

Dr. Shipra Jha
 Department of Biotechnology
 Amity University, Noida, India
 Mobile: +918860006941
 Email: sjanvi79@gmail.com



Dr. Shipra is currently working as Assistant Professor , Grade III, in the Department of Biotechnology, Amity University, Noida Campus, India. Her experience lies in academia, research and administration. She has over fifteen years of teaching experience in Nutraceuticals, Food Biotechnology, Nanotechnology, Nanotoxicology and Environmental Toxicology & Health among others. She has taught PhD , postgraduate and undergraduate engineering and science students. Her research interest lies in industrial wastewater treatment, heavy metals, essential oils, post-harvest technologies and environmental pollution. Her PhD focused on studying the removal of heavy metal from industrial wastewater, which led to development of a biological system based on newly isolated efficient and versatile fungal strain along with low-cost media substitutes based on wasteland growing plants and a storable formulation to facilitate Cu detoxification in small- scale industrial units. Her research work led to 21 publications in international peer-reviewed journals, 4 book chapters, several scientific presentations at National and International Conferences. Approximately 100 students have completed their dissertation under her. She is also a member of global climate change cluster in Amity university. Her experience also includes design and analysis of research projects, application for grant funding, managing budgets and producing intellectual property. She has also been involved in university administrative responsibilities.

Education

PhD (Environmental Biotechnology)	Study of Removal of Industrial Water Pollutant from Industrial Region Using Adsorbents (2013)	Jiwaji University, Gwalior, India
MPhil (Biochemistry)	Preliminary study on clinical Aspects of Stevia plant (2005)	Bharathidasan University, Trichy, India
MSc (Biochemistry)	Antimicrobial and Pesticidal activity of Annona Squamosa (2000)	North Maharashtra University, Jalgaon, India
BSc (Bio Group)	Bio-Group (1995-98)	North Maharashtra University, Jalgaon, India

Work Experience:

Organization	Position	Period
Amity Institute of Biotechnology, Amity University, India	Assistant Professor (Grade - III)	20011 - Till date
Amity Institute of Biotechnology, Amity University India	Assistant Professor	2007- 2008
Vydehi Institute of Biotech Sciences, Bangalore, India	Assistant Professor	2003- 2006
Indira Gandhi College of Biotechnology, Bangalore, India	Lecturer	2000-2003

Teaching Experience

- Carry out a teaching load of 16 credits/ per semester for both postgraduate and under graduate students
- Handle theory and practical classes of subjects which include Nutraceuticals, Nutrition Technology, Food Biotechnology, Food Technology, Nanotechnology, Nano Toxicology, Environmental Toxicology and Health, Biochemistry, Enzyme and Enzyme Technology, Downstream Processing and Advances in Cancer Research
- Plan and supervise research projects for PhD , Postgraduate (Technology and Science) and Undergraduate (Technology and Science) students
- Design syllabus and e-content for food biotechnology, nutraceutical and nano biotechnology course incorporating emerging trends

Research Experience

I am member of global climate change cluster in Amity university. Climate change mitigation and adaptation are thrust areas of my research, which include industrial wastewater, environmental site assessments, biodiversity studies, bio-pesticides, wastewater treatment strategies and formulation of natural dyes. Major areas of my research interests are as follows

