

# DEPTT. OF CHEMISTRY

B-A

LAB-B



## About Department

### ➤ Departmental profile

- Year of Establishment:1961
- Posts sanctioned:
  - (a)Teaching: 06
  - (b) Non-Teaching:01
- Present position of posts: Filled
- Programmes offered : Both UG & PG Chemistry.
- Vision and Mission of Department: Department of Chemistry is committed in inculcating scientific temperament in its students.
- Futuristic approach: Applied research.

## Departmental Facilities

➤ No. of Labs available :02

➤ No. of Major Equipments available:

1.Weighing Machines: 04

2.Spectrophotometer: 01

3.Refractometer: 02

4.Polarimeter: 01

5.Conductometer: 02

6.pH-Meter: 06

7.Magnetic stirrer: 02

8. Magnetic Beed: 05

9.Melting point apparatus: 04

10.Refrigerator: 02

11.Oven: 02

12.No. of computers: 01

13.Printer: 01

✓ Internet facility

➤ ICT enabled class rooms and labs:

➤ Detail of Chemistry books available in library: 4200

➤ No. of Journals in hard copy form: 01

➤ No. of e-Books and e-Journals available related to Chemistry: 250 (through enlist)

## Teaching Staff

➤ No of Sanction posts:06

➤ No. of Teaching Assistant: 03

➤ Present Status: Filled

Name of the Faculty	Designation	Qualification	Specialization
Dr. Sunil Kumar Bhat	Associate Professor	M.Phil, PhD	Organic Chemistry
Dr. Ved Kumar	Associate Professor	M.Phil, PhD	Inorganic Chemistry
Dr. Rabia Javed	Associate Professor	PhD	Inorganic Chemistry
Prof. Sunita Kumari	Associate Professor	M.Phil	Physical Chemistry
Dr. Satish Kumar	Assistant Professor	PhD	Organic Chemistry
Dr. Firdoos Ahmad Itoo	Assistant Professor	PhD	Physical Chemistry
Dr. Faizan	Teaching Assistant	PhD	Organic Chemistry
Dr. Nasseb Singh	Teaching Assistant	PhD	Organic Chemistry
Dr Anu Radha	Teaching Assistant	PhD	Inorganic Chemistry

## Supporting Staff

S. No	Nature of post	Existing
1.	Lab. Assistants	01
2.	Lab. Attendants	03
3.	Peon	Nil
4.	Others	Nil

# Teaching Staff

- No of Sanction posts:06
- No. of Teaching Assistant: 03
- Present Status: Filled

Name of the Faculty	Details of achievements (workshops, conferences, other programmes)	Detail of Publications with full detail	Year of Publication
Dr. Sunil Kumar Bhat	Nil	Higher education in India. Emerging Issues, challenges and important suggestions. DOI- 10.53571/NJESR. 2022.4.3.35-39	2022

Name of the Faculty	Details of achievements (workshops, conferences, other programmes) 2017 to 2022	Detail of Publications with full detail	Year of Publication
Dr. Ved Kumar	National Conferences = 12 International Conferences = 04 FDP's = 08	<ol style="list-style-type: none"> <li>1. A Text Book of Inorganic Chemistry Semester-II (ISBN 978-93-89800-27-2.)</li> <li>2. Green Methods in Chemistry. (ISBN 978-93-87013-79-7)</li> <li>3. A simplified Text Book of Chemical Energetics, Equilibria and Functional Organic Chemistry (ISBN 978-93-87013-76-6).</li> <li>4. Cosmetic Perfumes and Medicinal Agents from Natural sources. (ISBN-978-93-87013-85-8)</li> <li>5. Fuel Chemistry (ISBN-978-93-87013-86-5)</li> </ol>	<p>2019-20</p> <p>2019-20</p> <p>2019-20</p> <p>2020-21</p> <p>2021</p>

Name of the Faculty	Details of achievements (workshops, conferences, other programmes) 2017 to 2022	Detail of Publications with full detail	Year of Publication
Dr. Rabia Javed	National Conferences =08 International Conferences =05 FDP's =06 Refresher= 01	<ol style="list-style-type: none"> <li>1. A New Concept of Practical Chemistry. Semester I</li> <li>2. A Text Book Chemistry Semester-III</li> <li>3. A Text Book Chemistry Semester-V (ISBN no.=9788193681787)</li> </ol>	2018



