

## DEPARTMENT OF CHEMISTRY



### 1. VISION:

To offer a high quality of undergraduate and postgraduate curriculum.

To improve employment opportunities and entrepreneurship skills of students.

### 2. MISSION:

To Spread the knowledge of Chemistry through education for the benefit of society.

To create Research Orientation among students for Nation Building.

### 3. OBJECTIVES:

an appreciation of the applications of chemistry in daily life.

an understanding of the concepts and theories in chemistry.

help students to develop research knowledge of chemistry.

help students to solve problems involving chemistry.

help students to understand principles involved in various analytical techniques and their uses

help students to understand the importance of chemical elements of periodic table and their physical and chemical properties.

### 4. FACULTY

S.No	Name of the Teacher	Qualification	Specialization	Designation	Profile	Vidwan ID
1.	Dr. G. Pranitha (HOD)	M.Sc, Ph.D	Organic Chemistry	Assistant professor	<a href="#">view document</a>	244903
2.	M. Prabhavathi	M.Sc; NET, (Ph.D)	Analytical Chemistry	Assistant professor	<a href="#">view document</a>	244809
3.	K. Saritha Rani	M.Sc, NET (Ph.D)	Organic Chemistry	Assistant professor	<a href="#">view document</a>	244806

4.	Dr. Rafiya Sultana	M.Sc , Ph.D	Organic Chemistry	Assistant professor	<a href="#">view document</a>	84255
5.	N.Satyajit Raj	M.Sc., SET,(Ph.D)	Inorganic Chemistry	Assistant professor	<a href="#">view document</a>	-

5. **BOS:** [view document](#)

## 6. PROGRAMMES & COURSES OFFERED:

**B.Sc Chemistry:**

Mathematics-physics-chemistry,

Mathematics-chemistry-Computer science,

Botany-Zoology-chemistry,

Biotechnology-Zoology-chemistry,

Microbiology-Zoology-chemistry,

Microbiology-Botany-chemistry,

Biotechnology-Botany-chemistry,

AppliedNutrition-Zoology-chemistry,

AppliedNutrition-Botany-chemistry,

AppliedNutrition-Microbiology-chemistry,

Micribiology-Biotechnology-chemistry,

computer science-zoology-chemistry,

Genetics-zoology-chemistry,

Genetics-Botany-chemistry,

M.sc(Organic Chemistry)

## 7. CURRICULUM

Programme Specific Outcomes (PSO): [view document](#)

Course Outcomes (CO): [view document](#)

Syllabus: [view document](#)

8. **SEMINARS/WORKSHOPS/CONFERENCES/SYMPOSIUMS ORGANIZED:** [view document](#)

9. **Jignasa Projects of the department:**

2017-18 Jignasa Project: [view document](#)

2019-20 Jignasa Project: [view document](#)

2021-22 Jignasa Project: [view document](#)

**10. YouTube channel: "gdcwchemistrydept"**

**11. e-Adhyayan Kosh: [view document](#)**

**12. ACTIVITIES CONDUCTED : [view document](#)**

**13. TEACHER ACHIEVEMENTS:**

**Books\Chapters Published:**

Two text books were published by faculty ( Dr.G.Pranitha, Dr. Rafia Sultana, K.Saritha Rani, Dr.B.Rajani) of Department of chemistry, GDCW(A).

1. A Text Book of Chemistry For B.Sc-II Year, Semester-III (CBCS) By Divya Lakshmi Publishers and Distributers with ISBN: 978-93-91576-20-2.
2. A Text Book of Chemistry For B.Sc-II Year, Semester-IV (CBCS) By Divya Lakshmi Publishers and Distributers with ISBN: 978-81-952384-4-6.

**Research Publication:**

**Dr.G.Pranitha**

1. Quantitative Determination of Few Commercial Drugs by Using NBS and 8(6), Rhodamine-B Couple: A Spectrophotometric Study, J. Pharm. Sci. & Res. Vol. 2016, 390-394.
2. Spectrophotometric determination of drugs by using N-bromo succinimide and Rhodamine-b dye couple, World Journal of Pharmacy and Pharmaceutical Sciences, 2016, 5(6): 2249-2260.
3. A systematic investigation on the effect of Reducing Agents towards Specific Capacitance of NiMg@OH/ Reduced Graphene Oxide Nanocomposites, Materials Technology,2021.

**Dr. Rafia Sultana**

1. Prediction of Certain Well-Characterized Domains of Known Functions within the PE and PPE Proteins of Mycobacteria. Rafiya Sultana, Karunakar Tanneeru, Ashwin B. R. Kumar, Lalitha Guruprasad\*. PLoS ONE, 2016, 11(2): e0146786.
2. Facile one pot synthesis of sulphur doped graphene for non-enzymatic sensing of hydrogen peroxide , Saritha Rani Kanuganti,Rafiya Sultana,Deepti Kolli,Gnana Kiran Maddula &Mutta Reddy Singampalli, International Journal of Environmental Analytical Chemistry, Volume , Year 2021.

**K.Saritha Rani**

1. Facile one pot synthesis of sulphur doped graphene for non-enzymatic sensing of hydrogen peroxide , Saritha Rani Kanuganti,Rafiya Sultana,Deepti Kolli,Gnana Kiran Maddula &Mutta Reddy Singampalli, International Journal of Environmental Analytical Chemistry, Volume , Year 2021.
2. Electrocatalytic oxidation of hydrazine at sulphur-doped graphene-modified glassy carbon electrode, K. Saritha Rani, Bulletin of Materials Science, 2021.
3. Synthesis and application for the reduction of 4- nitrophenol using palladium nanoparticles decorated graphene oxide, k. Saritha rani, Rasayan Journal of Chemistry, 2021, 0974-1496(Print) 0976-0083(Online).

**Awards**

1. Saritha Rani Kanuganti received the Spandana Eda International Foundation award on World Teachers Day 2021, given by Guru Spandana 2021.

**M. Prabavathi**

1. Optical thermophysical and ultrasonic properties of biosynthesized nano(INDIUM oxide) fluids, M. Prabavathi, Proceedings of national conference on materials for specific applications, ISBN 978-81-928677-2-4, 2018.

**14. STUDENT ACHIEVEMENTS:** [view document](#)

**15. FUTURE PLANS:**

To plan interdisciplinary research

To organize National seminar & workshops

Provide placements in academic & industrial sector

Plan to conduct classes for NET and SLET.

**16. CONTACT US:** [gdcwchemistrydept@gmail.com](mailto:gdcwchemistrydept@gmail.com)