



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555  
Vol.9, No.08 pp 319-327, 2016

## Ruthenium Bipyridine Dichloride Complex Sensitized Cadmium Doped TiO<sub>2</sub> and SnO<sub>2</sub> Nanocrystals

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**Abstract :** Many semiconductor oxide layers were coated over TiO<sub>2</sub> which acts as the photoanodic materials in Dye Sensitized Solar Cells (DSSCs). A suitable dye sensitizer coated over the suitable photoanodic material could be used in DSSC to increase the efficiency to a higher rate. This paper deals with the photoconductivity and electrical studies of the cadmium doped TiO<sub>2</sub> and SnO<sub>2</sub> nanocrystals coated with the [Ru(bipy)<sub>2</sub>(C<sub>6</sub>H<sub>5</sub>NHNH<sub>2</sub>)]Cl<sub>2</sub> as the dye sensitizer which could be used in DSSC in future.

**Keywords :** DSSC, Photoanode, Photoconductivity, Dye sensitizer.

S. Chitra *et al* /International Journal of ChemTech Research, 2016,9(8),pp 319-327.

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