



# Zaryab Shafi

Village and Post Chitara-Mahmoodpur , Martinganj, Azamgarh ,  
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user=pwU8se8AAAAJ&hl=en](https://scholar.google.com/citations?user=pwU8se8AAAAJ&hl=en)

**in** Zaryab Shafi **f** Sheikh Zaryab Shafi **🐦** @Zaryabshafi

## Objective

Experienced microbiologist seeking knowledge by performing accurate research while complying with laboratory safety protocols and standard.

## Experience

- **Department of Biosciences, Integral University, Lucknow**  
Lab Instructor  
*Aug 2023 - Till date*
- **ICAR - National Bureau of Agriculturally Important Microorganisms, Kushmaur, Maunath Bhanjan, Uttar Pradesh, India**  
Young Professional -II  
*May 2022- June 2023*  
Worked on:
  - Bacterial endophytes with reference to biotic and abiotic stress management
  - Consortium of microorganisms and bioformulation
  - Biological Control
  - Plant-Microbe Interaction Rhizosphere Biology
- **St Xavier's Senior Secondary School Bahrapur, Ambedkar Nagar, Uttar Pradesh, India**  
P.G.T (Biology)  
*01/04/2021 to 30/04/2022*
  - Preparing and delivering engaging biology lessons to students from different backgrounds, who all have different interests and abilities.
  - Monitoring student performance, and adjusting teaching strategies and techniques for improved content delivery.
  - Establishing classroom, laboratory, and field trip rules and ensuring all students understand and accept them.
  - Setting up exams, assessments, and experiments in accordance with curriculum requirements and standards of the state and district.
  - Communicating any student issues to parents, counselors, and other relevant staff members.
  - Attending school events and staff meetings as required.
  - Representing the school at conferences, workshops, and other networking events.Coming up with suggestions to improve the Biology Department and general school operations.
  - Building rapport with students so that they feel comfortable and safe discussing sensitive topics in class.
  - Encouraging students to participate in science fairs, competitions, and expos, and preparing them for these events.
- **Laboratory of Molecular Microbiology, Babasaheb Bhimrao Ambedkar University, Lucknow, Uttar Pradesh, India**  
M.Sc Dissertation  
*January 2020 - June 2020*  
Dissertation title "Role and Application of Curcumin as an Antimicrobial Agent"  
The general objectives of this research is to observe the effect of Curcumin (*Curcuma longa*) on *E.coli* and *Mycobacterium smegmatis*
  - (1) Extraction of curcumin from turmeric by Microwave assisted method.
  - (2) Determination of MIC (Minimal Inhibitory Concentration).
  - (3) Effects of Curcumin on growth of *E.coli* and *Mycobacterium smegmatis*.  
(physical Appearance on body of the bacterium)
- **Dr. Ram Manohar Lohia Institute of Medical and Research, Lucknow, Uttar Pradesh, India**  
Intern

June 2019- July 2019

Worked in various laboratories such as Bacteriology, Virology, Parasitology, mycology, Media Preparation etc.

## Education

- **Integral University** 2023  
Doctor of Philosophy  
Pursuing
- **Babasaheb Bhimrao Ambedkar University (a Central University) Lucknow, Uttar Pradesh, India** 2020  
Master of Science (Environmental Microbiology)  
66%
- **Veer Bahadur Singh Purvanchal University, Jaunpur, Uttar Pradesh, India** 2018  
Bachelor of Science (Zoology and Botany)  
68%
- **Kendriya Vidyalaya Azamgarh, Uttar Pradesh, India** 2015  
Intermediate  
71%
- **Kendriya Vidyalaya Azamgarh, Uttar Pradesh, India** 2013  
High School  
7.4 CGPA

## Computer Proficiency

- Certificate in “**Course on Computer Concepts**”
- One Year Diploma in “**Computer Applications, Business Accounting and Multilingual D.T.P.**”
- **Computer Skills-** M.S. Office, M.S. Excel, M.S. PowerPoint

## Skills

- Experience in screening of Microbes
- Microbial Technique - Microscopy, Growth curve, Coliform test, Staining techniques, microbial analysis of samples, sterilization methods, Cultivation of pure cultures and Antibiotic sensitivity assay.
- Biochemical techniques - Estimation of Protein, Qualitative test for Carbohydrates, Lipid and Amino Acids , Preparation of buffers and Enzyme Estimation.
- Biophysical Techniques - Centrifugation and Titrations
- Immunology techniques- ELISA, Immuno- electrophoresis, Southern blotting
- Instrumentation Handling - UV- VIS spectrophotometer, Centrifuge, Gel Electrophoresis, Beat beater, PCR, Hot Air Oven, Incubator etc.

