DEPARTMENT OF BIOTECHNOLOGY

Personal Information



Name: G. Sai Sri Rekha

Designation:

Department: Biotechnology

Qualification: M.Sc. Biotechnology

Specialization: Biotechnology

Date of Joining the Institution: 17th November 2025

Total Teaching Experience: 1year 7 Months

Official Email ID: rekhagaggara@gmail.com

Qualification	Specialization	University	Year
M.Sc.	Biotechnology	Sri Padmavathi Mahila Visvavidyalayam	2024
B.Sc.	Biotechnology, Microbiology and Chemistry	Krishna University	2022

COURSES TAUGHT

Year	Titles of the Courses
Since 2025	Cell Biology & Genetics, Bioinformatics and Biostatistics, Industrial Biotechnology, Applications of Biotechnology, Metabolism, Immunology, Molecular Biology, Environmental studies, r-DNA technology, Microbial Physiology, Principles of Biological Sciences, Health and Hygiene.

RESEARCH

- Rajiv Gandhi Centre for Biotechnology (RGCB), Trivandrum, Kerala — *"Optimization of Calorimetric Based Assay for the Detection of Lipid Peroxidation"*; focused on in-vitro induction and quantification of lipid peroxidation through TBARS assay, hydrothermal synthesis and characterization of carbon dots, and investigating their role in lipid peroxidation and oxidative stress.
- Sri Padmavati Mahila Visvavidyalayam, Tirupati — *Independent Research Projects: "Medicinal Explorations of Lychee Peel Extract and FeO Nanoparticles" and "Bioengineered Magnesium Oxide Nanoparticles using Vigna mungo Extract"*; involved green synthesis of metal and metal oxide nanoparticles, their physicochemical

characterization using UV-Vis, FTIR, XRD and TEM, and evaluation of their antioxidant and antimicrobial potential.

- Andhra Loyola College, Vijayawada-*"Phylogram of EDAR Gene"*; involved retrieval and comparative analysis of EDAR gene sequences from different species, sequence manipulation, and multiple sequence alignment using GenBank resources and CLUSTAL W to study evolutionary relationships.

FDPS / WORKSHOPS / CONFERENCES

Event	Institute	Title
Conference	Sri Padmavati Mahila Visvavidyalayam	Bio Tech-Micro Con: Shaping the Sustainable Future
Conference	Yogi Vemana University	New and Renewable Energy Resources
Seminar	Sri Venkateswara University, Tirupati	Recent Advances in Life Sciences and Biotechnology
Workshop	Sri Padmavati Mahila Visvavidyalayam	Stingless Bee Cultivation and Conservation

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PUBLICATIONS

1. Sai Sri Rekha G., Mani Chandana B., Sai Manogna K., Deva Prasad Raju B. and John Sushma N. (2023). *Addressing CRISPR/Cas9 Challenges in Autism Gene Editing: Navigating Off-Target Effects, Immunogenicity and Apoptosis*. Iterative International Publishers. DOI: 10.58532/V3BJBT12P5CH1.

2. Sankari Mohan, Sai Sri Rekha G., Reshma Anjum and Narasimha Golla (2024). *Feedstock to Fortune: Microalgae Bioconversion to Value-Added Products via Circular Bioeconomy*. Springer. DOI: 10.1007/978-981-97-5544-8_9.

3. Rekha G.S.S., Hridya H. and Sankari M. (2025). *Health Implications of Polycyclic Aromatic Hydrocarbon (PAH) Exposure in Humans and Animals and Remedial Approaches*. Accepted for publication. DOI: 10.1007/s13530-025-00285-5.

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