Name of the Faculty	Details of achievements (workshops, conferences, other programmes) 2017 to 2022	Detail of Publications with full detail	Year of Publication
Prof. Sunita Kumari	National Conferences = 11 International Conferences = 08 FDP's =07 Refresher Course= 02	Nil	

Name of the Faculty	Details of achievements (workshops, conferences, other programmes) 2017 to 2022	Detail of Publications with full detail	Year of Publication
Dr. Satish Kumar	<p>National Conferences = 11  International Conferences = 02  FDP's =05  Refresher Course= 02  Three day workshop on research methodology organized by GCW parade, Jammu from 30<sup>th</sup> Jan 1<sup>st</sup> feb, 2018  Three weeks refresher course in chemistry from 03-12-2018 to 23-12-2018 organized by UGC HRDC, University of Jammu, Jammu  Online workshop on 'Life Skills Management for Teachers in Higher Education' organized by Faculty Development Centre- SMVDU .</p>	Nil	

Name of the Faculty	Details of achievements (workshops, conferences, other programmes) 2017 to 2022	Detail of Publications with full detail	Year of Publication
Dr. Firdoos Ahmad Itoo	<p><b>National Conferences = 11</b></p> <p><b>International Conferences = 05</b></p> <p><b>Faculty Dev. Programs =03</b></p> <p><b>Refresher Course= 02</b></p>	<p>1. Experimental-DFT interface of hydrogen bonding description of 1:10 methanol-water solution . Journal of Molecular Liquids (DOI:10.1016/j.molliq.2017.09.094)</p> <p>2. Density Functionalized Drug-Surfactant Interaction of Aqueous SDS-Tartrazine (June 2019 <a href="#">Journal of Chemistry Environmental Sciences and its Applications</a> DOI:<a href="#">10.15415/jce.2018.51002</a>)</p> <p>3. Density functional aspects and thermodynamic evaluation of sodium dodecyl sulphate in aqueous tartrazine <a href="#">Journal of King Saud University - Science</a> 32(4) DOI:<a href="#">10.1016/j.jksus.2020.04.009</a></p> <p>4. Biochemical tale of CO in the vale of eye: a mini review. Journal of Ophthalmology and Vision Care. DOI:04.2021/1.1006.</p> <p>5. SURFACTANT MATERIAL PROPERTIES AND CORONAVIRUS SURFACE: A SURFACE INTERACTION FOR COVID-19 TREATMENT AND VACCINATION DOI:<a href="#">10.22159/ijcr.2021v5i4.181</a></p>	<p><b>2017</b></p> <p><b>2019</b></p> <p><b>2020</b></p> <p><b>2021</b></p> <p><b>2021</b></p>

# ADDITIONAL RESPONSIBILITIES SHARED BY STAFF MEMBERS

Name of Faculty member		Additional responsibilities shared (different committees/assignments)
1	Dr. Sunil Kumar Bhat	College advisory Committee, Discipline /Anti-ragging Committee, Debate/Symposium Committee, Atam Nirbhar Bharat ,
2	Dr. Ved Kumar	College advisory Committee, Transport and Gen. Set Committee, Library Committee, Conference Hall/Smart Classes/Edu. Set/Virtual Classroom, College Beautification/Green Audit Committee, Science Club, Science Material Purchase Committee, Financial Aid Committee,
3	Dr. Rabia Javed	Academic Arrangement/Local Fund/Daily Wagers Committee, Counseling Centre for Drug De-addiction,
4	Prof. Sunita Kumari	College Development Committee, Picnic/Tour Committee, Scholarship Committee, College Beautification/Green Audit Committee, Women Empowerment/Development Cell, Heritage Cub, Medical Aid Committee,
5	Dr. Satish Kumar	Examination/Award Roll Committee, College Canteen Committee,
6	Dr. Firdoos Ahmad Itoo	Discipline /Anti-ragging Committee, Sports and Gym Committee,

# OBJECTIVES OF THE DEPARTMENT

- Objective of the department is to inculcate scientific temperament in students.
- Make students to understand the practicality of the subject and remedies it provides to the sufferings of people.
- Green chemistry is taught with the purpose to make students understand the sustainability of the subject.

