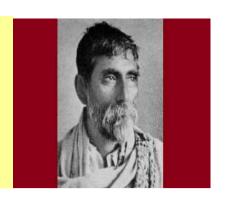


DEPARTMENT OF CHEMISTRY



Courses Offered:

- 1. B.Sc. in Chemistry (UG)
- 2. M.Sc. in Organic Chemistry (PG)

Vision

➤ To produce capable chemistry graduates and post-graduates with an aptitude for research and leadership.

Mission

- ➤ To impart quality education through demanding academic programmes.
- ➤ To advance the chemical sciences through the education of undergraduate students by providing them with quality classroom, laboratory and service opportunities.
- > To enhance career opportunities for students through exposure to society and industry.
- > To inculcate sensitivity forward society and a respect for the environment.

What is Chemistry?



About Department:

Anandibai Raorane Arts, Commerce and Science College, Vaibhavwadi has aptly rendered services to the community, by the way of providing educational facilities, particularly to the rural students. Chemistry is a laboratory science that is based on observations of changes that occur when different materials are mixed. In our college, the department of chemistry has been established in **academic year 2012-13** with nineteen students who had dreams and desire to enrich their competence in the field of chemical sciences. We know the fact that the prosperity and progress of faculty depends on the fundamental facilities. Our faculty member always tried their level best for all round development of the department. Due to sincere efforts of Principal Dr. C. S. Kakade, today we have fundamental facilities such as well-maintained store room, well equipped laboratories, laboratory drainage etc.

From academic year 2019-20 M.Sc. in Organic Chemistry (PG programme) started for providing the higher education facility for rural students with able guidance of our Management, Hon. Principal Dr. C. S. Kakade

It is a matter of pride to mention that our two staff members are completed Ph.D. and two staff members are pursuing. Our staff members acquired not only good academic qualification, but they are also ahead in extra-curricular and social activities like, participation and presentation of research paper in various national and international conferences, seminars and workshop, participation in Blood Donation camp etc.

Innovative curricular and extra-curricular activities such as Seminars, Guest Lectures were conducted successfully. All these programmes have added a great value to our teaching and learning programme.

Innovative practice chemistry club have been established from academic year 2014-15 and various activities like study tour, quiz competition, poster presentation competition, essay writing competition, science festival, Rasayan Jatra etc. are organized through chemistry club.

Students of Chemistry actively participated in university level as well as district level Avishkar research competition, Poster presentation competition, organized by university of Mumbai as well as by different institutions department of chemistry. This activity enhances scientific attitude and popularize science in the society.

Departmental faculty

Sr.	List of Faculty	Designation & Qualification					
No.							
	Teaching Faculty						
1		Name: Dr. D. M. Sirsat Designation: Head & Assistant Professor Qualification: M.Sc., Ph.D., SET, NET-UGC-JRF, GATE Experience: 6 Years Area of Expertise: Organic Synthesis Curriculum Vitae					
2		Name: Mr. K. S. Pakhare Designation: Assistant Professor Qualification: M.Sc., SET, GATE Experience: 5 Years Area of Expertise: Material Science Curriculum Vitae					
3	600	Name: Mr. S. M. Karape Designation: Assistant Professor Qualification: M.Sc., NET-CSIR-JRF (2), GATE Experience: 4 Years Area of Expertise: Material Science Curriculum Vitae					
4		Name: Dr. V. B. Gopula Designation: Assistant Professor Qualification: M.Sc., Ph.D. NET Experience: 3 Years Area of Expertise: Organic Synthesis Curriculum Vitae					

Name: Miss. K. M. Sutar **Designation: Assistant Professor** Qualification: M.Sc. 5 **Experience: 1 Years Area of Expertise: Material Science Curriculum Vitae Non-Teaching Staff** Name: Mr. M. G. Raorane **Designation: Laboratory Assistant** 1 Qualification: B.Com. **Experience: 6 Years Curriculum Vitae** Name: Mr. B. L. Baydane **Designation: Laboratory Attendant** 2 **Qualification: S.S.C. Experience: 25 Years Curriculum Vitae** Name: Ms. M. S. Pednekar **Designation: Laboratory Attendant** 3 **Qualification: H.S.C. Experience: 4 Years Curriculum Vitae**

