#### Madha Taluka Shikshan Prasarak Mandal's

# K. N. Bhise Arts, Commerce and Vinayakrao Patil Science College, Vidyanagar, Bhosare

**Department of Chemistry** 

Name of the Department	Chemistry
Year of Establishment	2004
Programme / Course offered	B.Sc.
Programme wise Examination	B.Sc. Semester with CBCS
System (Annual/Semester/CBCS	

#### Vision

- To encourage the students to apply knowledge of chemistry for the benefits of society.
- To provide a perfect learning environment that actively involves students in chemical educational process.
- To develop the abilities and to acquire the knowledge of process, facts, terms, concepts, techniques and principle of subjects.
- To make students capable of studying chemistry in academic and industrial courses.

#### Mission:

- To educate the students for higher education and research to meet the global environment issues through chemical education
- To support the developmental activities of the College and make the Department vibrant.
- To develop skills required in chemistry such as proper handling of chemicals and apparatus.
- To provide all undergraduate students with education in chemistry this will serve as a part of foundation for lifelong learning of science and chemistry.
- To expose the students to various emerging new areas of chemistry and apprise them with their prevalent in their future studies.
- To develop the power of appreciation, the achievements in chemistry and role in nature and society.

<b>Course conducted by the department</b>	A certificate course in Water
	Sample and Chemical Analysis
	<ul> <li>A certificate course in Mehandi</li> </ul>
	Arts

Number of teaching	posts:	Full Time - 03 C.H.B 04		
Faculty Profile:				
Name	Qualification	Designation	Experience in Years	
Ms. V. S. Shinde	M.Sc. SET	Head, Assistant Professor	10	
Mr. S. P. Phulwale	M.Sc. SET	Assistant Professor	09	
Mr. M. M. Patil	M.Sc. NET	Science Co- ordinator, Assistant Professor	09	
Dr. A. A. Patil	M.Sc. Ph.D	Assistant Professor	08	
Miss. Kumbhar D. M.	M.Sc. B.Ed	Assistant Professor	03	
Miss. A. I. Tamboli	M.Sc.	Assistant Professor	01	
Miss. T. B. Lungase	M.Sc.	Assistant Professor	01	
<b>Publications:</b>				
Name of Faculty		Number of papers presented/ attended Seminar/ Conferences		
Ms. V. S. Shinde		International: 09	National:10	
Mr. S. P. Phulwale		International: 04	National:07	
Mr. M. M. Patil		International: 08	National:06	
Dr. A. A. Patil		International: 13	National: 01	
Faculty working as omember on various Boards:				
Ms. V.S. Shinde		1. Head, Department 2. Member of Colle Committee 3. Chairman of Ada B. Sc. III	ge Development	

	1
	4.Chairman of Waste Disposal
	Committee
	5. V. Chairman of Parent Association
	Committee
	6. Member of N.S.S
	7. Member of Women Development
	Cell
	8. Member of Science Association
	9. Member of N.I.R.F/ A.I.S.H.E
	10. Member of Discipline Committee
	11. Member of Annual Magazine
	Committee
	12. Member of Swachh Bharat
	Abhiyan/ AIDS Awareness Committee
	13. Member Green Audit Committee
	14. Member of Career Counseling /
	Placement Cell
	15.Member of Internal Complaints
	Committee.
	16. Member of Career Counseling/
	Placement Cell
Mr. S. P. Phulwale	1. Member of IQAC
	2. In-charge Science Faculty of
	Time Table Committee
	3. Chairman of Admission
	Committee B. Sc. I
	4. V. Chairman of Competitive
	Exam Guidance Cell
	5. Member of Prospectus
	Committee
	6. Chairman of Film Club
	Committee
	7. Member of Sports Advisory
	Committee
	8. SPOC of NPTEL Local Chapter

Mr. M. M. Patil	1. Science Co-ordinator
	2. Member of IQAC
	3. Member of Admission
	Committee B. Sc. II
	4. Member, (In-charge, Science
	Faculty) of Examination
	(University and Internal)
	Committee
	5. Member of Discipline
	Committee
	6. Member of Library Advisory
	Committee
	7. Secretary of Internal
	Compliant Committee
	8.Member of Infra Structure /
	Construction Committee
	9. Member of Purchase
	Committee