# Year-wise Enrollment of the Students

Year		2016-17	2017-18	2018-19	2019-20	2020-21
UG	Sem-I	260	205	296	225	237
	Sem-II	260	205	295	225	197
	Sem-III	153	155	192	192	150
	Sem-IV	153	155	192	192	150
	Sem-V	144	147	146	151	148
	Sem-VI	117	147	146	149	148
	Skill Course Sem-III	30	26	34	42	43
PG	Sem-I	NIL	NIL	21	24	25
	Sem-II	NIL	NIL	21	24	24
	Sem-III	NIL	NIL	NIL	21	24
	Sem-IV	NIL	NIL	NIL	21	24

## Year-wise Result Statement of UG-Chemistry (Semester-I)

Year	Total Enrollment	Male	Female	Appeared in examination	Passed	Pass %age
2016-17	260	195	65	252	127	50.30%
2017-18	205	154	51	168	86	51.20 %
2018-19	296	239	57	262	148	56.40 %
2019-20	225	162	63	196	119	60.70 %
2020-21	237	160	77	173	170	98.20 %

## Year-wise Result Statement of UG-Chemistry (Semester-II)

Year	Total Enrollment	Male	Female	Appeared in examination	Passed	Pass %age
2016-17	260	195	65	224	197	87.9%
2017-18	205	154	51	172	152	88.3%
2018-19	296	239	57	243	223	91.7%
2019-20	225	162	63	186	175	94.00 %
2020-21	197	135	62	170	169	99.40 %

## Year-wise Result Statement of UG-Chemistry (Semester-III)

Year	Total Enrollment	Male	Female	Appeared in examination	Passed	Pass %age
2016-17	154	108	46	153	136	88.88 %
2017-18	155	103	50	153	113	73.85 %
2018-19	152	111	41	149	108	72.48 %
2019-20	192	136	56	183	165	90.10 %
2020-21	150	102	48	150	147	98.00 %

## Year-wise Result Statement of UG-Chemistry (Semester-IV)

Year	Total Enrollment	Male	Female	Appeared in examination	Passed	Pass %age
2016-17	154	108	46	153	132	86.20 %
2017-18	155	103	50	153	121	79.08 %
2018-19	152	111	41	149	110	73.82 %
2019-20	192	136	56	183	181	98.90 %
2020-21	150	102	48	150	149	99.33 %



## Year-wise Result Statement of UG-Chemistry (Semester-V)

Year	Total Enrollment	Male	Female	Appeared in examination	Passed	Pass %age
2016-17	144	78	66	141	128	90.7%
2017-18	147	79	68	145	120	82.7%
2018-19	146	80	66	143	132	92.3%
2019-20	151	85	66	149	148	99.3%
2020-21	148	73	75	147	147	100%

## Year-wise Result Statement of UG-Chemistry (Semester-VI)

Year	Total Enrollment	Male	Female	Appeared in examination	Passed	Pass %age
2016-17	117	76	41	109	95	87.2%
2017-18	147	79	68	133	116	87.2%
2018-19	146	80	66	134	118	88.0%
2019-20	148	85	64	133	126	94.7%
2020-21	148	73	75	147	147	100%

## Year-wise Result Statement of PG-Chemistry (Semester-I)

Year	Total Enrollment	Appeared in examination	Passed	Pass %age
2016-17	NIL	NIL	NIL	NIL
2017-18	NIL	NIL	NIL	NIL
2018-19	21	21	21	100 %
2019-20	24	24	24	100 %
2020-21	25	25	25	100%

## Year-wise Result Statement of PG-Chemistry (Semester-II)

Year	Total Enrollment	Appeared in examination	Passed	Pass %age
2016-17	NIL	NIL	NIL	NIL
2017-18	NIL	NIL	NIL	NIL
2018-19	21	21	21	100 %
2019-20	24	24	24	100 %
2020-21	25	24	24	100%

