

# DEPARTMENT OF CHEMISTRY

## Annual Report 2021-22

### 1) Date of Establishment of the Department

UG-June 1991

PG(Drug Chemistry) - June 2009

PG(Organic Chemistry) - June 2020

### 2) Built up area of the Department in Sq.Ft.:-

Sr. No.	Year	Name of the lab	Area in square Ft
1)	2021-22	Lab-I Organic Lab	755.58 Sq.Ft
		Lab-II Inorganic Lab	755.58 Sq.Ft
		Lab-III Main Lab	1013.84 Sq.Ft
		Lab -IV Instrumental lab	497.38 Sq.Ft
		Store Room	234.38 Sq.Ft
		HOD Cabin	121.00 Sq.Ft
		Staff Room	238.00 Sq.Ft
		Department Library	60.00 Sq.Ft
		Open Space	550.00 Sq.Ft
		Gas Chamber	70.00 Sq.Ft

### 3) Students Strength 2021-22

#### UG:

Sr.No.	Class	Male	Female	Total
1)	F.Y.B.Sc	82	77	159
2)	S.Y.B.Sc	56	70	126
3)	T.Y.B.Sc	47	43	90
	<b>Total</b>	<b>185</b>	<b>190</b>	<b>375</b>

#### PG:

Sr.No.	Class	Male	Female	Total
1)	MSc.I org	13	13	26
2)	MSc.I Drug	04	22	26
3)	MSc.II org	15	11	26
4)	MSc.II Drug	15	11	26
	<b>Total</b>	<b>47</b>	<b>57</b>	<b>104</b>

#### 4) Number of Teaching Staff : UG & PG

Sr. No.	Name of Teacher	Qualification	Experience
1)	Dr. D.D.Patil	M.Sc.(Physical Chemistry)B.Ed.,M.phil.,Ph.D.	32 Yrs.
2)	Dr.S.S.Borhade	M.Sc.(Physical Chemistry)M.Ed.,Ph.D	29 Yrs.
3)	Prof.S.B.Surve	M.Sc.(Inorganic Chemistry)B.Ed.	27 Yrs.
4)	Prof. D.C. Pawar	M.Sc.(Physical Chemistry)	25 Yrs.
5)	Dr.S.C. Dandwate	M.Sc.(Analytical Chemistry)Ph.D	27 Yrs.
6)	Prof.R.K.Manjul	M.Sc.(Organic Chemistry)NET,SET,M.Phil	09 Yrs.
7)	Dr.S.P.Goskulwad	M.Sc.(Organic Chemistry)NET(JRF),Ph.D	02 Yrs.
8)	Prof. R.S.Sabale	M.Sc.(Organic Chemistry)	04 Yrs.
09)	Prof. V.B.Savant	M.Sc.(Organic Chemistry) B.Ed. SET	07 Yrs.
10)	Prof. S.S.kawade	M.Sc.(Biochemistry)	03 Yrs
11)	Prof.M.B. Ambre	M.Sc.(Organic Chemistry) SET,	01 Yrs.
12)	Prof.A.M.Aher	M.Sc.(Drug Chemistry)	01 Yrs.
13)	Prof.N.A.Pansare	M.Sc.(Organic Chemistry)	01 Yrs.

#### 4) Work-load : UG

Sr.No	Class	No. of Students	Theory	Practical	Total
1)	F.Y.B.Sc	Div A- Div B-	$03 \times 02=06$ $03 \times 02=06$	$08 \times 04=32$	$12+32=44$
2)	S.Y.B.Sc.	Div A- Div B-	$04 \times 02 =$ 08 $04 \times 02 =$ 08	$09 \times 04=36$	$16+36=52$
3)	T.Y.B.Sc.		$06 \times 04 =$ 24	Physical= $04 \times 04=16$ Inorganic= $04 \times 04=16$ Organic= $04 \times 04=16$	$24+48=72$
				<b>Total Workload=</b>	<b>168</b>

