

Profile of Chemistry Department

* Year of Establishment :

- i) U.G. : 1959
- ii) P.G. : Physical chemistry: 1971
- iii) Organic chemistry (unaided) : 2007

* Number of teachers sanctioned: 19

Present position : 17

Names of Programme / Courses offered: UG, PG: Physical and Organic Chemistry,
PhD: Chemistry

The department has workload of 17 persons for aided courses. The department has 17 fulltime faculties out of which 7 faculties having Ph.D. degree and 2 faculties have M. Phil degree as the highest academic qualification, and rest of the faculties have passed NET or SLET qualifying examination. The faculty is competent to use bilingual teaching to address language challenges of the students. The faculty keeps pace with constant upgradation by attending and organizing seminars, workshops and refresher courses.

Faculty profile with name, qualification, designation, specialization:

Name of faculty	Qualification	Designation	Specilization	No. of Years of Experience	No. of Ph.D. Students guided
D.C.Nikam	MSc	HOD, Asso. Prof.	Phy. Chem.	36	-
Dr.Mehdi Hasan	MSc, PhD	Asso. Prof.	Phy. Chem.	33	8
A.B. Khairnar	MSc. M.Phil	Asso. Prof.	Phy. Chem.	32	-
Dr. A.R.Hiray	MSc, PhD.	Asso. Prof.	Phy. Chem.	31	1
Dr.R.R. Pawar	MSc, PhD.	Asso. Prof.	Phy. Chem.	31	-
Dr.A.B. Sawant	MSc, PhD.	Asso. Prof.	Org. Chem.	28	4
Dr.R.P. Shewale	MSc, PhD.	Asso. Prof.	Phy. Chem.	28	-
Dr.R.S. Patil	MSc, PhD.	Asso. Prof.	Phy. Chem.	24	-
Dr.U.B. Kadam	MSc, PhD.	Asso. Prof.	inorg. Chem.	24	-
R.S. Nirwan	MSc.	Assi. Prof.	Org. Chem.	18	-
P.S. Pawar	MSc. M.Phil	Assi. Prof.	Phy. Chem.	7	-
S.A. Ahire	MSc	Assi. Prof.	Org. Chem.	5	-
R.K. Pawar	MSc	Assi. Prof.	Org. Chem	4	-

C.S. Aher	MSc	Assi. Prof.	Org. Chem	9	-
S.B. Nahire	MSc	Assi. Prof.	Phy. Chem	3	-
K.S. Bachhav	MSc	Assi. Prof.	Phy. Chem	1	-
S. S. Pathade	MSc	Assi. Prof.	Org. Chem	1	-

Qualifications of teaching faculty.

Degree	For Year				
	2009	2010	2011	2012	2013
Ph.D.	7	7	7	7	7
M.Phil.	3	3	3	3	2
P.G. and NET/SET	6	6	6	6	8

Recently the chemistry laboratories were renovated and we now have well-equipped/furnished four laboratories for UG and PG students.

Research lab	3.16 X 9.70	30.652 Sq. m
Physical lab	3.10 X 9.70	30.07 Sq. m
M. Sc. lab	9.70 X 9.11	88.27 Sq. m
Cabin (MS)	3.00 X 5.00	15.00 Sq. m
M. Sc. Organic	3.00 X 4.53	13.50 Sq. m
F.Y. & T.Y. Senior lab	9.70 X 9.10	88.27 Sq. m
T.Y & S.Y. lab	12.30 X 10.75	132.23 Sq. m.
Chemical Store	4.80 X 6.15	29.52 Sq. m
Physical senior lab & Teacher room	6.00 X 10.75	64.50 Sq. m
Glass Store	4.80 X 3.95	16.96 Sq. m
Computer lab	3.30 X 3.20	10.96 Sq. m
	<i>Total</i>	<i>519.932 Sq. m</i>

The students show variety in competence and composition at entry level. The students admitted are from different strata of the society as constitutional reservation. Most of the students are from rural areas having lack of proficiency in English language.

Nearly 90% of students receive financial assistance from college, university, government or other agencies.

Department has recorded average 62.3% success rate for U.G. and 81% for M.Sc. (Physical chemistry) and 74% for M.Sc. (Organic chemistry). The drop out rate for U.G. is nearly 2% and for P.G. 4%.

The department is committed to address the challenges of the students. Most of the teachers participate in academic counseling; some of them participate in personal counseling to help the needy students. Head of the department acts as counselor to help the students for their academic as well as personal problems.

