

#### 4. Research

##### Papers published in journals:

| S. N . | Title of Paper                                                                                                                                              | Name of the author/s | Department of the teacher | Name of Journal                                                                               | Year of Publication                 | ISSN / ISBN No.         | Link of the recognition in UGC enlistment of the journal |
|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------|-------------------------|----------------------------------------------------------|
| 1      | "Viscosity Measurement and Determination of A & B Coefficient of Substituted Schiff's Bases in 70% DMF-Water Mixture at $304 \pm 0.1K$ "<br>Pg. No. 176-178 | Dr. S. P. Wagh,      | Chemistry                 | Journal of Aquatic Biology                                                                    | Sept. 2013                          | ISSN 0971-4235          |                                                          |
| 2      | Synthesis and Agricultural Studies Of(1 S-cis)- 4- (3 ,4- di chloro phenyl)- 1,2 ,3 ,4- tetra hydro- N- methyl- 1- naphthalenamine                          | R.M.Jumle            | Chemistry                 | Journal for Research Studies                                                                  | Volume- 2 ISSUE- 1,pp-1-6 (2013).   | ISSN- 2277- 839X        |                                                          |
| 3      | Study of molecular interactions of STL hydrochloride in different solvents at 303K.                                                                         | R.M.Jumle            | Chemistry                 | Journal for Research Studies                                                                  | Volume- 2 ISSUE- 1,pp-29-34 (2013). | ISSN- 2277- 839X        |                                                          |
| 4      | "Studies of Acoustic Properties of Substituted Schiff's Bases at Different Percentage of DMF-Water Mixture at $305 \pm 0.1K$ "<br>Pg. No. 1349-1353         | Dr. S. P. Wagh,      | Chemistry                 | International Journal of Researches in Bioscience Agriculture & Technology , Issue-2, Vol. I, | Jan. 2014                           | ISSN (Online) 2347-517X |                                                          |

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|---|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------|-----------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------|--|
| 5 | "Influence of Ionic Strength of Medium on Complex Equilibria of Lanthanum (III) and Neodymium (III) with substituted Schiff's Bases"<br>Pg. No. 606-610 | Dr. S. P. Wagh,                                                     | Chemistry | International Journal of Researches in Bioscience Agriculture & Technology , Issue-2, Vol. II,            | May 2014                        | ISSN (Online) 2347-517X   |  |
| 6 | "Synthesis of -5-(Substituted Phenyl) -5-(Substituted Benzyl) -2-Substituted ThioHydantoin                                                              | S. V. Kolhe<br>R. E. Bhadange,<br>G. B. Andhale,<br>A. R. Somwanshi | Chemistry | International Journal of researches in Biosciences , Agriculture & Technology                             | May 2014                        | issue-2, Vol.-II, 255-259 |  |
| 7 | "Synthesis and Antimicrobial Activities of -5-(Substituted Phenyl)-5-(Substituted Benzyl)-2-Substituted thiohydantoin"                                  | S. V. Kolhe                                                         | Chemistry | International Journal of researches in Biosciences , Agriculture & Technology : issue-2, Vol.-II, 255-259 | May 2014                        | ----                      |  |
| 8 | "Development of n-type Cds and Zns Nanostructured Semiconductors for Solar Cell Application"<br>Pg. No. 77-79                                           | Dr. S. P. Wagh,<br>Vijay B. Sanap                                   | Chemistry | International Journal of Thin Films Science and Technology                                                | 01 Sept. 2014                   | ISSN (Online) 2090-9527   |  |
| 9 | Effect of solvents on the ultrasonic velocity and acoustic                                                                                              | R.M.Jumle                                                           | Chemistry | Aayushi International interdisciplinary                                                                   | Special Issue NO 25 Page no.429 | ISSN No.2349-638 Impact   |  |

