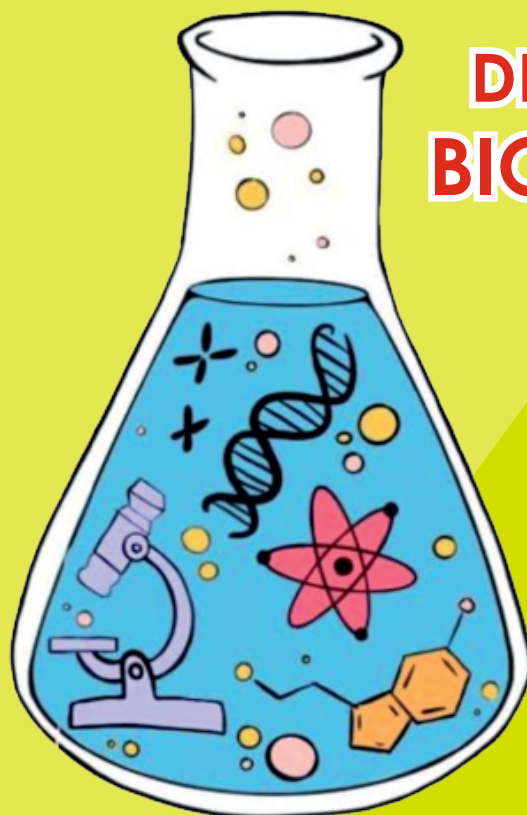




# Sri Venkateswara University Tirupati



## DEPARTMENT OF BIOCHEMISTRY

### VISION

The vision of the Department is to become a leader and center of excellence in education, research, development and training in basic and applied Biochemistry.

### MISSION:

The department is committed to programmes which will provide each student and researcher a holistic, value based education in a trusting and caring environment. We strive to equip the graduates to keep pace with the changes in technologies and meet the new challenges. We are committed to provide motivation and excellence in learning leading to independent and highly competent individuals who are responsive to contribute effectively globally.

### ABOUT THE DEPARTMENT

The department of Biochemistry was started in 1978 with M.Sc Biochemistry programme with an intake of 12 student community in general and of the Rayalaseema region in particular. The department has an independent building with in an area of 12000 sft in two floors. The department has celebrated its silver jubilee in 2003. To its credit the department started M.Sc Biochemistry with Immunology specialization in 2008. The course content is designed to cover all aspects of Biochemistry and practical orientation for biochemical methods. Further to strengthen the above, project work was introduced in the curriculum. The exhaustive training in biochemical methods and sound theoretical background is intended to make the student an appropriate candidate not only to take up teaching or pursuing doctoral research but also competent enough to work in pharmaceutical R&D and diagnostic labs, agricultural research institutions and various medical and allied institutions and industries. The department also invites Emeritus professors/ Scientists/ researchers from various institutions to deliver special lectures in order to encourage and motivate the students to take up research programme. The students who have successfully completed the M.Sc/ PhD, course have been working in India and abroad in various capacities in research institutions, biotech industries and universities.

## HEAD OF THE DEPARTMENT : Prof. S.D.S. MURTHY



**Prof. S.D.S. Murthy:** Presently serving as Dean of Pharmacy obtained PhD from J.N.U, New Delhi. He is a fellow of National environmental association (FNEA) and Society for plant science research (FSPR). His research areas are photosynthesis and abiotic stress in plants and cyanobacteria. He has completed 7 projects funded by UGC, DST and CSIR. Published more than 140 papers and guided 29 Ph.Ds. He has received UGC-BSR-one time grant, Fellow of A.P. Academy of sciences and A.P. Best teacher award.