- **Industrial Wastewater Treatment:** Wastewater generated from different industrial activities is the major global environmental concern as these contain toxic and hazardous elements including heavy metals. It is not feasible to prevent the release of wastewater into the environment, however, wastewater treatment can minimize devastating impacts on humans. My research focuses on how to remove heavy metals contaminants from industrial wastewater before releasing into the environment. My interest includes the mechanisms and processes to treat wastewaters that have been contaminated by anthropogenic industrial or commercial activities prior to its release into the environment or its re-use.
- **Natural Dyes:** Many harmful dyes and chemicals are used for textile processes. The toxic and allergic reactions of synthetic dyes and the environmental standards in textiles and garments industries are reviving interest in the application of natural dyes. Natural colors used for fabrics dyeing can save the environment from hazardous chemicals and it is gaining ground in the global market. My research interest lies in formulations of eco-friendly dyes using vegetable wastes and plant materials in collaboration with Textile printers in Rajasthan.
- **Biopesticides:** Pest causes losses to agriculture, hence, research on sustainable and integrated pest management practices is gaining ground. Plant-based pesticides are gaining increasing importance as they are alternatives to chemical pesticides. My research focuses on how to produce affordable biopesticide products to control/ minimize the growth of viruses, bacteria, fungi, nematodes and integrate them as a tool of post-harvest pest management strategy for lentils.
- **Air Pollution through Vehicular emission:** The air quality in Delhi, the capital of India, according to a World Health Organization (WHO) survey of 1,650 world cities, is the worst of any major cities in the world. As per Reuters study, Air pollution led to around 54,000 premature deaths in Delhi in 2020. Large amounts of air toxins due to constantly increasing vehicles on the road causes allergies, asthma, running nose, sleepiness, heavy eyes, and headache especially in children and the old age population. My research focuses on the effect of vehicular pollution on the foliar traits based on biochemical responses of common roadside plant species in selected sites and human health in Delhi.

Administrative Responsibilities

- **Internal Quality Assurance Cell (IQAC) member:** As IQAC member, I am engaged in development of standard operating processes (SOPs) to improve the academic and administrative performance of the institution. This also includes conducting regular and surgical audit of academic processes and laboratories.
- **Institutional National Assessment and Accreditation Council (NAAC) Team member:** As NAAC team member, I am responsible for implementing NAAC Criteria 5, which focuses on student support and progression.

- **Institutional Hazard identification, Risk Assessment and Control (HIRAC) coordinator:** As HIRAC coordinator, I am responsible for implementation of Occupational Health and Safety Management System (OHSMS) policy. This involves conducting awareness on HIRAC procedure and OHSAS Policy for PhD and Postgraduate students, faculty and staff. I am also engaged in organising workshop on safe laboratory practices and preparedness to contain spread of Covid-19 virus.
- **Institutional Mock Drill coordinator and Special guidance team member:** As Mock Drill Coordinator, I am responsible for organizing fire mock-drill for the Institute as well as counselling of the students.

Publications:

Shipra Jha^{1*} Nahid Siddiqui Emerging Role of Vitamin D in Women's Health **(2021)** International Journal of Medical Research & Health Sciences Volume 10(5), pp- 96-105

N SIDDQUI¹and **S JHA**^{1*} Biofortification: a sustainable strategy for improving nutrition in humans **(2021)** Uttar Pradesh journal of zoology Volume 42(13), pp-1-10

Shipra Jha, Renu Yadav Probiotics: Food Supplement for Human Consumption **(2021)** Journal of Scientific Research and Reports. Volume 27(4), pp-92-103

Shipra Jha Nutritional Needs and Dietary Modifications in Woman-Iron Deficiency. **(2020)** Journal of Pharma Research. Volume 9(6), pp-49-59

Shipra Jha, SN Dikshit Treatment of Common Effluent Treatment Plant Pollutant under Growing & Non-growing Condition of Biomass.(2020) Asian Journal of Environment & Ecology. Volume 12(4), pp-15-21

Shipra Jha, SN Dikshit Alternative culture media for fungal growth using different formulation of plant material. **(2017)** International Journal of Pharma and Bio Sciences. Volume 8(1), pp- 445 – 452

Shipra Jha, SN Dikshit Economically Viable Fungal Production by Using Alternative Plant Material for the Removal of Heavy Metal. **(2015)** Journal of Environmental Science and Technology. Volume 8(5), pp-198.

Shipra Jha, Ritu Chauhan, S.N. Dikshit. Fungal Biomass as Biosorbent for Removal of Heavy Metal from Industrial Wastewater Effluent. **(2014)** Asian Journal of Plant science. Volume 13 (2), pp- 93-97, pp-1-5. DOI:10.3923/aips

SHIPRA JHA, A.K.SRIVASTAVA. ANTIBACTERIAL, ANTIFUNGAL AND PESTICIDAL ACTIVITY OF PLANT *MORUS ALBA*- A NOVEL APPROACH IN POST HARVEST TECHNOLOGY. **(2013)** International Journal of Agricultural Science & Research. Volume 3, issue 1, pp- 157-162.

