>3+</sup> phosphor will be synthesized using solution combustion method. The starting raw materials will be of pure grade weighed in proportion. Mixture will then be dissolved in 10ml of de ionized water and stirred for 15minutes. Each sample prepared will be subjected to different wavelength to measure the absorbance