## BOS



**Prof. Ch. Appa Rao:** Obtained Ph.D from University of Madras, and joined in this department in 1989. He served as Head and Chairman, Board of Studies in Biochemistry. His research areas are Diabetes and medicinal plants. 26 Students were awarded Ph.Ds under his guide ship. He is a recipient of UGC one time grant (Mid career award). He completed 5 projects funded by ICMR and three projects of UGC. He is a Fellow of Andhra Pradesh academy of Sciences. He served as Director, DOA, Head, Department of Biotechnology and Dean, University Development. Presently he is the Principal of the S.V.U. College of Pharmaceutical Sciences and Dean, College Development Council of S.V.University. He has published 90 research papers. He wrote three books and four book chapters.



**Prof. O.V.S. REDDY** Presently serving as Head of the department obtained PhD from CFTRI, Mysore. He worked as STA postdoctoral Fellow at NRIB, Higashi-Hiroshima, Japan for a period of two years (1998-2000). He received Italian Govt. Scholarship for Bio-informatics course at University of Turin in the year 2006. His research areas are Fermentation Technology and Medicinal Plants. He completed 9 projects funded by DST (2), DBT (1), UGC (3), CSIR (1) and BRNS (2). Guided 19 PhDs and published more than 100 research articles. He is a recipient of UGC one time grant (Mid-career award).



**Dr. M. BALAJI** Presently serving as Associate Professor, obtained PhD from Osmania University, Hyderabad. He worked as Post-Doctoral Fellow at University of Tennessee Health Science Centre, Memphis, USA for a period of two years (2002-2004). His areas of research are metabolic syndrome disorders and Natural product-based therapeutics. He published 80 research articles. He completed 10 research projects funded by various funding agencies of Govt. of India. He is a recipient of ICMR-Award-2020 under Biomedical Sciences and best Scientist award-2021 from Govt. of A.P. He guided 12 PhD students. He is a life member of NSI, SBC (I) and ISCA.

## ACADEMIC CONSULTANTS



**Dr. Manneppula Sreedharamurthy** working as Academic consultant since 2014. Qualified APSET .He has 6 years research experience in Fermentation technology on production of lactic acid from mangopeel fruit waste, probiotication of fruit juices and published 7 publications and attended National and international conferences. He has ten years of teaching experience in this institution.



**Dr. C. Pallavi** working as Academic consultant since 2016 at Sri Venkateswara University, Tirupati. She holds Ph.D in Biochemistry. She has carried out scientific researches in the field of Embryology and Toxicology. She is an author of several scientific publications and Book Chapters. She Completed Computer Teacher training Course from SITD.



**Dr. B.J. Divya** has been working as Academic Consultant in the Department of Biochemistry since 2014. She has qualified APSET in 2012. She holds Ph.D in Biochemistry. She has carried out scientific researches in the field of medicinal plants and their clinical efficacy. She has published 17 review and research articles in reputed National and International journals and presented papers and participated in various Webinars/Workshops/National and International Conferences and published 2 books. She is also acting as life member in various professional bodies.

## Courses offered:

### M.Sc. Biochemistry / M.Sc Biochemistry (Immunology)

	Sl.No	TITLE OF THE PAPER
Semester – I	1.	Biochemical and Biophysical methods
	2.	Molecular Physiology and nutrition
	3.	Biochemical Preparations and Analysis Practicals
	4.	Biochemical and Biophysical methods Practicals
	5.	Enzymology
	6.	a) Cell Biology and Biomolecules b) Environmental Biochemistry
Semester – II	1.	Energy metabolism
	2.	Nitrogen Metabolism
	3.	Enzymology Practicals
	4.	Microbiology Practicals
	5.	Molecular Biology
	6.	Microbial Biochemistry and Genetics
Semester – III	1.	Immunology
	2.	Ecology and Evolution
	3.	Clinical Biochemistry Practicals
	4.	Molecular Biology Practicals
	5.	Clinical Biochemistry (Skill Oriented Course)
	6.	a) Endocrinology b) Plant Biochemistry
	7.	a) Analytical Methods b) Environmental Biochemistry
Semester – IV	1.	Genetic Engineering
	2.	Research Methodology & Bioinformatics
	3.	Immunology and Hematology Practicals
	4.	Project work
	5.	a) Developmental Biology b) Applied Biochemistry
	6.	a) Research Methodology b) Nutritional Biochemistry

