

List of Research and Publication

1. **S. Ibrahim**, S. Ghosh and T. Pal, Synthesis and characterization of solution-processable $\text{Cd}_{1-x}\text{Zn}_x\text{S}$ nanorods for photocatalytic degradation of tetracycline, *Journal of Materials Science: Materials in Electronics*, **31(15)**, 12955—12960(2020).
2. **S. Ibrahim**, T. Pal and S. Ghosh, The Sonochemical Functionalization of MoS_2 by zinc phthalocyanine and its Visible Light-induced Photocatalytic Activity, *New J. Chem.*, **43**, 10118—10125(2019).
3. **S. Ibrahim**, T. Pal and S. Ghosh, Solar Light Responsive Photocatalytic Degradation of Tetracycline by RGO – CdS Nanocomposite, *AIP Conf. Proc.* **2115**, 030188(2019).
4. **S. Ibrahim**, S. Chakrabarty, S. Ghosh and T. Pal, Reduced Graphene Oxide – Zinc Sulfide Composite for Solar Light Responsive Photo Current Generation and Photocatalytic 4-Nitrophenol Reduction, *ChemistrySelect*, **2**, 537 – 545(2017).
5. **S. Ibrahim**, K. Chakraborty, T. Pal, S. Ghosh, Reduced Graphene Oxide - Cadmium Zinc Sulfide nano Composite with Controlled Band gap for Large Area Thin Film Optoelectronic Device Application, *Journal of Materials Engineering and Performance*, **27(6)**, 2629-2634(2017).

6. K. Chakraborty, **S. Ibrahim**, P. Das, S. Ghosh, T. Pal, Solar Light Responsive Photocatalytic Activity of Reduced Graphene Oxide – Zinc Selenide Nanocomposite, *Journal of Materials Engineering and Performance*, **27(6)**, 2617-2621(2017).
7. **S. Ibrahim**, K. Chakraborty, T. Pal and S. Ghosh, Solution Processable RGO-CdZnS Composite for Solar Light Responsive Photocatalytic Degradation of 4-Nitrophenol, *AIP Conf. Proc.* **1832**, 050005(2017).
8. S. Kar, **S. Ibrahim**, T. Pal and S. Ghosh, Enhance Solar-Light-Driven Photocatalytic Degradation of Norfloxacin Aqueous Solution by RGO-Based Cd_xZn_{1-x}S Alloy Composite with Band-Gap Tuneability, *ChemistrySelect*, **5**, 54-60(2020).
9. K. Chakraborty, **S. Ibrahim**, P. Das, S. Ghosh and T. Pal, Reduced Graphene Oxide-CdS Nanocomposite with Enhanced Photocatalytic 4-Nitrophenol Degradation, *AIP Conf. Proc.* **1832**, 050077(2017).
10. K. Chakraborty, S. Chakrabarty, **S. Ibrahim**, T. Pal, S. Ghosh, Photo Current Generation in RGO - CdS Nanorod Thin Film Device, *AIP Conf. Proc.* **1731**, 080052(2016).

11. P. Das, **S. Ibrahim**, K. Chakraborty, S. Ghosh, T. Pal, Opto-electronic Transport Properties of Graphene Oxide Based Devices, *AIP Conf. Proc.* **1665**, 110048(2015).

12. **S. Ibrahim**, S, Ghosh and T. Pal, Large Area Thin Film Optoelectronic Device Application of RGO-Cd_{0.25}Zn_{0.75}S Nano composite. (Paper accepted in *AIP Conf. Proc.*)

Manuscript under preparation

13. P. Das, **S. Ibrahim**, K. Chakraborty, S. Ghosh and T. Pal, Chemical and Physical Properties of Graphene Oxide and Reduced Graphene Oxide.

14. K. Chakraborty, P. Das, **S. Ibrahim**, T. Pal and S. Ghosh, Reduced Graphene Oxide – Zinc Telluride (RGO-ZnTe) Composite for the Degradation of Dyes under Visible Light Illumination.

Award received

1. **“YOUNG SCIENTIST AWARD”** in the 2nd international conference on “Energy, functional materials and nano technology & sustainable environment management (ICEFN & SEM-2019)” held during May 24-26, 2019 organised by Nano Science and Nano Technology Centre, Kumaun University, Nainital, India.
2. **“BEST ORAL PRESENTATION AWARD”** in National Workshop on “Science and Technology of low dimensional systems (STLDS-2019)” organised by Department of Physics, Siksha o Anusandhan (Deemed to be University), Bhubaneswar, Odisha, India during 1-3rd November 2019.