# Student profile programme / course wise

Course	Year	Enrolled	Pass %
B.Sc. III	2015-16	32	78.13
	2016-17	35	71.43
	2017-18	45	86.67
	2018-19	40	67.5
	2019-20	43	100
	2020-21	51	98.04

# **Details of Infrastructural facilities:**

- Well Equipped Laboratory
- Glass made Water Distillation Plant
- Digital Weight Balance
- Digital Instruments (Polarimeter, Refractometer, Potentiometer, pH-meter, Conductometer etc.
- Oven
- Thermostat

- Computer and Printer
- Good Internet Facility for teachers and students
- Departmental Library
- ICT Enabled Classroom

# Details of student enrichment programmes (special lectures / workshops / seminar) with external expert guidance

- Bridge course
- Remedial coaching
- Mentor Mentee
- Guest lecture
- Laboratory safety workshop
- Group Discussions
- Parent meetings
- Programmes for slow and advance learners
- Expert lectures for Career Guidance
- Industrial visits
- Soft Skill Programmes
- Student Study Association
- Projects for students for Avishkar Participation
- Organization of National level Seminar, Poster Competition
- University level Syllabus Workshop

## **Other Activities:**

- Teachers' Day
- Birth anniversaries of eminent scientist
- Birth anniversary and Tribute to Dr. A.P. J. Abdul Kalam (Reading Inspiration Day Inspiration for students)
- Tree Plantation
- Seminar activity For B. Sc. III students
- Alumni meet
- Celebration of International Year of the Periodic Table of Chemical Elements (IYPT 2019)
- Celebration of National Science Day
- Celebration of Traditional Day

## **Teaching methods adopted to improve student learning:**

• Special Guest lectures

- Lecture method
- Use of Flow charts, Periodic table
- Use of Stereochemistry models
- Use of Ionic Solids, Crystal Structure models
- Demonstrations of Instruments
- Laboratory Demonstrations
- Micro scale Techniques for Practical
- Unit Test
- Internal and University Examination
- Book Review
- ICT based Teaching
- Group Discussions
- Seminar method
- Google Classroom
- Question and Answer method

## **Guest Lectures:**

Sr. No.	Subject	Name of Resource Person	Date
1	Scope of Chemistry in Higher Education and Research	Dr. V. M. Gurame	11/08/2015
2	Studies in step growth polymer and its Application	Dr. A. V. Diwate	31/07/2015
3	A solution to water pollution caused by Water Hyacinth	Dr. A. V. Diwate	28/09/2015
4	Science - All around us	Dr. Sharad Pasale	05/02/2018
5	Career Opportunities in Basic Sciences	Dr. Sharad Pasale	01/08/2018
6	Career Opportunities in Chemistry	Dr. V. M. Gurame	04/09/2019
7	Career Opportunities in Basic Sciences	Mr. Avinash A. Survase	08/01/2020
8	Frontier Research Areas in Basic Sciences	Dr. P. A. Bansode	02/03/2021

## **SWOC** analysis of the Department and future plans:

## **Strengths**

- The Department of Chemistry has well qualified and dedicated faculty.
- Always support to from management
- Good Coordination of staff members
- Good relations with students and parents
- Problem solving skill
- All laboratories (Instrumental and non instrumental) well equipped
- Good departmental library
- Mechanism is available for direct mentoring of students by faculty, interacting with students.

## Weakness

- Lack of laboratory
- Lack of specialized equipment's (Deep freeze, Spectrophotometer etc.)
- Soft skills and communication skills of students need to be improved

## **Opportunities**

- Increased demand of chemist in various industries.
- Scope and job opportunities in chemistry in various field.
- More potential are created in students.
- To develop social awareness in students in perspective of chemical science
- To prepare the students for higher education (PG) in reputed universities / PG colleges.

## Challenges

- To link up the teaching learning process with the need of industries.
- To frame and design an effective curriculum, Teaching learning methodologies that bridges the gap between industry and institution.
- Development of advanced teaching and learning methodology.
- Development of smart classroom.