

## DEPARTMENT OF CHEMISTRY

### DEPARTMENTAL PROFILE

#### 1. Faculty Profile – adequacy and competency of faculty.

The department of chemistry has one programme. i.e. B.Sc. It has three qualified faculties. Out of these three staff members, two are Ph. D one has submitted the Minor research projects to UGC (WRO) Pune.

Out of these three faculties one is recognized guide of S.G.B. Amravati University and has two research students each registered for their Ph. D. work.

Sr. No.	Name of Faculty	Qualification	Designation	Experience
1	Dr. A.Y.Deshmukh	M.Sc., Ph.D.	Head & Associate professor	27 years
2	Dr. R.B.Pawar	M.Sc., M.Phil., Ph.D.	Associate professor	26 years
3	Mr. V.W.Tathe	M.Sc.	Associate professor	26 years

- No. of post sanctioned: 04
- No. of post filled : 03
- No. of post vacant : 01

\*Two teachers have been appointed on clock hour basis counter this vacancy.

#### 2. Students Profile—entry level competencies, Sociometric status, language proficiency etc.

Admission to undergraduate level starts from B.Sc. I, who is on First come, first basis. However, in B.Sc. II and B.Sc. final, their entry level is from their previous exams. As our college is very famous for its academic excellence, it attracts students from all over India. Their knowledge of English is very much checked at the entry level, but is not the sole criteria for admission. However, we check, whether they have effective understanding and communication skills.

#### 3. Changes made in the courses or programme during the past two years and the contribution of the faculty to those changes.

The B.Sc. Syllabus as seen only one revision in the last three years, whereas the syllabus for B.Sc. II has been revised only this session and also implemented from 2009-

2010. Before, any changes were incorporated, the entire chemistry faculty of S.G.B. Amravati University, Amravati had number of meeting and discussed the changes minutely including the scope and limitations to be taught in the given specified number of periods. The meetings for changing undergraduate syllabus were organized in our college auditorium and our faculties were actively involved in the same.

**4. Trends in the success and drop out rates of students during the past two years.**

The department is one best department not only in the college but in the S.G.B. Amravati University as well. We are happy with the success rate our students in chemistry. The department has secured top merit position in UG courses for the last two years. The dropout rate is eleven.

However, this department continuously strives to improve its success rate and scale new heights.

**5. Learning resources of the departments—library, computer, Laboratories and other resources.**

Beside the central library the department also has its departmental library which has more than 160 Books of Indian and Foreign authors. The departmental library also has subscription to 06 journals catering to the needs of the research students. The department also has 01 computer with Internet connection.

**6. Modern teaching methods practiced and use of ICT in teachings—learning's.**

The department has OHP, LCD Projector, Charts, and Models, which are effectively used in teaching process. Use of ICT is made in teachings—learning and has increased with time.

**7. Participation of teachers in academic and personal counseling of students.**

Students counseling is our priority and the departmental faculties are actively involved in it. We believe in the fact that without counseling teaching remains incomplete and subsequently affect the student success rate. To enforce our efforts in

this direction we involve our alumni's, working in National and International level and holding high academic positions to guide them from time to time.

**8. Details of faculty development programmes and teachers who have been benefited during past two years.**

As such the faculty development is generally conducted by academic staff college of the University. In the past two years though the faculty have participated in any such programme but keeping the knowledge and the latest trends update the faculties are always after it from different best available sources.

**09. Participation/contribution of teachers to the academic activities including teachings consultancy and research.**

The following data shows the active participation of our faculties in the academic and teachings activities.

**Participation of faculty members in different academic activities.**

**Dr. A.Y.Deshmukh :**

1. National Conference on "Drug Designing and synthesis" at Dr. Ambedkar College, Nagpur on 19<sup>th</sup>, 20<sup>th</sup> Jan. 2007.
2. State level conference on "Environment 2007 at S.S. College, Akola on 4<sup>th</sup> Feb. 2007.
3. National Seminar on Advance Materials on the eve of supernniuation of Prof. N.S.Bhave at Department of Chemistry R.T.M. Nagpur University, Nagpur on 12<sup>th</sup> Feb. 2007.
4. International Conference on "Drug Discovery and Nano technology" at Yeshwant college, Nanded on Jan 27,28,29 2008.
5. National Conference on "Green chemistry and it's perspective at Department of Chemistry S.G.B. Amravati University, Amravati on Feb. 11,12, 2008.
6. Regional Seminar on "Recent Trends in Heterocyclic compounds in Chemical, medicinal and pharma ceutical sciences" at Mahatma Fule Mv. Warud on March 2, 2008.