Laboratory Facilities

- > Two well-equipped Laboratory
- ➤ Well-furnished classroom with LCD projector
- ➤ All necessary equipment's to perform the experiments
- ➤ All necessary glassware's for regular work
- ➤ Computer set with printer

Strength of Department

Sr.	Academic	B.Sc.	B.Sc.	B.Sc.	M.Sc.	Total	Students
No.	Year	Part-I	Part-II	Part-III	Part-I	Total	Teachers Ratio
1	2012-13	19				19	19:1
2	2013-14	27	19			46	46:2
3	2014-15	51	27	12		90	90:3
4	2015-16	35	43	20		98	90:3
5	2016-17	60	29	27		116	116:3
6	2017-18	37	36	22		95	95:4
7	2018-19	51	29	29		109	109:4
8	2019-20	73	28	20	20	141	141:4

Results of T.Y. B.Sc.

Sr.	Acad.	Class		No. of	Result Analysis					% of				
No.	Year		Sem.	Stud. App.	О	A+	A	B+	В	С	D	Е	F	Result
1	2014-15	T.Y.B.Sc	V	11	1	0	8	0	1	1	0	0	0	100 %
	2014-13	T.Y.B.Sc	VI	11	3	0	7	0	1	0	0	0	0	100 %
2	2015-16	T.Y.B.Sc	V	20	3	0	8	0	6	2	0	0	1	95 %
2		T.Y.B.Sc	VI	19	3	0	8	0	6	2	0	0	0	100 %
3	2016-17	T.Y.B.Sc	V	27	0	0	8	0	11	2	0	0	6	77.77 %
		T.Y.B.Sc	VI	27	1	0	17	0	6	3	0	0	0	100 %
4	2017-18	T.Y.B.Sc	V	22	0	0	9	0	9	2	0	0	2	90.90 %
'		T.Y.B.Sc	VI	22	6	0	15	0	0	0	0	0	1	95.45 %
5	2018-19	T.Y.B.Sc	V	29	0	0	6	13	2	0	0	0	8	72.41 %
		T.Y.B.Sc	VI	29	0	5	7	12	2	0	0	0	1	96.30 %
6	2019-20	T.Y.B.Sc	V	20	0	1	10	6	0	1	0	0	2	90.00 %
	2017 20	M.ScI	I	20										90.00 %

Departmental Rank Holders

Sr.	Academic	Sem.	Name of student	Grade	Departmental
No.	year	Sein.	Name of student	Grauc	Rank
			Mr. Kamble Praful Dhondiram	О	I st
1	2014-15	V	Mr. Pawar Deepak Prakash	О	Π^{nd}
			Mr. Raut Tofik Hamid	О	$\mathrm{III^{rd}}$
			Mr. Kamble Praful Dhondiram	О	I st
2	2014-15	VI	Mr. Pawar Deepak Prakash	О	$\mathrm{II}^{\mathrm{nd}}$
			Mr. Raut Tofik Hamid	О	$ m III^{rd}$
			Miss. Thange Nikat Ismail	О	I^{st}
3	2015-16	V	Miss. Thange Nagma Ismail	О	II nd
			Miss. Sutar Kalavati Maruti	О	$ m III^{rd}$
			Mr. Warang Girish Shrikrishna	О	I st
4	2015-16	VI	Miss. Thange Nagma Ismail	О	\mathbf{H}^{nd}
			Miss. Sutar Kalavati Maruti	О	$ m III^{rd}$
			Miss. Chavan Pratiksha Prasad	О	I st
5	2016-17	v V	Miss. Rahate Ankita Suresh		$\Pi^{ m nd}$
3	2010-17		Miss. Raorane Shraddha Sunil	О	II
			Mr. Mestri Kuldeepak Shamsudar	О	$ m III^{rd}$
			Miss. Rahate Ankita Suresh	О	I st
6	2016-17	VI	Miss. Chavan Pratiksha Prasad	О	II nd
			Miss. Raorane Shraddha Sunil	О	$ m III^{rd}$
			Miss. Patankar Jagruti Shridhar	О	I st
7	2017-18	V	Miss. Gurav Sonal Madhukar	О	II nd
			Mr. Shelar Prafulla Shivaji	О	$ m III^{rd}$
			Miss. Patankar Jagruti Shridhar	О	I st
8	2017-18	VI	Miss. Gurav Sonal Madhukar	О	II nd
			Miss. Kokate Rekha Vijay	О	III rd
			Miss. Naik Rinaj Farukh	О	I st
9	2018-19	V	Miss. Tamhankar Anuprita Bhalchandra	О	II nd
			Miss. Joil Arati Sunil	О	III rd
			Miss. Joil Arati Sunil	О	I st
10	2018-19	VI	Miss. Tamhankar Anuprita Bhalchandra	О	II nd
			Miss. Naik Rinaj Farukh	О	III rd

