SREYA PK

Education

2019-Present: PhD, Department of Plant Science, University of Hyderabad, Hyderabad.

2017–2019: MSc, Plant Biology and Biotechnology, University of Hyderabad, Hyderabad.

CGPA: **8.8/10**

2014–2017: BSc, Botany, Kannur University, Kerala, CGPA: 9.153/10.

Research Experiences

2019-Present **Phd**, University of Hyderabad.

Area of work Planctomycetota associated with algae.

Supervisor Prof. Ch. Venkata Ramana.

o Diversity of environmentally and biotechnologically important Planctomycetota

o Isolation and characterization of noval taxa.

o Insights into anammox bacterial diversity and interactions

2018–2019 MSc Project, University of Hyderabad.

Dissertation Diversity of anammox Planctobacteria across the eastern regions of India.

Supervisor Prof. Ch. Venkata Ramana.

 Diversity analysis of unexplored and difficult to cultivate group of bacteria called anammox Planctobacteria.

2016–2017 **BSc Project**, Kannur University.

Dissertation Biochemical analysis of road side plants and their response to vehicular pollution.

Supervisor Dr. K N Ajoy Kumar.

- o Elucidation of vehicular stress in plants by physio-biochemical comparison
- Resulted in one publication in an international journal.

Technical skills

- Microbial cultivation and characterization: Isolation and maintenance of microbial cultures, Substrate utilization tests, Polar lipid analysis
- o Imaging techniques: Basic knowledge in Confocal microscopy, Fluorescent insitu hybridization, Scanning electron microscopy.
- o Biochemistry: Basic knowledge in assays of proteins, sugar and enzymes
- Molecular biology: DNA/RNA isolation, Agarose gel Electrophoresis, PCR amplification
- Genomics and Computational: Nucleotide sequence alignment using BLAST, EzBio-Cloud, Phylogenetic tree construction using MEGA 7, Genome annotation
- o Metagenomics: Mothur, MG-RAST
- Metagenome assembled genome construction

o Software: Microsoft Word, Excel, Latex and PowerPoint

Awards/Fellowships

- Aug, 2020 Selected for Prime Minister's Research Fellowship
- Mar, 2020 Qualified GATE Life Sciences with Score of 575 and All India Rank 474
- Jun,2019 Qualified for CSIR-Junior Research Fellowship(JRF) in Life Science with All India Rank 59
- Mar, 2019 Qualified GATE Life Sciences with Score of 650 and All India Rank 177
- Jun, 2019 Qualified for ICMR funded project JRF in Life Sciences
- Dec,2018 Qualified for **CSIR-Naional Eligiblity test (NET)** for Lectureship (LS) in Life Sciences with All India Rank 42
- Dec,2018 Awarded **Post-Graduate Merit Scholarship** for University Rank Holders for PG Program by UGC.
- Mar,2017 Qualified **Joint Admission Test for MSc.(JAM)** with All India Rank of 698 for Biological Sciences and 442 for Biotechnology
- Jun,2017 Secured **Second rank in BSc Botany** from Kannur University.
- Mar,2013 Selected among top 1 % in Higher Secondary Examination

Workshops/Conference attended

- Mar,2024 Chaired a session on Stress Biology in International Symposium on Plant Biology and Functional Genomics(ISPBFG 2024) held at University of Hyderabad, India
- Feb,2023 Presented in International Conference on Current Trends and Future Prospects of Plant Biology held at University of Hyderabad, India
- Sep,2022 Presented poster at **69th Association of Microbiologists of India**, held at Mysuru,India
- May,2022 Attended **V PVC** meeting conducted on the theme 'From Nature to Genomes'
- May,2021 Attended **IPVC Webinar** on Planctomycetes, Verrucomicrobia and Chlamydiae (PVC) conducted by PVC V Scientific Committee.
- Jan,2020 Attended **National conference of Frontiers in Plant Biology 2020** held at University of Hyderabad
- Dec,2018 Attended and volunteered in **59th Annual Conference of Association of Microbiol- ogists of India (AMI-2018)** held at University of Hyderabad
- Oct,2017 Attended in International Conference on **Photosynthesis and Hydrogen Energy Research for Sustainability-2017** held at University of Hyderabad
- Sep,2017 Attended NanoBioEngineering of BioInspired BioPolymers (Nano3Bio) –The future of chitosan held at University of Hyderabad
- Jan, 2014 Attended National Seminar on Environment, Development And Sustainability with special reference to Biodiversity of Western Ghats, held at Nirmalagiri College