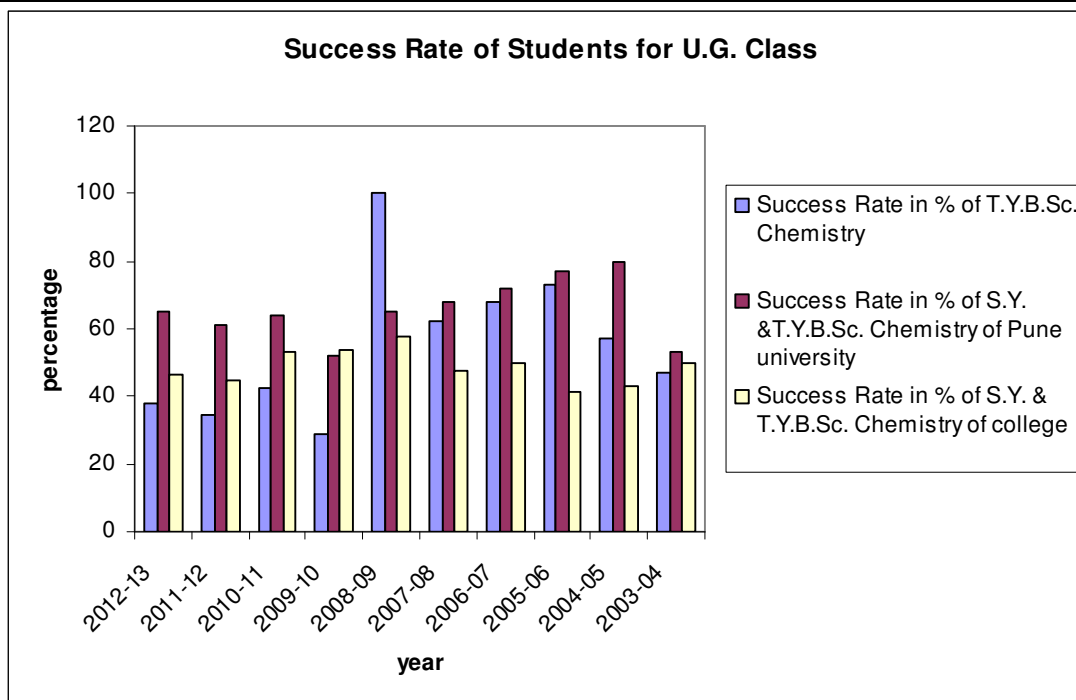
The department follows interactive sessions, group discussions, and seminars. student presentations. Some of the staff members use computer skill to manage ICT in teaching.

The faculty of the department have been guiding the students about the various avenues of job opportunities. Shri. S. A. Ahire, R. K. Pawar are working as assistant professor in the institute after qualifying NET examination, N. D.Khupse, and Parbat after passing the NET examination,are doing research in NCL, Pune.Some of our students are doing jobs in industry, teaching and government services.

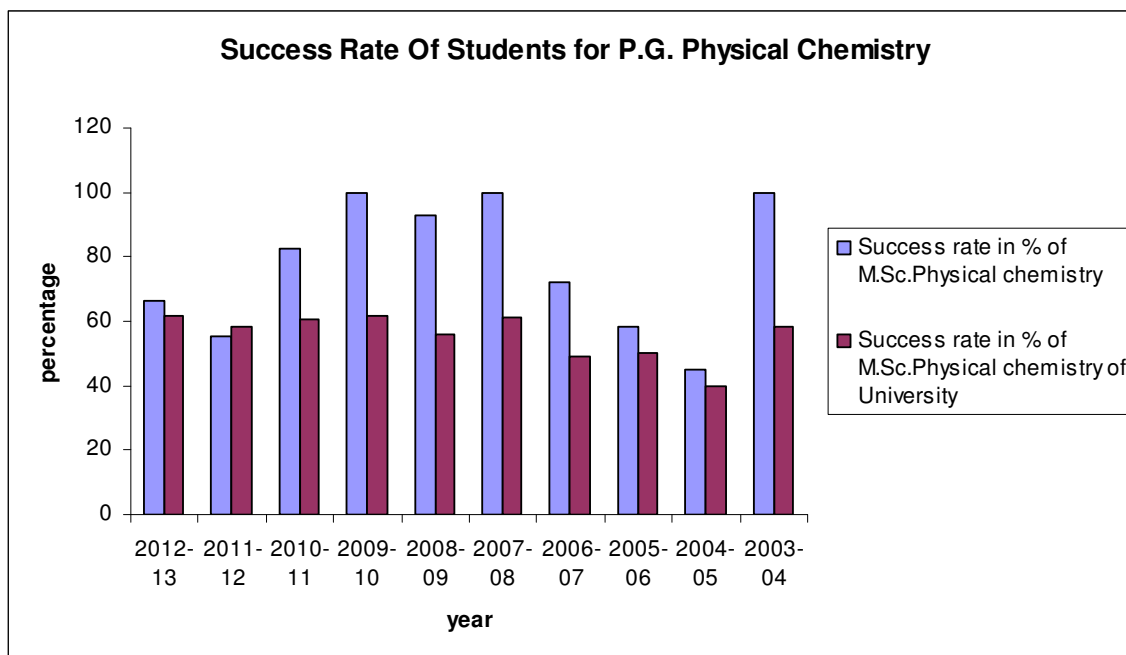
Success rate of students :

