

DEPARTMENT REPORT OF CHEMISTRY

Name of the Department: -	Chemistry
Faculty:-	<ol style="list-style-type: none"> 1. Dr. V.S.Panse 2. Dr. P.N. Pabrekar (on deputation) 3. Dr. G.G.Pusalkar 4. Dr. Lakshmy Ravishankar 5. Dr. A.R. Kolhatkar 6. Mr. Ashok G. Awale 7. Mr. S.S. Shendge 8. Dr. Paresh S. More
Technical and administrative staff:-	<ol style="list-style-type: none"> a. Lab .Assistants -3 b. Lab. Attendants – 12
Physical Infrastructure: -	Laboratory / Physical space: - Brief description of equipment. <ol style="list-style-type: none"> 1. 5 Laboratories:- <ul style="list-style-type: none"> 1 Degree laboratory 1 Junior Laboratory 1 Physical chemistry Laboratory 1 Research Laboratory 1 PG Laboratory 2. Store Room 3. Preparation Room 4. Instruments Room Total area of the laboratories is 5585 sq. feet.
Programs and Subjects taught	<ol style="list-style-type: none"> 1. Under graduate three year programme leading to B.Sc. degree in Chemistry (major six units) with Heavy and fine chemicals as the Applied Component. 2. Two years M.Sc. programme in Organic Chemistry 3. M.Sc. by Research in Inorganic Chemistry.
Other courses and programmes:-	Chemistry for F.Y.B.Sc.and S.Y.B.Sc.Biotech students.
Add-on courses UGC career oriented course under X plan by the department:	NIL
Revision of syllabus by the university.	F.Y.B.Sc.:- Revised in 2008-09 S.Y.B.Sc :- Revised in 2009-10 T.Y.B.Sc.:- Revised in 2010-11 M.Sc. part -I :- To be revised in 2011-12
Salient features of Department	Number of faculty:-08 PG Recognition: - PG Recognized Teachers by University -07 Papers taught: - Undergraduate:-2 at first year, 3 at second year & four at third Year.

	<p>Number of workshops/ seminars / lecture series conducted: Workshops:</p> <ol style="list-style-type: none"> 1. Workshop on Spectroscopy and preparing for IIT in 2005 2. Workshop on practicals on new syllabus of Applied Component in 2010. <p>Total number of publications: 07 Total number of workshops / seminars attended:-Details in individual faculty report Number of participation at international conferences: Details in individual faculty report Number of research projects completed and in progress: - 06 Number of UG students for year 2010 Number of PG students:-10 for M.Sc.- I, and 10 for M.Sc.-II. Number of M.Sc (by research) students completed: 2 Number of M.Sc (by research) students enrolled: 3</p>
Projects undertaken, completed:-	<p>Dr. Lakshmy Ravishankar completed 2 minor research projects of Mumbai University. Dr. G.G. Pusalkar completed 4 minor research projects of Mumbai University</p>
Contribution of the department to college administration and activities.-	<ol style="list-style-type: none"> 1. Dr. V.S. Panse: Cordinator for NAAC Accreditation 2005. Member of Unfair Means Enquiry Committee.(2005-09) IQAC Member(2005 till date) Chairperson Attendance Committee for the year 2007-08 & 2008-09 2. Dr. P.N.Pabrekar State level N.S.S. coordinator. 3. Dr. G.G.Pusalkar Chairman of Gymkhana since 2006 VCTS coordinator from 1990 to 2002 Chairman of Cultural Committee -2003-06 Chairman of Chemclub(2009 till date) Chairman of Chemalumni(2008 till date) Chairman Cultural Committee(2003-06) 4. Dr. Lakshmy Ravishankar Chairperson of Career Guidance, Placement & Alumni cell Chairperson, CHEM CLUB from 2005-2009

	<p>5. Dr. A.R.Kolhatkar Member of Examination Committee (1994 till date)</p> <p>7. Mr. Ashok G. Awale Member of Examination committee. (Jan2009-June2010) Member of Attendance Committee.(Jan2007 till date) Member of cultural committee (2003-06)</p> <p>8. Mr. S.S Shendge Convenor of Special Cell Committee.(2009 till date) Member of Student Council Committee. (2009 till date)</p> <p>9. Dr.Paresh More Member of Chemistry Olympiad(2002-04) Member of Gymkhana(2004-06) Co-Convenor of Vaze Centre for Talent Search (2007-08)</p>
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Students profile

Class: _T.Y.B.Sc

YEAR	APPEARED	I CLASS	II CLASS	PASS CLASS	% PASS
2005-06	41	40	1	-	100%
2006-07	36	26	09	-	97.29%
2007-08	40	38	02	-	100%
2008-09	34	29	05	-	100%
2009-10	35	09	18	-	77.14%
2010-11	25	05	17	-	85.10

Class: M.Sc.