Publications

[1] Kohli Pragya, **Sreya PK**, Lakshmanan Vighnesh, Dhurka Mahima, Mallick Sushmita, Chintalapati Sasikala, and Chintalapati Venkata Ramana. Phylogenomic analysis of

- metagenome-assembled genomes indicates new taxa in the order *Spirochaetales* and proposal of *Thalassospirochaeta sargassi* gen. nov. sp. nov. from seaweeds. *Systematic and Applied Microbiology*. pages 47(2–3), 126502, 2024.
- [2] G Kumar, N Kallscheuer, M Kashif, S Ahamad, U Jagadeeshwari, **Sreya PK**, T Haufschild, M Kabuu, Ch Sasikala, C Jogler, and Ch V Ramana. *Gemmata algarum*, a novel planctomycete isolated from an algal mat, displays antimicrobial activity. *Marine Drugs*. page 22:10, 2024.
- [3] **Sreya PK**, Kumar Gaurav, Shabbir Ahmed, Ch Sasikala, and Ch V Ramana. *Blastopirellula sediminis* sp. nov. a new member of *Pirellulaceae* isolated from the andaman and nicobar islands *Antonie van Leeuwenhoek*. (2023).
- [4] **Sreya PK**, Gandham Suresh, Anusha Rai, Biswas Ria, L Vighnesh, Vaibhav Chandrakant Agre, U Jagadeeshwari, Ch Sasikala, and Ch Ramana. Revisiting the taxonomy of the genus *Rhodopirellula* with the proposal for reclassification of the genus to *Rhodopirellula sensu stricto*, *Aporhodopirellula* gen. nov., *Allorhodopirellula* gen. nov. and *Neorhodopirellula* gen. nov. *Antonie van Leeuwenhoek*. 2022.
- [5] Anusha Rai, Gandham Suresh, Biswas Ria, L Vignesh, **Sreya PK**, Ipsita S, Ch Sasikala, and Ch V Ramana. Phylogenomic analysis of the genus *Alcanivorax*: proposal for division of this genus into the emended genus *Alcanivorax* and two novel genera *Alloalcanivorax* gen. nov. and *Isoalcanivorax* gen. nov. *International Journal of Systematic and Evolutionary Microbiology* 73(1). 2023.
- [6] Gaurav Kumar, Uppada Jagadeeshwari, **Sreya, PK**, Ahmed Shabbir, Chintalapati Sasikala, and Chintalapati Venkata Ramana. A genomic overview including polyphasic taxonomy of *Thalassoroseus pseudoceratinae* gen. nov., sp. nov. isolated from a marine sponge, *Pseudoceratina* sp. *Antonie van Leeuwenhoek*, pages 1–14, 2022.
- [7] Gaurav Kumar, Dhanesh Kumar, U Jagadeeshwari, **Sreya, PK**, A Shabbir, Ch Sasikala, and Ch V Ramana. *Crateriforma spongiae* sp. nov., isolated from a marine sponge and emended description of the genus "*Crateriforma*". *Antonie Van Leeuwenhoek*, 114(4):341–353, 2021.
- [8] Dhanesh Kumar, Kumar Gaurav, **Sreya, PK**, A Shabbir, Jagadeeshwari Uppada, Sasikala Ch, et al. *Gimesia chilikensis* sp. nov., a haloalkali-tolerant planctomycete isolated from chilika lagoon and emended description of the genus *Gimesia*. *International Journal of Systematic and Evolutionary Microbiology*, 70(6):3647–3655, 2020.
- [9] Ajoykumar KN and Sreya PK. Bio-monitoring of roadside plants and their response to vehicular pollution- A physiochemical appraisal. *International Journal of Advanced Research* 6,715-725, 2018.