Is there any method of assessing the student's academic performance in order to enrichment and/ or Remedial Course?

rid ge

Co

urse for F.Y.B.Sc. Students

2. Remedial Coaching

Types of learner		
Slow learner	Remedial	Extra lecture individual problem solving etc.
Medium learner	Improvement	Test, problem solving etc.
Advance learner	Enrichment	Projects, students seminars etc.

Research Project

Sr. No.	Title of Project	Name of Investigator	Sanctioned Amount	Year	Status
1	"Diversity Oriented Synthesis of Thiazole and Pyrazole Integrated Chalcones as Potent Leads for the Development of Anti-microbial and Anti-inflammatory Drugs"	Mr. D. M. Sirsat	30000/-	2018- 19	Completed
2	"Facile Synthesis and Characterization of CdO-ZnO nano-composite"	Mr. K. S. Pakhare	30000/-	2019-	Ongoing
3	"Applications of Organocatalysis in the Synthesis of Heterocyclic Framework"	Mr. S. M. Karape	20000/-	2019-	Ongoing
4	"New Synthetic Method for the Regioselective Synthesis of 1,2,3- Triazole Derivatives"	Dr. V. B. Gopula	30000/-	2019-	Ongoing

Research Publication, Book Publication & Achievements of Faculty

Sr. No.	Name of Faculty	Achievements
1	Mr. D. M. Sirsat	Curriculum Vitae
2	Mr. K. S. Pakhare	Curriculum Vitae
3	Mr. S. M. Karape	<u>Curriculum Vitae</u>
4	Dr. V. B. Gopula	Curriculum Vitae

Honors, Awards and Rewards of Students

Sr.	Name of Student	Class	Achievement	Year
No.	Name of Student	Class	Acmevement	1 eai
1	Miss. Kalavati Maruti Sutar	T.Y.B.Sc.	Student of the Year	2015-16
2	Miss. Pratiksha Prasad Chavan	T.Y.B.Sc.	Student of the Year	2016-17
3	Miss. Ankita Suresh Rahate	T.Y.B.Sc.	Best Reader	2016-17
4	Miss. Sonal Madhukar Gurav	T.Y.B.Sc.	Student of the Year	2017-18
5	Miss. Jagruti Shridhar Patankar	T.Y.B.Sc.	Best Reader	2017-18
6	Miss. Sonal Madhukar Gurav	T.Y.B.Sc.	G.S.	2017-18
7	Mr. Amit Rajkumar Sonkar	T.Y.B.Sc.	Student of the Year	2019-20

