

Personal Profile

❖ **Name:** Dr Goutam Mandal

❖ **Contact:** Department of Physics,
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Natunchati, Bankura, 722101, West Bengal, India.

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❖ Academic Position:

- **Current position:** Associate Professor & HoD, Dept. of Physics, Bankura Zilla Saradamani Mahila Mahavidyapith.
- **April 2015 to September 2019:** Assistant Professor & HoD, Dept. of Physics, Bankura Zilla Saradamani Mahila Mahavidyapith.
- **January 2006 to March 2015:** Assistant Professor, Dept. of Physics, Ramsaday College, Howrah.
- **March 2005 to December 2005:** Lecturer, Dept. of Physics, Ramsaday College, Howrah.

❖ Research Interests:

- **Environmental Applications and Biomedical Applications of Semiconductor nanomaterials.**
- **Nonlinear optics.**

❖ Education:

- **M.Sc. in Physics (2003, Burdwan University)**
- **Ph. D. (2025, Bankura University)**

❖ 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 CeO₂ 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.
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, 18th July 2015.
4. Chapter entitled “E-WASTE MANAGEMENT IN INDIA” in “Environment: Its Threat and Challenges” edited by Dr. Anurupa Mukhopadhyay and Prof. Uday Sankar Sarkar, April 2017.
5. “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, 19th January 2012.
2. Presented a paper entitled “Air Pollution and some remedies using Nano-technology” in UGC sponsored Two Day National Seminar, 23rd & 24th September 2016, held in Bankura Zilla Saradamani Mahila Mahavidyapith.
3. Presented a paper entitled “Some elemental aspects of Tri-state logic” in 1st Regional Science Congress & Technology Congress, 7th & 8th 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”, 8th 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, 31st January 2018.
6. Presented a paper entitled “History of Periodic Table” in Two Day National Seminar on “Celebrating International Year of Periodic Table”, 18th & 19th 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 17th February to 17th February 2020.
8. Poster Presentation on “Effect of the Optical Bandgap on the Absorption property of CeO₂ 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 CeO₂ 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 9th 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	Place	Duration	Sponsoring Agency
62nd Orientation Programme	Academic Staff College, Burdwan University	19 th June to 16 th July 2007.	UGC
11th Refresher Course in Physics	Academic Staff College, Burdwan University	7 th January to 27 th January 2010.	UGC
3rd Refresher Course in Nano Science & Nano technology	Academic Staff College, Burdwan University	14 th September to 4 th October 2018.	UGC
STC on “Gender and Society”	Academic Staff College, Burdwan University	19 th September to 25 th September 2019.	UGC
STC on “Uses of Open-Source Software in Higher Education & Research”	Academic Staff College, Burdwan University	15 th November to 21 st November 2019.	UGC