

Work address
Dream Institute of Technology
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DR. SUSHMA DAS

Objective

Research and development position for solving challenging problems in Civil engineering and Environmental engineering.

Experience

Nov.2023 – current **Dream Institute of Technology,**
Thakurpukur, Kolkata 700104
Assistant Professor of CE

July. 2011 –2023 **Calcutta Institute of Engineering and Management,**
24/1A, Chandi Ghosh Road, Tollygunj
Assistant Professor of CE

Education

Ph.D., Civil Engineering, Indian Institute of Engg Science and Technology,
IEST Shibpur

Dissertation: Evaluation of Ciprofloxacin Resistance in *E. coli* and *S. aureus* Isolated from Wastewater and Removal of the Antibiotic by Montmorillonite-impregnated Nanofiber Sorptive Membrane

Date of Defence: 11th August 2021

(Supervisor: Dr. Asok Adak)

Associate Professor, Civil Engineering Department, IEST Shibpur

M.Tech., Civil Engineering Department, Jadavpur University

June 2011 Percentage: 72.33%

Thesis: Adsorptive Removal of Mixed Dye (Methylene Blue and Congo Red) as Binary Solute from Aqueous Medium Utilizing Raw Rice Husk (RRH) as a Low Cost Adsorbent

(Advisor : Dr. Anupam Deb Sarkar)

Date: 18th June 2011

B.Tech., Civil Engineering Department, Haldia Institute of Technology

MAKAUT., June 2009

GPA : 7.96/10

Awards

- Completed course on AICTE Training And Learning (ATAL) Academy Faculty Development Program on “Waste Management Technology and Sustainability” at National Institute of Technical Teachers' Training & Research, KOLKATA from 15/01/2024 to 20/01/2024.
- Awarded 3RD prize in 1ST International Conference on SATEM-2023 held in IEST Shibpur for best paper and presentation.
- Awarded 2ND prize in International Conference on ATIPC-2018 held in IEST Shibpur for best paper and presentation.
- Granted Institute Fellowship from the Government of India for pursuing the degree of Doctoral of Philosophy.
- Handpicked to host the international conference ATIPC-2018 and SATEM-2019 in IEST Shibpur in two years in a row
- I have achieved significant professional accomplishments, and I have also

excelled in extracurricular activities completing 6th year in Fine Arts (Oil painting) and 5th year in Bharat Natyam (Dance).

Research Skills

- Conducted research on membrane fabrication and analysis of wastewater treatment.
- Handled complex machineries such as ESPIN-NANO, Needle based Electro spinning machine for membrane fabrication.
- Operated machineries like HPLC (High Performance Liquid Chromatography), TOC (Total Organic Carbon), AS (Atomic Spectroscopy), UV-VIS single and double beam spectrophotometer for the analysis of samples.
- Operated Micro plate Reader to determine the optical density of the sample.
- Assisted and coordinated with other research scholars in their respective fields of study.
- Assisted post-graduate students in comprehending their projects and analysing samples using complex machinery such as HPLC, TOC, AS and Spectrophotometers.
- Provided a clear understanding of the working principles of these instruments and helped them develop methods for sample analysis.
- Helped and assisted postgraduate students in developing their knowledge of writing a thesis for their degree.
- Guided undergraduate students in understanding and conducting experiments in Environmental Engineering laboratories.

List of Publications

Journals

- Sushma Das, Asok Adak, Ananya Barui (2020) Montmorillonite impregnated electrospun cellulose acetate nanofiber sorptive membrane for ciprofloxacin removal from wastewater, Journal of Water Process Engineering 37 (2020) 101497, DOI no.: <https://doi.org/10.1016/j.jwpe.2020.101497>
- Sushma Das, Asok Adak, Ananya Barui (2020) Determination of minimum inhibition concentration of bacteria (E. coli and S. aureus) in surface water and wastewater against ciprofloxacin, J. Indian Chem. Soc., Vol. 97, April 2020, pp. 547-553, DOI no: [10.5281/zenodo.5638530](https://doi.org/10.5281/zenodo.5638530)
- Sushma Das, Asok Adak, Ananya Barui (2019) Fabrication of Montmorillonite impregnated cellulose acetate nanofiber membrane and its use for adsorption of Ciprofloxacin, J. Indian Chem. Soc., 2019, Vol. 96, April 2019, pp. 475-479, DOI no: [10.5281/zenodo.5637837](https://doi.org/10.5281/zenodo.5637837)
- Sushma Das, Asok Adak, Ananya Barui (2018) Removal of Antibiotics from water and wastewater by nanofiber membrane, Conference paper on First International Conference on Energy and Environment: Global Challenges ICEE 2018, NIT Calicut, March 2018, pp. 55-56

Conference Papers

- Attended 1st International Conference on Sustainable Advanced Technologies for Environmental Management (SATEM-2023), December 20 – 22, 2023, Civil Engineering Department, IEST Shibpur.
- Attended 2nd National Conference on Sustainable advanced technologies for Environmental Management (SATEM-2019), December 18 – 20, 2019, Civil Engineering Department, IEST Shibpur.
- Attended International Conference on Advanced Technologies for Industrial Pollution Control (ATIPC 2018), December 17 – 19, 2018, Civil Engineering Department, IEST Shibpur, Howrah, West Bengal.
- Attended Conference on Water, Sanitation and Hygiene (WASH) for All Sustainability Issues under Rural Indian Conditions, 17th March 2018, IEST, Shibpur.
- Attended 1st International Conference on Energy and Environment: Global Challenges ICEE 2018 March 9 -10, Department of Chemical Engineering, NIT Calicut, Kerala, India.

Additional Info

- Proficient in Microsoft Word, PowerPoint, Excel.
 - LinkedIn Link: www.linkedin.com/in/dr-sushma-das-1b1b0a56
 - Orcid : <https://orcid.org/0009-0001-0194-990X>
 - Google Scholar: <https://scholar.google.com/citations?hl=en&user=VtzXFUsAAAAJ>
- ResearchGate: <https://www.researchgate.net/profile/Sushma-Das-3>

References

Available upon request.