**Distribution of workload UG :**

Sr.No.	Name of the Teacher	Class	Workload		Total
			Theory	Practical	
1)	Dr.S.S.Borhade	F.Y.B.Sc	03	...	03
		S.Y.B.Sc.	...	08	08
		T.Y.B.Sc	04	04	08
		<b>Total</b>	<b>07</b>	<b>12</b>	<b>19</b>
2)	Prof.S.B.Surve	F.Y.B.Sc.	...	...	...
		S.Y.B.Sc	04	04	08
		T.Y.B.Sc	04	08	12
		<b>Total</b>	<b>08</b>	<b>12</b>	<b>20</b>
3)	Prof.D.C.Pawar	F.Y.B.Sc.	03	06	09
		S.Y.B.Sc	...	04	04
		T.Y.B.Sc	04	06	10
		<b>Total</b>	<b>07</b>	<b>16</b>	<b>23</b>
4)	Dr.S.C.Dandwate	F.Y.B.Sc.	.....	04	04
		S.Y.B.Sc	02	08	10
		T.Y.B.Sc	04	04	08
		<b>Total</b>	<b>06</b>	<b>16</b>	<b>22</b>
5)	Prof.R.K.Manjul	F.Y.B.Sc.	03	04	07
		S.Y.B.Sc	04	04	08
		T.Y.B.Sc	02	..	02
		<b>Total</b>	<b>09</b>	<b>08</b>	<b>17</b>
6)	Dr.S.P.Goskulwad	F.Y.B.Sc.	....	04	04
		S.Y.B.Sc	04	12	16
		T.Y.B.Sc	02	04	06
		<b>Total</b>	<b>06</b>	<b>20</b>	<b>26</b>
7)	Prof. R.S.Sabale	F.Y.B.Sc.	....	12	12
		S.Y.B.Sc	....	....	.....
		T.Y.B.Sc	02	14	16
		<b>Total</b>	<b>02</b>	<b>26</b>	<b>28</b>
<b>Total workload</b>			<b>40</b>	<b>88</b>	<b>40+88=138</b>
				<b>Total</b>	<b>138</b>

**Distribution of Workload PG :**

Sr.No.	Name of the Teacher	M.Sc.I Drug/org.		M.Sc.II(Drug)		M.Sc.II(Org)		Total
		Theo.	Pract.	Theo.	Pract.	Theo.	Pract.	
1	Dr.D.D.Patil	02	-	-	-	-	-	02
2	Dr.S.S.Borhade	02	-	--	-	-	-	02
3	Prof.R.K.Manjul	-	-	02	-	02	-	04
4	Prod.S.S.Kawade	02	10	06	10	-	-	28
5	Prof. V.B.Savant	02	10	06	10	-	-	28
6	Prof.M.B.Ambre	02	10	06	10	-	-	28
7	Prof.N.A.Pansare	02	10	06	10	-	-	28

8	Prof.A.M.Aher	02	10	06	08	-	-	26
	<b>Total</b>	<b>14</b>	<b>50</b>	<b>32</b>	<b>48</b>	<b>16</b>		<b>146</b>

**7) Paper/Course taught during this year UG:**

Sr.No.	Class	Semester	Course No.	Name of the Course/Paper
1)	F.Y.B.Sc	I	Paper-I Paper-II Paper-III	CH-101: Physical Chemistry CH-102: Organic chemistry CH-203: chemistry practical-II
2)	F.Y.B.Sc	II	Paper-I Paper-II Paper-III	CH-201: Inorganic chemistry CH-202: Analytical chemistry CH-203: chemistry practical-II
3)	S.Y.B.Sc	I & II	Paper-I Paper-II Paper-III	Physical & Analytical chemistry Organic & Inorganic chemistry Practical
4)	T.Y.B.Sc		Paper-I Paper-II Paper-III Paper-IV Paper-V Paper-VI Practical Paper-I Paper-II Paper-III	Physical Chemistry Inorganic chemistry Organic chemistry Analytical chemistry Industrial Chemistry Environment chemistry  Physical Chemistry Inorganic chemistry Organic chemistry

**Paper/course taught during this year PG:**

Sr.No.	Class	Semester	Course No.	Name of the Course/Paper
1)	M.Sc.I (Drug & Organic chem)	I	CHP-110 CHI-130 CHO-150 CHG-190 CHP-107	Physical Chemistry-I Inorganic chemistry-I Organic chemistry-I General chemistry-I Theory & Practical Basic Practical Chemistry-I
2)	M.Sc.I (Drug & Organic chem)	II	CHP-210 CHI-230 CHO-250 CHG-290  CHP-227	Physical Chemistry-II Inorganic chemistry-II Organic chemistry-II General chemistry-II Theory & Practical Basic Practical Chemistry-II
3)	M.Sc.II (Organic chem)	III	CHO-350 CHO-351  CHO-352	Organic reaction mechanism Spectroscopic methods in structure determination Organic stereochemistry

