

## Personal Profile

**Name:** Prof Goutam Mandal

**Contact:** Department of Physics

Bankura Zilla Saradamani Mahila Mahavidyapith

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### Academic Position:

- Associate Professor & H.O.D. of Physics in Bankura Zilla Saradamani Mahila Mahavidyapith.
- April- 2015 to September- 2019: As Assistant Professor of Physics in Bankura Zilla Saradamani Mahila Mahavidyapith.
- March-2005 to March-2015: Assistant Professor of Physics in Ramsaday College, Howrah.

### Research Interests:

- Semiconductor nanomaterials for Environmental Applications.
- Non linear optics.

### Education:

- **M.Sc. (2003, Burdwan University)**
- **Thesis Submitted (Ph.D)**

### Research Publications:

1. Mandal, G., & Bhattacharjee, B. (2024). Cerium Oxide Nanoparticle-Papain Enzyme Bioconjugate: Synthesis, Characterization and Optical Absorption Study for Biomedical Applications. Indian Journal of Science and Technology, 17(13), 1331-1339.
2. Mandal, G., & Bhattacharjee, B. (2024). Green synthesis of Cu doped zinc oxide nano antibiotic: characterization and effect of Cu doping on antibacterial activity, Afr. J. Bio. Sc, 6(5), 3725-3739.
3. Mandal, G., & Bhattacharjee, B. (2024). Biosynthesis of ZnO nanoparticles using the young fruit of Borassus flabellifer: Characterization and photocatalytic removal of biohazardous safranin-O dye using solar irradiation. The Scientific Temper, 15(02), 2092-2098.
4. Mandal, G., & Bhattacharjee, B. (2024). RSM-CCD Modeling and Optimization for Adsorptive Removal of Rose Bengal Dye from Aqueous Medium using CeO<sub>2</sub> Nanoflowers. Indian Journal of Science and Technology, 17(31), 3199-3209.
5. Mandal, G., & Bhattacharjee, B. (2024). Bio-Mediated Synthesis of ZnO Nano Photocatalyst using *C. gigantea* (L.): Microstructural Study for Rapid Degradation of Organic Pollutants from Aqueous Medium. Environment and Ecology, 42(4), 1541-1551.

**Books and Chapter in books Published:**

1. Title “Amar Bhoutabigyan O Poribesh”, Class-IX, TB No. WBBSE-New Syll/PScE (B)/IX/2015/T 18(24), ISBN :81-87284-52-8, December 2014.
2. Title “Amar Bhoutabigyan O Poribesh”, Class-X, TB No. WBBSE-New Syll/PScE (B)/X/2016/T 13/27, November 2015,(Without ISBN).
3. Chapter entitled “Poradhin Bharater Streesikhsha o Bhogini Nibrdita” in “Sister Nivedita’s Role in Women Education in India” Edited by Dr. Arup Kr. Ghosh and Prof. Nityananda Patra, 18<sup>th</sup> July 2015.
4. Chapter entitled “E- WASTE MANAGEMENT IN INDIA” in “Enviornment: Its Threat and Challenges” Edited by Dr. Anurupa Mukhopadhyay and Prof. Uday Sankar Sarkar, April 2017.
- “Enviornmental Education a Need of the Day”, Edited by Dr. Sayantan Mondal, Prof. Nityananda Patra, Prof. Goutam Mandal, August 2017

**Conferences/ Invited Presentations/Workshops/Others:**

1. Participated in One Day State Level Seminar on “Some basic Aspects in UG Level Mathematics” at Ramsaday College, Amta, 19<sup>th</sup> January 2012.
2. Presented a paper entitled “Air Pollution and some remedies using Nano-technology” in UGC sponsored Two Day National Seminar, 23<sup>rd</sup> & 24<sup>th</sup> September 2016, held in Bankura Zilla Saradamani Mahila Mahavidyapith.
3. Presented a paper entitled “Some elemental aspects of Tri-state logic” in 1<sup>st</sup> Regional Science Congress & Technology Congress, 7<sup>th</sup> & 8<sup>th</sup> November 2016, held in Bankura Christian College.
4. Presented a paper entitled “Future of UG level science in Girls College” in One Day UGC sponsored State Level Seminar on “Woman Empowerment”, 8<sup>th</sup> March 2017, held in Bankura Zilla Saradamani Mahila Mahavidyapith.
5. Participated in NAAC sponsored two day national seminar on “The Importance of Benchmarking in Third Cycle of NAAC” at BZSMM, Bankura, 31<sup>st</sup> January, 2018.
6. Presented a paper entitled “History of Periodic Table” in Two Day National Seminar on “Celebrating International Year of Periodic Table”, 18<sup>th</sup> & 19<sup>th</sup> March 2019, held in Bankura Sammilani College, Bankura.
7. Poster Presentation on “Structural Investigation of ZnO Nanocrystals for Dye Degradation” by G. Mandal, B. Bhattacharjee, A. Bhunia, in National Conference on “Recent Trends in Physics” organized by Bankura University, Bankura, India during 17<sup>th</sup> February to 17<sup>th</sup> February 2020.

8. Poster Presentation on “Effect of the Optical Bandgap on the Absorption property of CeO<sub>2</sub> nanostructures” by G. Mandal, B. Bhattacharjee in National Conference on “Frontier of Material Science and Photonics: Issues and Development” organized by Sidho-Kanho-Birsha University, Purulia, India during 5th March to 6th March 2020.
9. Oral Presentation on “Characterization of CeO<sub>2</sub> Nanoparticles for the study of the Photocatalytic Degradation of Fluorescein Sodium Salt” by G. Mandal, B. Bhattacharjee in Regional Conference on “5th Regional Science & Technology Congress 2022-2023” organized by Bankura University, Bankura, India during 9<sup>th</sup> January to 10th January 2023.
10. Oral Presentation on “The Characteristics and photocatalytic activities of chemically synthesized ZnO nanoparticles” by G. Mandal, B. Bhattacharjee in International Conference on “Recent Trends in Physics & Allied Sciences” organized by B. B. College, Asansol, India during 15th March to 16th March 2023.

**Faculty Development Programme Attended:**

Name of the Course/Summer School	Place	Duration	Sponsoring Agency
62 <sup>th</sup> Orientation Programme	Academic Staff College, The University of Burdwan	19th June to 16th July, 2007.	UGC
11 <sup>th</sup> Refresher Course in Physics	Academic Staff College, The University of Burdwan	7th January to 27th January, 2010.	UGC
3 <sup>rd</sup> Refresher Course in Nano Science & Nano technology	Academic Staff College, The University of Burdwan	14th September to 4th October, 2018.	UGC
STC on “Gender and Society”	Academic Staff College, The University of Burdwan	19th September to 25th September, 2019.	UGC
STC on “Uses of Open Source Software in Higher Education & Research”	Academic Staff College, The University of Burdwan	15th November to 21st November, 2019.	UGC