



# SRI VENKATESWARA UNIVERSITY

## S.V.U. COLLEGE OF SCIENCES



## DEPARTMENT OF CHEMISTRY

The Department of Chemistry is a flourishing hub of scientific activity for teaching and world – leading research in chemical sciences.

### VISION

To provide intellectual and moral leadership by igniting the minds of youth to realize their potential and make positive contributions leading to prosperity of the society and nation at large.

### MISSION

The mission of the department includes inculcating creativity and professional competency in students through quality education and research, to develop state of art facilities for undertaking research in emerging areas of chemistry and to support student activities for holistic development.

BETTER THINGS FOR BETTER LIVING THROUGH CHEMISTRY



## DEPARTMENT OF CHEMISTRY - A BRIEF PROFILE

The Department of Chemistry is one of the first six departments started during the year 1954 when the university was founded. The Department offers M.Sc. course in Chemistry with specializations in Analytical, Environmental, Inorganic, Organic and Physical Chemistry besides Self Supporting Courses in Organic and Analytical Chemistry. Choice Based Credit System is followed and the courses are categorized as per the guidelines of the statutory authorities. Ability enhancement and skill development courses are part of the curriculum. Most of the students are qualifying in National Entrance Test conducted by UGC-CSIR. Also the Department offers quality research training experience leading to Ph.D., Degrees for the students. Over the last sixty five years the department has trained about 650 students for their Doctoral degrees. Most of the research scholars are doing Post-Doctoral research in abroad and in India. The faculty published more than 3600 research papers in reputed National and International journals. The Department organizes National and International conferences / seminars / workshops on regular basis. The Department has well equipped laboratories for research and teaching besides a DST funded computer lab and a Department library. All the faculty members are having individual research laboratories with internet facility. At present the Department is flourished with 10 faculty members and most of the faculty members have Post Doctoral

research and training experience abroad. Some of the faculty worked as Visiting Professors and Visiting Fellows in prestigious universities abroad. Majority of faculty members have undertaken major research projects funded by agencies like UGC, CSIR, DST, BRNS, DBT and MOES and have successfully completed the tasks with a budget outlay of Rs. 250.00 lakhs. Most of the faculty members have collaboration with different Institutions and Industries in India and Abroad and have approved patents. Some of the faculty and Alumni are the recipients of JSPS Fellowship, UGC Raman Fellowship, Common wealth Academic Fellowship, State Best Teacher Award etc., Recognizing the excellence in teaching and research in the Department, the University Grants Commission and Department of Science Technology have provided funding under DRS and FIST programmes. The Alumni of the department served in coveted positions as Vice-chancellors, Registrars, CEO of pharma industries etc. The former students of the Department have established leading International pharmaceutical industries in India and abroad. Some of them are actively engaged in the manufacture of COVID 19 vaccine. The ultimate goal of the Department is to achieve excellence in fundamental research as well as the development of innovative technologies for the future.

## COURSES OFFERED

### REGULAR

- » Analytical Chemistry
- » Environmental Chemistry
- » Inorganic Chemistry
- » Organic Chemistry
- » Physical Chemistry

### SELF SUPPORTING COURSES

- » Analytical Chemistry
- » Organic Chemistry

**THE POTENTIALITY IN HIGHER EDUCATION AND RESEARCH IN ORGANIC AND ANALYTICAL CHEMISTRY FLOURISHING THE STUDENTS TO OPT CHEMISTRY**



**HEAD, DEPARTMENT OF CHEMISTRY : Prof. V. PADMAVATHI, M.Sc., Ph.D**  
Mobile: +91-9440079363 | Email: vkpuram2001@gmail.com

Dr. V. Padmavathi has 30 years of teaching and research experience in Organic Chemistry. She worked as an INSA Fellow at IISc, Bangalore and Post doctoral research at Fel's Cancer Research Institute, Temple University, USA. She is the recipient of UGC-BSR one time grant. She has completed 11 research projects funded by UGC, CSIR, DST, BRNS. 35 Ph.Ds and 13 M.Phil degrees are awarded under her guidance. She has published more than 260 articles in peer reviewed National and International journals. She awarded Meritorious Teachers award, 2000, Teacher of Excellence Award by S.V. University, 2009, Lifetime Achievement Award in Chemistry –VIFA, 2019. She is the Fellow - AP Academy of Sciences 2019.