For U.G. :

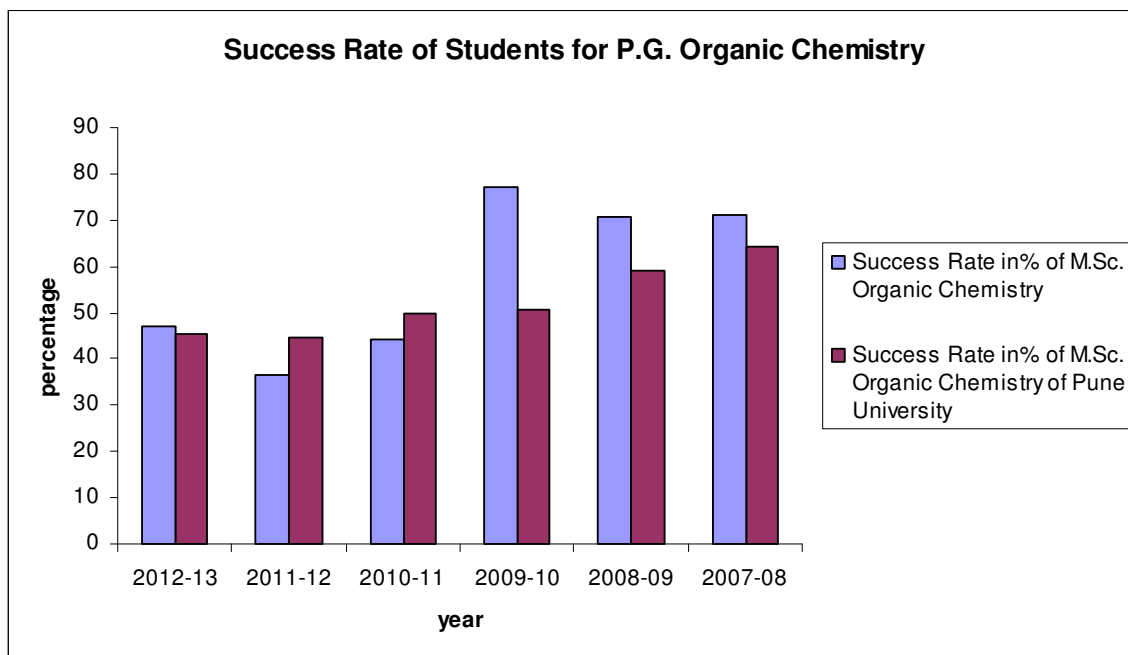
Sr.No.	Year	Success rate in % for T.Y.B.Sc. Chemistry	Success rate in % of S.Y. and T.Y.B.Sc. of University	Success rate in % of S.Y. and T.Y.B.Sc. of College
1	2013-14			
2	2012-13	38	64.9	46.2
3	2011-12	34.4	61	45
4	2010-11	42.3	64	53
5	2009-10	29	52	54.0
6	2008-09	100	65	57.5
7	2007-08	62	68	47.5
8	2006-07	68	72	49.8
9	2005-06	73	77	41.4
10	2004-05	57	79.7	43.2
11	2003-04	47	53	50



Sr.No.	Year	Success rate in % for M.Sc.Physical Chemistry	Success rate in % for M.Sc.Physical chemistry of University
1	2013-14		
2	2012-13	66.6	61.54
3	2011-12	55.5	58
4	2010-11	82.35	60.5
5	2009-10	100	62.0
6	2008-09	93	56.0
7	2007-08	100	61.29
8	2006-07	72	49.21
9	2005-06	58	50
10	2004-05	45	40
11	2003-04	100	58