7. National Seminar on “Current Trends in Chemical sciences Research at S.S. College, Akola on 28<sup>th</sup> March 2008.
8. State Level Seminar on “Recent Trends in Teaching Basic & applied sciences” at Phulsing Naik Mahavidyalaya, Pusad on 3<sup>rd</sup> Jan. 2009.
9. Workshop on College office & Library Computerisation at S.S. College, Akola on 5<sup>th</sup> Jan. 2009.
10. State level conference on “Environmental Crisis with Special Emphasis to save earth” at B.B. College, Digras on 25<sup>th</sup>, 26<sup>th</sup> Feb. 2009.
11. International Conference on “English Language & Literature Today” at V.B. College, Amravati on 12<sup>th</sup> & 13<sup>th</sup> Nov. 2009.
12. Workshop on “Information Literacy”, S.S.S.K.R.Innani Mahavidyalaya, Karanja (Lad) (M.S.) 27<sup>th</sup> November, 2009.
13. WRCE-2009 - "Women's Role in Conservation of Environment". S.S.S.K.R. Innani Mahavidyalaya, Karanja (Lad), 30<sup>th</sup> December 2009.
14. National Seminar on “Recent Innovation in Drug Technology, Techniques and Nanotechnology” at S.R.R.L. Science College, Morshi on 27<sup>th</sup> Feb. 2010.
15. National Conference on “Recent Trends in Chemical Research 2010”, at G.S. Gawande college, Umarched on 12<sup>th</sup> & 13<sup>th</sup> March 2010.
16. Workshop on "Total Solar Eclipse". S.G.B. Amravati University, Amravati. 13<sup>th</sup> - 14<sup>th</sup> June, 2010.
17. Workshop on Semester pattern “Implimentation at S.S.S.K.R.Innani College, Karanla Lad on 29<sup>th</sup> Sep. 2010.
18. National Conference on “Recent Advnances in Environmental Biology and Biodiversity” at S.S.S.K.R.Innani Mv. Karanja (Lad) on 3<sup>rd</sup>, 4<sup>th</sup> Feb. 2011.

**Dr. Ms. R.B.Pawar :**

1. National Conference at Dr. Ambedakar college Nagpur on 19 & 20 Jan 2007.
2. Regional Seminar at Mahatma Fule Mv. Warud on March 2, 2008.
3. National conference on green chemistry & its perspective at deptt of chemistry, S.G.B.Amravati University Amravati on Feb 11, 12 2008.

4. National conference at R.T.M.Nagpur University Nagpur on 28 to 30 Nov 2007.
5. At Shri Shivaji science college Amravati on 27 to 31 Oct 2009.
6. International conference at Vidyabharti science college Amravati at 12, 13 Nov 2009.
7. Symposium womens role in conservation of environment (Paper published) 30 Dec 2009 (University)
8. N.C.M.S. 2010 Vidya Bharti Sc.College Amt 6 &7 Jan 2010 (National)
9. N.C.A.M.R. Shankarlal K.C. Akola National (Poster personated) 26 & 27 Feb 2010
10. National workshop on advances in instrumental techniques Shri. Shivaji sci. college Amt. on 14 to 46 Oct 2010.
11. Workshop on Information Literacy, S.S.S.K.R.Innani Mahavidyalaya, Karanja (Lad) (M.S.) 27<sup>th</sup> November, 2009.
12. National Conference on "Recent Advances in Environmental Biology and Biodiversity" at S.S.S.K.R.Innani Mv. Karanja (Lad) on 3<sup>rd</sup>, 4<sup>th</sup> Feb. 2011.
13. Workshop on Semester pattern "Implementation at S.S.S.K.R.Innani College, Karanla Lad on 29<sup>th</sup> Sep. 2010.