**CHAIRMAN, BOS : Prof. N. VENKATASUBBA NAIDU, M.Sc., Ph.D.**  
Mobile: +91-9440722881 | Email: nvsn69@gmail.com

Dr. N.V.S. Naidu has 30 years of teaching and research experience in Inorganic Chemistry. He was awarded Best Teacher Award, Govt of Andhra Pradesh in 2018. He is Fellow, APAS, Govt of Andhra Pradesh 2017. He was awarded MID-Career Award UGC-BSR – 2018. He is a Fellow, Royal Society of Chemistry, London. He awarded Young Scientist Award in 2007. He has completed six major research projects. He has guided 34 Ph.D & 10 M.Phil Degrees. He has published 150 papers in reputed National and International journals.



**Prof. CHUNDURI VENKATA RAO, M.Sc., Ph.D.**  
Mobile: +91-9849605140 | Email: cvrsvu@gmil.com

Dr. Chunduri Venkata Rao has 33 years of teaching and research experience in Organic Chemistry in the Department of Chemistry SV University, Tirupati. He worked as INSA VISITING Fellow at IISc Bangalore, and also as DIRECTOR, RGUKT, ONGOLE for one year. He completed four Research Projects funded by UGC, MoES, CSIR. He has guided 23 research students for their PhD degrees and 05 M.Phils and published 90 research articles in reputed journals.



**Prof. N.Y. SREEDHAR, M.Sc., Ph.D, Ph.D**  
Mobile: +91- 9440087124 | Email: sreedhar\_ny@rediffmail.com

Dr. N.Y. Sreedhar has 30 years of teaching and research experience in Bioanalytical Chemistry. He is an associate member, Andhra Pradesh Academy of Sciences. He was awarded BSR one-time grant for his academic excellence. He has published 120 research papers in reputed journals. He has completed 7 research projects funded by BRNS, CSIR, UGC, and DST. He guided 30 students for Ph.D and 9 for M.Phil degrees.



**Prof. C. SURESH REDDY, M.Sc., Ph.D**  
Mobile: +91-9849694958 | Email : csrsvu@gmail.com

Dr. C. Suresh Reddy has 30 years of teaching and research experience in Organic Chemistry & Electroorganic Chemistry. He was a Post-Doctoral Fellow at National Taiwan University, Taiwan. He got Life-Time Achievement Award in Sciences-VIFA, 2017, State Level Best Teacher Award-2018, Dr. L. R. Row Memorial Award-2020 under Chemical Sciences, and India's Most Dynamic Achievers Award-2021 in the Field of Science & Research. He has published 1 patent and about 320 research papers in reputed National and International journals with high impact factor. Till now he guided 13 M.Phil. and 57 Ph.D. degrees (as Guide: 44 & as Co-Guide: 13) along with 2 Post-Doctoral young scientists. He has successfully completed 12 major research projects funded by UGC, CSIR, DRDO, DAE-BRNS, and DST-SERB.





**Prof. A. PADMAJA, M.Sc., M.Phil., Ph.D.**  
Mobile: +91-9440350194 | Email: a.padmaja62@gamil.com

Dr. A. Padmaja has 28 years of teaching and research experience in Organic Chemistry and Bioorganic Chemistry. She was awarded Associate Fellow, APAS – 2019. She produced 17 Ph.D., and 7 M.Phil., degrees and published nearly 200 research papers in national and international journals of repute. She has completed 6 Research Projects funded by CSIR, UGC, and BRNS.

**Prof. Y.V.RAMI REDDY, M.Sc., PH.D., M.A., M.ED., B.L**  
Mobile: +91-9440450108 | Email: dryvrsvu@gmail.com

Dr. Y.V. Rami Reddy is having 15 years of teaching and Research experience in Physical Chemistry. He is the member of EAC, MOEF & CC and CPCSEA Ministry of Animal Husbandry and he is also member of Governing Bodies of few colleges as a UGC nominee. Prof. Reddy is an assessor of NAAC, UGC and NABET. He published 68 research papers in reputed National and International research journals. He guided 19 students for Ph.D. and 6 students for M. Phil. and at present 4 students are doing Ph. D's, under his guidance. He is the recipient of State Best Teacher Award - 2022.