Sr.No.	Year	Success rate in % for M.Sc.Organic Chemistry	Success rate in % for M.Sc.Organic Chemistry of University
1	2013-14		
2	2012-13	47	45.25
3	2011-12	36.6	44.5
4	2010-11	44	50
5	2009-10	77.27	50.81
6	2008-09	70.83	58.98
7	2007-08	71.00	64.17



University Distinction :

Sr.No.	Year	T.Y.B.Sc.	M.Sc.Physical Chemistry	M.Sc.Organic Chemistry
1	2013-14			
2	2012-13	1	6	2
3	2011-12	3	8	1
4	2010-11	2	4	2
5	2009-10	4	10	6
6	2008-09	5	12	8
7	2007-08	5	5	-

University Ranks

Sr.No.	Year	Name of the student	Rank	% Marks
1	2008-09	Shewale Deepali Dilip	I	75.70
2	2007-08	Nahire Sandip Balkrishna	I	76.55
3	2004-05	Ansari Shaista Nasreen Nihal	I	71.05

The department has very large number of reference as well as text books. There are 9 journals prescribed in the central library. Department has 8 computers out of which two have internet facility, some of faculty have their own laptops.

The curriculum are designed by the university authorities. Some changes regarding the applications are made in curriculum and also some changes in practicals. Dr. A. B. Sawant, Prof. D.C.Nikam and Dr. R. R. Pawar participated in designing the curriculum of F.Y. and M.Sc. classes.

Faculties of the department fully contribute to the academic activities in creating academic wealth. Dr. Mehdi Hasan, Dr. A. B. Sawant ,Dr.R.R Pawar and Dr.A.R Hiary are fully engaged in research activity. 7 students are doing research work.

Dr. R. R.Pawar and Prof. Nirwan R.S. have completed three minor research projects sanctioned by U.G.C. and B.C.U.D. Pune. Dr. A. R. Hiray and Dr. R. R. Pawar are recognized as guide for M.Phil. And Ph. D. Prof. D. C. Nikam, Prof. A. T. Thakare, Dr.

Mehdi Hasan, Dr. A. B. Sawant and Prof. A. B. Khairnar delivered lectures as resource persons in seminars and workshops.

In faculty development program, Prof. R. S. Nirwan was awarded teacher fellowship for Ph. D. by U.G.C. for the period of two years. He is doing research under the guidance of Dr. A. B. Sawant on the topic of synthetic organic chemistry and computation. The faculty of the department refreshes knowledge through participating in national, international and state level seminars, workshops and refresher course. 14 faculties attended and actively participated in national, international and state level seminars and workshops. Prof. P. S. Pawar and Prof. N. A. Dokhe awarded M. Phil. Degree. Prof. R. S. Patil, Hiray, A.P, R.M. Bhalerao, Thakare S.D., Naukudakar V.J., Hiray R.P., Wagh S.G., Shirsath W.B, Kurhe K.J., Sawant R.B. and Loke P.G. have been awarded Ph. D. Degree by University of Pune under the guidance of Dr. Mehdi Hasan and Dr. A. B. Sawant. Dokhe N.A., Pawar P.S., Nirwan R.S. and Patil V.V. have submitted their theses.

Three of our faculty members, Dr. Mehdi Hasan, Dr. A. B. Sawant and Dr. R. R. Pawar have contributed internationally by reviewing almost 75 research articles submitted to nearly 20 research journals of national and international reputation.

The department has purchased a unique software "Gaussian 03 with Gauss View 4.1" for theoretical work.

The Department has organized two state level seminars and one National Seminar.

Publications by faculty : Since 2003

Sr.No.	Name of the faculty	No. of research Papers published in national journals	No. of research Papers published in International journals
1	Dr.Mehdi Hasan Inayat Husain	10	20
2	Dr.A.B.Sawant	07	14
3	Dr.R.R.Pawar	-	2
4	Dr.A.R.Hiray	2	-
5	Dr.R.P.Shewale	-	2
6	Dr.D.F.Shirude	1	7
7	Dr.U.B.Kadm	1	7
8	Prof.R.S.Nirwan	7	-

Faculty who have attended national and International seminars

Name of Faculty	National Level	International Level
D.C.Nikam	1	–
Dr.Mehdi Hasan	4	2
A.B. Khairnar	2	1
Dr. A.R.Hiray	4	1
Dr.R.R. Pawar	2	1
Dr.A.B. Sawant	5	2
Dr.R.P. Shewale	2	1
Dr.R.S. Patil	1	1
Dr.U.B. Kadam	2	1
R.S. Nirwan	7	2
P.S. Pawar	1	–
S.A. Ahire	1	–
R.K. Pawar	2	–
C.S. Aher	3	–

S.B. Nahire	3	–
K.S.Bachhav	1	–

- National Level Seminars organized : 1

Topic: Advanced Analytical Techniques in Chemistry and Pharmacy.

