

**EDUCATION**

Year	Degree/Exam	Institute	CGPA/Marks
2016	M. Tech	Maulana Azad National Institute of Technology	9.53 / 10
2013	B. Tech	Gautam Buddh Technical University (U.P.T.U)	77.32%
2007	Intermediate	U.P. Board	77.8%
2005	High School	C.B.S.E Board	85.6%

WORK EXPERIENCES

Worked as an **Assistant Professor (On contract)** in the Department of Biotechnology, Dr Ambedkar Institute of Technology for Handicapped, Kanpur (U.P.), India (July 2017- July 2021). Mentored/Guidance- 27 (B. Tech) Students

Worked as a **Research Fellow** in the Department of Biotechnology under the MHRD project "Design and Innovation Centre", MNNIT, Allahabad (Oct 2016- June 2017)

Completed dissertation work of M. Tech from CSIR- CIMAP, Lucknow (Supervisors: Dr Kiran Singh & Dr Archana Mathur) (July 2015- May 2016)

Completed **Summer Internship** at Basic Molecular Biology and Biotechnology from Biotech Park, Lucknow, Kanpur (U.P.), India in B. Tech (4 Weeks)

Completed **Industrial Training**, in Theory, Application, Practical on Biotechnology (Plant Tissue Culture) from Fragrance and Flavour Development Centre, Kannauj, U.P. (6 weeks)

AWARDS AND ACHIEVEMENTS

Certificate of Honour from the Council of Science and Technology, U.P., under the Engineering Student Project Grant Scheme.

Institute Fellowship by the Ministry of Human Resource and Development (MHRD), India, for pursuing M. Tech at the National Institute of Technology Bhopal, 2014-2016.

Graduate Aptitude Test in Engineering (GATE) conducted by the Indian Institute of Technology, qualified in Biotechnology with All India Ranking 359 (2014)

PROJECTS

Reduction in post-harvest losses in fruits and vegetables using essential oils funded by **COUNCIL OF SCIENCE AND TECHNOLOGY, U.P.**, under Engineering Students' Project Grant Scheme 2019-2020

M. Tech Thesis: Establishment of aseptic cultures of *Gymnema Sylvestre* with specific reference to secondary metabolite production.

Supervisor: Dr Kiran Singh (MANIT), and Dr Archana Mathur (CSIR, CIMAP)

B. Tech Thesis: Antimicrobial and antioxidant activity of a medicinal plant, *Adhatoda Zeylanica*

Supervisor: Hemant Kumar, Department of Biotechnology, Dr Ambedkar Institute of Technology for Handicapped (A.I.T.H), Kanpur, U.P.

PUBLICATIONS

- 1. Tolerance and Reduction of Chromium (VI) by *Bacillus* sp. MNU16 Isolated from Contaminated Coal Mining Soil** Vol. .8, pp. 778, **Front. Plant Sci.** 2017 (**Research Article**)
- 2. Avenues of the membrane transport system in adaptation of plants to abiotic stresses**, Vol-39 pp-861-883 **Critical reviews in biotechnology** 2019 (**Research Article**)
- 3. Exploring the Role of Plant-Microbe Interactions in Improving Soil Structure and Function Through Root Exudation: A Key to Sustainable Agriculture** at *Plant-Microbe Interactions in Agro-Ecological Perspectives*, Publisher: Springer. (**Book Chapter**)
- 4. Exploring the Multifaceted Role of Microbes in Pharmacology: *Microbial Biotechnology***, Publisher: Springer. (**Book Chapter**)
- 5. Microbial Interactions in Litchi Rhizosphere: *Lychee Disease Management***, Publisher: Springer. (**Book Chapter**)
- 6. Exploring the Potential of Nanotechnology in Agriculture: Current Research and Future Prospects: *Composite Materials***, Publisher: Taylor and Francis (**Book Chapter**)
- 7. Potential Contribution of Soil Microflora and Fauna in Nitrogen Cycle: A Comprehensive Study: *Soil Nitrogen Ecology***, Publisher: Springer. (**Book Chapter**)
- 8. Production and applications of Polylactic acid: *Biomass, Biofuels, Biochemicals***, Publisher: Elsevier. (**Book Chapter**)
- 9. Synthetic Bone Analogue Materials and Design for Skeletal Tissue Healing: *Emerging Materials and Technologies for Bone Repair and Regeneration*** Publisher: Taylor and Francis. (**Book Chapter**)

SKILLS AND EXPERTISE

Nanoparticle Synthesis, Materials characterisation (SEM, XRD, FT-IR, UV, ICP-MS, HPLC, GC-MS, AAS, TEM, etc.), Plant Tissue Culture, Microbial Culture, Green synthesis of Nanoparticles, Extraction Technique.

