

**TELANGANA SOCIAL WELFARE
RESIDENTIAL DEGREE COLLEGE FOR
WOMEN, WANAPARTHY**

DEPARTMENT OF CHEMISTRY

Profile of the department



**DEPARTMENT OF
CHEMISTRY**

**TELANGANA SOCIAL WELFARE RESIDENTIAL DEGREE COLLEGE
FOR WOMEN, WANAPARTHY-509103**

IMPORTANCE OF CHEMISTRY:

Chemistry is the scientific discipline that focuses on the study of elements and compounds, which are made up of atoms, molecules, and ions. It covers their composition, structure, properties, behavior, and the transformations they undergo when reacting with other substances. Chemistry primarily deals with atoms and their interactions with each other, such as the chemical bonds that form between atoms to create compounds. It also includes interactions involving atoms and other phenomena—such as electrons and different forms of energy—like photochemical reactions, redox reactions, phase changes, and the separation of mixtures. Additionally, it examines the properties of materials like alloys and polymers.

Chemistry is often called the "central science" because it links the physical sciences with the life sciences and applied sciences. It involves understanding how substances interact on atomic and molecular levels and how these interactions lead to the formation of new substances.

Chemistry is an integral part of our everyday lives. We encounter it in the food we eat, the air we breathe, our emotions, and virtually every object we see or touch. Many changes in the world around us are the result of chemical reactions, such as cooking food. Even the emotions we experience are due to chemical messengers known as neurotransmitters. Thus, studying chemistry is essentially studying life itself.

Vision



The vision of the Department of Chemistry is to become a model center of excellence in education, particularly in the advanced areas of chemistry. Our primary goal is to produce highly skilled graduates who are capable of thriving in the ever-evolving landscape of chemical science and technology throughout their careers.

Mission

To contribute quality education in chemical science and technology in compliance with the Vision and mission of TSWREIS

OUR MOTTO IS

**“CHEMISTRY CONNECTS SCIENCE WITH LIFE
ENTER TO LEARN LEAVE TO SERVE”**

INTRDUCTION:

- The Department of CHEMISTRY was established since the very inception of the college in 2016 with under graduation course for the first time in this rural area with the growing demand of B.Sc. course, in English medium.
- The Department has taken up some of the additional curriculum programs like Extension Lectures, Guest Lectures, Field Trips, Group Discussions and Quiz's to enrich the student knowledge. The Department also provides the study projects to merit students and conduct the student seminars to improve their presentation skills. The Department is also giving additional coaching for students to get the admission into M.Sc., (chemistry) Course conducted by various universities.

I. COURSES OFFERED:

At present, chemistry is offered in B.Sc. course with three combinations i.e.,

1. Chemistry-Physics-Mathematics–E/M
2. Chemistry-Botany-Zoology–E/M
3. Chemistry-Zoology-Micro biologyE/M



II. **FACULTY PROFILE:** The department's faculty members are recognized leaders in their fields, contributing to scientific knowledge through research, publications, and participation in professional organizations. They are dedicated to mentoring students, fostering a collaborative and supportive learning environment. At present three (03) faculty members are working in this department. Among these one of the faculty Dr. Ch. Rajitha is PhD and other two faculties, J.Ragaswathi and M.Jyothi both have qualified with M.Sc. Degree. The faculty members are constantly updating themselves a modern method of teaching by attending various, seminars and workshops. The department provides excellent learning in chemistry through its dedicated faculty members by means of new teaching and learning methods. It's a matter of pride that students studied here have been highly placed in society.

