

# Dr S BISWAS, MSc, PhD, MBA

Independent Director (IDDB-NR-202403-056904)- Indian Institute of Corporate Affairs (IICA) qualified  
Bangalore, India

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## EXECUTIVE SUMMARY

- Accomplished and innovative leader with over 13 years of experience in industry and academia, currently spearheading the Research and Development (R&D) Department at Gaiagen Technologies. Proven track record in developing Environmentally Sound Technologies (ESTs) and new products such as Biopesticides, Organics, Microbial Inoculants, Pheromones, Pesticide baits, Mushrooms as food and adaptogens, managing cross-functional teams, and driving process improvements.
- Recognized for academic excellence with scholarships, fellowships, and grants from prestigious institutions across the globe such as the European Commission, the Georg-August University of Göttingen, Germany; and the University of Aarhus, Denmark.
- Gained domain knowledge from education, training, workshops, and seminars on Life Sciences and Biology, Mycology and Microbiology, Metagenomics, Recombinant DNA Technology, Microbial Resources, and Molecular Biology Techniques from diverse universities and institutions from India, Denmark, Germany, France, and Australia.

## WORK EXPERIENCE

### **Gaiagen Technologies | Formerly Pest Control (India) Pvt. Ltd.**

**Bangalore, India**

*Lead Scientist, Research & Development Department*

April 2021 – present

- Directing a diverse team of scientists and associates, leading scientific research and development initiatives.
- Streamlining processes to align with business needs and objectives, developing training programs, user acceptance tests, and communication plans to introduce new functionalities and foster global collaboration.
- Acting as the global interface for synergies, best practices sharing, and benchmarking.

*Lead Scientist, Product Development and Product Lifecycle Management*

August 2019 - April 2021

- Development of improved SOPs for 2 products to reduce the usage of raw materials and technical products in the production of finished goods by 93% and 64%, which translates to a reduction in COGS.
- Development of improved SOPs for 2 products to reduce batch failure from more than 30% to less than 1%, which translates to a reduction in COGS.
- Development of improved SOP to bring back a product from nonconforming formulation to label claim and augmented speed of action of the product in the field by more than 30%.
- Generated proof of concept for in-vitro production of a biological control agent, the active ingredient of a product, which is a new organisational capability, reducing workforce as well as space usage significantly.
- Established and increased our in-house microbial Culture Collection by 740%.
- Improved the quality of Contract Research delivered to our client, resulting in positive feedback and repeat clients.

**Personalised Medicine Institute Pvt Ltd (PMI)***Biologist***Kolkata, India**

January 2018 - July 2018

- Led the deployment of next-generation sequencing (NGS) technology for clinical diagnosis of infectious diseases and genetic disorders with a budget of \$1 million.
- Engaged with KOLs and HCPs while delivering seminars in CMEs.

**Visva-Bharati University***Project Fellow***Santiniketan, India**

June 2009 - August 2010

- Designed and executed scientific experiments for a major project entitled “Exploitation of free-living phosphate solubilising rhizobia for improvement of soil fertility and promotion of plant growth” funded by the University Grant Commission (UGC), Govt. of India.

**University of Aarhus***Guest Researcher***Aarhus, Denmark**

September 2008 - November 2008

- Conducted research on UV-induced DNA damage in a bacterial isolate from the Arctic and the effect of osmotic stress on a psychrophilic bacterial isolate from the Antarctic.

**National Centre for Antarctic & Ocean Research and Visva-Bharati University***Principal Investigator***India and Antarctica**

December 2007 - December 2008

- Defended my own proposal, as a principal investigator, to the Govt. of India and secured a position in a 61-member team of 27<sup>th</sup> Indian Scientific Expedition to Antarctica with a total budget of \$53 million. 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, managed documentation and reported the findings of the project to NCAOR (National Centre for Antarctic & Ocean Research).

**EDUCATION****MBA** (Master of Business Administration), Deakin Business School, Deakin University**Australia, 2023****PhD** (Doctor of Philosophy) 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.*” Doctor of Philosophy with **cum laude**.

**MSc** (Master of Science) in Botany, Visva-Bharati University**India, 2007**

Rank 7<sup>th</sup> (first class), specialised in Mycology and Plant Pathology from a Central University directly administered by the Government of India.

**BSc Honours** (Bachelor of Science) in Botany (Life Science), Visva-Bharati University**India, 2005**

Rank 5<sup>th</sup> (first-class) with distinction in Chemistry and Physics as subsidiary subjects from a Central University directly administered by the Government of India.

**PROFESSIONAL MEMBERSHIPS & AFFILIATIONS**

- **IOBC** (International Organisation for Biological Control)
- **BMS** (The British Mycological Society)
- **AMI** (Association of Microbiologists of India)