Shipra Jha, S.N.Dikshit and G.Pandey.Removal of Cu²⁺ ions by Immobilized *A. lentulus* fungal strain from Industrial wastewater. **(2013)**, International Journal of Chemical & Petrochemical Technology. Volume -3, Issue- 1, pp-1-8.

SHIPRA JHA, A.K.SRIVASTAVA . Screening of Antibacterial activity of The Essential oil from seed of *Artocarpus Heterophyllus*. **(2012)**, International Journal of Agricultural Science & Research. Volume 2, issue 3, pp- 92-96.

Shipra Jha, S.N.Dikshit and G. Pandey. Comparative study of Growing/ Immobilized biomass verses resting biomass of *A.lentulus* for the effect of pH on Cu²⁺ metal removal. **(2012)**, Research Journal of Pharma Biological & chemical sciences. Volume 3, issues-3, pp- 421-427.

Shipra Jha, S.N.Dikshit and G. Pandey. Comparative studies of Bacteria and fungi for the removal of Cu²⁺ metal. **(2011)**, International journal of Pharma and bioscience. Volume-2, issue-4, B-133-139.

Shipra Jha, S.N.Dikshit and G.Pandey Comparative study of agitation rate and stationary phase for the removal of Cu²⁺ by A.lentulus, **(2011)**, International journal of Pharma and bioscience. Volume - 2, issue-3, pp-B-208-B 211. Elsevier indexed journal

Shipra Jha, S.N.Dikshit and G. Pandey .Bio sorption: An eco- friendly alternative for Cu ²⁺ removal by using A lentulus fungal strain. **(2011)**, International Journal of Engineering Science and Technology, volume -3, issue-6, pp-4518-4522.

Shipra Jha, S.N.Dikshit and G. Pandey .Effect of Binary Biopolymeric Beads of Alginate and Gelatin as Adsorbent for removal of Cu²⁺. **(2011)**, Asian journal of chemistry. Volume - 23, issue-9, pp-4098-4100.

Hemlata M.Kotkar,Prashant S Mendki, Sangeetha VGS Sadan, **Shipra R Jha** Antimicrobial and pesticidal activity of partially purified flavonoids of Annona Squamosa.**(2002)**,International Pest management Journal, volume- 58, issue-1, pp-33-37.

Book Chapters

Recent trend in IPR protection in fermented dairy products across the globe.

In-Advances in Dairy Microbial Products 1st Edition

Published: 1st December 2021, **Imprint:** Woodhead Publishing, **ISBN:** 9780323857932

Impact analysis of oil pollution on environment, marine and soil communities. In: Advances in oil-water separation: A complete guide for physical, chemical, and Biological processes" to be published by **Elsevier (In Press)**

Impact of industrial waste on medicinal plants growth, active constituents and production. In: Environmental Pollution and Medicinal Plants: Impact and Adaptation Responses. To be published by **Taylor and Francis (Submitted for Publication)**

Municipal wastewater as potential bio-refinery, In: Biorefinery of Water & Wastewater Treatment". International Publisher "**SPRINGER**". **(Accepted for publication)**

Abstract & Oral Presentation

Shipra Jha, Antibacterial Activity of Carica Papaya Aqueous Extract- A Novel Approach in Medicine. National conference on Use of Animals & Alternative in Biomedical Research with special reference to Drug Discovery & Drug Development held by Amity university & CPCSEA. (2013)

Shipra Jha, S.N.Dikshit and G.Pandey Removal of Industrial water pollutant from Industrial wastewater by using adsorbents in Agricultural Biotechnology International Conference held in Queen Sirikit National Convention Center in Bangkok, Thailand. (2009)

Shipra Jha, S.N.Dikshit and G. Pandey Removal of Cu²⁺ ions by Immobilized A. lentulus fungal strain from Industrial wastewater in Indo – German workshop in the frame of the program Initiation and Intensification of Bilateral Cooperation. Organized by Amity Institute of Microbial Technology, Amity University. (March 22-24th, 2011)

Shipra Jha, S.N.Dikshit and G. Pandey Biosorption: An eco- friendly alternative for Cu ²⁺ removal by using A lentulus fungal strain. International conference of Microorganism in Environmental Management & Biotechnology. Barkatullah University. Bhopal. (1st to 3rd July 2011)

Shipra Jha, S.N.Dikshit and G. Pandey National Seminar Recent Trends in Chemical and Biological Sciences held in Indore Govt. Holkar Science College, Indore M.P.(January 13th to 15,2012)

Shipra Jha, S.N.Dikshit and G.Pandey International Conference on Perspectives in Phyllosphere Biology. Organized by Amity Institute of Biotechnology. (February 15-17, 2012).

