

ROMA AGRAHARI

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CAREER OBJECTIVE

To obtain a responsible, challenging and rewarding position in a result-oriented organization where my skills and abilities are utilized solely towards its growth and development.

ACADEMIA

- **Doctor of Philosophy** from Motilal Nehru National Institute of Technology Allahabad, Prayagraj (Pursuing)
- **Master of Technology** in **Biochemical** engineering from Harcourt Butler Technical University, Kanpur with 80.15% in year 2017
- **Bachelor of Technology** in **Biotechnology** from Bundelkhand University, Jhansi with 78.06% in year 2014
- **H.S.SC** with 67% from Bal Bharti Public School ISC Board, Varanasi
- **H.S.C** with 75.42% from Bal Bharti Public School ICSE Board, Varanasi

ACADEMIC PROJECTS

- **Title - Isolation and characterization of hydrocarbon degrading microorganisms from contaminated soil.**
Supervisor - Dr. Lalit Kumar Singh
Centre - Harcourt Butler Technical University, Kanpur.
- **Title - Screening of polythene degrading bacteria isolated from dumped soil area.**
Supervisor- Er. Mahendra Pratap Singh
Centre- Bundelkhand University, Jhansi.
- **Title - Potential of microorganism on different starch sources for Amylase production**
Centre- Genetech Laboratory, Biotech Park, Lucknow.

EXPERIENCE

- Senior Research Fellow, Department of Biotechnology, MNNIT, Allahabad, 2020-21
- Junior Research Fellow, Department of Biotechnology, Motilal Nehru National Institute of Technology, Allahabad, 2018-20
- Clinical Research Coordinator, Om Research Center, Varanasi, 2017-18

ACHIVEMENTS

- Qualify National level exam **GATE 2015** with a gate score of 412.
- **Certificate of appreciation** in student committee in organizing **BIOFUTURITY** Current Scenario and Future Trends in Biotechnology **2014**, a national conference.

- **Certificate of appreciation** in organizing **GENESIS 2016**, a national conference as Head of Ensemble and flashback committee.

PUBLICATIONS

- **Agrahari, R.**, Bayar, B., Abubackar, H. N., Giri, B. S., Rene, E. R., & Rani, R. (2021). Advances in the development of electrodes material for improving reactor kinetics in Microbial Fuel Cells. *Chemosphere*, 133184.
<https://doi.org/10.1016/j.chemosphere.2021.133184>
- Geetanjali, **Agrahari, R.**, Kumar, S., & Rani, R. (2020). Microbial Fuel Cell-Based Process for Wastewater Treatment and Power Generation. In *Environmental Biotechnology Vol. 1* (pp. 243-259). Springer, Cham.
https://link.springer.com/chapter/10.1007/978-3-030-38192-9_10
- Selvasembian, R., Mal, J., Rani, R., Sinha, R., **Agrahari, R.**, Joshua, I., ... & Pradhan, N. (2021). Recent progress in microbial fuel cells for industrial effluent treatment and energy generation: Fundamentals to scale-up application and challenges. *Bioresource Technology*, 126462.
<https://doi.org/10.1016/j.biortech.2021.126462>

PATENT

- Dr. Radha Rani & Roma Agrahari Patent filed - A Multi-Modular Microbial Fuel cell (under examination). Application No.-[202011055658](#)
- Dr. Radha Rani & Roma Agrahari Patent filed - A process for the treatment of dyecontaminated wastewater and simultaneous bioelectricity generation(underexamination). Application No.- [202111036172](#)

INSTRUMENTATION AND TECHNICAL SKILLS

- Isolation, identification and molecular characterization of micro-organism
- Biochemical testing
- Basics of molecular biology experimentation and PCR handling, Electrophoresis
- UV Spectrophotometer
- Florescence Microscopy
- Multichannel Electrochemical Analyzer
- Bioreactor (Microbial Fuel Cell reactor)
- Hydraulic Hot Press
- Waste water and soil analysis (pH, COD, BOD, Total Nitrogen, Total Phosphorus, Potassium, Electrical Conductivity, Total Solid (including Volatile Solid, Suspended Solid))
- Enrichment of Exo-electrogenic bacteria

KEY SKILLS

- **Communication skill:** Can converse well with everyone while listening actively and probing questions.

- **Positive Attitude:** Responsible, Effective Planning, Team facilitator, motivating power & Comprehensive problem-solving abilities.
- **Computer skills:** MS Excel, MS Word, MS Office, C++, Java, NOVA software, SOLID EDGE, Graph Pad Prism

TRAININGS / SEMINARS / WORKSHOPS/CONFERENCES

- Poster presentation on Transgenic plants in BIOFUTURITY Current Scenario and Future Trends in Biotechnology, 2011.
- Training on molecular biology from GENETECH LABORATORIES, Biotech Park, Lucknow, 2013.
- Certificate of participation in a national workshop on opportunities and challenges in bio-fuels and bio-lubricants, 2015.
- Certificate in national science talent search examination.
- Certificate of participation in attending a national seminar “Genesis”, 2016.
- Attended a short-term course on “**Advances in Enzyme and Bioprocess Engineering**” from February 7-11th, 2019 at NIT Jalandhar.
- Participated in a National workshop on “**New Trends in Wastewater Treatment and Its Reuse**” from March 12-16th, 2019 at MNNIT Allahabad.
- Participated in a National workshop on “**Biotechnological Approaches for Industrial Waste Management and Renewable Energy**”, from April 1-7th, 2019 at MNNIT Allahabad.
- Participated and presented paper on “**Role of electro-active microorganism in bioelectricity generation**” in International Conference “Energy and Environmental Technologies for Sustainable Development” at MNNIT Allahabad from Feb 14-16th, 2020.
- **Participated** in one week GIAN course on “A hands-on introduction to Next Generation Sequencing and Metagenomics Analysis” organized by Department of Biosciences and Bioengineering, IIT-Bombay.

I declare that, all the above written information is true to the best of my knowledge and belief.

ROMA AGRAHARI