	Sl.No	TITLE OF THE PAPER
Semester – I	1.	Biochemical and Biophysical methods
	2.	Molecular Physiology and nutrition
	3.	Biochemical Preparations and Analysis Practicals
	4.	Biochemical and Biophysical methods Practicals
	5.	Enzymology
	6.	a) Cell Biology and Biomolecules b) Environmental Biochemistry
Semester – II	1.	Energy metabolism
	2.	Nitrogen Metabolism
	3.	Enzymology Practicals
	4.	Microbiology Practicals
	5.	Molecular Biology
	6.	Microbial Biochemistry and Genetics
Semester – III	1.	Immunology
	2.	Ecology and Evolution
	3.	Clinical Immunology Practicals
	4.	Molecular Biology Practicals
	5.	Clinical Immunology (Skill Oriented Course)
	6.	a) Molecular Endocrinology b) Developmental Biology
	7.	a) Basics of Immunology b) Immunotechniques
Semester – IV	1.	Genetic Engineering
	2.	Research Methodology & Bioinformatics
	3.	Hematology Practicals
	4.	Project work
	5.	a) Applied and molecular immunology b) Immuno pharmacology
	6.	a) Research Methodology b) Immunological diseases and therapeutics

#### Laboratories in the Department:



**Equipment Availability:** Department has all the basic equipment like Centrifuges, Spectrophotometers, Lyophilizer, Gel Doc system, Gas Chromatography, Rotary evaporators, Fermenter, Spectrofluorimeter, CO<sub>2</sub>-incubator, ELISA reader, PCR unit, HPLC, -80°C Deep freezer, Nitrogen storage facility etc., required for carrying our research.

**Ph.Ds. awarded:** Research scholars can work either full-time or part-time basis to pursue their PhD degrees as per the rules of the University framed by UGC, New Delhi. Strength of research scholars: At present 7 research scholars are working for their Ph.D. degrees. The department has produced more than 120 Ph.Ds. till now.

**Post-Doctoral Fellows:** At present two PDFs are working in the department.

- 1. Dr.M.Venkataswamy** ICMR-RA August 2021-August 2024.
- 2. Dr.A.Rajasekhar** ICMR-RA July 2022-July 2025.

### Department projects – Details

2018-23	DST-FIST	Infrastructure, teaching and research- needs	50.00lakhs
2022-25	DST-Indo-South Africa	Effect of anti-obesity from marine algae	40.00Lakh

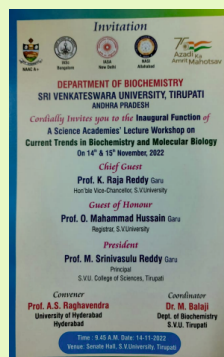
### Fellowships –Students

Mr. K. Surya	2022	3 years	MAJOR PROJECT	DST-indo-SA	M.Sc
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### Conferences, Seminars, Workshops organized

Recent trends in Biochemistry and Biotechnology	8 <sup>th</sup> -9 <sup>th</sup> March 2017
Recent Trends In Biological Chemistry	29-09-2019 to 30-09-2019
University-Industry interaction programme DBT-BIRAC	05-12-2020
Current Trends in Biochemistry and Molecular Biology	14 <sup>th</sup> – 15 <sup>th</sup> November 2022

**Extension outreach activities:** Creating awareness to the students and public on biochemical, clinical and nutritional aspects of Plant, Animal and Microbial Biochemistry.



Teachers Day Celebrations 2019  
Prof.S.D.S.Murthy Department of Biochemistry Sri Venkateswara University, Tirupati  
Receiving the State Best Teacher Award  
from Honourable Chief Minister Sri Y.S.Jaganmohan Reddy D.05-09-2019 at Amaravati