**Mr. V.W.Tathe :**

1. National conference on green chemistry & its perspective at deptt of chemistry, S.G.B.Amravati University Amravati on Feb 11,12 2008.
2. Regional Seminar on "Recent Trends in Heterocyclic compounds in Chemical, medicinal and pharma ceutical sciences" at Mahatma Fule Mv. Warud on March 2, 2008.
3. State Level Seminar on "Recent Trends in Teaching Basic & applied sciences" at Phulsing Naik Mahavidyalaya, Pusad on 3<sup>rd</sup> Jan. 2009.
4. Workshop on Information Literacy, S.S.S.K.R.Innani Mahavidyalaya, Karanja (Lad) (M.S.) 27<sup>th</sup> November, 2009.
5. State level conference on "Environmental Crisis with Special Emphasis to save earth" at B.B. Arts, N.B. Commerce & B.P. Science College, Digras on 25<sup>th</sup>, 26<sup>th</sup> Feb. 2009.
6. Interdisciplinary State Level Symposium on "Women's Role in Conservation of Environment". 30<sup>th</sup> December 2009.

7. WRCE-2009 - "Women's Role in Conservation of Environment". S.S.S.K.R. Innani Mahavidyalaya, Karanja (Lad), 30<sup>th</sup> December 2009.
8. National Conference on "Recent Advances in Environmental Biology and Biodiversity" at S.S.S.K.R.Innani Mv. Karanja (Lad) on 3<sup>rd</sup>, 4<sup>th</sup> Feb. 2011.
9. Workshop on Semester pattern "Implimentation at S.S.S.K.R.Innani College, Karanla Lad on 29<sup>th</sup> Sep. 2010.

**10. Collaboration with other departments/ institutions at the state, National and International level and their outcome during the past two years.**

The department has collaboration with the department of Chemistry, S.G.B. Amravati University Amravati.

**11. Priority areas for research and details ongoing projects important note worthy publication are of the faculty, during the past two years.**

Sr. No	Title of the project	Name of Investigators	Newly implemented	completed
01	Minor research project:- Soil analysis of ruler agricultural land of karanja tahasil Dist. Washim to assess its fertile potential.	Mr.V.W Tathe	29/07/10	Submitted to UGC.WRO, PUNE.

**LIST OF THE PUBLICATIONS BY FACULTY MEMBERS :**

**Name of the faculty : Dr.A.Y.Deshmukh :**

**A) Research Papers :**

**I) International :**

1. D.B.Rathod, P.B. Raghuwanshi, A.Y.Deshmukh, D.T. Tayade. : Studies in the synthesis of [2-Hydroxy-4-Methyl-6-(3-substituted) Thiocarbamide ]-1, 3, 5-Triazine. International Conference on "Drug Discovery and Nanotechnology at Yeshwant College Nanded on Jan 27-28-29, 2008.

**II) National :**

1. P.B.Raghuwanshi, A. Y. Deshmukh and A. G. Joshi : Studies on Interaction between Fe (III) metal ions and substituted pyrazolines at 0.1 M ionic strength potentiometrically and spectrophotometrically. (Paper Accepted).

