



Debolina Ghosh

I am a results-oriented doctoral student with a strong interest in pursuing groundbreaking research in a dynamic working environment that can challenge my intellectual capacity, my experimental and analytical skills, and help deliver high-quality outputs.

IIT Guwahati, Assam, India

9748802011

debolina_ghosh@iitg.ac.in
www.iitg.ac.in/stud/debolina_ghosh/

[linkedin.com/in/debolina-ghosh-20391216b/](https://www.linkedin.com/in/debolina-ghosh-20391216b/)

TECHNICAL SKILLS

Research Methodology, Data Analysis, Presentation skills, Scientific Writing

INSTRUMENTATION

FESEM, FETEM, Optical and Fluorescence Microscopy

FTIR, UV and Fluorescence Spectroscopy

XRD, TGA, DSC, DLS, HPLC, UTM, Rheometer

EDUCATION

PMRF Fellow, Indian Institute of Technology, Guwahati

Guwahati, Assam, India
2020 – till now

PhD Scholar, under Prof. Gopal Das, Centre for Environment

KIIT School of Biotechnology

Bhubaneswar, India
2015 – 2020

B.Tech-M.Tech in Biotechnology,
GATE AIR 579

GPA: 9.01/10

South Point

Kolkata, India
2000 – 2015

School

GPA: 83%

RESEARCH EXPERIENCE

Dissertation Project (under Prof. Pankaj Parhi), Materials Research Lab, KIIT School of Biotechnology

Bhubaneswar, India • December 2019 – May 2020

"Identification and Characterisation of isolated bacterial strain *Brevibacillus laterosporus* and its role in bioreduction based bioremediation of Hexavalent Chromium Cr (VI)"

Research Project Intern (under Prof. Pankaj Parhi), Materials Research Lab, KIIT School of Biotechnology

Bhubaneswar, India • July 2018 – March 2022

"Hydrometallurgical Process for Recovery of Rare Earth Metal Neodymium from secondary sources like spent magnet waste"

Research Trainee (under Dr. Deepmoni Deka), Centre for Environment, IIT Guwahati

Guwahati, India • December 2017 – July 2019

"Bioadsorption of Congo Red Dye and Ampicillin on PVA- Alginate Hydrogel Beads, impregnated with Colocasia stem powder"

PUBLICATIONS

1. A book chapter entitled "**Silver nanoparticle: A nanomedicine in treatment of bacterial wounds**" by Namrata Kundu and Debolina Ghosh in the book "**Biotechnological Interventions in Current Scientific Scenario: Way Forward to a Healthy Future**" by Lambert Academic Publishing (USA) with ISBN: 978-620-4-19051-8.
2. A review entitled "**A critical review on adsorptive removal study of organic pollutants using activated sorbents from waste contaminated water**" by B.M. Murmu, S. Behera, A. Ray, D. Ghosh, D. Das, B.K. Bindhani, P.K. Parhi", (Status- Just Accepted)
3. A research paper entitled "**Fabrication and Photophysical Assessment of Quinoxaline-Amine Derivative: Selective determination of Nitro-Aromatics in Hydrogel and Aqueous medium**" by D. Ghosh, M. Basak, D. Deka, G. Das, (Status- Under Review)

CONFERENCES and AWARDS

1. **Advances in Environmental Protection and Sustainability** (AEPS 2018), hosted by Centre for Environment, IIT Guwahati. **Finished as runners up.**

2. Oral Presentation in '**Advances in Energy, Environment for Sustainable Development**' (AEESD 2022), hosted by SOA University, Bhubaneswar on the title "Heavy Metal and Dye Removal using biobased hydrogel"

3. Poster Presentation in **North East Research Conclave (NERC 2022)**, hosted by IIT Guwahati on the title "Natural mucilage plant hydrogels for environmental applications"