Curriculum Vitae

# Dr. Deepika Biswas, Ph.D.

Department of Biochemistry/Microbiology CIMS&R, Dehradun, India

Phone: (Mob.) +91-9968413275

Email: [biswas.deepika89@gmail.com](mailto:biswas.deepika89@gmail.com)

* **PROFESSIONAL EXPERIENCE**
* **Assistant Professor- Combined (PG) Institute of Medical Sciences, Kuanwala, Dehradun, Uttarakhand**
* February 2020- present
* Department of Biochemistry and Microbiology (Under Gradate and Post Graduate level)
* **PROJECT AS PRINCIPAL INVESTIGATOR**
* **USERC, Uttarakhand, India (2022-2023): Completed**
* **UCOST, Uttarakhand, India (2023-2025): Ongoing**

# EDUCATION

* 2014-2020: Awarded **Doctor of Philosophy (Ph.D) in Biochemistry** from department of Biochemistry, Central University of Rajasthan, Ajmer, India
* 2011 - 2013: Completed Masters of Science **(Biochemistry**) with 1st Division (76.5%) from the **S.B.S.P.G.I. Dehradun**, H.N.B.G. University, Uttarakhand, India.
* 2008 - 2011: Completed Bachelors of Medical Laboratory Technology **(BMLT)** with 1st Division (68%) from Santosh Medical College Affiliated from Chaudhary Charan Singh University, Meerut, India
* 2005 – 2008: Completed Diploma Medical Laboratory Technology **(DMLT)** with (74%) from St. Lawrence Institute of Medical Science, Geeta Colony Affiliated from Board of Technical Education, Delhi, India
* 2007: Completed Higher Secondary (Intermediate of Science) with 2nd Division(53%) from NIOS Board, Delhi, India
* 2005: Completed Secondary education with 2nd Division (51%) from C.B.S.E borad, Delhi, India

# OTHER QUALIFICATIONS:

* Diploma in Aids and Family Education (DAFE) from IGNOU Delhi with 3.82 grades in 2009
* Basic Computer Course (MS-Office, Internet Surfing)

# TECHNIQUES ACQUAINTED WITH

* DNA, RNA and protein extraction, Isolation, Purification, 2-D gel Electrophoresis, chromatographic Techniques, SDS PAGE, Agarose-gel Electrophoresis, Spectroscopy Techniques, ELISA, PCR, Autoanalyser, colorimeter, FTIR, Flow cytometry, and Microscopic techniques.
* **RESEARCH EXPERIENCE**
* **PhD Co-supervisor : 1 (Ongoing)**
* **MASTERS (M.Sc.) THESIS SUPERVISOR:** 9 M.Sc. Thesis
* **GRADUATE (B.SC.) THESIS SUPERVISOR :** 6 B.Sc. thesis

# WORKING EXPERIENCE

* Worked with **NABET-QCI** as Technical Inspector during august 2023.
* Worked as **Practical examiner** (B.Sc. Biotechology) at SBSPG University, Dehradun.
* Worked as **Practical examiner** (M.Sc. Microbiology) at Uttaranchal (P.G.) College of Bio-Medical Sciences & Hospital,Dehradun.
* 4 month internship (July 2007- October 2007) as Lab Technician Trainee at LOK NAYAK JAI PRAKSH HOSPITAL, New Delhi, India
* 3 month internship (December 2007- February 2008) as Lab Technician Trainee at HINDU RAO HOSPITAL, New Delhi, India
* 6 month internship as Lab Technician Trainee at SMC, Ghaziabad, India
* SBSPGI, Dehradun, India (Dissertation, 2013): Under the supervision of Dr. VikaskumarJodon- Optimization and characterization by PCR amplification for selective identification of *Salmonella Typhi.*

# PUBLICATIONS

# Communicated (Under review) : "Efflux Pumps In Multidrug Drug resistant-Klebsiella pneumoniae: Discovery of Efflux Inhibitors", Frontiers in Cellular and Infection Microbiology.