S.No.	Name	Designation
1	Dr. Ch. Rajitha, M.Sc.,(PhD)	HOD
2	J.Ragaswathi,M.Sc.,SET.	Lecturer
3	M.JyothiM.Sc.,SET.	Lecturer

FACULTY PROFILE

PERSONAL MEMORANDA

Name: Dr. Ch.Rajitha.
Date of Birth: 02.04.1980
Nationality: Indian
Languages Known: English, Telugu &
Hindi



ACADEMIC QUALIFICATIONS:

- Ph.D awarded in 2015.(Chemistry), (**Topic: SYNTHESIS OF NOVEL 1,4-BENZOXAZINONES AND THEIR DERIVATIVES** Awarded from Jawaharlal Nehru Technological University, Kukatpally, Hyderabad
- **Master of Science (M.Sc.) in Medicinal chemistry** from University college for women Koti ,Hyderabad in 2001-03
- **Bachelor of Science (B.Z.C)** from Govt. Women's Degree College, Nalgonda affiliated to Osmania University in 1998-2001.
- **Intermediate (Bi.P.C.)** from Little Flower Junior College, Nalgonda in 1996-98.
- **Secondary School Certificate (S.S.C)** from Nirmala Vidhya Mandir, Nalgonda, in 1995-96.

Ph.D RESEARCH TOPIC:

"SYNTHESIS OF NOVEL 1,4-BENZOXAZINONES AND THEIR DERIVATIVES"

TEACHING AND RESEARCH EXPERIENCE:

- ❖ Presently working as a Chemistry Lecturer in **Telangana Social Welfare Degree College, Wanaparthi**, since 03.04.2019 recruited through TSPSC.
- ❖ Worked as **Research Scientist in Civenti Chem (India) Pvt. Ltd.**, (Formerly known as **Indus Biosciences Pvt. Ltd.**), Hyderabad from April 2013 – August 2017

- ❖ Worked as **Senior Research Associate** from March 2010 - April 2013 in **Civenti Chem (India) Pvt. Ltd.,** (Formerly known as **Indus Biosciences Pvt. Ltd.,**), Hyderabad
- ❖ Worked as **Research Associate** from June 2006 to March 2010 in **Indus Bio Sciences Pvt. Ltd.,** (Presently known as **Civenti Chem (India) Pvt. Ltd.,**), Hyderabad
- ❖ Worked as **Chemist** from August 2003 to June 2006 in **Indus Bio Sciences Pvt. Ltd.,** (Presently known as **Civenti Chem (India) Pvt. Ltd.,**), Hyderabad.

❖ PARTICIPATED SEMINARS AND CONFERENCES

- **Participated in one National seminar on “IMPACT OF CLIMATE CHANGE ON BIODIVERSITY ON CONSERVATION”** organized by Department of Botany, Govt. Degree college (W) Wanaparthy in collaboration with Association For Biodiversity Conservation & Development (ABCD) on 17th June 2021.
- **Participated in one National webinar on “CANCER CELLS”** organized by Department of Chemistry, Telangana Social Welfare Residential Degree College(W) Wanaparthy on 28th June 2021.
- **Participated in webinar on “Engaging, Empowering and Equipping the Young Brains Towards Emerging Trends”**, Telangana Social Welfare Residential Degree College(W) Wanaparthy on 3rd -5th June.
- **Participated in National webinar on “The Role of parser in complier”** organized by Department of Computer, Telangana Social Welfare Residential Degree College(W) Wanaparthy on 21th June 2021.
- **Participated in National webinar on “An Introduction to Asymmetric Organic Synthesis”** organized by Department of Chemistry, Telangana Social Welfare Residential Degree College(W) Mahabubnagar on 29th May 2021. **Participated in National webinar on “Recent Trends in Drug Design and Discovery”** organized by Department of Chemistry, Telangana Social Welfare Residential Degree College(W) Nirmal on 25th February 2021.

- **Participated in National webinar on “Molecular Representation in organic chemistry and their interconversion”** organized by Department of Chemistry, Telangana Social Welfare Residential Degree College(W) Adilabad on 25thFebruary 2021.
- **Participated in webinar on “Dr B.R Ambedkar the Beacon Refuge and Armour for destitutes”** organized by Telangana Social Welfare Residential Degree College(W) Mahabubnagar on 29thMay 2021.