**Prof. D. SRINIVASULU, M.Sc., Ph.D.**  
Mobile: +91- 9493816701 | Email: doddaga\_s@yahoo.com

Dr. D. Srinivasulu has 27 years of research experience and 13 years of teaching experience in Organic Chemistry. He was awarded Associate Fellow, APAS-2014. Dr. D. Srinivasulu has been serving as Registrar of the Cluster University, Kurnool, A.P from the month of July 2021 on deputation. He guided six Ph.Ds. and three M.Phils. and five research scholars are working for Ph.D under his guidance. He acted as Principal Investigator and Co-Investigator for two major Research Projects (UGC&BRNS). He has published 30 research papers in reputed National and International journals



**Prof. G. MADHAVI, M.SC., Ph.D.**  
Mobile: +91-9440096500 | Email: gmchem01@gamil.com

Dr. G. Madhavi has 15 years of teaching and research experience in Environmental Chemistry and Analytical Chemistry. Her research mainly focuses on the analysis of Environmental samples by using electro analytical techniques. She has published 92 research articles in national & international journals. She has presented research papers in 17 international & 36 national conferences. She has guided 11 Ph.D. and 3 M.Phil Students. She is Member of Executive council, S.V.University, Tirupati and Member of A.P. SEAC, MoEF&CC, Govt.of India. She is an Associate Fellow of A.P.Academi of Sciences. She is Editorial board Member, Journal of Current Analytical Chemistry, Editorial board Member, Current Nanoscience, Sensors International. She has published two books, and one book chapter. At present she is doing one MoEF&CC, HSMD, G.O.I Project.



**Dr. N.V.V. JYOTHI, M.Sc., Ph.D**  
Mobile: +91-9912366219 | Email: nvvjyothi73@gmail.com

Dr. N.V.V. JYOTHI is having 15 years of teaching and research experience in Electroanalytical Chemistry. She awarded Associate Fellow, APAS – 2019. Four Ph.D, two M.Phil degrees and one UGC-Post doctoral fellow are awarded under her guidance. At present Three Ph.D students and one UGC-Post doctoral are working. She has published 45 research papers in National and International journals along with 3 book chapters.



**Dr. T. MADHUSUDANA REDDY, M.Sc., Ph.D**  
Mobile: +91-9441088587 | Email: tmsreddysvu@gmail.com

Dr. T. Madhusudana Reddy has 14 years of teaching and research experience in Physical Chemistry. He has published 65 research articles in international journals. He worked as Postdoctoral Researcher at "Chimie, ElectrochimieMoléculaires et ChimieAnalytique" CNRS, UMR 6521, Universities de Bretagne Occidentale, Brest, France during 2015-2016. He was awarded Raman Fellowship by UGC to visit University of Minnesota, Minneapolis, USA. He has successfully completed two major research projects funded by UGC and DST. Under his guidance eight Ph. D's and three M.Phil., degrees are awarded. Presently seven Ph. D scholars are working under his guidance.



## MAJOR AREAS OF RESEARCH

### ORGANOSULFUR CHEMISTRY

Prof. V. Padmavathi  
Prof. A. Padmaja

### ORGANOPHOSPHORUS CHEMISTRY

Prof. C. Suresh Reddy

### ENVIRONMENTAL POLLUTION MONITORING AND MANAGEMENT

Prof. N.Y. Sreedhar  
Prof. N.Venkata subba Naidu

### NANOTECHNOLOGY

Prof. N.Venkatasubba Naidu  
Prof. Y.V. Rami Reddy  
Dr. N.V.V. Jyothi

### ELECTROCHEMISTRY

Prof. Y.V. Rami Reddy  
Prof. G. Madhavi  
Dr. T. Madhusudhan Reddy

### SYNTHETIC ORGANIC CHEMISTRY

Prof. V. Padmavathi  
Prof. C. Suresh Reddy  
Prof. A. Padmaja

## MAJOR RESEARCH OUTCOMES

- » Synthesis of pharmacologically potential molecules analogous to drugs and application of green methodologies for the synthesis of complex molecules.
- » Development of new hybrid sorbents for monitoring toxic metals in environmental samples.
- » Fabrication of novel electrochemical sensors and biosensors towards the detection of organic molecules and pollutants.