Achievements in Co-curricular & Extra-curricular Activities

Sr. No.	Name of Student	Class	Name of Activity	Achievement	Date
1	Miss. Kalavati M. Sutar	T.Y.B.Sc	District Level Avishkar Research Convention	Selection to University Level	28 th Nov. 2015
2	Miss. Pratiksha P. Chavan & Miss. Kajol C. Panchal	T.Y.B.Sc F.Y.B.Sc	District Level Avishkar Research Convention	Selection to University Level	13 th Dec. 2016

3	Miss. Pratiksha P. Chavan	T.Y.B.Sc	State Level Research Paper Presentation Competition-2017	First Prize	11 th Feb. 2017
4	Miss. Vaibhavi G. Malavade & Mr. Ninad S. Panchal	S.Y.B.Sc S.Y.B.Sc	District Level Avishkar Research Convention	Selection to University Level	9 th Dec. 2017
5	Mr. Amit R. Sonkar & Miss. Supriya C. Narkar	S.Y.B.Sc T.Y.B.Sc	District Level Avishkar Research Convention	Selection to University Level	16 th Dec. 2018
6	Miss. Supriya C. Narkar	T.Y.B.Sc	District level Essay Writing Competition	First Prize	20 th July 2018
7	Miss. Manasi Padval	F.Y.B.Sc.	District Level Avishkar Research Convention	Selection to University Level	14 th Dec. 2019

Collaboration/ MoU With Other Institutes/ Industry

Sr. No.	Name of Other Institute/ Industry	Details
1.	Abasaheb Marathe Arts & New Commerce, Science College, Rajapur, Dist-Ratnagiri	Click Here
2.	Smile Additional Mineral Water, Vaibhavwadi	Click Here

Activities Conducted by Department

Academic Year 2014-15

Inauguration of Chemistry Club









Inauguration of chemistry club on 7th August, 2014 Chief guest Prin. Dr.C.S Kakade, Vice-Prin. Dr. N. V. Gawali, Prof. A. M. Kamble & Head, Dept. of Chemistry Prof. D. M. Sirsat

Poster Presentation Competition Dated on 7th August 2014









Poster Presentation Competition on 7th August, 2014, Chief guest Hon. Prin. Dr. C. S. Kakade, Vice-Prin. Dr. N. V. Gawali, Prof. A. M. Kamble & Head, Dept. of Chemistry Prof. D. M. Sirsat. Examiner of Poster competition Prof. R.P. Kashetti, Prof. S.B. Kadam & Dr. V. S. Jadhav

Academic Year 2015-16





Inauguration of Chemistry Club (14th August, 2015) Chief guest Joint Secretary of Maharana Pratapsinh Shikshan Sanstha Mumbai`s Hon. Vijay B Raorane.

Rasayan Jatra Festival 2015-16













Poster Presentation Competition dated on 14th August, 2015, Chief guest Hon. D. P. Raorane Secretary of M.P.S.S. Mumbai`s & Joint Secretary Hon. Vijay B Raorane

Study Tour







Industrial visit at Padmashree Dr. D.Y.Patil Sugar Factory Asalaj, Tal-Gaganbawada, Dist-Kolhapur on 18th January, 2016.

Inauguration of Departmental Library



Chemistry Festival dated on 30th August, 2016, Chief guest Hon. Prin. Dr. C.S. Kakade, Hon. Vice-Prin. Dr. N.V. Gawali, Office superintendent Mr. Sanjay Raorane.

Academic Year 2016-17

University Level One Day Workshop on F.Y.B.Sc. Revised syllabus.



