

ACADEMIC PROFILE



DR. Aditi Jana

Assistant Professor in Botany (W.B.E.S.)

M.Sc., Ph.D.

Email: aditijana.botany@gmail.com

- **Specialization:** Cell biology
- **Date of joining in this college:** 02.03.2015
- **Total teaching experience in college level:** 11 years
- **Area of research:** Cellular toxicity, phytoremediation
 - **Title of Ph.D. thesis (if any):** Bioassay for Monitoring the Genotoxicity of Soil Polluted by Fly Ash and Phytoremediation for Mitigation
- **Research guidance (if any):** Nil
- **Research projects [completed / ongoing] (if any):** Nil
- **List of publications:**

A. Published papers in Journals:

1. **Jana, Aditi**, Manosij Ghosh, Sonali Sinha, Manivannan Jothiramajayam, Anish Nag, and Anita Mukherjee. "Hazard identification of coal fly ash leachate using a battery of cyto-genotoxic and biochemical tests in *Allium cepa*." *Archives of Agronomy and Soil Science* 63, no. 10 (2017): 1443-1453. [ISSN: 0365-0340 and 1476-3567. ;**IF: 2.2**].
2. **Jana, Aditi**, Manosij Ghosh, Arpita De, Sonali Sinha, Manivannan Jothiramajayam, and Anita Mukherjee. "Comprehensive analysis of fly ash induced changes in physiological/growth parameters, DNA damage and oxidative stress over the life cycle of *Brassica juncea* and *Brassica alba*." *Chemosphere* 186 (2017): 616-624. [ISSN: 0045-0635 and 1879-1298; **IF: 9.76**].
3. **Jana, Aditi**, Ritesh Banerjee, Manosij Ghosh, and Anita Mukherjee. "Potential phytoremediation of coal fly ash leachate using *Lemna minor*: a free floating macrophyte." *The Nucleus* 67, no. 3 (2024): 547-555. [ISSN: 0029-568X; **IF: 1.3**]

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4. Ghosh, Manosij, Jit Paul, **Aditi Jana**, Arpita De, and Anita Mukherjee. "Use of the grass, *Vetiveria zizanioides* (L.) Nash for detoxification and phytoremediation of soils contaminated with fly ash from thermal power plants." *Ecological Engineering* 74 (2015): 258-265. [ISSN: 0925-8574; **IF: 2.1**].
5. Ghosh, Manosij, **Aditi Jana**, Sonali Sinha, Manivannan Jothiramajayam, Anish Nag, Anirban Chakraborty, Amitava Mukherjee, and Anita Mukherjee. "Effects of ZnO nanoparticles in plants: cytotoxicity, genotoxicity, deregulation of antioxidant defenses, and cell-cycle arrest." *Mutation Research/Genetic Toxicology and Environmental Mutagenesis* 807 (2016): 25-32. [ISSN: 18793592, 13835718; **IF: 2.64**]
6. Ghosh, Manosij, Sonali Sinha, Manivannan Jothiramajayam, **Aditi Jana**, Anish Nag, and Anita Mukherjee. "Cyto-genotoxicity and oxidative stress induced by zinc oxide nanoparticle in human lymphocyte cells in vitro and Swiss albino male mice in vivo." *Food and Chemical Toxicology* 97 (2016): 286-296. [ISSN: 0278-6915; **IF: 3.2**]
7. Sinha, Sonali, Manivannan Jothiramajayam, Manosij Ghosh, **Aditi Jana**, Urmil Chatterji, and Anita Mukherjee. "Vetiver oil (Java) attenuates cisplatin-induced oxidative stress, nephrotoxicity and myelosuppression in Swiss albino mice." *Food and Chemical Toxicology* 81 (2015): 120-128 [ISSN: 0278-6915; **IF: 3.2**].
8. Jothiramajayam, Manivannan, Sonali Sinha, Manosij Ghosh, Anish Nag, **Aditi Jana**, and Anita Mukherjee. "Sodium fluoride promotes apoptosis by generation of reactive oxygen species in human lymphocytes." *Journal of Toxicology and Environmental Health, Part A* 77, no. 21 (2014): 1269-1280. [ISSN: 10872620, 15287394, **IF: 2.16**]
9. Chakrabarti, Manoswini, Ilika Ghosh, **Aditi Jana**, Manosij Ghosh, and Anita Mukherjee. "Genotoxicity of antiobesity drug orlistat and effect of caffeine intervention: an in vitro study." *Drug and Chemical Toxicology* 40, no. 3 (2017): 339-343. [ISSN: 0148-0545 and 1525-6014; **IF: 3.479**].
10. Banerjee, Ritesh, **Aditi Jana**, Arpita De, and Anita Mukherjee. "Phytoextraction of heavy metals from coal fly ash for restoration of fly ash dumpsites." *Bioremediation Journal* 24, no. 1 (2020): 41-49. [ISSN [1088-9868](#); **IF: 1.7**].
11. Adegoke, Olajire A., Manosij Ghosh, **Aditi Jana**, and Anita Mukherjee. "Studies of the interactions of 4-carboxyl-2, 6-dinitrophenylazohydroxynaphthalenes with CT-DNA in aqueous medium." *Journal of Molecular Liquids* 174 (2012): 17-25. [ISSN: 18733166, 01677322; **IF: 5.79**]
12. Adegoke, Olajire A., Manosij Ghosh, **Aditi Jana**, and Anita Mukherjee. "Photo-physical investigation of the binding interactions of alumina nanoparticles with calf thymus DNA." *The Nucleus* 62, no. 3 (2019): 251-257. [ISSN: 0029-568X; **IF: 1.3**]

