## **Education:**

- Graduated in Agricultural Sciences at Bapatla Agricultural College, Acharya NG Ranga University of Agricultural Sciences
- Post graduation and Ph D from Indian Agricultural Research Institute, New Delhi (1984-1990);
- Post-Doc at Department of Biochemistry, Indian Institute of Science, esteemed guidance of Professor HS Savithri; Professor Appaji; Professor MRN Murthy; followed by Short visiting scientist at Washington State University, Pullman, USA in 2013.

## **Professional credentials:**

As scientist in ICAR Agricultural Research Service – from 1990 with first posting at Central Potato Research Institute Simla till 1994;

1994 to 2001 served at ICAR- Indian Institute of Horticultural Research, Bengaluru

2001 to 2013 served as Principal Scientist and Head, Division of Genomic Resources at erstwhile ICAR-Project Directorate of Biological Control, currently ICAR-NBAIR

2014-16, served short stint as Head, Division of Crop Protection, ICAR-Central Potato Research Institute, Shimla on ASRB selection; returned to NBAIR and took charge as Head, Division of Genomic Resources till 2021.

Served as Director (Acting), ICARONBAIR since 1 August, 2021 till September 2022, on seniority.

Currently serving as Principal Scientist at ICAR-NBAIR.

- Published about 65 research papers as senior author; 45 as co-author; Edited 6 books; few chapters; guided 4 PhD and 8 MSc;
- Was granted 3 national patents; licensed technologies to 40 companies and generated 70 lakhs revenue.
- De novo genomes generated for 7 beneficial nematodes & 4 bacteria, one insect, diploid potato; novel crystal protein structure for oxalate decarboxylase from bacterium obtained and deposited; heterologous expressed 3 recombinant toxin proteins; transcriptomes and MALDI-TOFF proteins characterised related to pathogenomics of insect-nematode-bacterium triptrophism.
- Solid, liquid and di-phasic fermentation of fungi & bacteria, formulations for antagonistic fungi with scale-up production protocols standardised; Novel WP formulations devised for the entomopathogenic nematodes and antagonistic fungi with 12 and 24 months shelf-life.