F.Y.B.Sc. revised syllabus workshop dated on 30th July, 2016, Chief guest Hon. Arjun Raorane & Hon. Shailendra Raorane Member of Maharana Pratapsinh Shikshan Sanstha Mumbai's. Principal of ARACS college Vaibhavwadi Dr. C.S.Kakade & Head Dept. of Chemistry Mr.D.M.Sirsat. Resource person of Workshop Prin. Dr. S.B. Dharap (Principal Bhausaheb Nene college, Pen), Dr. P.P.Kulkarni (Gogate-Jogalekar College, Ratnagiri), Dr. S.N. Gawale (D.B.J. College, Chiplun), Prof. Anand Pukale (Dr. Babasaheb Ambedkar College, Mahad), Prof. Dr. G.S.Nadkarni (Head, Dept. of Chemistry Goa University, Goa)

Chemistry Festival

a) Rangoli competition



b) Poster competition



Chemistry Festival dated on 30th August, 2016, Chief guest Hon. Prin. Dr. C.S. Kakade, Hon. Vice-Prin. Dr. N.V. Gawali, Office superintendent Mr. Sanjay Raorane.

C) Organized Guest Lecture



Prof. C. D. Bhenki (S. H. Kelkar College, Devgad)

D)Study Tour At National Chemical Laboratory Pune





Two days Study tour of T.Y.B.Sc. students (17 students & two faculty Prof. K.S. Pakhare & Prof. S. M. Karape) at National Chemical Laboratory Pune on 13th &14th February,2017. Memorial photographs with Scientist **Dr. P. Wadgaonkar sir**

Academic Year 2017-18

Chemistry Club Inauguration



Chemistry club Inauguration on 27th July, 2017, Chief guest Hon. Pramodji Raorane (secretary Local Management committee) Hon. Prin. Dr. C.S. Kakade, Hon. Vice-Prin. Dr. N.V. Gawali

Guest Lecture



Guest Lecture Organized for TYBSc students on 7th March, 2018. Chief Guest Asst. Prof. D. D. Bhenki

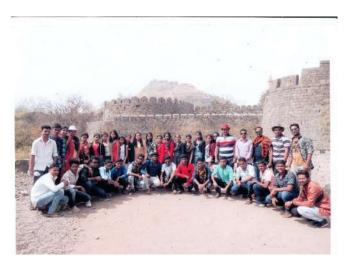


Guest lecture organized for SYBSc students on 17^{th} March, 2018. Chief Guest Dr. S. S. Karhale



Guest lecture organized for FY/SY/TYBSc students on 17th March, 2018. Chief Guest Dr. Sharad K. Pasale

Educational Trip



Educational Trip of SYBSc Students at Dr. Babasaheb Ambedkar Marathwada University Aurangabad on 5th to 7th Feb. 2018



Educational Trip of TYBSc Students at Banglore, Mysore & Ooty on 26^{th} to 29^{th} January, 2018

Academic Year 2018-19

Inauguration of Chemistry Club





Inauguration of Chemistry Club 2018-19 on 14th August, 2018

Power Point Presentation Competition





Power Point Presentation Competition on "Environment & Sustainable Development" on 14th
August, 2018

District Level Essay Writing Competition









District Level Essay Writing Competition on "Environment & Sustainable Development" on 20th July, 2018

Guest Lectures



Guest lecture of Dr. S. S. Karhale (Abasaheb Marathe College, Rajapur) on 1/10/2018



Guest lecture of Asst. Prof. B. A. Bulakhe (Abasaheb Marathe College, Rajapur) on 21/10/2018



Guest lecture of Dr. S. S. Karhale (Abasaheb Marathe College, Rajapur) on 9/3/2019

One Day Workshop on Importance of Medicinal Plants





Chief Guest Mr. Ramson (General Manager Himalaya Drugs), Dr. Shrinath Kavade (Director, SEBC) on 13/10/2018

One Day Workshop on Voice Culture & Personality Development



Chief Guest Mr. Nilesh Pawar (Zee Marathi Serial Actor)

One Day Workshop on Laboratory Safety



Chief Guest Prof. C. D. Bhenki (S. H. Kelkar College, Devgad)

Academic Year 2019-20

Inauguration of Chemistry Club 2019-20





Inauguration of Chemistry Club 2019-20 on 20th August, 2019

Celebration of International Periodic Table Year





Celebration of International Periodic Table Year by Organizing Poster Competition as well as quiz competition on Periodic Table on 20th August, 2019