

## Department of Chemistry



### **Introduction:**

The Department of Chemistry is established in 1978. The department is in function of running Under Graduate (B.Sc) and Post Graduate (M.Sc. Analytical Chemistry and Organic Chemistry) courses. Choice based Credit Courses are implemented at UG and PG level. The department has a recognized research centre for Ph.D. and presently 12 research scholars are pursuing their research.

All the faculties are with Ph. D. degree and are recognized research guides. The department is fully equipped with instruments, equipments and department has a departmental library to study the Chemistry in more effective manner at UG and PG levels. Along with theory and practicals, there are extra activities conducted by department for true benefit of students such as; seminars, live demonstrations, industrial visits, guest lecturers etc. The department also organizes the campus placement campaigns for PG students and many students have got the job opportunities in various multinational companies like Cipla Pharmaceuticals Ltd., Lupin Pharmaceuticals Ltd., Emcure, Sun Pharma etc.

### **Salient Features:**

#### **Laboratories**

Well equipped and spacious laboratories for UG, PG and research activities. The laboratories

are maintained with proper ventilation. Along with all necessary requirement for safety purpose fire extinguishing system is well maintained.

### **Departmental Library**

The departmental library has been fully prepared with all the necessary reference books required for UG and PG classes.

### **Internet Facility**

The department provides internet facility for PG students and teachers for browsing current knowledge of the subject.

### **Research Laboratory**

The department has a well equipped research laboratory, where Teachers, PG students and research scholars carry out their research activities on projects funded by different agencies. These include UV-VIS, FT-IR, Gas Chromatography (Shimadzu-2014) and Simultaneous Thermal Analyser (Shimadzu, DTG-60). Department also set up a small lab for antimicrobial study with all necessary equipments. Our research students are conducting their mandatory research projects at various laboratories like C-MET, NCL, Pune University, etc.



### Faculty Profile:

Name	Qualification	Designation	Specialization	Experience (Years)
 Dr. A. B. Pawar	M.Sc; Ph.D; NET	Associate Professor	Organic Chemistry	27
 Dr. V. B. Jadhav	M.Sc; Ph.D.	Associate Professor	Physical Chemistry	25
 Dr. S. P. Dagade	M.Sc; Ph.D.	Assistant Professor	Organic Chemistry	12
 Dr. M. P. Wadekar	M.Sc; Ph.D.	Assistant Professor	Inorganic Chemistry	10
 Dr. V. B. Adsul	M.Sc; Ph.D.	Assistant Professor	Organic Chemistry	14

**Visiting Faculty Profile:**

S.No.	Name of Visiting Faculty	Qualification	Experience (Years)
1.	Dr. V. V. Dhapte	M.Sc.; M.Phil; Ph.D.	36
2.	Dr. Jagtap G.S.	M.Sc.; M.Phil; Ph.D.	39
3.	Dr. Sarawadekar R.G.	M.Sc.; Ph.D.	15
4.	Dr. Mrs. Deshpande N. R.	M.Sc.; Ph.D.	38
5.	Dr. Mhetre A.N.	M.Sc.; Ph.D.	35
6.	Dr. Pol P.G	M.Sc.; Ph.D.	37
7.	Dr. Deogadkar B.B.	M.Sc.; Ph.D.	36
8.	Dr. Mahamulkar B.G.	M.Sc.; Ph.D.	38
9.	Dr. Khatiwora Eliza	M.Sc.; Ph.D.	11
10.	Prof. Kumbhar A.S.	M.Pharm. MBA.	26
11.	Prof. Mrs. Walunjkar M.S.	M.Sc.; M.Phil.	10

**Number of PG Students during last three years admitted and passed:**

Analytical & Organic Chemistry	PG Students Strength					
	Admitted			Passed		
	2014	2015	2016	2014	2015	2016
<b>M Sc I</b>	76	83	83	82	74	82
<b>M Sc II</b>	80	76	82	57	75	75

**Conference/Seminar/Workshops Organized By Department:**

S.No.	Title of Seminar	Duration	Funded by
1	National Seminar on "New Challenges in Chemistry and Nanoscience (NCCNS – 2012)	13-14, February 2012	UGC, New Delhi
2.	National Seminar on 'Recent Trends in Chemical and Material science' (RTCMS – 2013)	12-13, January 2013	BVDU, Pune
3.	National Workshop in Analytical Chemistry (NWAC- 2013)	17 <sup>th</sup> September 2013	UGC, New Delhi
4.	National Workshop on "Challenges in Chemical Analysis" (CICA-2014)	13 <sup>th</sup> September 2014	BVDU, Pune
5.	One day Workshop on "Preparing for SET & NET examination"	18 <sup>th</sup> August 2015	BVDU, Pune