## Year-wise Result Statement of PG-Chemistry (Semester-III)

Year	Total Enrollment	Appeared in examination	Passed	Pass %age
2016-17	NIL	NIL	NIL	NIL
2017-18	NIL	NIL	NIL	NIL
2018-19	NIL	NIL	NIL	NIL
2019-20	21	21	21	100 %
2020-21	24	24	24	100 %

## Year-wise Result Statement of PG-Chemistry (Semester-IV)

Year	Total Enrollment	Appeared in examination	Passed	Pass %age
2016-17	NIL	NIL	NIL	NIL
2017-18	NIL	NIL	NIL	NIL
2018-19	NIL	NIL	NIL	NIL
2019-20	21	21	21	100 %
2020-21	24	24	24	100 %

# Students Progression

Name of student	Degree	Status
Mr. Rattandeep Singh	PG Chemistry (passout)	Working as Project Associate at CSIR-IIIM Jammu
Mr. Mohd Rizwan Ali	PG Chemistry (passout)	Serving in J&K Govt. as Panchayat Accounts Assistant
Mr. Sahil Sharma	PG Chemistry (passout)	Bank Employee in State Bank of India
Mr. Parshottam	PG Chemistry (passout)	Serving in J&K Govt. as Panchayat Accounts Assistant
Ms Remu Sharma	UG Chemistry (passout)	Currently pursuing MSc in Chemistry
Ms. Reeta	UG Chemistry (passout)	Currently pursuing MSc in Chemistry
Ms. Alisha	UG Chemistry (passout)	Currently pursuing MSc in Chemistry
Mr. Pardeep	UG Chemistry (passout)	Currently pursuing MSc in Chemistry
Ms. Parul	UG Chemistry (passout)	Currently pursuing MSc in Chemistry
MS. Sonia	UG Chemistry (passout)	Currently pursuing MSc in Chemistry
Ms. Simran	UG Chemistry (passout)	Currently pursuing MSc in Chemistry
Ms. Shagufta	UG Chemistry (passout)	Currently pursuing MSc in Chemistry

# Best Practices

Keeping in view the topography of the place, most of the students belong to families where teaching learning process is a distant dream and to full fill the gap department is usually providing sample books to the students , so that their study may not hamper.

The department is making it possible for the students to have understanding of the subject via industrial tours etc.

# Innovative Initiatives by the Department

- The innovative initiative regarding our Chemistry department in GDC Udhampur is running Post Graduation course which only few colleges in the Union territory are offering.
- Industrial visits also is used as an innovative method to make students understand the gravity of the subject.

# Teaching & Learning Methodology

- As chemistry is experiment oriented, hence emphasis is always put on practical aspects
- Interactive smart boards are usually availed in displaying pictorial concepts
- Quiz competitions, industrial visit reports, seminar presentation etc. are used as a participative learning method
- Interactive group discussions are usually practiced in order to solve the problems faced by the students while understanding the subject

# Mode of Assessment

➤ In order to assess the performance of the students, apart from final exams which is conducted as per the guidelines of the Jammu university, various tools are used to assess the performance of the students are used, *viz.*

➤ Class Tests

➤ Assignments

➤ Reports

➤ Projects

➤ Seminars



# SWOC Analysis

## ➤ **Strength:**

1. The strength of the department is mainly its dedicated team who under limited resources are running the department at UG/PG Levels efficiently
2. Without making much excuses, the department is taking all the limitations in an optimistic manner & puts things in order

## ➤ **Weakness:**

1. As said above, the department is running UG & PG courses but the infrastructure many times turns hiccup in making things more efficient and large.
2. Manpower is another weakness that needs to be looked after as early as possible for good of the department

## ➤ **Opportunities:**

1. Chemistry is a research oriented subject, henceforth, department should avail the opportunity in order to inculcate scientific temperament among students
2. Postgraduate students presence in the department provides an opportunity where undergraduate students via interactive sessions with their seniors may turn more enthusiastic in pursuing chemistry as their subject for higher education.

## ➤ **Challenges:**

1. Teaching Learning process in itself is a challenge, therefore, to keep the process running as deserved, the department should believe in "Scope of Improvement" always.
2. Keeping topography of the place in mind, the department should attract students more towards the subject.

# Glimpse of the Departmental Activities