Sponsoring Agency: BCUD ,University of Pune.

Academic year:2013-2014, 8-9th October 2013.

Amount sanctioned: Rs. 50,000/-

Number of Participants: 50

State Level Seminars organized : 2

Topic: “Advance Trends in Chemistry “and “Recent Trends in Chemistry”.

Sponsoring Agency: UGC.

Academic year:2008-2009, 22-23 September 2008. and 29-30 January 2010

Amount sanctioned: Rs. 60,000 and Rs.80,000/-

Number of Participants: 40 and 50

Three Minor Research Projects Completed.

Sr.No	Principal investigator	Co-investigator	Type of Research Project	Funding Agency	Amount Sanctioned	Status	Duration
1	Dr.R.R. Pawar	Dr.Mehdi Hasan	Minor	U.G.C.	Rs.150000/-	Completed	2 Years 2009-11
2	Prof.R.S. Nirwan	Dr.A.B. Sawant	Minor	U.G.C.	Rs.200000/-	Completed	2 Years 2009-11

3	Prof.R.S. Nirwan	Dr.A.B. Sawant	Minor	BCUD, Uni. of Pune	Rs.100000/-	Completed	3Years 2009-2012
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List of eminent academicians and scientists/ visitors to the department

<i>Academician / scientist/ visitor</i>	<i>Year</i>
Dr. Apoorva P. Hiray, MLC member of Maharashtra, Co-ordinator of MG Vidyamandir, Malegaon Camp	2009 -2010, 2010-2011, 2011-2012,2012-2013, 2013-2014
Dr. V. B. Gaikwad, Director, BCUD, Pune	2011-2012, 2012-2013
Dr. S. K. Singhle, Head, Deptt. of Forensic Science, ACPM Medical College, Dhule	2010-2011, 2013-2014
Dr. S. B. Wagh, Principal, NDMPV's College of Pharmacy, Nashik	2010-2011
Dr A K Nikumbh, Deptt of Chemistry, University of Pune	2009 -2010
Prof. S.L. Oswal, Ex. Professor, South Gujrath University, Surat	2011-2012, 2013-2014
Dr. S.H. Sonawane, Scientist, VJTI, Mumbai	2011-2012
Prof. R.T. Marathe, Govt. College of Pharmacy, Aurangabad	2011-2012
Dr.Mazahar Farooki, Aurangabad	2013-2014

Number of Ph.D's Declared:19 students obtained the Ph.D.Degree under the guidance or co-guidance of Dr.P.S.Nikam,Dr.Mehdi Hasan and Dr.A.B.Sawant

Sr.No.	Name of the Student	Guide	Co-Guide	Date of Declaration
1	Pawar T.B.	Dr.Mehdi Hasan		29-8-2003
2	S.V.Patil	Dr.P.S.Nikam		2005
3	Miss.V.P.Sonawane	Dr.P.S.Nikam		2006
4	Kadam U.B.	Dr.Mehdi Hasan		5-1-2007
5	Shirude D.F.	Dr.Mehdi Hasan		22-3-2007
6	K.H.Kapadnis	Dr.P.S.Nikam		23-3-2008
7	Patil R.S.	Dr.Mehdi Hasan		20-8- 2008
8	Hiray A.P.	Dr.Mehdi Hasan	Dr.A.B.Sawant	22-12-2008

9	Bhalerao R.M	Dr.Mehdi Hasan		16-2-2010
10	Thakare S.D.	Dr.Mehdi Hasan		23-12-2011
11	Naukudkar V.J.	Dr.A.B.Sawant	Dr.Mehdi Hasan	15-12-2011
12	Hiray R.P.	Dr.A.B.Sawant	Dr.Mehdi Hasan	15-12-2011
13	Wagh S.G.	Dr.A.B.Sawant		16-12-2011
14	Shirsath W.B.	Dr.A.B.Sawant		30-1-2012
15	Kurhe K.J.	Dr.Mehdi Hasan		26-4-2013
16	Sawant R.B.	Dr.Mehdi Hasan		21-8-2013
17	Loke P.G.	Dr.R.Y.Borse	Dr.Mehdi Hasan	
18	Shelar	Dr.R.Y.Borse	Dr.A.B.Sawant	
19	Savle S.S	Dr.R.Y.Borse	Dr.A.B.Sawant	

Number of M.Phils Declared: Three students obtained the M.Phil.Degree under the guidance of Dr.Mehdi Hasan.