WORKSHOPS ATTENDED:

- Participated two days Chemistry workshop by TSWRIES at Heal Vijayawada , 5-6thSeptember 2019.

ATTENDED FIP & FDP



- **3-Day faculty development program** from 13th-15th June 2020, Rc. No TSW/RDC/2620/2020 conducted by TSWREIS.
- **15- Day virtual refresher program on Effective online teaching** from 15th-30th June, 2020, vide reference Rc. No. RDC/ ACAD/1/2020.
- **Ten day online FDP** on Online teaching tools, Aug 5-14, 2020, School of management studies, UOH.
- **Faculty Induction Program** from, July. 8-13, 2019 organized by the UGC-Human Resource Development Centre, University of Hyderabad.
- **Refreshers Course in Chemistry**, from, Dec. 6th-20th, 2023 organized by Malaviya Mission Teacher Training Program,UOH.
- **Faculty Development Program on National Educational Policy 2020: Strategies for Implementation**, Jan. 17-25, 2024 organized by Malaviya Mission Teacher Training Program, UOH.

CONDUCTED SEMINARS/ WEBINARS/ WORKSHOPS

- **Organized One day Webinar** on Cancer and few class of compounds, 28th June, 2021.

ADDITIONAL ROLES

- **Worked as Librarian charge for two years July 2019 to Jan 2022.**
- **Worked as Admission In charge for academic year 2022-23 & 2023-24 at TSWRDC(W) Wanaparth**

PUBLICATIONS: Have **five** Research publications in National and International journals.

- 1) Synthesis and pharmacological evaluation of novel 2H-Benzo[b][1,4]oxazin-3(4H)-ones as a new class of anti-cancer agents.

Ch. Rajitha, P.K. Dubey, S. Venkataiah, F. J. Piedrafita, V. V. Rao and M. Pal, *Eur J. Med. Chem.* 46, 4887-4896, **2011**.



- 2) H₃PO₄/(CF₃CO)₂O Mediated Acylation Followed by Hurd-Mori Reaction: Synthesis of Novel 1,2,3-Thiadiazol Derivatives.

Ch. Rajitha, P.K. Dubey, S. Venkataiah, V. V. Rao and M. Pal, *J. of Heterocycl. Chem.* 50, 630-637, **2013**.

- 3) Synthesis of novel fused 2-Aminobenzothiazoles, Ch. Rajitha^{a*}, B. George Vineel^a, S. Venkataiah^a, P. K Dubey^b *Indian J. Heterocycl. Chem.* 23-24, 111-114, **2014**

- 4) Synthesis of 1,3,4-oxadiazole-2-yl-methyl-4H-benzo[1,4]oxazin-3-ones, Ch. Rajitha^{a*}, B. George Vineel^a, S. Venkataiah^a, P. K Dubey^b *Indian J. Heterocycl. Chem.* 24-25, 321-324, **2015**.

- 5) Synthesis of 6-(2-Aminopyrimidin)-4-ylbenzoxazinones, Ch. Rajitha^{a*}, B. George Vineel^a, S. Venkataiah^a, P. K Dubey^b *Indian J. Heterocycl. Chem.* 24-25, 325-329, **2015**.

EXTENSION LECTURE :

- ◆ Delivered an extension lecture on “Spectroscopy” Topic on 27-06-2022 for the students of MPC, BZC - III year UG course of Govt. Degree college, Kollapur.
- ◆ Delivered an extension lecture on “Coordination Compounds” Topic on 07-03-2024 for the students of MPC, BZC - II year UG course of Govt. Women’s Degree college, Wanaparthy.
- ◆ Delivered an extension lecture on “Importance of chemistry” Topic on 04-05-2024 for the students of MPC, BZC - III year UG course of Govt. Degree college (Co.Ed) ,Wanaparthy.
- ◆

WEBINAR ORGANIZED:

A 1- Day online webinar on “Cancer Cells “ 28th JUNE 2021.