2. D.B.Rathod, D.T.Tayade and S.U.Patil. A.Y.Deshmukh : Synthesis and Structural Elucidation of substituted-S-Triazines., Asian Journal of Chemistry Vol. 22 No. 10 (2010), 8252-8254.
3. A.Y.Deshmukh, D.B.Rathod and D.T.Tayade : Synthesis and Antimicrobial activities of 2-Hydroxy, 4-Methyl-6-Substituted Thiocarbamide-1, 3, 5, Triazines. Published at National Conference on Chemistry for Health at Deptt of Chemistry Institute of Science Nagpur on 28<sup>th</sup> & 29<sup>th</sup> Jan. 2010.
4. A.Y.Deshmukh, D.B.Rathod, N.D.Gawhale and S.S.Asawale : A convenient method in the synthesis of some Nitrogen Containing heterocyclic compounds. Published at National Conference on "Recent Trends in Heterocyclic compounds in chemical medicinal and pharmaceutical science at M.F. College, Warud on
5. A.Y.Deshmukh, D.B.Rathod, S.U.Patil and S.S.Asawale : Studies in Antimicrobial activities of substituted triazino thiocarbamides. Published at National Conference on G.C.E.P. – 2010 at S.S.V.P.S. Science College, Dhule on 16-17<sup>th</sup> Jan. 2010.
6. P.V.Raut, M.J. Dagawal and A.Y.Deshmukh : Physico-chemical Analysis of Natural river water at Omkareshwar (M.P). Published at National Conference on Environmental Biology & Biodiversity at S.S.S.K.R.Innani College, Karanja (Lad) on 3<sup>rd</sup> & 4<sup>th</sup> Feb. 2011.
7. P.P. Barde, A.Y.Deshmukh and D.T.Dongare : Role of community in Ground Water Development and Management for labitations located nearby Urban area 'A case study of Vidyabharati Colony Village Walai District Washim. Published at National Conference on Environmental Biology & Biodiversity at S.S.S.K.R.Innani College, Karanja (Lad) on 3<sup>rd</sup> & 4<sup>th</sup> Feb. 2011.

### **III) Books :**

1. A Textbook of Inorganic Chemistry (B.Sc.I).  
W.S.Marathe, S.G.Bhadange, A.Y.Deshmukh, P.P. Mapari and K.K. Kubade.

**Name of the faculty : Dr.Ms.R.B.Pawar :**

### **A) Research Papers :**

1. "Analysis of space-Time Singularities in Higher dimensional monopole-void collapse" published in Indian journal of physics, 81(4), 485-493 (2007)
2. "Gravitational collapse of radiating dyon solution and cosmic censorship" published in Chinese physics letter, Vol.25, No. 3(2008)854.
3. "Analysis of radial null geodesics in higher dimensional space-Time" published in Bulletin of Cal. Math. Soc., 100, (1)73-84(2008)

**I) National Level Research Publications:-**

1. Studies of molecular interaction of legends in Dioxane-water mixture  
R.B.Pawar, D.T.Dongare, B.G.Khobragade & A.N.Narwade  
Proceeding of national conference on advances in material research -2010

**II) State level Research Publications:-**

1. Women's role in Conservation of Environment Souvenir of symposium at S.S.S.K.R.Innani College Karanja

**12. Placement record of the past students and the contrition of department to aid student's placement.**

The department is continuously monitoring the placement of our U.G. students.

Sr.No.	Name of students	Details of placements
1	Mr. Kishor Puri	Associate Professor at Shivaji College, Akola.
2	Mr. P.D.Netankar	Associate Professor at Milind College, Aurangabad.
3	Mr. K.M.Gunjate	Associate Professor at Shivaji College, Nagpur.
4	Mr. M.M.Munde	I.I.T. Bombay.
5	Mr. A.A.Nandgaonkar	Civil Judge at Buldhana.
6	Ms. S.R.Sarani	Civil Judge at Nanded.
7	Mr. N.D.Gawhale	Assistant Professor at B.B. College, Digras.
8	Mr. Mahesh Pawar	Assistant Professor at Shivaji College, Chikhali.
9	Mr. P.V.Raut	Assistant Professor at R.Sarda College, Anjangaon Surji.
10	Mr. N.S.Thakare	Principal, M.S.P. College, Manora.
11	Mr. A.B.Chavhan	S.D.O.-Sub divisional office, Amravati.
12	Mr. H.N.Bagade	S.D.O.-Sub divisional office, B.S.N.L. Amravati.



13	Mr. R.S.Kinhikar	Medical physicist – Tata Memorial Hospital, Mumbai.
14	Mr. Sanjay Vaidya	Custom officer – EDI system, New Mumbai.
15	Ms. Shalini Dhote	Deputy commissioner, Deputy commissioner office, Pune.

**13. Plan of action of the department for next five years.**

The departmental has planned for the following activities:

- Inauguration of chemical society.
- Guest lecture by eminent teachers.
- Remedial teaching.
- To make laboratories more equipped with advanced instrument.
- To arrange for campus interview.
- More stress will be given in applied and interdisciplinary research.