

Synthesis and characterization of rare earth doped Oxide based material for lighting and space dosimetry application

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Sudipta Som has completed his Ph.D. from Indian School of Mines, Dhanbad, India. His research work was mainly concentrated on the Swift heavy ion induced modification in structural, optical and luminescence properties in rare earth doped yttrium oxide phosphors. This work focused on the comparative investigation on structural and optical modifications of rare earth doped/ codoped Y_2O_3 phosphors after swift heavy ions irradiation to find its suitability in colour tunable devices and as heavy ion dosimeters.

Recently he is doing Post-doctoral research on the development of novel light-emitting materials by co-precipitation, combustion and hydrothermal method for white light application. Development novel thermoluminescent material for the measurement of doses/ fluences of very highly energetic particles for space dosimetry application is also a part of his recent research. He has experience in calculating different parameters such as Rietveld refinement parameter, ion impact parameter, Judd-Ofelt parameter, CIE parameter, trapping parameter etc. He has all total 26 publications in different reputed journal from Elseveir, Springer, IOP, Taylor and Francis, World Scientific, Willey, OSA, RSC etc. He attended 10 conferences and has 03 conference proceedings.