B. Published Books / Chapters in Books:

1. "Bioremediation: A Sustainable Approach towards Mitigation of Salinity-Affected Area", Aditi Jana, *Tipping the Boundaries Health and Well-Being of Sustainable*

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Development editor: Sandeep Poddar, Waliza Ansar; 2024, Nova Science Publishers, Inc; New York 119-140, [ISBN: 979-8-89530-146-3].

C. Participation in Seminars/Symposia/Conferences/Workshops:

Title of the invited lecture /paper (oral/poster) presented	Title of Conference /Seminar with date	Organized by	Level
Study of Stress response of Vetiver growing on fly ash for screening as a potential phytoremediant of fly ash dumpsite	19 th All India Congress of Genetics and Genomics and the International symposium on “Air pollution and its impact on human health” Date: December 2-4, 2019	CSIR-Indian Institute of Chemical Biology	International
Algae : a potential solution for sustainable development	A oneday national seminar on Sustainable development goals and their evaluation Date: 06.06.2022	IQAC, GGDC Singur and Rani Rashmoni Green University and Association of Chemistry teachers, TIFR, Mumbai	National
Phytoremediation efficiency of two aquatic plants: a comparative account	20 th All India Congress of Genetics and Genomics and national special symposium on “Impact of Covid-19: A retrospective analysis on Human Health and Environment Date: January 30-31, 2023	CSIR-Indian Institute of Chemical Biology	National
Workshop on hands on training on plant genome analysis and flow cytometry	Department of Botany, Habra Sri Chaitanya College; 09.02.2024-10.02.2024	Department of Botany, Habra Sri Chaitanya College; Sponsored by DST	National
Adaptive strategies of <i>Ceratophyllum demersum</i> L. to fly ash leachate	17 th All India Congress of Cytology & Genetics & International Symposium on “Exploring Genomes: The New Frontier”; 22-24 th December, 2015	CSIR-Indian Institute of Chemical Biology	International

➤ Participation in OP/RC/FIP/FDP:

Name of the Course	Place	Duration	Sponsoring Agency
Short-Term Course on 'Biodiversity and its Conservation	UGC-Malaviya Mission Teacher	14.02.2025 to	UGC

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	Training Center Doctor Harisingh Gour Vishwavidyalaya, Sagar - 470 003 (MP) India	20.02.2025	
Refresher Course in Life Sciences	UGC-Malaviya Mission Teacher Training Center, Patna University, Patna	02.09.2024 to 14.09.2024	UGC
REFRESHER COURSE IN TRENDS IN LIFE SCIENCES INDUSTRY	UGC-HRDC, Burdwan University, Burdwan	25.09.2021 to 08.10.2021	UGC
SRC in Biological sciences (Refresher course)	UGC-HRDC, The University of Calcutta, Kolkata	02.01.2019 to 22.01.2019	UGC
123th Orientation Programme	UGC-HRDC, The University of Calcutta, Kolkata	04.09.2018 to 03.02.2018	UGC

➤ **Membership of Learned Societies/ Editorial Boards, etc. (if any):**

1. Life Member of All India Congress of Cytology and Genetics

➤ **Patents (if any):** Nil

➤ **Awards (if any):**

➤ **Other notable activities (if any):**