YEAR	APPEARED	I CLASS	II CLASS	PASS CLASS	% PASS
2005-06	7	5	2	--	100%
2006-07	7	5	2	-	100%
2007-08	8	4	4	-	100%
2008-09	9	3	6	-	100%
2009-10	10	5	3	-	80%
2010-11					

Class: SYBSc

YEAR	I CLASS	II CLASS	PASS CLASS	Total	% PASS
2005-06	22	15	01	49	77.55
2006-07	17	31	01	68	72.05
2007-08	11	19	01	52	59.61
2008-09	04	27	01	50	64.00
2009-10	03	06	01	39	25.64
2010-11	03	11	01	46	32.60

Class: FYBSc					
YEAR	I CLASS	II CLASS	PASS CLASS	Total	% PASS
2005-06	13	34	06	136	38.97
2006-07	12	32	05	112	43.75
2007-08	05	17	06	130	21.53
2008-09	03	13	03	95	20.00
2009-10	06	12	03	177	11.86
2010-11	07	19	06	160	20.00
Innovations in Teaching Methods:-			<p>A) Industrial visit</p> <ol style="list-style-type: none"> 1. To Godrej Soaps company for S.Y.B.Sc students in 2006 2. N.C.L. Pune for T.Y.B.Sc. students in 2007 3. Rhythm synthetics Ltd. For S.Y.B.Sc students in 2009 4. BASF India for M.Sc (I & II) students in 2010. <p>B) Process oriented guided enquiry (POGIL) programme for PG students is initiated for M.Sc (II).</p> <p>C) Intensive coaching for weak students.</p> <p>D) Study circle to prepare for competitive exams.</p> <p>E) Use of CD and educational charts.</p>		
16. Innovation in evaluation Methods:-			NIL		
Plans for coming five years :-			<p>Organization of lecture series in a year for PG students.</p> <p>Organization of workshops for NET/SET</p>		
Annual budget for the department for library.					
YEAR	Allocation (RS)		Utilization (RS)		
2005-06	18,000.00 + 6800.00		20,423.10 + 5329.50		
2006-07	20,000.00 + 6800.00		9923.75 + 7133.00		
2007-08	20,900.00 + 6800.00		16957.00 + 3879.00		
2008-09	20,900.00 + 3000.00		9303.00 + 2276.00		
2009-10	20,500.00		6566.50		
Prominent Alumni					
Name	Current position	India / Abroad	Other details		
Dr. Santosh Gharpure	Asst. professor	IIT, Chennai	Recipient of INSA young scientist award in 2008 , Recipient of Young Research Faculty Award of IIT in 2010. Silver medallist in M.Sc-IIT Mumbai		

Dr. Soni Singh	Scientist	S.H. Kelkar Company	Recipient of Gold medal, in inter research meet Avishkar
Dr. Chaitanya Wannere	Scientist	Forrest Chemicals, USA	Wrote a chapter for a book authored by Nobel Laureate Prof. Olah
Dr. Sanjay Poman		Merck	
Dr. Champak Chatterjee	Asst. Professor	Univ. of Washington, Seattle, USA	Silver medallist in M.Sc-IIT Mumbai
Dr. Shubhagi Umbarkar	Scientist	NCL, Pune	
Mr. Nilesh Joshi	Ph.D student	Wayne Univ., USA	KVPY scholar
Dr. Vidya Menon	Faculty, Junior college	V.G. Vaze College	Recipient of Gold medal, in inter research meet Avishkar
Dr. Sonali Deshpande	Asst. Professor	Tawson university, USA	
Dr. Arun Yadav			
Dr. Chaitanya Sathe			
Mr. Mukund Pandey	Senior executive	IBM, Mumbai	

Student's Achievements

Publications by M.Sc students

1. Mr. Siddhartha Patwe and Ms. Nehal Gosarani: Cerium (III) Catalysed synthesis of Schiff Bases- A Green Approach, Synthetic Communications, 40 (21), 3177-3180, 2010.
2. Mr. Rohit Lokhande & Ms. Jayashree Sonawane: Solvent free reductive amination of aromatic aldehydes catalysed by $CeCl_3 \cdot 7H_2O$, Green Chemistry Letters and Reviews, 2010, *in press*

T.Y.B.Sc students won Late Dr. A.P.Rao memorial Trophy in year 2006-07 and 2008-09 and 2009-10. For best performance in the intercollegiate competitions organized by Ruia college and Dr. R.A.Kulkarni Research Foundation.

