

# Anila Fariq

Department of Biotechnology, University of Kotli, AJK

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**Interests:** My current job interest centers on microbiology and biotechnology. I seek to build on strong research skills. Ambition is to eventually have broad-based career in microbiology research field.

## Education

**2014-2019 PhD, Environmental Sciences, Fatima Jinnah Women University, Pakistan**

**Project:** Ecology, diversity and metabolites analysis of extremophiles

**Lab:** Microbiology & Biotechnology Research Lab

**Supervisor:** Prof. Dr. Azra Yasmin

**March-September 2017 Visiting Research Scholar, Soil and Crop Sciences Department, Texas A&M University, U.S.A**

**Project:** Iron oxidizing bacteria from extreme acidic environment

**Lab:** Soil and Aquatic Microbiology Research Lab

**Advisor:** Prof. Dr. Terry J. Gentry

**2012-2014 MPhil Environmental Sciences, Fatima Jinnah Women University, Pakistan**

**Project:** Screening of biosurfactant producing indigenous bacteria from polluted environment (1 year)

**Lab:** Microbiology & Biotechnology Research Lab

**Supervisor:** Prof. Dr. Azra Yasmin

**2007-2009 MSc Environmental Sciences, Fatima Jinnah Women University, Pakistan**

**Project:** Microbiology of soil affected with tannery effluents (6 months)

**Lab:** Microbiology & Biotechnology Research Lab

**Supervisor:** Prof. Dr. Azra Yasmin

## Experience

**Institution:** Foundation University Rawalpindi Campus (FURC)

**Position:** Visiting Faculty      **Duration:** September 2019 to January 2020

**Courses taught:** Environmental Sciences, Genetics and Evolution

**Institution:** Department of Biotechnology, University of Kotli, Azad Jammu and Kashmir

**Position:** Visiting Faculty

**Duration:** January 2020 to June 2020

**Courses taught:** Genomics, Proteomics and Metabolomics, Methods in Molecular Biology, Introduction to Bioinformatics, Enzyme Technology

**Institution:** Department of Biotechnology, University of Kotli, Azad Jammu and Kashmir

**Position:** IPFP Fellow

**Duration:** July 2020 to onward

## Skills

### Technical Skills

- Microbiology laboratory techniques (Isolation, characterization of microbes, sterilization)
- Basic molecular techniques (DNA extraction, colony PCR, gel electrophoresis)
- Microbial genomics, Metagenomics
- Enzymology
- Bacterial metabolites extraction and analysis
- UV, FTIR spectroscopy

## Publications

### Conference Papers

- "Investigation of biosurfactant production potential of a bacterium isolated from oil contaminated soil" 10th Biennial International Conference of Pakistan Society for Microbiology, Punjab University, Lahore. (2015)
- "Potential of biosurfactant producing bacteria in reclamation of hydrocarbon polluted soils and combating climate change" 15th International congress of soil sciences, NARC, Islamabad. (2014)
- "Whole genome sequence analysis of extreme acidophilic iron oxidizing bacterium *Acidithiobacillus ferrooxidans* IO-2C isolated from acid mine drainage affected soil" American Society of Microbiology Texas branch meeting, Texas, U.S.A. (2017)

### Book Chapters

- Fariq, A., & Yasmin, A. (2018). Microbial Surfactants: Recent Trends and Future Perspectives. *In: Microbial Cell Factories* (pp. 75-94). CRC Press.
- Khan T., Abbas S., Fariq A., Yasmin A. (2018) Microbes: Nature's Cell Factories of Nanoparticles Synthesis. *In: Prasad R., Jha A., Prasad K. (eds) Exploring the Realms of Nature for Nanosynthesis. Nanotechnology in the Life Sciences*. Springer, Cham

### Research Articles

- Fariq, A., & Saeed, A. (2016). Production and Biomedical Applications of Probiotic Biosurfactants. *Current Microbiology*, 72: 489-495. (1.74 IF)

- Fariq, A. (2016). Microbial cellulases: Production and applications. *Journal of Biotechnology Science Research*, 3(1):122-127. (None IF)
- Fariq, A. & Yasmin, A. (2017). Phenotypic characterization and correlation analysis of heavy metal tolerant bacteria. *Journal of Microbiology, Biotechnology and Food Sciences*, 7(1): 37-41. (None IF)
- Fariq, A., Khan, T., & Yasmin, A. (2017). Microbial synthesis of nanoparticles and their potential applications in biomedicine. *Journal of Applied Biomedicine*, 15(4): 241-248. (1.7 IF)
- Fariq, A., Yasmin, A., & Jamil, M. (2019). Production, characterization and antimicrobial activities of bio-pigments by *Aquisalibacillus elongatus* MB592, *Salinicoccus sesuvii* MB597, and *Halomonas aquamarina* MB598 isolated from Khewra Salt Range, Pakistan. *Extremophiles*, 23(4): 435-449. (2.4 IF)
- Fariq, A., Blazier, J. C., Yasmin, A., Gentry, T. J. and Deng, Y. (2019). Whole genome sequence analysis reveals high genetic variation of newly isolated *Acidithiobacillus ferrooxidans* IO-2C. *Scientific Reports*. 9(1): 1-10. (4.1 IF)
- Fariq, A., & Yasmin, A. (2020). Production, characterization and bioactivities of biosurfactants from newly isolated strictly halophilic bacteria. *Process Biochemistry*. 98: 1-10. (2.9IF)