### Major/Minor Research Projects sanctioned/ Completed/Ongoing:

#### Details of major research projects

S.No.	Year	Name of the Project	Funding Agency and Name of the faculty	Total Grants (Rs.)
1.	2013-2016	Chemical, structural and biological investigation of the metal chelates of 1,2 naphthoquinone oximes	UGC (Dr. V. V. Dhapte)	7,88,136/-
2.	2011-2014	Synthesis and characterization of solid acid catalysts based on supported Nano-crystalline ceria and Molybdenum / silica oxide and study their catalytic activity.	UGC (Dr. S. P. Dagade)	11,19,800/-
3.	2011-2014	Establishment of theoretical computation and calculation of naphthoquinone oxime and its derivatives.	UGC (Dr. G. S. Jagtap)	11,25,400/-
4.	2011-2014	Development of new series of isomeric juglonates and study of their chemical structure and biological properties.	UGC (Dr. M. P. Wadekar)	7,04,300/-

#### Details of minor research projects

S.No.	Years	Title Of The Project	Funding Agency and Name of the faculty	Grants Received
1.	2015-17	Chemical, structural and biological investigation of some transition metal chelate of 1,2 Naphthoquinone oximes.	UGC (Dr. V. B. Jadhav)	3,95,000/-
2.	2013-16	Entamological investigation of Ipomoea carnea leaves	UGC (Dr. Mrs. V. B. Adsul)	85,000/-

#### Research Guides:

S.No.	Name of Guide	No. of Research Scholars Awarded	No. of Research Scholars Registered
1.	Dr. V. V. Dhapte	03	01
2.	Dr. A. B. Pawar	00	02
3.	Dr. V. B. Jadhav	00	01
4.	Dr. S. P. Dagade	02	02

5.	Dr M. P. Wadekar	01	02
6.	Dr. Ms. V. B. Adsul	00	01

**Publications:** Publication per faculty **Total=101**

S.No.	Name of Faculty Member	No. of Publications	International	National
1.	Dr. A. B. Pawar	16	16	00
2.	Dr. V. B. Jadhav	11	10	01
3.	Dr. S. P. Dagade	31	28	03
4.	Dr. M. P. Wadekar	20	12	08
5.	Dr. V. B. Adsul	23	18	05

**LIST OF PATENTS:**

S.No.	Name of Faculty	Title of Patent	Application No/Patent No.	Year
1	Dr. S. P. Dagade	Process for the preparation of dihydroxy diphenylmethane	US Patent no. 6, 492, 566	<b>2002</b>
2.	Dr. S. P. Dagade	Hydroamination of Phenyl acetylene catalyzed by Cu/Mo/SiO <sub>2</sub> mixed oxide catalysts	Indian Patent application no. 2021/MUM/2014	<b>2014</b>
3.	Dr. S. P. Dagade	Synthesis of lipase mediated metal nanoparticles as selective destaining detergents	Indian patent application no.201721019044	<b>2017</b>
4.	Dr. V. V. Dhapte	Biosynthesis of colloidal Silver Nanoparticles using <i>Bryonia Laciniosa</i> for Biological and Pharmaceutical Applications	Indian Patent application no. 2810/MUM/ 2013	<b>2013</b>

**Thrust Areas For Research:**

S.No.	Name	Prioritized area of research
1	Dr. V. V. Dhapte	Coordination Chemistry, Gas sensors, Nanomaterials
2	Dr. V. B. Jadhav	Coordination Chemistry
3	Dr. A. B. Pawar	Coordination Chemistry, Natural Products
4	Dr. S. P. Dagade	Catalysis, Material Science
5	Dr M. P. Wadekar	Coordination Chemistry, Traditional Medicine
6	Dr. V. B. Adsul	Natural products

**Board of Studies in Chemistry (02 / 01 / 2017 to 01 / 01 / 2019)**

<b>Name</b>	<b>Designation</b>
Dr. A. B. Pawar	Chairman
Dr. R. P. Singh	Member
Dr. V. V. Dhapte	Member
Dr. V. B. Jadhav	Member
Dr. Mrs. S. P. Dagade	Member
Dr. Shaibal Banerjee	Member
Dr. N. N. Bhujbal	Member

**Distinction earned by faculty members:**

<b>S.No.</b>	<b>Name</b>	<b>Recognition</b>	<b>Awarding Agency</b>
1	Dr. A. B. Pawar	Shikshak Gaurav Puraskar	PMC, Pune (2013)
2.	Dr. V. B. Jadhav	Shikshak Gaurav Puraskar	PMC, Pune ( 2013)