			CHO-353	Free radical, photochemistry, pericyclic reaction and their application
4)	M.Sc.II (Organic chem)	IV	CHO-450 CHO-451 CHO-452 CHO-453 PRACTICAL CHO-347 CHO-447 CHO-452	Chemistry of natural product Synthetic methods in organic chemistry Carbohydrate chemistry, chiron approach, chiral drugs & medicinal chemistry Heterocyclic chemistry & asymmetric synthesis  Single stage preparation Double stage preparation Green chemistry practicals
5.	M.Sc -II ( Drug Chemistry )	III	CHD 361 CHD 362 CHD 363 CHD 364 A  CHD 364 B  Practical CHD 367	Chemistry of Heterocycles and Biologically Active Compounds Advanced Analytical Techniques Stereochemistry and Asymmetric Synthesis Pericyclic Reactions  Practical Course-I
6.	M.Sc -II ( Drug Chemistry )	IV	CHD 461 CHD 462 CHD 463 CHD 464 A  CHD 464 B  Practical  CHD 468 CHD 469	Synthetic Organic Chemistry Chemotherapy Drug Design Organic Chemistry Organic Chemistry  Practical Course-II Practical Course-III

### 8.Result :-UG(Previous year 2021-22

Sr .No	Class	Adm..	App.	Pass	Fail	Abs.	%
01	T.Y.BSc	85	85	42	43	00	49.04

**Rank Holders**

Class	Rank no.	Name of the student	Total Marks	%
T.Y.B.Sc	1	Thorat Ashvini.S	1637	90.91
T.Y.B.Sc	2	Waman Rutuja B.	1592	88.45
T.Y.B.Sc	3	Aher Aarti J.	1561	86.77

**10. Result :-PG(Previous year 2021-22)**

Sr .No	Class	Adm..	App.	Pass	Fail	Abs.	%
1.	M.Sc-I (Org.C hem)	26	26	24	02	00	92.30
2	M.Sc- I(Drug C hem)	26	26	18	08	00	69.00
3	M.Sc-II (Drug Chem)	26	26	21	05	00	80.00
4	M.Sc-II (Organic Chem)	26	26	19	06	00	73.00

**Rank Holders**

Class	Rank no.	Name of the student	Total Marks	%
Msc II Drug Chem	1	Dhighe Sonal.B	1547	77.32
	2	Ghumare Mangesh	1495	74.75
	3	Gaikwad Gaurav	1482	74.10



Class	Rank no.	Name of the student	Total Marks	%
Msc II Organic Chem	1	Dighe Rohini B.	1605	80.25
	2	Shinde Rutuja B.	1523	76.15
	3	Varpe Saurabh N.	1453	72.65

**11) Aptitude Test-** Beginning of the academic year 2021-2022, 52 students have applied for the M.Sc.I (Drug & Organic Chemistry) .We have conducted aptitude test of these students and 52 students selected for the said Examination

**10) Enrichment Program For Advanced Learner:** We have selected advanced learner students by Tutorials & 10 students selected from T.Y. B.Sc. Chemistry M. Sc. I & II Class. We have delivered the extra lectures to enrich their knowledge & score. We have also provided reference books them by library & We have also conducted extra class for solving reactions.

**11) Remedial Teaching For Slow Learners:-** The students who have got less marks in the Tutorials & Unit test, are students from T.Y. B.Sc. Chemistry Class We have conducted extra lectures on organized schedule for Slow learners & taught the same topic which has taught in regular class. We have also tried to develop their basic concepts & skills.

**Remedial Teaching & Advanced Learners 2021-2022**

#### Statistical data

Class	Slow Learners	Advanced Learners
M.Sc-I (Org.& DRUG)	04	05
M.Sc-II (Org.& DRUG)	04	05
<b>Total</b>	<b>08</b>	<b>10</b>

**12) Student Evaluation:-** During academic year 2021-2022our Department had conducted 06 Tutorials, 02 Unit tests & 01 Terminal examinations.

**13) Guest Lectures :-** Our department has been organized guest lecture under Quality improvement scheme is as under.

Sr.No.	Date	Time	Class	Name of the guest lecturer	Topic
01	02/02/2022	11.30am to	MSC I	Dr.G.C.Wadhawa	Research at

		01.00pm			college level
02	05/04/2022	11.30am to 02.30pm	MSC I&II	Mr.A.D.Sontakke	Campus drive
03	06/05/2022	08.00am to 02.30pm	MSC I	Dr. D.R.Thube	Co-ordination compounds inorganic chemistry

**14) Completed Refresher Courses during academic Year 2021-22(Short Term Course):-NIL**

Sr.no.	Name of The Teacher	Place	Period	Subject
1)				