## Publications

- Shafi, Z., Ilyas, T., Shahid, M., Vishwakarma, S.K., Malviya, D., Yadav, B., Sahu, P.K., Singh, U.B., Rai, J.P., Singh, H.B. and Singh, H.V., 2023. Microbial Management of Fusarium Wilt in Banana: A Comprehensive Overview. Detection, Diagnosis and Management of Soil-borne Phytopathogens, pp.413-435.
- Vishwakarma, S.K., Ilyas, T., Malviya, D., Shafi, Z., Shahid, M., Yadav, B., Singh, U.B., Rai, J.P., Singh, H.B. and Singh, H.V., 2022. Arbuscular Mycorrhizal Fungi (AMF) as Potential Biocontrol Agents. In Rhizosphere Microbes: Biotic Stress Management (pp. 197-222). Singapore: Springer Nature Singapore.
- Malviya D, Ilyas T, Chaurasia R, Singh UB, Shahid M, Vishwakarma SK, Shafi Z, Yadav B, Sharma SK, Singh HV. Engineering the Plant Microbiome for Biotic Stress Tolerance: Biotechnological Advances. In Rhizosphere Microbes: Biotic Stress Management 2022 Oct 8 (pp. 133-151). Singapore: Springer Nature Singapore.
- Singh A, Shafi Z, Mahto SK, Yadav S, Sankhwar R (2020) Role and Application of Curcumin as an Alternative Therapeutic Agent. Adv Microb Res 4: 014. (DOI:10.24966/AMR-694X/100014)
- Shahid, M., Singh, U.B., Ilyas, T., Malviya, D., Vishwakarma, S.K., Shafi, Z., Yadav, B. and Singh, H.V., 2022. Bacterial Inoculants for Control of Fungal Diseases in Solanum lycopersicum L.(Tomatoes): A Comprehensive Overview. Rhizosphere Microbes: Biotic Stress Management, pp.311-339.

- Ilyas, T., Malviya, D., Shafi, Z., Shahid, M., Vishwakarma, S.K., Yadav, B., Singh, U.B., Rai, J.P., Singh, H.B. and Singh, H.V., 2023. Biochar-Mediated Suppression of Soil-Borne Pathogens in Agronomically Important Crops: An Outlook. In *Detection, Diagnosis and Management of Soil-borne Phytopathogens* (pp. 383-400). Singapore: Springer Nature Singapore.
- Yadav, B., Singh, U.B., Malviya, D., Vishwakarma, S.K., Ilyas, T., Shafi, Z., Shahid, M. and Singh, H.V., 2023. Nematophagous Fungi: Biology, Ecology and Potential Application. In *Detection, Diagnosis and Management of Soil-borne Phytopathogens* (pp. 309-328). Singapore: Springer Nature Singapore.
- Singh Harsh V., Singh Udai B., Kumar A., Singh Jyoti P. Malviya D. Mohd. S. Vishwakarma Shailesh K., Ilyas T. and Shafi Z (2023) *Distinct Microbe-Based Approaches for Plant Stress Amelioration- A Training Manual*. Published by Director, ICAR-National Bureau of Agriculturally Important Microorganisms, Kushmaur, Maunath Bhanjan, Uttar Pradesh (India). pp. 1-180.
- Shafi Z, & Nafees F (2020) A Review on *Withania Somnifera* (Ashwagandha): A Salubrious herb and its dynamic in pharmacology. *IRJETS*, Volume 2, Issue 8
- Shafi Z, Azmi A, & Nafees F (2020). A Review on Therapeutic Activities of Some Indian Traditional Medicinal Plant: A Nature's Gift with a Promising Future Prospective. *IJRSET*, Volume 9, issue 8. (DOI:10.15680/IJRSET.2020.0908001)
- Shafi Z (2020). An Overview of Corona Virus Disease - Review. in *Science Letter* (DOI: 10.46890/SL.2020.v01i05.002)
- Abstract Published on "Curcumin : An age old anti-inflammatory and anti- neoplastic agent" in International Conference on Environmental Sustainability: innovation, Translation Dimensions way forward at Babasaheb Bhimrao Ambedkar University, Lucknow.
- Shafi, Z., Sharma, A. K., & Sahu, P. K. (2024). Application of *Bacillus* Species in the Alleviation of Salinity-Stressed Agricultural Soil: An Overview. *Applications of Bacillus and Bacillus Derived Genera in Agriculture, Biotechnology and Beyond*, 107-131.
- Shafi, Z., Shahid, M., AlGarawi, A. M., Zeyad, M. T., Marey, S. A., Hatamleh, A. A., ... & Singh, U. B. (2023). The exogenous application of 24-epibrassinolide (24-EBL) increases the Cd and Pb resilience in *Zea mays* (L.) by regulating the growth and physiological mechanism. *Applied Biochemistry and Biotechnology*, 1-25.
- Sahu, P. K., Shafi, Z., Singh, S., Ojha, K., Jayalakshmi, K., Tilgam, J., ... & Srivastava, A. K. (2023). Colonization potential of endophytes from halophytic plants growing in the "Runn of Kutch" salt marshes and their contribution to mitigating salt stress in tomato cultivation. *Frontiers in Microbiology*, 14, 1226149.
- Shafi, Z., Pandey, V. K., Singh, R., & Rustagi, S. (2024). Carbon Dots-Nanosensors: Advancement in Food Traceability for a Sustainable Environmental Development. *Food Control*, 110693.
- Shahid, M., Singh, U. B., Ilyas, T., Malviya, D., Vishwakarma, S. K., Shafi, Z., & Singh, H. V. (2024). *Bacillus*-Mediated Degradation of Recalcitrant Agricultural Pesticides: A Cutting-Edge Approach Towards the Clean-Up of Environmental Contaminants. In *Applications of Bacillus and Bacillus Derived Genera in Agriculture, Biotechnology and Beyond* (pp. 213-251). Singapore: Springer Nature Singapore.