Students selected for summer projects / programmes

Deepak Sharma of M.Sc -II selected for the Apprentice programme of Glaxo Smith Kline for training at UK (2010)

	<p>Rohit Lokhande of M.Sc -II selected for the Apprentice programme of Galaxy Smith Kline for training at Ireland (2010)</p> <p>Patricia Nazareth of M.Sc –II selected II selected for two months research project in the UGC sponsored Networking Resource Centre, School of Chemistry, Hyderabad (2010)</p> <p>Snehal Bansode of M.Sc –II selected for two months research project in the UGC sponsored Networking Resource Centre, School of Chemistry, Hyderabad (2010)</p> <p>Tejas Joshi: NIUS (National Initiative in Undergraduate Science) organized by HBCSE (2010)</p> <p>Deepak Sharma M.Sc - II selected for one month research project in the UGC sponsored Networking Resource Centre, School of Chemistry, Hyderabad (2009)</p> <p>Laxmi Kini: Two months project at IIT, Kanpur, under the Indian Academy of Sciences (2005)</p> <p>Charutha Palsuledesai: NIUS (National Initiative in Undergraduate Science) organized by HBCSE (2005)</p>
<p>Programmes Organized</p>	<p>Workshops</p> <ol style="list-style-type: none"> 1. One day workshop on practicals of Applied Component revised syllabus held in July 2010. 2. Half day workshop on Soft Skills development was held in January 2010. 3. On 21st and 23rd Aug. 2005, workshop on spectroscopy and related topics was organized. 4. Faculty from IIT and MUICT were invited as resource persons... 156 students from 17 college attended workshop. <p>Intercollegiate competitions</p> <ol style="list-style-type: none"> 1. Intercollegiate Aptitude test on 25th Sept-2005. 164 students from 11 colleges appeared for the test. 2. 2)Intercollegiate paper presentations for UG & PG students on 26th and 27th

	<p>Sept.2005 , M.Sc- 17 students from 10 colleges and B.Sc. 11 students from 7 colleges participated.</p> <p>3. Intercollegiate poster presentations for UG students on 20th January, 2010. 13 teams from 6 Colleges participated.</p> <p>4. Intercollegiate paper presentations for UG students on 20th January, 2010. 10 teams from 5 Colleges participated.</p> <p>Research Scholars Meet 20th Research scholars Meet was jointly organized by Indian Chemical Society and Department of Chemistry on 22nd, 23rd February 2008. 32 Research Scholars (doing PhD) from B.A.R.C., I.I .T. Mumbai, I .C.T., Mumbai University, Institute of Science and Ruparel , Ruia Mithibai, Xaviers , C.B. Patel Institute , Bandodkar,Kirti, Dnyansadhana,C.H.M. Jhunjhunwala college participated .</p>
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PG Lecture Series (In association with Royal Society of Chemistry)

Name of Speaker	Topic	Year
Dr. Suvarna Kulkarni-IIT, Mumbai	Carbohydrates	2010
Dr. Kaliappan – IIT, Mumbai	Oxidation	2010
Dr. Pradeep Kumar-IIT, Mumbai	Structure of RNA & DNA	2010
Mahesh Vishe-IIT, Mumbai	Name Reactions	2010
Vikram Sapre IIT, Mumbai	Protection & deprotection	2010
Padma Vibhushan Prof. M.M. Sharma -FNA, FRS, CChem, FRSC	Chemistry & Passion	2008

Prof. P. Mathur-IIT, Mumbai	Organo Metallic Chemistry	2008
Dr. Anandya Dutta IIT, Mumbai	Spectroscopy	2008
Dr. R. Fernandez IIT, Mumbai	Chiral Applications in Drugs	2008
Dr. Kaliappan –IIT, Mumbai	Evolution in Organic Synthesis	2008
Dr. Pradeep Kumar- IIT, Mumbai	Chemical biology using Nucleic acids	2008
Prof. M.K.Mishra - IIT, Mumbai	Laser in chemical reactions	2008
Dr. Saurav Pal-NCL, Pune	Topics in Physical Chemistry	2008
Dr. Satyanarayana-NCL, Pune	Hydrogen for fuel cells	2008
Dr. Vijayamohan Pillai-NCL,Pune	Design of Functional materials	2008
Mr. R.Pisurelinekar, AMRSC, Pharmacy college	Molecular modeling –Drugs	2008
Dr. Mariam Digani, ICT, Mumbai	NCE Design & Synthesis	2008
Dr. Ashok Kumar,FRSC,IPCA	Synthesis of Drugs	2008
Prof. Murugavel, FRSC, IIT, Mumbai	Metathesis	2008
Dr.Deepa Khushalani TIFR	Synthesis on a Nano length scale	2008
Dr. Pradeep Kumar , IIT, Mumbai	Nucleic Acids as Drugs and as Catalysts	2008
Lecture Series by Alumni held in 2009		
Speaker	Topic	
Dr.Sanjay Poman	H.P.L.C	
Dr. Soni Singh	GC-MS Technique	

Dr,Chaitanya Sathe	Environmental Chemistry	
Dr.Amit Jagtap	Colours in Chemistry	
Guest Lectures		
Neha Mathur	Innovations in R & D	2005
Dr. S.D. Samant	Opportunities after M.Sc	2005
Dr.Chaityna Wanere	Carbonations	2006
Dr.Champak Chatterji	Chemical Solutions to Biological Problems	2007
Dr.S. Poman	H.P.L.C.	2007