ADDRESS FOR COMMUNICATION:**Permanent**

Dr,Ch.Rajitha

D/o Ch.Narsimha

H.No. 4-10-711

Siddartha colony

Nalgonda- 508001.

Mobile: 9966955358

Email:chrajitha2010@gmail.com.



J.RAGA SWATHI
PERSONAL PROFILE

NAME : **J.RAGA SWATHI**

DESIGNATION : Degree Lecturer in Chemistry

DEPARTMENT : Chemistry

TYPE OF JOB : REGULAR

DATE OF JOIN : 16-08-2019

DATE OF BIRTH : 02-06-1988

EXPERIENCE : 4 Years and 6 Months

HIGHEST QUALIFICATION : M.Sc.(Organic Chemistry), AP-SET.

LANGUAGES KNOWN : ENGLISH, HINDI, TELUGU

NATIONALITY : INDIAN

RELIGION : HINDU

PHONE NUMBER : 8500545586

EMAIL ID : ragaswathi02@gmail.com

OFFICE ADDRESS : TSWRDC(W)- WANAPARTHY

PERMANENT ADDRESS : H.No.:1-9-40,B.C.Colony,Kollapur, Nagar Kurnool(Dist),
509102.



EDUCATIONAL DETAILS:

Course	Institute	University/ Board	Year of Pass	%
PG (Organic Chemistry)	Sri Padmavati Mahila Vishwa Vidyalayam	SPMVV	2011	72.13%
B.Sc.(Micro biology, Chemistry. Computer applications)	Aurora Degree College, Hyderabad	Osmania University	2009	64.5%
INTER (BiP C)	Sri Prathibha Junior College, Ongole.	Board of Intermediate Education	2005	80.8%
SSC	Sri Satya Sai Vidya Nisham, Kollapur.	Board of Secondary Education	2003	84.5%

WORK**EXPERIENCE:**

Total Teaching Experience: 4 Years and 6 Months

- Aug 2019 to till date: Working as a Degree Lecturer in TSWRDC(W), Wanaparthy

ACHIEVEMENTS :

- Qualified APSET in 2013

WORKSHOPS ATTENDED:

- A 1 week Faculty Induction Program by UoH (University of Hyderabad) in December 2019.
- A 3- Day Faculty Development Program from 13th - 15th June 2020 vide reference Rc.No.TSW/RDC/2620/2020.

WEBINARS ATEENDED:

- ◆ Participated in the national webinar on “An introduction to Asymmetric Organic Synthesis”.
- ◆ Participated in the national webinar on “Biodiversity and Conservation”.
- ◆ Participated in the national webinar on “National Intellectual Property Rights Awareness Mission”.
- ◆ Participated in the national webinar on “Time Management”.
- ◆ Participated in the national webinar on “ Molecular Representation in Organic Chemistry & their interconversion”.

EXTENSION LECTURE :

- ◆ Delivered an extension lecture on “Hybridization” Topic on 07-03-2024 for the students of MPC,BZC - I year UG course of Govt. Women’s Degree college,Wanaparthy.

WEBINAR ORGANIZED:

A 1- Day online webinar on “Cancer Cells “ 28th JUNE 2021.

PERSONAL ASSETS :

- I am passionate about my work and it helps me bring my best to the role.
- Fast learning Capability in any new cutting-edge technology.
- Can adopt to any situation and any environment, with Self-motivation.

DECLARATION

I hereby assure you that the particulars given are true and correct to the best of my knowledge.