## Achievements & Awards

- Governor Award in Scout and Guide
- Cadet in National Service Scheme (NSS)

## Work Shop/ Conferences

- Participated in eight days national training on "Modern techniques for characterization of bacterial endophytes and its application in agriculture" held at ICAR-NBAIM, Mau in 2023.
- Training assist in organization of eight days national training on "Distinct Microbe based approaches for Plant stress amelioration" held at ICAR-NBAIM, Mau in 2023.
- Participated in two days workshop on "Basics of Flow Cytometry and its Applications in Biomedical Sciences" at Department of Biotechnology, in 2020 Babasaheb Bhimrao Ambedkar University, Lucknow.
- Participated in Workshop on "Reducing our water Footprints" in 2020 at Babasaheb Bhimrao Ambedkar University, Lucknow
- Participated in Two days workshop on "Self Management of Excessive Tension Stress" at Babasaheb Bhimrao

Ambedkar University ,Lucknow.

- Participated in International Conference on “Global of Green house gases at the sources by physical and chemical technology” in 2019 at Babasaheb Bhimrao Ambedkar University Lucknow.
- Participated in International Conference on “Environmental Sustainability: Innovations, Translation Dimensions Way Forward” at Babasaheb Bhimrao Ambedkar University, Lucknow.
- Participated in Seminar on Environmental Sustainability: Present Scenario and Future Aspects at Babasaheb Bhimrao Ambedkar University Lucknow.
- Participated in Integrated workshop on "Publication Ethics and Patenting" at Babasaheb Bhimrao Ambedkar University, Lucknow
- Participated in workshop on " Genome editing in Agriculture: Science, Potential, and Policies at CSIR- NBRI, Lucknow.

## Activities

- Participated in Rangoli competition on the Occasion of ‘World Immunology Day’
- Participated in IFS Forensic Science Quiz
- Participated in Quiz on the Occasion of “World Environment Day”
- Participated in Online Course on “Immunology”
- Participated in Online Course on “Microbial Application in Daily Life”
- Participated in “25th District level Rovers/ Rangers Rally and Winners in Youth forum and Kim’s game.
- Participated in “26th District Level Rovers / Rangers Rally and Winner in Speech competition”
- Participated in “27th District Level Rovers / Rangers Rally and winners in Kim’s Game and Runner up in Night Scouting”
- Participated in “17th Uttar Pradesh State Level Scout And Guide Rally”

## Personal Details

- Date of Birth : 18/09/1998
- Marital Status : Single
- Nationality : Indian
- Religion : Islam
- Passport : U9585778
- Gender : Male
- Aadhaar No. : 3908 9103 2219

## Personal Attitude

- Learn and implement
- Quick adaptability to any environment
- Energetic and hardworking
- Flexible and Responsible
- Optimistic and sincere
- Convincing and cooperative dealing

## Languages

- English
- Hindi
- Urdu

## Reference

- **Dr. Pramod Kumar Sahu**  
**Senior Scientist (Agri. Microbiology)**  
Plant Microbe Interaction and Rhizosphere Biology Lab  
ICAR-National Bureau of Agriculturally Important Microorganisms, kushmaur, Maunath Bhanjan  
Email.- pramod.sahu@icar.gov.in  
Mobile no.- +91 63860 45054
- **Prof. Iqbal Ahmad**  
**Professor and Chairman**

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## Declaration

- I hereby inform that the above mentioned information furnished by me is true to the best of my knowledge and belief . I bear the responsibility for the correctness of the above mentioned particulars.

Date:

Place: Azamgarh

(Zaryab Shafi)