## CONFERENCES ORGANIZED

- » Current trends in chemical and Pharmaceutical Sciences (CTCPS -2017)
- » Recent advance in materials and chemical sciences (RAMCS – 2019).
- » Role of Organic Chemistry in Drug Formulations (ROCD – 2021).
- » Synergistic Training Program Utilizing the scientific and Technological Infrastructure (STUTI – 2022)
- » National conference on Science and Technology of Rare Earths (STAR – 2022)



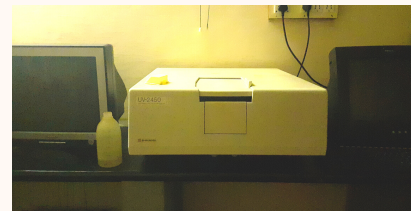
## INSTRUMENTATION FACILITIES



HPLC



AAS



UV SPECTROPHOTOMETER



FT -IR



ELECTRO CHEMICAL WORKSTATION



LCMS

## PATENTS AWARDED TO THE FACULTY

### 1. PROF. A. KRISHNAIAH (RETD)

**US PATENT NO:US8002917B2 (2011)**

TITLE OF INVENTION :

“Adjusting yield of a manufacturing process for energetic compounds through solubility modification”.



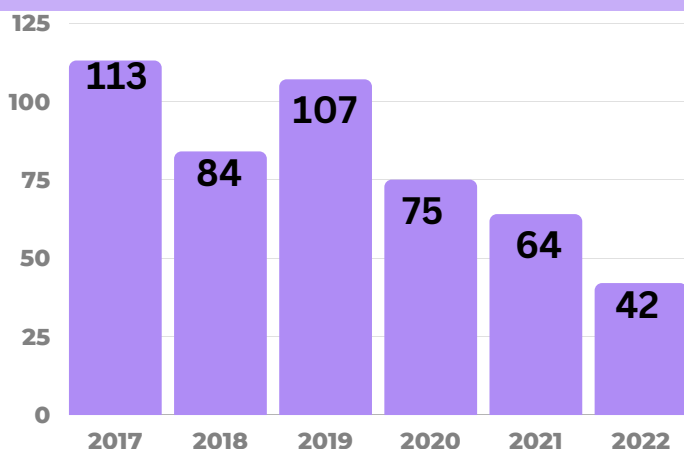
### 2. PROF. C. SURESH REDDY

**INDIAN/201741046873 (2019)**

TITLE OF INVENTION :

“Amino-Chromeno Pyrimidine Phosphonate Derivatives and their Anticancer Activity” in Collaboration with National Research Development Corporation, New Delhi – March, 2019.

## RESEARCH PUBLICATIONS DURING 2017-2022



During the period 2017-22 the Department has published 485 research papers in good impact Factor Journals. In addition the important research findings have been presented in International / National conferences and published in proceedings.

## PROJECTS FUNDING AT A GLANCE 2017-22

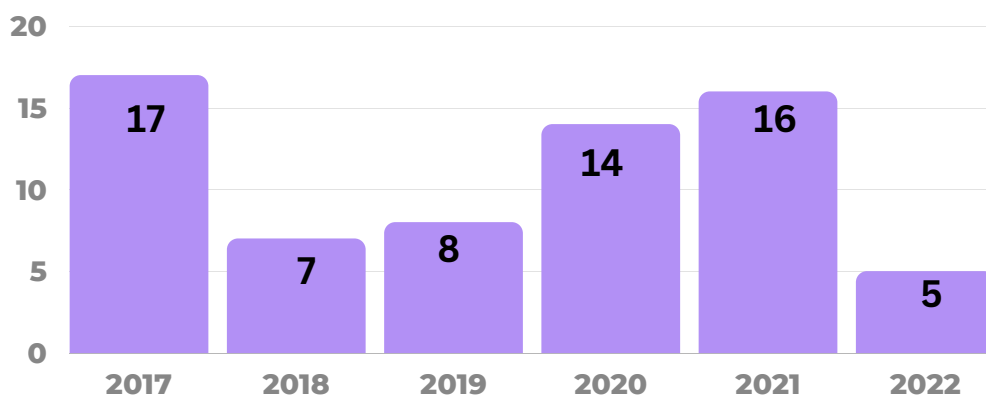
Funding Agency	No. of Projects	Amount in Lakhs
DST-FIST-II (2015-20)	01	110.00
UGC-DRS-II (2014-19)	01	70.00
DST – SERB	01	32.7
DAE – BRNS	01	23.78
CSIR	01	18.96
UGC-MRP	01	9.27
UGC	01	8.00
MEFC	01	10.00
Total	08	282.71

