

## PROFILE

**Name:** Dr. Kanamarlapudi Sri Lakshmi Ramya Krishna

**Educational Qualifications:** MSc, PhD

**Designation:** Assistant Professor

**Department:** Biotechnology

**Date of joining Maris Stella:** 02.06.2025



### I Academics

Degree	Institution/University	Year
PhD in Biotechnology	Koneru Lakshmaiah Deemed to be University	2021
MSc Biotechnology	Gitam University	2012

### II Professional Experience

Position Held	Institution	Year
Assistant Professor (Guest Faculty) in Biotechnology	K L (Koneru Lakshmaiah) Deemed to be University, Guntur	2013 - 2018
Assistant Professor (Guest Faculty) in Biotechnology	SRM University, Amravati, AP	2023 - 2024

### III Workshops / FDPs / Training Programs Attended

1. Participated in one day workshop on “Food labeling and health claims-what a nutritionist should know? organized by National Institute of Nutrition (NIN), Hyderabad on 8<sup>th</sup> October 2015.
2. Participated in three day training program on “Patent Law & Policy” organized by Andhra Pradesh Human Resource Development (AP HRDI), Bapatla, Guntur from 21<sup>st</sup> – 23<sup>rd</sup> November 2016.

### IV Research Contribution

- (i) Area (s) of Research: Fermentation technology, Microbiology, Food & Nutrition; Hands on experience in handling different Analytical techniques [HPLC (UV and ELSD detectors); FTIR, SEM – EDX, ICP - OES, ELISA, Chromatography techniques; SDS page; PCR and others
- (ii) Research Projects done
  1. Completed DST-SERB sponsored project entitled “Application of therapeutic sugar

producing Lactic acid bacteria in diabetes and obesity management” (25 lakhs, DST Fast Track Young scientist) as Project Assistant (Completion of objectives and preparation of detailed end report) along with Principal Investigator Dr. M Sudhamani, Associate Professor, Department of Biotechnology, K L Deemed to be University.

2. Completed DST – SEED sponsored project entitled “Trace metal nutritional security of rural women and their economic empowerment through food fortification technology” as Junior Research Fellow (JRF – completion of objectives and preparation of detailed end report) along with Principal Investigator Dr. M Sudhamani, Associate Professor, Department of Biotechnology, K L Deemed to be University.

(iii) Research Papers Published

1. Ramya Krishna KSL, Sudhamani M, ‘The metal binding potential of a dairy isolate’, Journal of Water Reuse and Desalination 2017, ISSN: 2709-6092, Vol. 7, Issue 4, Pages: 429-441.
2. Ramya krishna KSL, Sudhamani M, ‘Biosorption of Iron (II) by *Lactobacillus fermentum* from aqueous solutions’, Polish Journal of Environmental studies 2019, ISSN: 2083-5906, Vol.29, Issue 2: Pages: 1659-1670.
3. Ramya krishna KSL, Sudhamani M, ‘Application of food-grade microorganisms for addressing deterioration associated with fortification of food with trace metals’, International Journal of Food Properties 2019, ISSN: 1094-2912, Vol. 22, Issue 1, Pages: 1146-1155.
4. Ramya krishna KSL, Sudhamani M, ‘Structural changes of *Bacillus subtilis* biomass on biosorption of iron (ii) from aqueous solutions: Isotherm and kinetic studies’, Polish Journal of Microbiology 2019, ISSN: 2544-4646, Vol. 68, Issue 4, Pages: 549-558.
5. Ramya krishna KSL, Sudhamani M, ‘Characterization of Exopolysaccharide produced by *Streptococcus thermophilus* CC30’, Biomed Research International 2017, ISSN: 2314-6141, Vol. 2017, Article ID 4201809, Pages: 11.
6. Vinay kumar Ch, Ramya Krishna KSL, Useni reddy M, Sudhamani M, ‘Effect of pretreatment of *Bacillus subtilis* biomass on biosorption and its real time application’, Polish Journal of Chemical Technology 2021, ISSN: 1899-4741, Vol. 23, Issue 1, Pages: 16-24.
7. Vinay kumar Ch, Ramya Krishna KSL, Useni reddy M, Sudhamani M, ‘Isolation, identification, biosorption optimization, characterization, isotherm, kinetic and application of novel bacterium *Chelatococcus* sp. biomass for removal of Pb (II) ions from aqueous solutions’, International Journal of Environmental Science and Technology 2022, ISSN:1735-1472, Vol. 19, Pages: 1531-1544.

