

# BioTechnologist

## Biotech Resume



**Er. Bhoomika Varshney**

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### Profile Summary

Trained and skilled in molecular biology, protein purification and spectroscopy techniques; Good experience in analyzing large data set using computational approaches, strong problem solving and data analysis skills; Experienced in equipment operational trainings and presentations; Highly Motivated and Hardworker with good keen learner.

### Research & Area of Interests

- Genetics
- Immunology
- Bio nanotechnology
- Bioinformatics
- RDT
- Plant Biotechnology

### Technical Expertise

- Bioinformatics Techniques
- Molecular Biology Techniques
- Microsoft Office - Word, PowerPoint & Excel
- Windows, Mac OS

### Publications

- **Bhoomika Varshney**, Anand Kumar, Er. Rehan Sultan Khan, Raj Shekhar Mishra, Pallavi Sharma "*Comparative Study to Enhance the Production of Cellulase enzyme by Physical and Chemical Mutagens*", International Journal of Science and Research, Volume 8 Issue 11, November 2019:913-919.
- **Bhoomika Varshney**, Anand Kumar, "*Cellulase Production Through Mutation and Co-Culture*", International Journal of Bio-Pharmacology, Biotechnology and Allied Science, Volume1 Issue 4 July, 2020: page number 435-444
- **Bhoomika Varshney**, Rahul Singh, "*Current status of biopesticides over the chemical pesticide*", agrosphere Volume 2 Issue 9, 2021, page no 46-49
- **Bhoomika Varshney**, and Ayushi Rastogi, "*Treading Approaches to Bridge Traditional and Modernity in Food Packaging*", 2nd International conference on Recent Advances in Bio-Technology & Nanobiotechnology (Int-BIONANO-2022)
- **Bhoomika Varshney**, Gauresh Sharma, Priya Kumari and Archana Vimal (2022), "*A Potent source of Bioactive Compound c-phycoerythrin from cyanobacterial strain Plectonema Boryanum*", Advancement in Environment Biotechnology.
- **Bhoomika Varshney**, V.P. Sharma, 2022, "*Biobased Polymer to reduce Plastic Pollution*" in CGES News letter Volume-07 No.02 page no -07
- Dave, Sushma, Jayashankar Das, **Bhoomika Varshney**, and V. P. Sharma. "*Dyes and Pigments: Interventions and How Safe and Sustainable Are Colors of Life.*" In Trends and Contemporary Technologies for Photocatalytic Degradation of Dyes, pp. 1-20. Cham: Springer International Publishing, 2022.
- Satyansh Srivastava, **Bhoomika Varshney**, V.P. Sharma, Babra Ali3, "*Applications of Artificial Intelligence in Polymer Manufacturing*", Materials Research Foundations, Vol. 147, pp 105-122, 2023



## Projects

- Basic Training on topic “*Tools and techniques in molecular genetics*” from SGPGI, Lucknow.
- Mini Project in “*Comparative study to Enhance the production of Cellulase Enzyme by Physical and Chemical Mutagens*” at MRD Life Science Lucknow duration.
- Project in “*Study of Bioactive Compound of Withania Somnifera and its application*” at A.I.E.T, Lucknow.
- Dissertation in “*Food Packaging Materials: Application, Paradigms Shifts in Development Strategies with Toxicological Relevance*” from CSIR-IITR, Lucknow.

## Project Presentation

- Project: Production of Bioplastic with the help of Starch and Banana waste.

## Achievements

- Workshop & certification on topic “*Food Adulteration Analysis*” organized by Institute of Transgene Life Sciences on 28th Feb, 2017
- International Seminar on “*Advancements in Biotechnology: Current and Future Perspectives*” organized by Department of Bioengineering and Biosciences, Integral University on 25th November, 2017
- Certification on topic “*Industrial Quality Control Program*” organized by Institute of Transgene Life Sciences on 07th to 13th March, 2017
- Certification on topic “*Computational Analysis of Genomics and Proteomics*” organized by CytoGene on 13th to 27th September 2017
- Certification on topic “*Synthesis, Characterization and Antibacterial Activity of Zinc and Nanoparticles*” organized by CytoGene on 18th September 2018 to 03rd October, 2018
- Certification of training, three days of rigorous Hands-on Industrial Training with state of arts lectures on “*High Performance Liquid Chromatography*” at MRD LifeSciencesTM on 27th - 29th July 2019 to 03rd October, 2018
- Certification on topic “*Biotech Skill Development Series (BSDS)-2019*” organized by MRD LifeSciencesTM on 01th -07th November,2019
- Certification on topic “*NABL- Confirmation for PTP Awareness Program*” -20th May, 2022, Conducted by NABL
- Certification on topic “*ISO/IEC 17025:2017 General Requirements for the Competence of Testing & Calibration Laboratories*” - 04th July, 2022 conducted by CSIR-IITR

## Education

- M-Tech, Biotechnology, Integral University (Lucknow UP), **Percentage- 84.8% (2020-2022)**
- B-Tech, Biotechnology, Azad Institute of Engineering and Technology, AKTU University (Lucknow UP), **Percentage- 83.6% (2016-2020)**
- Higher Secondary, 12th, BDV Inter College, Bilsa (Budaun UP), UP Board of Allahabad, **Percentage- 88.89% (2015)**
- Senior Secondary, 10th, BDV Inter College, Bilsa (Budaun UP), UP Board of Allahabad, **Percentage- 86.5% (2013)**

## Qualifying Examination

- Netaji Subhas Institute of Technology, New Delhi (State university) - PhD entrance examination- 2023-2024
- Delhi Technical University, New Delhi (State University, New Delhi) - PhD entrance examination- 2023- 2024
- Amity University, Noida (State University, Uttar Pradesh) - PhD entrance Test 2023-2024
- NTA Exam (State University Entrance Exam) 2023-2024

## Training & Teaching Experience

- Acted as resource person in ITLS academy as well as Progemone Life science . Provide teaching on Biotechnology as well as create lecture on YouTube.

## Work Experience

### ITLS Academy

- Nano-biotechnology
- AI in Molecular Biology
- NGS
- Plant Tissue Culture
- Molecular Medicine
- Protein Modelling

### Progenome Life Science

#### Courses

- Basic to Advance Bioinformatics
- Chemo- informatics
- Immuno-informatics
- Protein- Modelling
- Molecular Docking
- CRISPR
- Pepidommetric Drug design
- Vaccine design
- Drug design
- Nano-informatics
- Whole genome Sequence
- Scientific Research Writing
- DNA Barcoding
- Cancer-informatics
- Primer design

5 Days offline workshop in DFRL (DRDO), Mysore on topic: Structure Prediction, Molecular Docking Post Docking Analysis & Protein Ligand interaction Analysis, Drug design, Pepidommetric drug designing.

### 3 /6 months Projects/Thesis

- Reverse Vaccine design
- Protein Modelling
- Protein-Protein Interaction
- Homology Modelling
- Molecular Docking
- Multiple Sequence Alignment
- Epitopes Prediction and their application in vaccine design
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### Webinar

- AI in cancer Biology: Application in Genomics and drug design
- AI in Cancer Biology
- Scientific Research Writing
- BIOAI

I hereby declare that the above provided details are true to my knowledge and belief.