Shipra Jha, National Symposium on HIV and AIDS: Biology to Bedside held at Amity University Uttar Pradesh, Noida (U.P.) India (March 15-16, 2012)

Shipra Jha, S.N.Dikshit and G. Pandey Biosorption of heavy metal by immobilized and dead fungal cells: A comparative assessment :3rd World congress on Biotechnology held at Hyderabad, India(on Sep 13-15, 2012)

Shipra Jha, S.N.Dikshit . Effects of plant l. leucocephala based anti-termite formulations on Indian white termite in sub-tropical high infestation areas. National conference on “Balanced Fertilization: A Key to Food Security & Environmental sustainability”. Organized by Amity Institute of Organic Agriculture, Amity University Uttar Pradesh, Noida In association with AgRICon (24-25 Feb,**2016**)

Shipra Jha, Food security in India as Framing GM crops. International seminar on Biosafety and Regulatory Affairs on GMOs and GE plants Amity university in association with Biotech Consortium India Ltd., New Delhi. (**9th Sept,2016**)

Shipra Jha, Renu Yadav. “**IMPACT OF VECHICULAR POLLUTION ON SUSTAINABLE ENVIRONMENT**” National seminar on recent advances in environmental toxicology organized by Dept. of Biosciences, Jamia Millia Islamia, New Delhi. (**13-14, Feb,2017**)

Event Organisation

Member of organizing committee and anchor in Sir Richard Roberts Centre for Genetically Modified Organisms (SRRCGMO) and Amity Institute of Biotechnology (AIB) Amity University Uttar Pradesh (AUUP), Noida “Quality Management of Tissue Culture Raised Plants for African Candidates” held on 1st - 5th October 2018

Member of organizing committee of Sir Richard Roberts Centre for Genetically Modified Organisms Amity University Uttar Pradesh, Noida organizes “Training on Entrepreneurship Development in Plant Tissue culture for African Candidates” 5th - 9th March 2018

Member of organizing committee of Sir Richard Roberts Centre for Genetically Modified Organisms and Amity Institute of Biotechnology Amity University Uttar Pradesh, Noida “Indo African International Training Program on Quality Management of Tissue Culture Raised Plants” 11th - 14th December 2017

Member of organizing committee of Sir Richard Roberts Centre for Genetically Modified Organisms Amity University Uttar Pradesh, Noida “Training on Virus Indexing and Genetic Fidelity Testing of Tissue Culture Plants for African Candidates” 30th October to 4th November 2017

Others:

Life Member: Indian Society of Agricultural Biochemistry

Reviewer: Advances in Natural Science Canadian Research & Development Center of Sciences and Cultures (CRDCSC, ISSN 1715-7862 [PRINT] ISSN 1715-7870 [ONLINE]
Environmental Toxicology & Chemistry , Wiley online, ISSN: 1552-8618
International Journal of Plant & Soil Science,
SCIENCEDOMAIN international (SDI)
Asian Journal of Medicine and Health, SCIENCEDOMAIN international

Editorial Board Member

- International Journal of Entrepreneurship and Small Business Management (IJESBM) International Research Publication House. (Since 2014)
- International Journal of Business Management and Economics Research (IJBMER). International Research Publication House. (2014)

Member of Organizing Committee

- 7th International Symposium on Recent Advances in Natural Products (2012) held in Amity University, U.P, Noida. (November 15-17, 2012)
- International seminar on Biosafety and Regulatory Affairs on GMOs and GE plants Amity university in association with Biotech Consortium India Ltd. New Delhi. (9th Sept, 2016)

PERSONAL DETAILS

Sex	Female
Date of Birth	30 November 1978
Nationality	Indian
Spoken Languages	English and Hindi
Written Languages	English and Hindi