J.Ragaswathi

(DL inChemistry)

M.JYOTHI PERSONAL PROFILE

NAME Mane Jyothi
DESIGNATION Degree Lecturer in Chemistry
DEPARTMENT Chemistry
TYPE OF JOB Regular
DATE OF JOIN 31-08-2019
DATE OF BIRTH 11-08-1993
EXPERIENCE 4 Years 5 months



HIGHEST QUALIFICATION MSc in Chemical Sciences

LANGUAGES KNOWN English, Hindi, Telugu, Marati

NATIONALITY Indian

RELIGION Hindu

PHONE NUMBER 9573035615

EMAIL ID jyomanechem@gmail.com

OFFICE ADDRESS TSWRDC (W) Wanaparthi, Nagavaram

PERMANENT ADDRESS H-No. : 2-519, Sai Nagar Colony, Miyapur, Hyderabad, Telangana 500049.

Experience:

Degree Lecturer in Chemistry

Sept 2019 -

Present

Telangana Social Welfare Residential Degree College for Women Wanaparthi - Telangana, India.

Junior Research Fellow (JRF)

2016 - 2019

University of Hyderabad, Telangana – India.

Educational Qualifications:

Course	Institution	Board/University	Year of passing	Percentage/CGPA
IMSc (Chemistry)	UNIVERSITY OF HYDERABAD	UOH	2016	7.73
11th+12th (HSC)	APSWR (IIT LTCD), Gowlidoddi, Telangana.	AP Board of Intermediate Education	2011	93.8%
SSC	APSWRS Narsingi Telangana	AP Board of Secondary Education	2009	83.3%



Publications:

1. "Spatio-Temporal Growth Anomalies in Photo-Isomerisable Cyanostilbene-Based Crystals Triggered by Light". *J. Phys. Chem. C* (2021), 125, 4909-4916.
2. "Direct micro-scale monitoring of aggregation, its growth and diffusion via aggregation-induced emission". *Soft Matter* (2020), 16, 2664-2668.

Awards/Fellowships:

- Selected as Government Degree lecturer in Chemistry for TSWREIS, Telangana - 2019
- Qualified CSIR-JRF Dec-2016

- Qualified GATE-2016**Project:**

Masters Project title: *“Self-assembly of Alq₃ for whispering gallery mode (WGM) resonance and micro rods for optical wave guiding”.*

Research Skills:

- Expertise in carrying out multi-step organic synthesis and Self-assembly techniques.
- Handling moisture sensitive reagents and catalysts.
- Ability to develop novel synthetic organic methodologies.
- Structural characterization of organic compounds using NMR, Mass (ESI-MS, HRMS) and UV-VIS, IR spectral techniques.
- Laboratory expertise in handling various chemicals, performing moisture sensitive / -78 °C temperature reactions.
- Isolation, purification of organic compounds by TLC and Column chromatography.
- Single particle micro studies using Confocal Raman spectroscopy and Atomic Force Microscopy.

Technical Knowledge:

- **Software:** MS Office, Sci-Finder, Origin Pro, ChemDraw, Mercury
- **Programming Languages:** Fortran 66, Python

Area of Interest:

Nano photonics | Mechanophotonics | Single particle Micro Spectroscopy |
Covalent Organic Frameworks.

Subjects Taught:

BSC Chemistry

Paper I BSC

Chemistry Paper

II BSC Chemistry

Paper III BSC

Chemistry Paper

IV

BSC Chemistry Paper V (Molecular Spectroscopy and Separation
techniques) BSC Chemistry Paper VI (Medicinal Chemistry)

Advanced Chemistry

**Conferences/Workshops:**

- Mental well-being - 2024 @ TSWRJC Madnapur
- Faculty Induction Programme by UGC-HRDC - 2019 @ University of Hyderabad
- OSI – International Symposium on Optics – 2018 conducted by IIT Kanpur
- Frontiers in Nanoscience and Technology – 2018 conducted by UOH
- VI - Science Conclave - 2013 conducted by IIIT Allahabad

DECLARATION

I hereby assure you that the particulars given are true and correct to the best of my knowledge.

Date:**Mane Jyothi****Place:****(DL Chemistry)**