## MOUS SIGNED WITH INDUSTRIES

1. NATSOL LABORATORIES P.LTD,
2. SREECHEM ANALYTICAL SERVICES P. LTD.
3. COSTAL LABORATORIES
4. SLR PHARMA P. LTD.

VISAKHAPATNAM  
HYDERABAD.  
NELLORE  
HYDERABAD

## NUMBER OF PH.D., DEGREES AWARDED DURING 2017-22



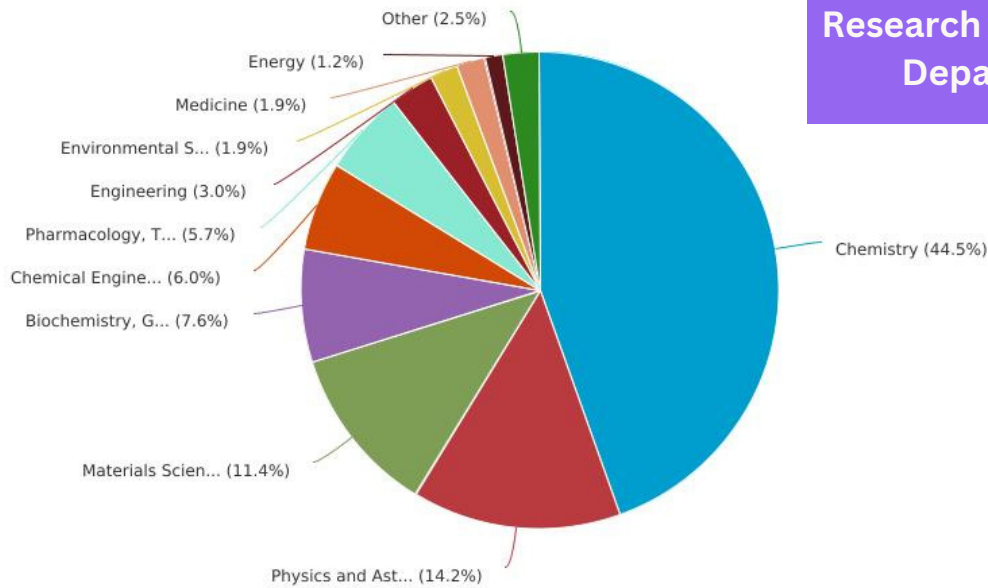
## RESEARCH COLLABORATIONS WITH INSTITUTIONS AND INDUSTRIES

- |                                                    |            |
|----------------------------------------------------|------------|
| 1. INDIAN INSTITUTE OF SCIENCES                    | BANGALORE  |
| 2. INDIAN INSTITUTE OF CHEMICAL TECHNOLOGY         | HYDERABAD  |
| 3. AVRA LABORATORIES                               | HYDERABAD  |
| 4. BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI | HYDERABAD  |
| 5. EPR LABORATORIES                                | HYDERABAD  |
| 6. AMARA RAJA BATTERIES                            | TIRUPATI   |
| 7. RRL (REGIONAL RESEARCH LABORATORY)              | TRIVANDRUM |