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|    | parameters of Naloxone drugs at 308K                                                                                                                                |                 |           | nary research journal(AIIR J)                                                          | 2014                                      | Factor 4.574           |  |
| 10 | "Viscosity Measurement of Substituted Schiff's Bases in 70% DMF-Water Mixture at Different Temperature and Determination of Thermodynamic Parameters" Pg. No. 69-72 | Dr. S. P. Wagh, | Chemistry | International Journal of Chemical and Physical Sciences IJCPS Vol.4 Special Issue-NCSC | Jan. 2015                                 | ISSN 2319-6602         |  |
| 11 | Studies in Acoustic Parameters of Promethazine Drug in Dioxane-Water Solvent at Different Temperatures                                                              | R.M.Jumle       | Chemistry | International Journal of Chemical and Physical Sciences                                | Volume-4 Special Issue, 478-482, Jan 2015 | ISSN:2319-6602 IF 1.02 |  |
| 12 | Seasonal Variation in Physico-Chemical parameters and Incidence of pesticides residues of Poha Dam Reservoir, Karanja (lad) Dist - Wasim                            | R.M.Jumle       | Chemistry | International Journal of Chemical and Physical Sciences                                | Special issue, Vol 4.-Jan 2015            | ISSN No.2319-6602      |  |
| 13 | "Assessment of water quality in the river Purna, District-Akola, Maharashtra"                                                                                       | S. V. Kolhe     | Chemistry | International journal of chemical and physical Sciences Vol.4 pp. 524-529.             | Jan- 2015                                 | ISSN; 2319-6602        |  |
| 14 | Novel synthesis of 2,3-Disubstituted methylene Furan                                                                                                                | R.M.Jumle       | Chemistry | International Journal of Chemical                                                      | Volume-4 Special Issue,                   | ISSN:2319-6602         |  |

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|--------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------|--|
|        | Quinoxaline -----<br>---and its<br>biological<br>activities.                                                                     |                    |               | and<br>Physical<br>Sciences                                                                                                           | 524-529,<br>Jan 2015                                  | IF 1.02                                                       |  |
| 1<br>5 | Assessment of<br>Water Quality in<br>the River Purna,<br>Dist. Akola                                                             | R.M.Jumle          | Chemistr<br>y | Internation<br>al Journal<br>of Chemical<br>and<br>Physical<br>Sciences                                                               | Volume-4<br>Special<br>Issue,<br>524-529,<br>Jan 2015 | ISSN:231<br>9-6602<br>IF 1.02                                 |  |
| 1<br>6 | Study of<br>molecular<br>interactions of<br>Chlorpromazine<br>hydrochloride in<br>different solvents<br>at 308.15K.              | R.M.Jumle          | Chemistr<br>y | Global<br>Journal of<br>Research<br>Analysis                                                                                          | Volume-4<br>Issue-2,<br>Feb 2015,<br>13-14            | ISSN No.<br>2277-<br>8160<br>IF 1.5408                        |  |
| 1<br>7 | "Synthesis of 3,4-<br>Dilylidine and N-<br>Substituted<br>Pyrrolidines and<br>its Anti-Microbial<br>Activity"<br>Pg. No. 154-159 | Dr. S. P.<br>Wagh, | Chemistr<br>y | American<br>Journal of<br>Pharmetec<br>h Research<br>2015 : 5(3)                                                                      | Apr. 2015                                             | ISSN<br>2249-<br>3387                                         |  |
| 1<br>8 | "Antimicrobial<br>Properties of<br>Calcium Chloride<br>Loaded<br>Polyaniline"Pg.<br>No. 314-315                                  | Dr. S. P.<br>Wagh, | Chemistr<br>y | Internation<br>al Journal<br>of<br>Researches<br>in<br>Biosciences<br>,<br>Agriculture<br>and<br>Technology<br>, Issue (3),<br>Vol.II | May 2015                                              | ISSN<br>2347-<br>517X                                         |  |
| 1<br>9 | "Physco-Chemical<br>Analysis of River<br>Morna<br>(Maharashtra)"Pg.<br>No. 121-126                                               | Dr. S. P.<br>Wagh, | Chemistr<br>y | Life<br>Sciences,<br>64(2015)                                                                                                         | 1 June<br>2015                                        | ISSN<br>2277-<br>4297<br>(Print)<br>0976-<br>1098(Onl<br>ine) |  |

