

Ashti Taluka Shikshan Prasarak Mandal's

ADV. B. D. HAMBARDE MAHAVIDYALAYA

Ashti Tal. Ashti Dist. Beed- 414203

NAAC Accredited B⁺⁺ Grade College



DEPARTMENTAL PROFILE

Department of M.Sc. Organic Chemistry

Departmental Profile M.Sc. Chemistry

A) IMPORTANCE OF CHEMISTRY:

1. Chemistry is the science of matter, which deals with the composition, structure, properties and reactions.
2. Chemistry is one of the important subjects in science faculty.
3. Chemistry is the central science which acts as bridge between physical sciences and life sciences.
4. All matter is made up of chemicals, so the importance of chemistry is that it is the study of everything.
5. Chemistry has played important role in our daily life. No Life without Chemistry is possible.

The professional societies working all over the world.

- American Chemical Society
- International Union of Pure and Applied Chemistry
- Royal Society of Chemistry
- Society of Chemical Industry
- World association of theoretical and computational chemists.
- Indian chemical society

The chemical industries are playing vital role in economic development. The global top fifty chemical producers in 2004 had sales of 587 billion US dollars with a profit margin of 8.1 % and R.D spending of 2.1 % of total chemical sales.

B) SCOPE OF CHEMISTRY:

The areas of specialization in chemistry are Physical, Organic, Inorganic, Analytical, Industrial, Bio, Medicinal and Drug chemistry.

In 21st century considerable development was found in the areas of polymer, environmental, medicinal, Agrochemicals, forensic and computer chemistry.

Chemical industry is one of the fastest growing sectors of Indian economy. In 2005-06 its total production was 30.59 billion US dollars; it contributes to 3 % of GDP. Today India is exporting basic chemicals, agrochemicals, organic, inorganic chemicals as well as drugs and pharmaceuticals. So today India needs chemists who can work in different

fields like production, quality control, research and development, sales and computational work.

Trained staff is also required in research and academics.

C) VISION OF THE DEPARTMENT:

- To make dedicated efforts to provide quality education to the students from Rural and Tribal areas. (Backward areas)
- To provide latest chemistry equipments to the students and increase their knowledge.
- To arrange lectures of renowned persons on syllabus and personality development of students.
- The students run programmes organized by the department.

D) HIGHLIGHTS OF THE DEPARTMENT:

- 1) Department organizes and celebrates 'Science Day'.
- 2) Department organizes Guest lecturers of eminent scholars.
- 3) Department organizes Guest lectures on personality development for the students.
- 4) Department organizes Birth Anniversaries and festivals for the student participants.
- 5) Department organizes industrial visits for student.
- 6) Students of the department regularly participate in tests, tutorials and extra lectures.
- 7) Department organizes Welcome function for the students of first year and Fare - well function for the student of third year.
- 8) Publication of Wall Poster by Students.

2. INTRODUCTION OF THE DEPARTMENT:

Ashti Taluka Shikshan Prasarak Mandal's , Arts & Commerce College was established in June 1972. In the academic year 2019-20 the institute started M.Sc. Chemistry (Organic) course in science faculty on permanent non -grant basis. In Academic Year 2017-18 Management decided to start PG course in Organic Chemistry & First Batch came in 2019.

A - Papers taught in the Department (P.G.) :

Class & Year	Semester	Paper No.	Name of the Paper
M.Sc.I 2019-20	Sem-I	CHE 101	Analytical Chemistry
		CHE 102	Inorganic Chemistry
		CHE 103	Organic Chemistry
		CHE 104	Physical Chemistry
M.Sc.I 2019-20	Sem-II	CHE 205	Analytical Chemistry
		CHE 206	Inorganic Chemistry
		CHE 207	Organic Chemistry
		CHE 208	Physical Chemistry
M.Sc.I 2019-20	Sem-I & II	CHE 209	Practical Analytical Chemistry
		CHE 210	Practical Inorganic Chemistry
		CHE 211	Practical Organic Chemistry
		CHE 212	Practical Physical Chemistry