8. Vinay kumar Ch, Ramya Krishna KSL, Useni reddy M, Sudhamani M, 'Characterization of biosorption potential of *Brevibacillus* biomass isolated from contaminated water resources for removal of Pb (II) ions', Water Science and Technology 2022, ISSN: 0273-1223, Vol. 85, Issue 8, Pages: 2358-2374.
  9. Vinay kumar Ch, Ramya Krishna KSL, Useni reddy M, Sudhamani M, 'Enhanced biosorption of Pb (II) ions from aqueous solutions onto citric acid treated *Aspergillus niger* biomass: Equilibrium and Kinetic studies', Asian Journal of Chemistry 2020, ISSN: 0970-7077, Vol. 32, Issue 3, Pages: 508-514.
  10. Ramyakrishna KSL, Yamuna G, Divya P, Sudhamani M, 'Biosorption of Fluoride from aqueous solutions using *Bacillus subtilis* biomass', Asian Journal of Chemistry 2018, ISSN: 0970-7077, Vol.30, Issue 2, Pages: 427-433.
  11. Susmita M, Madhuri B, Ramya Krishna KSL, Sudhamani M, 'Development of a functional fermented food (dahi)', International Journal of Pharma and Biosciences 2017, ISSN: 0975-6299, Vol.8, Issue 3, Pages: 1124-1128.
  12. Soujanya E, Ramyakrishna KSL, Sudhamani M, 'Statistical optimization of cellulase production from a new strain of *Bacillus subtilis* VS15 by central composite design and artificial neural network', Research Journal of Biotechnology 2016, ISSN: 0973-6263, Vol. 11, Issue 4.
- (iv) Research Papers Presented
1. Participated and presented a paper on 'Application of metal bound food grade microorganisms for fortification of food with trace elements' in the 47<sup>th</sup> Annual National Conference of Nutrition Society of India, organized by NIN, Hyderabad, during 9<sup>th</sup> - 10<sup>th</sup> October 2015.
  2. Participated and presented a paper on 'Removal of iron (ii) ions from aqueous solutions by *Bacillus subtilis*' in BIOTRENDZ – 15, a National level technical seminar organized by Department of Biotechnology, K L University, Guntur during 27<sup>th</sup> August 2015.
  3. Participated and presented a paper on 'Removal of Fluorine from water by *Bacillus subtilis* biomass' in the 33<sup>rd</sup> International Conference of the International society for fluoride research organized by NIN, Hyderabad, during 9 – 11 November 2016.
  4. Participated and presented a paper on 'Potential of Lactic acid bacteria to remove iron ions from aqueous solutions' in International Conference on Recent Advances in Biosciences and Applications of Engineering in Production of Biopharmaceuticals and 9<sup>th</sup> Annual Convention of Association of Biotechnology And Pharmacy, organized by Department of Biotechnology, K L university, Guntur during 14 – 16 December 2015.
  5. Participated and presented a paper on 'Nutritional security and economic empowerment of

rural households through novel food fortification technology' in 48<sup>th</sup> National Conference on Nutrition risk management and communication organized by St. John's Research Institute, Bangalore during 4 – 5 November 2016.

(v) Books / Chapters in Books Published

Kanamarlapudi, Sri Lakshmi Ramya Krishna, Vinay Kumar Chintalpudi, and Sudhamani Muddada, "Application of biosorption for removal of heavy metals from wastewater," In *Biosorption*. IntechOpen, 2018

V Workshops / Conferences / Seminars Organised – 1

Organized one day SERB sponsored National seminar on Emerging role of probiotics in cognition, autoimmunity and metabolic disorders in Department of Biotechnology, K L University, Guntur during 13<sup>th</sup> April 2018 along with Convener Dr. M. Sudhamani.

VI Awards & Recognitions

- A Startup named “Utopia Nutraceuticals India Private Limited” was initiated in 2018 as a Women Entrepreneur (CEO) and founder holding a share percentage of 51% with the aim of production, manufacture and commercialization of food products fortified with metals (metal bound biomass) to combat with trace metal malnutrition (Hidden Hunger). Brand entry (DESIMAA) was done by manufacturing and commercializing instant chapattis (FSSAI license no: 10122020000069)
- Startup was selected for funding under Biotechnology Ignition Grant (BIG) scheme sponsored by BIRAC in 2020 for the amount of Rs. 50 lakhs for commercialization of fortified food products.
- Awarded First prize in oral presentation on the research work entitled “Fortification of food with metal bound food grade microorganism” in ICMR sponsored 2<sup>nd</sup> international conference on Innovative food and nutrition technologies for public health care organized by department of clinical nutrition and dietetics, Periyar University, Salem

**Patents**

1. Application Number: 202141058219

Title: A method for food fortification by iron enriched Lactic acid bacteria. Inventors: K S L Ramya Krishna, Sudhamani M.

2. Application Number: 202241001639

Title: A process for preserving substances of bioactive, functional, medicinal/therapeutic and nutritional value. Inventors: K S L Ramya Krishna, Sudhamani M.