

**MARIS STELLA COLLEGE (AUTONOMOUS), VIJAYAWADA**  
**DEPARTMENT OF BIOCHEMISTRY**

**Academic Profile**

**Name:** Dr. R. Gangaraju

**Department:** Biochemistry

**Designation:** Assistant Professor, Head (Microbiology)

**Academic Qualifications:** M.Sc., Ph.D., CSIR-NET, AP-SET, GATE

**G-suit email ID:** drrgangarajubiochem@marisstella.ac.in

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**Areas of interest:** Immunology, Bioactive compounds, Bioinformatics, Immunoinformatics

**Experience in Maris Stella College:** 6 months

**Academic Positions**

- Head, Department of Microbiology, Maris Stella College, Vijayawada
- Chairperson BoS, Department of Microbiology, Maris Stella College, Vijayawada
- Member, BoS, UG-Biochemistry, Krishna University, Maris.

**Research Experience:** 5 Years

- Junior Research Fellow under UGC-National fellowship 2016- 2018.
- Senior Research Fellow under UGC-National fellowship 2018-2021.

**Academic Achievements:**

- Graduate Aptitude Test (GATE) | 2013
- Andhra Pradesh State Eligibility Test (APSET) | 2013
- UGC-CSIR NET | 2015 and 2019

**Laboratory Skills:**

- **General laboratory:**
- Practice and handling of sterilization techniques
- Fumigation techniques
- Preparation of reagents and buffers
- **Microbiology:**

- Media preparation and cultivation of microorganisms
- Maintain stock cultures of microorganisms
- Isolation and characterization of microorganisms
- Fermentation techniques
- Anti-microbial Assays
- Immobilization of bacterial cells
- Isolation and purification of bioactive compounds from microorganisms
- Extraction and purification of DNA and RNA from bacterial cells
- **In-vitro Bioassays:**
- In-vitro Antioxidant activities
- In-vitro cytotoxic activities
- In-vitro anti-inflammatory activities
- In-vitro antidiabetic activity
- **Biochemistry & Immunology:**
- Estimations of Carbohydrates, proteins and lipids
- Enzyme Assays and kinetics
- Isolation and purification of proteins
- Extraction and characterization of fatty acids
- Immunodiffusion
- ELISA
- Immunoelectrophoresis
- Immunoprecipitation

### **Workshops/ Trainings:**

1. FDP: Three day national workshop on The AI educators toolkit, Conducted by Maris stella college on 21<sup>st</sup> -23 Nov 2023
2. Capacity building Workshop on Andrew Furco's self-assessment rubrics for self - assessment rubric for the institutionalisation of service-learning in higher education, Conducted by Maris stella college, Vijayawada on 4-5<sup>th</sup> December 2023
3. National workshop on BIOCHIMICA-2K23, conducted by Department of Biochemistry, Andhra University, Visakhapatnam on 28<sup>th</sup> to 29 December 2023

4. A Joint workshop by US FDA and Andhra University on “Current Good Manufacturing Practices (cGMPs)” held on 23-24th February 2023 at AU College of Pharmaceutical sciences, Andhra University, Visakhapatnam.
5. Hands-on training on “Cancer Tools and Techniques”, held on 22-26th August 2022 at Merck Innovation Lab ( Merck High end skill Development Centre), Bangalore.
6. One day national workshop on “Electro spin resonance spectrometer ” held on 7 April 2017at
7. Advanced Analytical laboratory-PURSE Programme, Andhra University, Visakhapatnam.
8. GIAN sponsored workshop on “Immunologicals in human and animal health” at University of Hyderabad (4th to 16th July 2016).
9. DBT sponsored Short Term Hands-on Training Course on ‘Animal Cell Culture and Molecular Diagnostic Techniques’ 18th Aug-1st Sept 2014 at Kakatiya University.

#### **Research Publications:**

1. Rapaka G, Bollavarapu A and Tamanam R: Phytochemical evaluation and HPTLC analysis of Phoenix sylvestris fruit extract at two ripening stages. Int J Pharm Sci Res 2016; 7(12): 5067-71.doi: 10.13040/IJPSR.0975-8232.7(12).5067-71
2. Gangaraju Rapaka , Bollavarapu, Archana, P, Felicity, Tamanam, Raghavarao. (2019). Elemental Analysis of Two Varieties of Wild Date Palm Seeds. IJSRR, 8(2), 1773-1779.
3. Sirisha Nagala, Gangaraju Rapaka and Raghava Rao Tamanam A Comparative study of the Antimicrobial activities of five varieties of essential oils from the seeds of Artocarpus. IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS) Volume 10, Issue 6 Ver. I (Nov -Dec. 2015), PP 17-25
4. Archana Bollavarapu, Gangaraju Rapaka and Raghavarao Tamanam. Phytochemical evaluation and antioxidant potential of Praecitrullus fistulosus fruit extracts. IOSR Journal of Environmental Science, Toxicology and Food Technology ,Volume 10, Issue 9 Ver. III (2016), PP 23-28
5. Archana Bollavarapu, Gangaraju Rapaka and Raghava rao Tamanam, Determination of phytochemical and antioxidant properties of different parts of croton bonplandianum: a comparative study, ijopils. June 2016; 4(7):1-12.

6. Bollavarapu, A., Rapaka, G., Felicity, P., & Tamanam, R. (2020). Determination of Mineral Content in *Praecitrullus Fistulosus* by Using ICP-MS and SEM-EDX Analysis. *Journal of Advanced Scientific Research*, 11(01 Suppl 1), 410-413.
7. Pinipay, F., Rokkam, R., Bollavarapu, A., Rapaka, G., & Tamanam, R. R. (2022). Phytochemical Screening of *Ficus religiosa* Seeds and Evaluation of its Antioxidant Potential. *J Food Chem & Nanotechnol*, 8(3), 127-137.
8. Rokkam, R., Pinipay, F., Bollavarapu, A., Rapaka, G., & Botcha, S. (2022). Phytochemical Investigation, Antioxidant Profiling and GC-MS Analysis of *Cajanus scarabaeoides* Seed extracts. *J Food Chem Nanotechnol*, 8(4), 147-161.