Class & Year	Semester	Paper No.	Name of the Paper
M.Sc.II 2020-21	Sem-III	CHEO 313	Organic Spectroscopy
		CHEO 314	organic Synthesis
		CHEO 315	Asymetric Synthesis and Bioorganic Chemistry
		CHEO316	Photochemistry, Free Radical and Pericyclic Reactions
M.Sc.II 2020-21	Sem-IV	CHEO417	Retrosynthetic Approach
		CHEO418	Advanced organic & heterocyclic Chemistry
		CHEO419	Chemistry of Natural Products
		CHEO420	Medicinal Chemistry
M.Sc.II 2020-21	Sem-III & IV	CHEO421	Practical Ternary Mixture
		CHEO422	Practical Two Stage Synthesis
		CHEO423	Practical Single Stage Synthesis
		CHEO424	Practical Organic Chemistry - Project

a) i) Subject Books in Central Library:

Sr. No.	Medium	No. of Books
1)	English	73
		Total- 73

**ii) Subject Books in the Department:
(Personal books of the faculty kept in department)**

Sr. No.	Medium	No. of Books
1)	English	05
		Total- 05

iii) Periodicals in the Central Library:

Sr. No.	Medium	No. of Books
1)	English	Nil
		Total-

3. ESTABLISHMENT OF THE DEPARTMENT:

Sr. No.	Department	Particulars	Date of Establishment
1)	PG	M.Sc.	2019-20

4. a) HEADS / TEACHERS:

Sr. No.	Name	Designation	Tenure
1)	Mr.Tarate V.A.	Lecturer Reader Head	2019 to to till date

b) HONOURS / AWARDS / PRIZES RECEIVED: Nil

5. ACHIEVEMENT OF DEPARTMENT:

Chemistry Department is one of the biggest departments in the college so plays leadership role in many activities like organizing the seminars, workshops, etc. Every year results of P.G & UG classes are much better results in the university . Every year this department is participating in Chemiad examination conducted by Dr. Babasaheb Ambedkar Marathwada Aurangabad for first year students to develop interest in chemistry. Many times our students have good ranking in this competitive examination. Our past students are working in Research, Academics and Industry

College Toppers-

Sr No	Name of the student	Percentage of marks	Year
1	Miss Lokhande Koyal Jalindar	83.00 %	2019-20
2	Miss.Patel Nidhi Jagdish	83.00%	2019-20
3	Miss.Karale Tarka Vilas	80.70%	2019-20

6. WORKSHOP/SEMINAR/CONFERENCE/WEBINAR ORGANIZED: 1

Sr. No.	Topic	Date	Level
1	Career Opportunities After UG and PG	24/02/2021	PG

7. OBJECTIVES OF THE DEPARTMENT:

- 1) Providing quality education.
- 2) To promote creativity and innovation.
- 3) To make rural youth self-reliant and self-confident.
- 4) To acquaint the students with the latest technology.
- 5) To provide education to all the masses.
- 6) To provide education for educationally deprived groups in the society.
- 7) To inculcate social awareness and civic responsibilities among the students.

8. FACULTIES AVAILABLE:

a) Teaching Staff

Sr. No.	Name of the Teacher	Qualification	Designation	Date of Joining
1)	Mr.Tarate V.A.	M.Sc.SET B.Ed.	Assistant Professor & Head	01/07/2019
2)	Miss.Brahmdandi R.R.	M.Sc.	Assistant Professor	01/07/2019
3)	Miss Tarate S.C.	M.Sc.	Assistant Professor	01/07/2019
4)	Mr.Dongare A.U.	M.Sc.NET	Assistant Professor	01/07/2021

8. FUTURE PLAN OF THE DEPARTMENT:

Sr. No	Activity	Year	Remark
1	To increase Departmental library and Reference books.	2019-20	06
2	To arrange Campus Drive.(M.Sc. Organic chemistry)	2020-21	In Progress.
3	To arrange industrial tour.	2021-22	-

9. BEST PRACTICES:

1. Tree plantation in college campus.
2. Soil Testing. (PH)
3. Water Testing. (PH)

10-Photographs -



Prof . Tarate V.A. presenting Power point presentation to M.Sc. I Students



Prof . Dongare A.U. presenting Power point presentation to M.Sc. Students



Practical Demonstration Photograph's of Teacher and Students