## Documents by subject area

Scopus

### Research Contributions of Chemistry Department, S.V. University

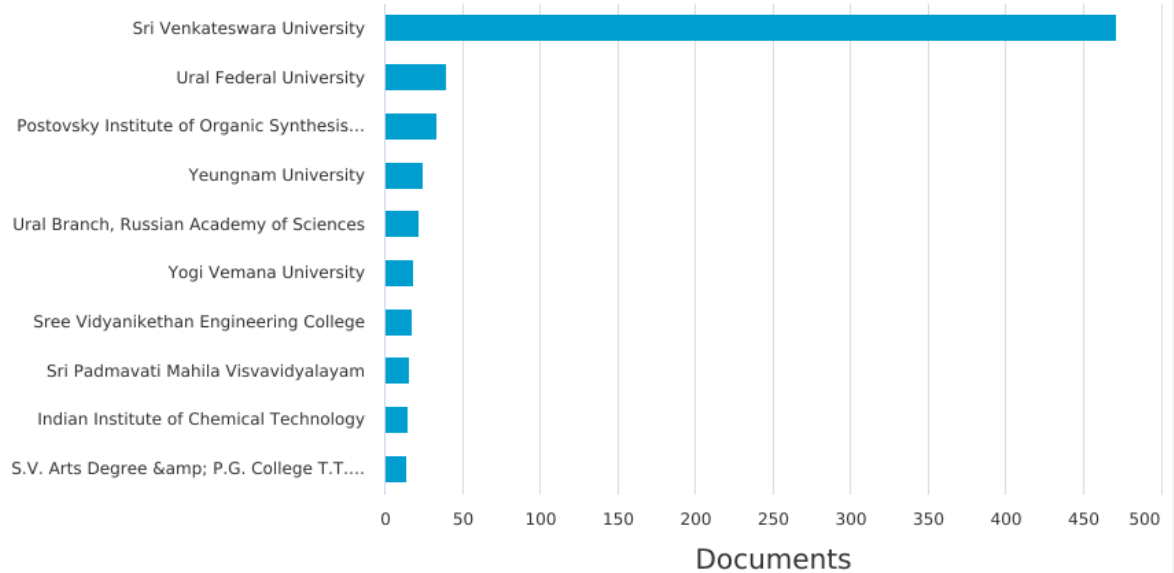


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## Documents by affiliation

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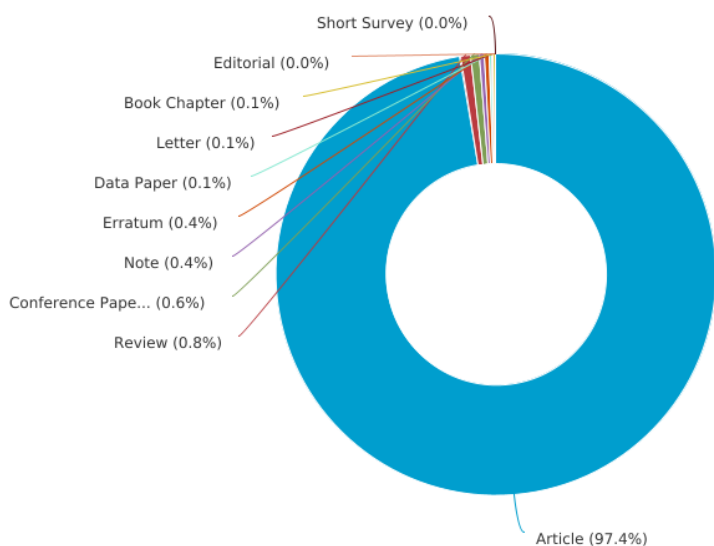
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## Documents by type

Scopus



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## FACULTY AWARDS / HONOURS

S.N.	Name of the Faculty	Awards
1	Prof. N. Venkatasubba Naidu	*Fellow AP Academy of Sciences – 2017 *Best Teacher Award - 2018
2	Prof. V. Padmavathi	*Life Time Achievement Award in Sciences – 2019 *Fellow AP Academy of Sciences – 2019
3	Prof. C. Suresh Reddy	*Life Time Achievement Award in Sciences - 2018 *State Level Best Teacher Award – 2018 *Dr. L.R. Row Memorial Award - 2020
4	Prof. A. Padmaja	Associate Fellow, APAS 2019
5	Prof. D. Srinivasulu	Registrar, Cluster University, Kurnool
6	Prof. G. Madhavi	Associate Fellow, APAS 2019
7	Dr. N.V.V. Jyothi	Associate Fellow, APAS 2019
8	Prof. Y.V. Rami Reddy	State Level Best Teacher Award – 2021

