

Shri Shivaji Education Society Amravati's
SCIENCE COLLEGE, CONGRESS NAGAR, NAGPUR

DEPARTMENT OF CHEMISTRY

INTERNAL ACADEMIC AUDIT

2019-2020

1. Vision and Mission of the Department.

Vision:

- To initiate post doctoral collaborative research.
- To initiate seminar competition, quiz competition and guest lectures.
- Faculty Student exchange programme.
- To establish the success rate in competitive examination.
- MOU with N.C.L. Pune , L.I.T. and Department of Chemistry R.T.M.N.U. Nagpur.

Mission :

- Synthesis of low cost adsorbent for water treatment.
- To focus on synthesis of biofuels, Biosensor, eco-friendly paints and dyes.
- Synthesis of superconducting polymers.
- Economical production of cosmetics and allied products.

2. A. Faculty Strength:

Faculty	Recruited	Vacant	Remarks
Regular	07	04	
CHB	05		
Adhoc	-		
B.Sc	02		
M.Sc	03		
Non-teaching	06		

B. Faculty profile

Name	Highest Qualification	Designation	Specialization	Teaching Experience
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1. Dr. R. U Khope	M. Sc, M Phil, Ph. D.	Head and Associate Professor	Physical Chemistry	27 Yrs.
2. Dr. P. D Burghate	M. Sc, Ph. D.	Associate Professor	Analytical Chemistry	32Yrs.
3. Dr. P. S Utale	M. Sc, Ph. D.	Associate Professor	Organic Chemistry	21Yrs.
4. Dr. Y. K Meshram	M. Sc, SET, Ph. D.	Associate Professor	Organic Chemistry	25Yrs.
5. Dr. J. K Gunjate	M. Sc, SET, NET, Ph. D.	Associate Professor	Organic Chemistry	17Yrs.
6. Dr. R. A Deshmukh	M. Sc, Ph. D.	Associate Professor	Organic Chemistry	15Yrs.
7. Dr. R. D Urkude	M. Sc, Ph. D.	Associate Professor	In-Organic Chemistry	15Yrs.
8. Dr. P. N Deshmukh	M. Sc, Ph. D.	Assistant Professor	Organic Chemistry	9Months

3. Students strength

Year	Group	Number of Students Admitted
B.Sc. Semester I	PCM	50
	CZM	31
	CBM	30
	CBZ	45
	CBG	23
	CGM	15
	PCG	22
	CMBT	85
	Total	301
B.Sc. Semester III	PCM	45
	CZM	24
	CBM	29
	CBZ	44
	CBG	23
	CGM	20
	PCG	24
	CMBT	88
	Total	297
B.Sc. Semeste V	PCM	56
	CZM	30
	CBM	23
	CBZ	48
	CBG	19
	CGM	26
	PCG	19
	CMBT	78
Total	299	
M.Sc. I	Chemistry	22

M.Sc. II	Chemistry	22
Ph.D	--	--
Value Added Program	Certificate course in Water Analysis.	

4. Students Performance

A. Result Analysis (Winter 2019)

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination		Number of students passed in final year examination		Pass Percentage	
B.Sc I st Yr.	B.Sc I Sem	Chemistry	Section		Section		Section	
			A+D	108	A+D	92	A+D	85 %
			C	99	C	79	C	79.79 %
			E	76	E	63	E	92.39 %
			Total	283	Total	234	Total	82.68 %
B.Sc II nd Yr.	B.Sc III Sem	Chemistry	Section		Section		Section	
			A+D	111	A+D	73	A+D	63.76 %
			C	93	C	68	C	77.27 %
			E	88	E	62	E	66.66 %
			Total	292	Total	203	Total	69.52 %
B.Sc Final Yr.	B.Sc V Sem	Chemistry	Section		Section		Section	
			A+D	108	A+D	92	A+D	85 %
			C	99	C	79	C	79.79 %
			E	76	E	63	E	92.39 %
			Total	283	Total	234	Total	82.68 %

Result of EVEN Semester is not available due to COVID-19

B. Achievements (Medals/Awards/Prizes at University level)

Sr.No	Name of the Students	Class	Title
1.	Rohan Mankar	B.Sc I	State level chemistry talent search examination- 2020. (3 rd Prize)

5. Students Progression:

- (i) Students' publication in Extracurricular activity

- Students actively participated in enter and extra collegiate competition (Debate, Rangoli, Singing, Dancing, Quiz etc)
- (ii) Students' Extension Activity
- Student participate in actively NSS Camp tree plantation Fetari.
- (iii) No. of Students pursuing higher course
- (iv) Students' participation in seminar
- (v) Students' Learning course through online
- (vi) Students Participated and passed in chemistry talent search examination 2020.

