

Name: Dr. Arti Hansda

Designation: Assistant Professor

School: School of Science



Research Interest:

- Plant – microbe interaction
- Bio-fertilizer production
- Bioenergy production
- Mechanism involved in microorganisms and plants to cope up with environmental stress

Academic Background:

Degree	Subject	University	Year
PhD	Environmental Science (Specialization: Environmental Microbiology)	Indian Institute of Technology (Indian School of Mines), Dhanbad	2017
M.Sc	Microbiology	Orissa University of Agriculture and Technology	2013
B.SC	Zoology (Hons.)	Ranchi University	2011

Professional Experience:

From	Period	Position	Organisation
September, 2022	Presently working	Assistant Professor	Department of Microbiology, School of Science, GSFC University, Vadodara, Gujarat
December, 2021	September, 2022	Assistant Professor	Department of Advance Sciences and Technology, NIMS University, Jaipur, Rajasthan
November, 2018	November, 2021	Teaching Faculty	Department of Biotechnology Ranchi Women's College, Ranchi, Jharkhand

Teaching Engagements:

Title	Course Code	Class Name	School Name
Environmental Microbiology	16C28605B	B.Sc	Department of Advance Sciences and Technology, NIMS University, Jaipur, Rajasthan
Instrumentation Techniques	16C28203B	B.Sc	Department of Advance Sciences and Technology, NIMS University, Jaipur, Rajasthan
Basic Microbiology & Microbial Diversity	16D32305B	B.Sc	Department of Advance Sciences and Technology, NIMS University, Jaipur, Rajasthan
Phycology & Mycology	16D24302B	M.Sc	Department of Advance Sciences and Technology, NIMS University, Jaipur, Rajasthan
Biostatistics & Research Methodology	16C13BTC701	B.Tech	Department of Advance Sciences and Technology, NIMS University, Jaipur, Rajasthan
Research Methodology	ECBTC403	M.Sc	Department of Biotechnology Ranchi Women's College, Ranchi, Jharkhand
Microbiology	CCBTC205	M.Sc	Department of Biotechnology Ranchi Women's College, Ranchi, Jharkhand
Environmental Biotechnology	CCBTC204	M.Sc	Department of Biotechnology Ranchi Women's College, Ranchi, Jharkhand

Publications:

Book Chapter:

- 2022 ➤ **Hansda A**, Kisku PC, Kumar V and Anshumali: Plant-microbe association to improve phytoremediation of heavy metal. *In* Advances in Microbe-assisted Phytoremediation of Polluted Sites. Elsevier Inc.

Publications in Journals:

- 2017 ➤ **Hansda A**, Kumar V and Anshumali: Influence of Cu fractions on soil microbial activities and risk assessment along Cu contamination gradient. *Catena*, 151: 26-33. <http://dx.doi.org/10.1016/j.catena.2016.12.003>
- **Hansda A**, Kumar V and Anshumali: Cu resistant *Kocuria* sp. CRB15: a potential PGPR isolated from the dry tailing of Rakha copper mine. *3 Biotech*, 7: 132. <http://dx.doi.org/10.1007/s13205-017-0629-5BTEC-D-16-00435.1>

- Kumar S, **Hansda A**, Chandra A, Kumar M, Sithambaresan M, Faizi SH, Kumar V, John RP : Co(II), Ni(II), Cu(II) and Zn(II) complexes of acenaphthoquinone 3-(4- benzylpiperidyl) thiosemicarbazone: Synthesis, structural, electrochemical and antibacterial studies. *Polyhedron*, 134: 11-21. <https://doi.org/10.1016/j.poly.2017.05.055>
- Singh MK, Roy S, **Hansda A**, Kumar S, Kumar M, Kumar V, Peter SC, John RP: Synthesis, characterization and antibacterial activity evaluation of trinuclear Ni(II) complexes with N-substituted salicylhydrazide ligands. *Polyhedron*, 126: 100-110. <http://dx.doi.org/10.1016/j.poly.2017.01.019>
- 2016** ➤ **Hansda A**, Kumar V and Anshumali: A comparative review towards potential of microbial cells for heavy metal removal with emphasis on biosorption and bioaccumulation. *World Journal of Microbiology and Biotechnology*, 32: 170. <http://dx.doi.org/10.1007/s11274-016-2117-1>
- Lothe AG, **Hansda A** and Kumar V: Phytoremediation of Copper Contaminated Soil using *Helianthus annuus*, *Brassica nigra* and *Lycopersicon esculentum* Mill. : A Pot Scale Study. *Environmental Quality Management*, 25 (4): 63-70. <http://dx.doi.org/10.1002/tqem.21463>
- 2015** ➤ **Hansda A**, Kumar V and Anshumali: Biosorption of copper by bacterial adsorbents: A review. *Research Journal of Environmental Toxicology*, 9(2): 45-58. <http://dx.doi.org/10.3923/rjet.2015.45.58>

Publications in Conferences:

- 2020** ➤ **Hansda A**, Kumar V and Anshumali: Effects of Cu Concentration on Physiology and Nutrients' uptake of *Lycopersicon esculentum* Mill In: Proceeding of National Webinar on Mining Environment, from 14th – 15th December, 2020 at Indian Institute of Technology (Indian School of Mines), Dhanbad, Jharkhand, India.

- 2016** ➤ **Hansda A**, Kumar V and Anshumali: Characterization of Cu-tolerant bacteria and their role in promotion of growth, Cu accumulation and reduction of Cu toxicity in *Brassica alba*. In: Proceeding of 57th Annual Conference of Association of Microbiologists of India (AMI- 2016) & International Symposium on “Microbes and Biosphere: What’s New What’s Next”, from 23rd – 27th November, 2016 at Gauhati University, Guwahati.
- 2015** ➤ **Hansda A**, Kumar V and Anshumali: Bacterial biofertilizers: a new dimension for sustainable agriculture and environmental development. In: Proceeding of 56th Annual Conference of Association of Microbiologists of India (AMI- 2015) & International Symposium on “Emerging Discoveries in Microbiology”, from 7th – 10th December, 2015 at Jawaharlal Nehru University, Delhi.
- 2014** ➤ **Hansda A**, Kumar V and Anshumali: Phytoremediation of heavy metals contaminated soil using plant growth promoting rhizobacteria (PGPR): A current perspective. In: Proceeding of International Conference on Emerging Challenges and Issues in Environmental Protection, Raipur Institute of Technology, Raipur, 23rd -24th January, 2014.

Awards/Recognitions:

2013-2017: Ministry of Human Resource Development, Govt. of India National fellowship for PhD.