Four Ph.D.Theses have been submitted to the University of Pune.

Sr.No.	Name of the Student	Guide	Co-Guide	Date of Submission
1	Pawar P.S.	Dr.Mehdi Hasan	Dr.A.B.Sawant	28-9-2013
2	Dokhe N.A.	Dr.Mehdi Hasan		24-10-2013
3	Nirwan R.S.	Dr.A.B.Sawant		30.11-2013
4	Patil V.V.	Dr.Mehdi Hasan		21-4-2014

Teacher Fellowships awarded to the following faculties from M.S.G.College as well as from other colleges to pursue Ph.D.Degrees under the guidance of Dr.P.S.Nikam, Dr.Mehdi Hasan and Dr.A.B.Sawant

Sr.No.	Name of the Student	College	Guide
1	Shewale R.P.	M.S.G.College	Dr.P.S.Nikam
2	Pawar T.B.	M.S.G.College	Dr.Mehdi Hasan
3	Kadam U.B.	M.S.G.College	Dr.Mehdi Hasan
4	Patil R.S.	M.S.G.College	Dr.Mehdi Hasan
5	Shirsath W.B.		Dr.A.B.Sawant
6	Hiray R.P.	L.V.H.College,Nashik	Dr.A.B.Sawant
7	Nirwan R.S.	M.S.G.College	Dr.A.B.Sawant

Ph.D.Students currently doing research : 06

Travel Grants were awarded to present papers at International Conference at Mauritius to

1)Dr.A.B.Sawant Rs.1,10,148=0

2)R.S.Nirwan Rs.1,08,229=0

Lecturers Delivered as Resource Person on Various Topics: Dr.Mehdi Hasan

Sr.No.	Topic	Venue
1.	Guest Lecture under Faculty Improvement Programme	V.N Naik College Nasik,2010
2.	Resource Person in the Faculty Development Programme	K.T.H.M College, Nasik 2011
3.	Physical Chemistry at M.Sc. Level	J.A.T.Arts,Science and Commerce College (For Women) 2013
4.	National Conference on Redifining the Role of Chemistry in Modern Science	V.N Naik College Nasik,13 & 14 th Feb. 2014

Awards/Recognitions Received by Faculty and students

<i>Name of Faculty/Student</i>	<i>Award/ Recognition</i>
Dr. Mehdi Hasan	Ph.D. Guide. Research Director, M.S.G.College 2006 Sanman Patr 2007 Certificate of Merit from M.S.G.College for Publishing Research papers in National and International Journals 2011 Certificate of Appreciation from American Chemical Society for Reviewing Research Articles submitted to ACS Journals (2011).
Dr. A. B. Sawant	Ph.D. Guide, Core NAAC Committee Member of MGV
D.C. Nikam	Core NAAC Committee member of MGV
Dr. R. R. Pawar	Ph.D. Guide
Dr. A.R. Hiray	Ph.D Guide
S. B. Nahire & Deepali Shewale (Students)	University Rank holders

Faculty as Members in

<i>Faculty</i>	<i>Life Member</i>
Dr. Mehdi Hasan	Indian Thermodynamic Society,

	Member of American Chemical Society
Dr. A. B. Sawant	Indian Thermodynamic Society

Strengths:

Highly qualified staff with 7 Ph.D. ,2 M.Phil and 7 NET/SET qualified.

Four Research Guides.

Well-equipped separate laboratories for regular practical and research.

Collaboration with other Universities and research Institutes like CMET, NCL and Institute of Pharmacy.

More than 150 research papers published in national and international journals.

More than 45 researchers awarded Ph.D. Degrees from this centre.

10 researchers awarded M.Phil. Degrees from this centre.

Three faculties receive research articles for review from reputed national and international journals.

Adequet number of reference books and scientific journals.

Internet facility in Department.

Faculties are members of various committees of University.

Recipient of Best Teacher Award in Department.

Research activities are continued and progressive.