Dr. S. BISWAS, MSc, PhD

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SUMMARY

- I have pitched a project (own) successfully by presenting and defending a proposal, as a principal investigator, to the Govt. of India; and secured a position in a 61 expeditioner 27th Indian **Scientific Expedition to Antarctica** with a total budget of $53 million.
- I have deployed **next-generation sequencing (NGS)** technology for clinical diagnosis of infectious diseases and genetic disorders with a budget of $1 million.
- I have presented product and services at continued medical educations (CME) to key opinion leaders (KOL) and healthcare practitioners (HCP).
- I have achieved in-depth knowledge in the metagenomics, molecular biology and microbiology from more than 10 years of working in **academia and industry**; investigating Viruses, Bacteria, Archaea, and fungi; leading to the discovery of more than 430 genera and 50 genes, from unique specimens, for the first time.
- I have received **4 scholarships, fellowships, and grants** from the Georg-August University of Goettingen, Germany; University of Aarhus, Denmark; and European Commission.
- I have achieved in-depth domain knowledge from **more than 10 workshops, seminars, and training** on Genomics, Recombinant DNA Technology, Microbial Resources, PCR Applications and Molecular Biology Techniques in India, Germany, and France.

WORK EXPERIENCE

Bio-Control Research Laboratories, Pest Control India Pvt Ltd (PCI) **Bangalore, India**
Lead Scientist, Product Development and Lifecycle Management August 2019 – present

- Currently driving improvement cycles for existing microbiological and mycological products and developing new products (not restricted to pest management)
- Reviewing, integrating, and enhancing processes to match business needs, initiatives, and objectives; covering the critical engineering and cross-functional activities
- Development of training program, user acceptance test, and communication plan for the introduction of new functionalities
- Acting as the global interface for synergies, best practices sharing and benchmarking (processes, configuration and requirements management, tool integration, and collaboration)
- Critical areas of contribution include developing future strategies for customer's product lines, designing product lines, identifying, supporting and driving product cost management in conjunction with the finance department, introducing changes and improvements necessary to existing product lines that do not meet the requirements of quality with aesthetics, form, fit or functional expectations

UVOCORP **Remote**
Freelance Writer November 2018 to May 2019

- Wrote authentic, non-plagiarized papers
- Timely delivered customers' orders

Personalized Medicine Institute Pvt Ltd (PMI) **Kolkata, India**
Junior Molecular Biologist January 2018 to July 2018

- Presented the company's product and services to KOLs and HCPs during CMEs

- Managed purchasing of laboratory equipment for NGS, qPCR, cell culture, and peripherals
- Developed and validated standard operating procedures (SOPs) for clinical diagnosis of infectious diseases and genetic disorders by deploying Next Generation Sequencing (NGS) technology
- Developed and validated SOPs for deploying quantitative polymerase chain reaction (qPCR) for clinical diagnosis of infectious diseases and genetic disorders
- Managed quality of the procedures and safety in the laboratory

Visva-Bharati University **Santiniketan, India**
Project Fellow June 2009 to August 2010

- Designed scientific experiments for University Grant Commission (UGC), Govt. of India, Major Project, entitled "Exploitation of free-living phosphate solubilizing rhizobia for improvement of soil fertility and promotion of plant growth."
- Isolated and characterized phosphate solubilizing rhizobia
- Managed documentation and archiving of the findings of the project

University of Aarhus **Aarhus, Denmark**
Guest Researcher September 2008 to November 2008

- Investigated UV-induced DNA damage in a bacterial isolate from the Arctic
- Investigated the effect of osmotic stress on the growth of a psychrophilic bacterial isolate from Antarctic cold, dry habitat
- Developed and validated a protocol for Endonuclease Sensitive Site (ESS) Assay

National Centre for Antarctic & Ocean Research|Visva-Bharati University **Antarctica|India**
Principal Investigator December 2007 to December 2008

- Designed and successfully defended a project proposal, submitted to NCAOR and Ministry of Earth Science, Govt. of India; Project title: "Assessment of Microbial Biodiversity of Antarctic Soil for future application."
- Scientific expeditioner to Antarctica (Schirmacher oasis and Larsemann Hills)
- Managed logistics for the collection of samples from Antarctica and transporting them to India
- Performed scientific experiments according to the project at Visva-Bharati University
- Managed documentation, and reported the findings of the project to NCAOR

EDUCATION

Doctor of Philosophy (Ph.D.) in Biology, Georg-August University of Goettingen **Germany, 2016**
Thesis title: *"Prokaryotic Biodiversity of Lonar Meteorite Crater Soda Lake Sediment and Community Dynamics During Microenvironmental pH Homeostasis by Metagenomics."*

Master of Science (M.Sc) in Botany, Visva-Bharati University **India, 2007**
I have secured **rank 7th** (first class), specialized in Mycology and Plant Pathology from a Central University, directly administered by Government of India.

Bachelor of Science (B.Sc Honours) in Botany (Life Science), Visva-Bharati University **India, 2005**
I have secured **rank 5th** (first class) with distinction in Chemistry and Physics as subsidiary subjects from a Central University, directly administered by Government of India.

PROFESSIONAL MEMBERSHIPS & AFFILIATIONS

- International Organisation for Biological Control (**IOBC**)
- Association of Microbiologists of India (**AMI**)
- International Society for Computational Biology(**ISCB**)