6. Faculty

I. Research Paper Publications

A. Total Number of publications:

- i) International ____ YKM (02), RDU (01)
- ii) National _____

B. Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self-citation

C. Faculty participation in conferences/seminar/workshop and symposia:

Name of the Faculty	Title of Conference/ Seminar/ workshop Attended	Period	Level International/ National/State /University /College	Whether Presented papers	Whether abstract /paper published in Souvenir/Abstract Book
Dr. R. U Khope	1) International Conference on Advanced Materials (AFM2020)	23 rd to 25 th January 2020	International	Yes	Yes

Dr. P. S Utale	1) National conference on Science and technology rural development.	27 and 28 Nov 2019	National	Yes	Yes
	2) National Conference on "Solid State Chemistry And Allied Areas"	20 & 21 Dec 2019	National	Yes	Yes
	3) Emerging trends in science	1 to 2 Feb 2019	National	Yes	Yes
Dr. Y. K Meshram	1) International Conference on Advanced Materials (AFM2020)	23 rd to 25 th January 2020	International Conference by Kamla neharu mahavidyalaya.	Yes	Yes
	2) Two days interdisciplinary workshop on hands on training on laboratory equipments.	2 nd and 3 rd Aug 2019	National Bajaj collage of science in association with spoken tutorial, IIT Bombay.	Yes	Yes
	3) One week faculty development program on Jmol application.	8 th May to 14 th May 2020			
Dr. J. K Gunjate	1) International Conference on Advanced Materials (AFM2020)	23 rd to 25 th January 2020	International Conference by Kamla neharu mahavidyalaya.	Yes	Yes
	2) International Conference on Advanced Materials (AFM2020)	23 rd to 25 th January 2020	International	Yes	Yes
Dr. R. D Urkude	1) National Conference on "Solid State Chemistry And Allied Areas"	20 & 21 Dec 2019	National	Yes	Yes
	2) International Conference on Advanced Materials (AFM2020)	23 rd to 25 th January 2020	International	Yes	Yes

Dr. R. A Deshmukh	1) International Conference on “Energy and Environmental Challenges (CE2C-2019)”	18 &19 January 2019	International	Yes	Yes
	2) National Conference on “Solid State Chemistry And Allied Areas”	20 &21 Dec 2019	National	Yes	Yes
	3) International Conference on Advanced Materials (AFM2020)	23 rd to 25 th January20 20	International	Yes	Yes
Dr. P. N Deshmukh	1)) International Conference on Advanced Materials (AFM2020)	23 rd to 25 th January20 20	International	Yes	Yes
	2) National conference on innovative research science and technology.	17 and 18 Dec 2019	National	Yes	Yes

D. Awards to Faculty members.

- Nil.

7. MoUs signed with institutions of national, international importance, other universities, industries, corporatehouses etc. during the year

Date of MOU	Organization	Purpose/Activity	Student Participate under MOU

8. Research funds sanctioned and received from various agencies, industry and other organizations

Nature of the Project	Duration	Name of funding Agency	Amount Sanctioned	Amount Received

9. Books Published

Name of the Author	Book		Book Edited
	Title	ISBN and Date	Chapter
Dr. R. D Urkude	Quality control in beverage industry	15/08/2019	Pesticide residues in beverage, volume 17 issue 1.Elsevier Publication

10. Research Guidance by Faculty during the year

Name of the guide	Ph.D		
	Awarded	Submitted	Registered
Dr.R.U.Khope	02		
Dr Reshal Deshmukh	01		
Dr.R.D.Urkude	01		

11. Action Plan of the Department

- To organize conferences and seminars.
- To organize poster ,quiz and curriculum related competitions.

- To enhance research publications in national and international Journal.
- To form linkages with National Laboratories like NCL, IICT Hyderabad.
- To arrange the lecturers of eminent scientists and Professor.
- To encourage UG and PG student for research.
- To celebrate scientific days like Ozone days, world water day, Antidrug day.
- To synthesize the drugs, dyes and adsorbents for betterment of life.
- To arrange the skilled based training programmes required by Industries.

12. Best Practices of the department:-

- Counseling to slow learner.
- Provided Question Bank as per university pattern.
- Conducted test on all units as per university pattern.
- Digitalization of entire documents / records.
- Celebration of national science day.
- Celebration of Teacher's day.
- Staff members were involved in campus cleaning, Sponsored medals / awards by the faculty.

13. SWOT Analysis

Strength:

- Well Qualified, Competent and Experienced Staff.
- Self financing PG Course.
- Well quipped Laboratories.
- Number of options available with chemistry subject.
- Department is under CPE.
- Certificate course in environmental Analysis.
- Regular seminars, personality development, guest lectures and awareness programs.
- Laboratory is recognized for higher learning and research.
- Five faculties are Ph.D. supervisors.
- Remedial teaching to slow learners.
- NET/SET coaching centre.
- Four National Conferences organized.

➤ **Weakness :**

- Average student seek admission in the subject.
- Research on social oriented problems.
- The gap between the industrial demand and curriculum.

➤ **Opportunities :**

- Employment potential for M.Sc. Student in chemical/pharma companies.
- Student faculty exchange programme.
- Upcoming industries in MIHAN.
- Upcoming textiles Zone nearby Nagpur.
- To stablish collaboration and Consultancy Services.
- To undertake interdisciplinary research having social relevance.
- Students can pursue research leading to Ph.D.

• **Threats :**

- Fostering global challenges among the students.
- Inculcating value education among the students.
- Quest for excellance.