



**UNIVERSITY OF CALCUTTA
FACULTY ACADEMIC PROFILE/ CV**

Full name of the faculty member: DR. BARNALI MANDAL

Designation: ASSISTANT PROFESSOR (Stage -III)

Specializations : ENVIRONMENTAL ENGINEERING, BIOTECHNOLOGY,
CHEMICAL TECHNOLOGY

Contact information :

Assistant Professor, Department of Chemical Engineering, University of Calcutta, 92, A.
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Academic qualifications:

College/ university from which the degree was obtained	Abbreviation of the degree
Jadavpur University	B.E.
Jadavpur University	M.E.
Jadavpur University	Ph.D

Positions held/ holding:

Assistant Professor, Department of Chemical Engineering, University of Calcutta (since 22th December, 2015)

Assistant Professor, Department of Biotechnology, Neotia Institute of Technology Management and Science (2nd February, 2010 to 21th December, 2015)

Research interests:

1. Environmental Engineering
2. Bioprocess and Fermentation

List of publications

Journals:

- 1) **Barnali Mandal**, "Study the production of pediocin by *Pediococcus acidilactici* in repeated fed-batch fermentation mode on meat processing waste" *Int. J. Pharm. Pharm. Sci.*, Oct 2022, pp.11 -15.
- 2) **Barnali Mandal**, "Decolourisation of dye and removal of COD from textile wastewater using biodegradation" *J.Indian Chem.Soc.*, 97, Sept 2020, pp.1336 - 1341.
- 3) **Barnali Mandal**, "Pediocin production by *Pediococcus acidilactici* in fed batch fermentation using meat processing waste" *J.Indian Chem.Soc.*, 97, Jun 2020, pp. 903 - 909.
- 4) **Barnali Mandal** and Sattar Mallick, "Removal of fluoride from drinking water by adsorption on Zr-treated laterite soil using response surface methodology" *J. Indian Chem. Soc.*, Vol. 95, March 2018, pp. 377-382.
- 5) **Barnali Mandal**, "Study the growth kinetic parameters of *Pediococcus acidilactici* with estimation of kinetic parameters and applied in large scale pediocin production " *Asian J Pharm Clin Res*, Vol 9, Issue 5, 2016, 130-135.
- 6) **Barnali Mandal**, " The inhibitory effects of Pediocin 2292 against *Listeria monocytogenes* and *Staphylococcus aureus* in tomato sauce " *Innovare Journal of food science*, Vol 4, Issue 1, 2016,1-2.
- 7) **Barnali Mandal**, Ranjana Chowdhury, Chiranjib Bhattacharjee, " Pediocin production by *Pediococcus acidilactici* NCIM 2292 in fed batch and repeated fed batch fermentation using goat meat processing wastes".*Asian Journal of Microbiology, Biotechnology and Environmental Science*. Vol. 17, No. (1) : 2015 : 89-96.
- 8) **Barnali Mandal**, Ranjana Chowdhury, Chiranjib Bhattacharjee, " Purification and characterization of pediocin produced by *Pediococcus acidilactici* NCIM 2292". *International Journal of Pharmacy and Pharmaceutical Sciences*. Vol 6 Issue 6, July 2014.
- 9) **Barnali Mandal**, Ranjana Chowdhury, Chiranjib Bhattacharjee, " Optimization of pediocin production by batch fermentation of *Pediococcus acidilactici* NCIM 2292 using goat meat processing waste", *Research Journal of Biotechnology*, Vol. 8 (10) October (2013).
- 10) **Barnali Mandal**, Ranjana Chowdhury, Chiranjib Bhattacharjee, Rabiul Haque, " Production of Pediocin from Simulated Slaughterhouse waste using *Pediococcus acidilactici* APC8042 – Experimental and Modeling", *International Journal of Biotechnology Research*, 6, 39-51, (2013).
- 11) **Barnali Mandal**, Rabiul Haque, Somnath Mukherjee, "Assessment of A New Adsorbents for Arsenic Uptake from Aqueous Solution to Make a Low Cost Filter Media", *International Journal of Advances in Pharmacological Sciences*, 2, 10-19, (2012).
- 12) Ayan Sinha, **Barnali Mandal**, "Optimization of Reactive dye and COD Removal from Textile Waste Effluent using Microbial Treatment", *PROCEEDINGS BOOK of ATIPC-2018* ISBN no. 978-93-5346-452-3.

Conference/ seminar volumes:

1) **Barnali Mandal**, "Pediocin production by *Pediococcus acidilactici* in repeated fed-batch fermentation on meat processing waste", ACMS - 2022, IICHE (International), HIT Kolkata, April 14 - 16, 2022.

2) **Barnali Mandal**, "Pediocin production by *Pediococcus acidilactici* in fed batch fermentation using meat processing wastes", Recent trends in chemical and allied industries-technology, economics and related issues.(National) Dept. of Chemical Engg.,C.U. Sep 13, 2019.

3) **Barnali Mandal**, Sattar Mallick, " Comparative batch mode study for adsorptive removal of fluoride from drinking water using treated and untreated laterite soil", National symposium on sustainable waste management (NSSWM-2019), Institute of Engineering & Management, Kolkata, April 20, 2019.

4) Ayan Sinha, **Barnali Mandal**, "Optimization of Reactive dye and COD Removal from Textile Waste Effluent using Microbial Treatment", Advanced Technologies for Industrial Pollution Control (ATIPC-2018) Civil Engineering Department, IEST Shibpur December 17-19, 2018.

5) **Barnali Mandal**, Sattar Mallick, "Removal of Fluoride From Drinking Water By Adsorption on Laterite Soil using response surface methodology", SATEM, IEST, Shibpur, West Bengal, 2017.

6) **Barnali Mandal**, Ranjana Chowdhury, Chiranjib Bhattacharjee, "Production of Probiotics from food wastes", CHEMCON, Tamilnadu, India, 2010.

7) **Barnali Mandal**, Ranjana Chowdhury, Chiranjib Bhattacharjee, "Production of Pediocin in batch fermentation", Heritage Institute of Technology, West Bengal India, 2010.

8) **Barnali Mandal**, Somnath Mukherjee, "Removal of Arsenic by Batch Adsorption Process", Neotia Institute of Technology Science and Management (NITMAS), West Bengal, India, 2010.

Membership of Learned Societies:

Indian Institute of Chemical Engineers (IICHE).