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## Vashavantrao Chavan Institute of Science, Satara- 415001

ISO 9001/2008 Certified Rescondited by NAAC. At grade (CGPA 3.57) Selected as College with Task Ital for Excellence by UGC, Selected for FIST by DST and STAR Scheme by DBT.



## NATIONAL CONFERENCE ON RECENT TRENDS IN NANOMATERIALS (NCRTN-2017) 28th Sept. 2017

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Date: 25 / 09 / 2017

Dear Sir,

Thanks for contribution to the National Conference on Recent Trends in Nanomaterials (NCRTN-2017) during 28<sup>th</sup> September, 2017.

Sir, you're research paper is **accepted for presentation**. A mode of presentation is poster presentation.

Looking for your favorable response!

Thanking you, with regards,

Tajarshi chin. Shahu College Knihabur

Convener NCRTN-2017





## Photo-electrochemical studies of CdSe and Al:CdSe thin films deposited by electrodeposition method

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## Abstract:

Synthesis of CdSe and Aluminium doped CdSe (Al:CdSe) thin films is carried out using Electro-deposition method. In order to study the effect of aluminum doping, the structural, optical and photoelectrochemical studies of undoped CdSe and Al:CdSe are undertaken. X-ray diffraction pattern reveals that the both films are crystalline in nature with cubic crystal structure. Aluminum doping in CdSe found to decrease band gap from 1.83 to 1.72eV. The photoelectrochemical studies are carried out using CdSe or Al:CdSe\ 1M (NaOH-Na2S-S)\ Graphite configuration under illumination intensity 50mW/cm<sup>2</sup>. Aluminum doping in CdSe is found to enhances the efficiency from 0.97 to 1.25 and fill factor from 0.35 to 0.37. Both films show n-type conductivity.

Keywords: Al: CdSe, thin film, XRD, Photo electrochemical, optical study

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