## FACULTY SERVING AT STATE AND NATIONAL LEVEL GOVT. COMMITTEES

S.N	Name of the Faculty	Committees
1	Prof. K. Seshaiyah	*Member, State Expert Appraisal Committee of AP (SEAC), Govt. Of India
2	Prof. C. Suresh Reddy	*Member, Environment Quality in State Expert Appraisal Committee (SEAC), Govt., of India *Technical Committee Member for Environmental Impact & Protective Measures for State Environment at TTD, Tirupati. *Member, Environment Audit Committee, APPCB, AP
3	Prof. Y.V. Rami Reddy	*Member, Expert Appraisal Committee (Industrial) Ministry of Environmental Forests & Climate change, Govt. of India (2016-19). *Member, CPCSMIA, Ministry of Animal Husbandry Assessor, NAAC, UGC, NABET. *Member, UGC Syllabus Committee for CBCS UG Courses (Semester System) (2015-18).
4	Prof. G. Madhavi	* Member, Executive Council (EC), SVU * Member, AP State Experts Appraisal Committee (AP-SEAC) Govt. of India.

## EDITORIAL BOARDS

**PROF. K. SESHIAH**

International Journal of Industrial Chemistry and Biotechnology.

**PROF.N.Y. SREEDHAR**

Associate Editor, Journal of Current Sciences.

**Dr. T. Madhusudhana Reddy**

Open Journal of Applied Biosensor

International Journal of Applied Biology and Pharmaceutical Technology.

## BOOKS PUBLISHED DURING 2017-2022

S.N	Title of the Book	Author	Year
1	Bovine serum Albumin: An efficient Adsorbent and Drug Delivery Transporter	Prof. N. Venkatasubba Naidu	2017
2	New Methodologies for the Synthesis of Some Organic Compounds	Prof. C. Suresh Reddy	2018
3	Synthesis and Antimicrobial Activity of Spiroheterocycles	Prof. V. Padmavathi	2019
4	Green methods for Wastewater Treatment, Green technologies for wastewater treatment	Dr. N.V.V. Jyothi	2019
5	Ultrasound promoted synthesis of pyrazolyl/isoxazolyl/1,2,4-triazoles as antimicrobials	Prof. A. Padmaja	2020

## STUDENT RESEARCH FELLOWSHIPS

FUNDING AGENCY	NAME OF THE FELLOWSHIP	NO.OF STUDENTS
UGC	BSR	15
	RGNF	01
	JRF/SRF	06
	PDF	03
DST	Inspire	02
	Women Scientist	01
	JRF & SRF	01
CSIR	JRF & SRF	01
BRNS	JRF & SRF	01
OTHERS	Project Fellow	02

## STUDENT PROGRESSION



1	CSIR/UGC (JRF/SRF)	26
2	CSIR/UGC (NET)	05
3	GATE	03
4	APSET	15
5	DOCTORAL STUDENTS	32

S N	Name of the Company	No. of Students Selected
1	GVK Bio	19
2	GVK FY	13
3	Hetro Labs Pvt. Ltd.	18
4	Innovare Labs Pvt. Ltd.	14
5	Aurigen	04
6	Syngene	05
7	Others (Industries)	20
8	Academic Consultants	05

## PLACEMENT DETAILS



## FACULTY PROFILES

S.N	Name of the Faculty	Teaching Experience	Number of Ph.D Awarded	Number of Journals Published	h Index	i10
1	Prof. C.Venkata Rao	33	23	90	25	53
2	Prof. N.Y. Sreedhar	30	30	120	15	23
3	Prof. N. Venkatasubba Naidu	30	34	150	12	19
4	Prof. V. Padmavathi	30	35	262	30	95
5	Prof. C.Suresh Reddy	30	57	320	30	99
6	Prof. A. Padmaja	28	17	200	24	67
7	Prof.Y.V. Rami Reddy	15	19	68	09	08
8	Prof. D.Sreenivasulu	13	06	30	10	13
9	Prof. G.Madhavi	15	11	92	23	40
10	Dr.N.V.V.Jyothi	15	04	45	10	10
11	Dr.T.Madhusudhan Reddy	15	08	65	24	44



STAR CONFERENCE - 2022



Alumni Meeting



STUTI Workshop



**STUDENTS LAB**



**Environmental day**



**LIBRARY**



**Students Seminars**



**SEMINAR HALL**