

Extraction of High Luminescence Light from Light Emitting Devices Using ZnS QDs Material

S.P. MISHRA and K.K. NAIK[†]

*P.G Dept. of Physics, Berhampur University, Odisha, India
Email: kushakumarnaik08@gmail.com*

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Abstract : Extraction of efficient light from the light-emitting device in an economical way is always challenging. Modern technology demands more and more performances of devices fabricated at low cost. In this paper, we have demonstrated the synthesis of Zinc Sulfide Quantum Dots (ZnS QDs) by a facile and cost-effective solvothermal method, and their performance of light extraction as a light-emitting device is investigated extensively. Further, the ZnS QDs are characterized by modern tools like XRD, SEM, and EDAX spectroscopy respectively. The light extraction performance of ZnS QDs thin film is more questing which can be recommended for mass production and industrial applications.

Keywords: Zinc Sulfide, Quantum Dots, Solvothermal method, Thin film, and Light Extraction