* Antibacterial Activity And Identification Of Phytochemical Components Of Leaf Extracts Of Mallots Philippensis. International Journal of Life Sciences, Biotechnology and Pharma Research. 2023. Vol. 12, No. 3.
* Comparative mechanism based study on disinfectants against multidrug ‐ resistant *Acinetobacter baumannii*. Journal of Cellular Biochemistry. 2018. 119(12):10314-10326. doi: 10.1002/jcb.27373.
* Molecular mechanism of antimicrobial activity of chlorhexidine against carbapenem resistant Acinetobacter baumannii. PLoS ONE. 2019. 14(10): e0224107
* Rationale and design of an inhibitor of RecA protein as an inhibitor of *Acinetobacter baumannii*. The Journal of Antibiotics. 2018. **71**, 522–534. https://doi.org/10.1038/s41429-018-0026-2.
* Significances of OMV and Extracellular Vesicle Proteomics. J Data Mining Genomics Proteomics. 2017. 8: 208. doi:10.4172/2153-0602.1000208.

# BOOKS

# Chapter titled: A comprehensive review on extraction, identification and purification methods of secondary metabolites from medicinal plants​"\* with Chapter ID \*"DPS17G108-24AU12RS13SEP​"\* submitted to IIP Book Series \*"IIPV3EBS17\_G108 Futuristic Trends in Biotechnology​"\* under Volume 3, 2023.

# CONFERENCES/ WORKSHOP

# ATTENDED

* Poster presentation **“Antibacterial potential of Punica granatum l. Leaves against *Klebsiella pneumoniae*”. National Conference on Medicinal Plants, Natural Products and Indian system of Medicine**. September 8-9, 2023. ICAR-Central Agroforestry Research Institute, Jhansi, UP, India
  + Poster presentation “Determining the efficacy of phenol and sodium hypochlorite for inactivation of carbapenem resistant strain of *Acinetobacter baumannii”.* **Biyani International Conference BICON- 2016**. Jaipur at Biyani Group Of Colleges Jaipur, Rajasthan, India.
  + Poster presentation “Optimization of effective disinfectant concentration against carbapenem resistant strain of *Acinetobacter baumannii”.* 58th **Annual Conference of AMI - Association of Microbiologists of India**. November, 2017 at Babasaheb Bhimrao Ambedkar University (BBAU), Lucknow, UP, India.
  + Poster presentation “Optimization of effective concentration of chlorine dioxide, chlorhexidine, and hydrogen peroxide against carbapenem resistant strain of *Acinetobacter baumannii*”. **The Rajasthan Science Congress Association.** October, 2018 at Central university of Rajasthan. Ajmer, India.
  + Poster presentation “Mechanism based study of various concentrations of biocides against carbapenem resistant strain of *Acinetobacter baumannii”.* **International Conference On Molecular Basis Of Diseases and Therapeutics**. March 2019 at Central university of Rajasthan. Ajmer, India.
  + Poster presentation “Mechanism based study and chemical characterization of carbapenem resistant strain of Acinetobacter baumannii treated with effective concentrations of disinfectant”. 12th International Symposium on the Biology of Acinetobacter. 4th September 2019 to 6th September 2019 at **Goethe University Frankfurt am main, Germany**.
* Workshop cum Training Programme on *Open Source Tools in Bioinformatics* held on 21-23 January 2015 at Bioinformatics **Centre Birla Institute of Scientific Research, Statue Circle, Jaipur, India.**

**ORGANISED**

* Co-coordinator and Convener in the National Conference on COVID at Department of Microbiology, Combined (PG) Institute of Medical Science and Research, Kuanwala, Dehradun, May 2023

# ACHIEVEMENTS/FELLOWSHIP

* UGC-RGNF (Rajiv Gandhi National Fellowship) Research Fellow, New Delhi, India.
* **ADMINISTRATIVE DUTIES**
* **Member of admission (PG & UG courses) at CIMS & R, Dehradun**
* **Research coordinator of external students at CIMS & R, Dehradun**
* **Answer sheet evaluator at H.N.B Medical University, Dehradun**

**Date of Birth :** 30 October 1989

**Language Known :** English, Hindi, & Bengali

# DECLARATION

I hereby certify that all the information provided here is correct to the best of my knowledge and belief. I promise to abide by all the norms laid down by your esteemed organization.

Place: Dehradun

Date: Dr. Deepika Biswas