**15) Conducted any Seminar, Workshop, Conference during the academic year 2021-22**

Sr.no.	Name of The Teacher	Place	Period	Subject
1)	Prof. V.B.Savant	Annasaheb Magar Mahavidyalay, Hadapsar, Pune	22-23/04/2022	Chemistry of Natural Product Inspiring Journey from nature to Laboratory
2)	Prof.M.B.Ambre	Annasaheb Magar Mahavidyalay, Hadapsar, Pune		Chemistry of Natural Product Inspiring Journey from nature to Laboratory

**16) Attended any Seminar, Workshop, Conference etc. by our Departmental Staff during academic year 2021-22**

Sr.no.	Name of Lecturer	Name of conference	Organized By	Date	Place
01	Dr. S.C.Dandawate	International Conference on 31- IAAT	Harishchandragadha	4/4/2022-5/4/2022	Harishchandragadha



**Summary:**

Sr.no.	Name of Lecturer	University level	State level	National level	International level
01	Dr. S.C.Dandawate	International Conference on 31- IAAT	-----	-----	International level

**17) Research Project On going :-NIL**

Sr.no.	Name of teacher	University / UGC Funded	Subject	Name of the Topic	Total Cost
01					

**Research Project Completed :-NIL**

Sr.no.	Name of teacher	University / UGC Funded	Subject	Name of the Topic	Total Cost
01					

**18) Ph.D. Research (on giving)/ Completed:-**

Research center newly granted /permitted (SPPU)

**19) Details of Research Students Working in the College :-**

Nil

**20 )Research Paper Publication :-**

- 1) Dr.S.C.Dandwate :- 1)Mruda savardhana sathi shetkaryanmadhil durdarshita mulyanche adhyayan
- 2) An International multidisciplinary quarterly research journal.

**21) Information of book & Journal subscribed and their cost:-**

Sr.No.	Particulars	Quantity	Amount
01	Text Book	--	----
02	Reference Book	43	44375
03	Journal	29	39485
04	Others	----	----

**22) Budget Allocated to the Department :-**

Instruments Purchased in the Department-

**For UG Department**

Total Cost of the Purchased Instrument for the Department in **2021-22**:- Nil

Total Cost of the Purchased Chemicals for the Department in **2021-22** :-Nil

Total Cost of the Purchased Glassware for the Department in **2021-22** :-Nil

**For PG Department**

Total Cost of the Purchased Instrument for the Department in **2021-22** :-Nil

Total Cost of the Purchased Chemicals for the Department in **2021-22** :-Nil

Total Cost of the Purchased Glasswares for the department in **2021-22** :-Nil

Total Cost of the Purchased Books for the Department in **2021-22**:-Nil

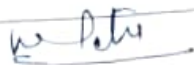


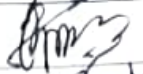
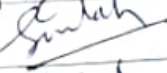
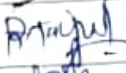
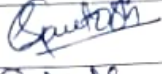
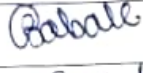
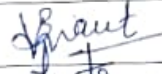
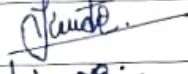
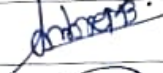

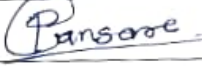
Total Cost of the Purchased Journals for the Department :-

**23) Prize Winners of the Department :-Nil**

**24) Best Practices of the Department:-NIL**

**25) Future Plan of the next Academic Year i.e. 2022:23**

- 1) To organize Workshop for farmers on Soil & water Testing
- 2) To organize Student seminar
- 3) The Department interested to conduct Chemiad Examination for F.Y.B.Sc
- 4) To organize Guest Lecture for PG Students
- 5) To organize Chem fair
- 6) To Organize NET/SET Workshop
- 7) To organize Campus Interview for B.Sc/M.Sc Drug Chemistry
- 8) To organize Parent Meet
- 9) To organize Alumni Meet
- 10) To Establish research center

Sr.No.	Name of The Teacher	Sign
1)	Dr. D.D.Patil	
2)	Dr.S.S.Borhade	
3)	Prof.S.B.Surve	
4)	Prof. D.C. Pawar	
5)	Dr.S.C. Dandwate	
6)	Prof.R.K.Manjul	
7)	Dr.S.P.Goskulwad	
8)	Prof. R.S.Sabale	
09	Prof. V.B.Savant	
10	Prof. S.S.kawade	
11	Prof.M.B. Ambre	
12	Prof.A.M.Aher	
13	Prof.N.A.Pansare	



Dr. Shobha Borhade  
**Dr. S. S. Borhade**  
 HOD Dept. of Chemistry  
 S.M.B.S.T. College, Sangamner




Dr. D.D.Patil  
**Principal**  
 S M B S T. College, Sangamner