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| 20 | "Dependence of Cds Grain Size in Thin Films on the Source of Cadmium Ion"Pg. No.143-145                                   | Dr. S. P. Wagh,                                                                          | Chemistry | Multilogic in Science Vol. V, Issue XIII                  | July 2015         | ISSN 2277-7601 |  |
| 21 |                                                                                                                           |                                                                                          |           |                                                           |                   |                |  |
| 22 | "Synthesis of Pyrazole Derivatives and Their Antimicrobial Activities"Pg. No. 1230-1236                                   | Dr. S. P. Wagh, Vivek. R. Tembhare, Chandrakant S. Bhaskar.                              | Chemistry | World Journal of Pharmaceutical Research Vol. 4, Issue 11 | 6 Oct. 2015       | ISSN 2277-7105 |  |
| 23 | "Green Approach to the Synthesis of Some $\alpha, \beta$ Un-Saturated Ketmines"Pg. No. 40-43                              | G. B. Andhale<br>Dr. S.P. Wagh<br>Dr. R. M. Jumle,<br>Dr. S. V. Kolhe,<br>A.R. Somwanshi | Chemistry | Vidyawarta Issue-12, Vol-03                               | Oct. to Dec. 2015 | ISSN 2319 9318 |  |
| 24 | "Green Approach to the Synthesis of Some $\alpha, \beta$ Un-Saturated Ketmines"Pg. No. 40-43                              | G.B.Andhale                                                                              | Chemistry | Vidyawarta Issue-12, Vol-03                               | Oct. to Dec. 2015 | ISSN 2319 9318 |  |
| 25 | "Green Approach to the Synthesis of Some $\alpha, \beta$ Un-Saturated Ketmines"Pg. No. 40-43                              | S. V. Kolhe                                                                              | Chemistry | Vidyawarta Issue-12, Vol-03                               | Oct. to Dec. 2015 | ISSN 2319 9318 |  |
| 26 | "Green Approach to the synthesis of some $\alpha, \beta$ unsaturated ketimines" Vidyawarta International Research journal | G. B. Andhale, Dr. S. P. Wagh, Dr. R. M. Jumle, A. R. Somwanshi                          | Chemistry | Vidyawarta International Research journal.                | Oct. to Dec. 2015 |                |  |

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| 27 | "Studies on Physicochemical Parameters to Assess the Water Quality of Khadakpurna Dam in Buldhana District" Pg. No. 39-43 | Dr. S. P. Wagh, | Chemistry | 'Vidyawarta', Interdisciplinary Multilingual Referred Journal Issue-13, Vol-05 | Jan, Feb, Mar. 2016               | ISSN 2319 9318             |  |
| 28 |                                                                                                                           |                 |           |                                                                                |                                   |                            |  |
| 29 | Ultrasonic studies of molecular interactions of some phenothiazines in aqueous medium at 308K                             | R.M.Jumle       | Chemistry | International Journal of Researches in Biosciences ,Agriculture and technology | Volume IV, issue (3),SEPT.2016    | ISSN 2347-517X             |  |
| 30 | "A Study of Ground Water Quality of Akola road ward in Municipal area of Akot Dist. Akola Maharashtra"                    | S. V. Kolhe     | Chemistry | International Journal of Chemical Sciences 14(2) pp847-851,                    | 2016,                             | ISSN 0972-768 X.           |  |
| 31 | Study of Acoustical Behavior of Terbufine in Binary Liquid Mixture at 303K.                                               | R.M.Jumle       | Chemistry | International Journal of Researches in Biosciences ,Agriculture and technology | Special issue(2),vol V.-July 2017 | ISSN No.2347-517X (online) |  |

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| 3<br>2 | Regression Analysis of Ground Water Quality of Rural Areas of Akot-City Using Physico – Chemical Parameters                                              | S. V. Kolhe                                    | Chemistry | International Journal of Engineering Inventions Volume 6, Issue 2 pp: 54-57             | Feb 2017   | ISSN: 2278-7461    |     |
| 3<br>3 | Synthesis and Antimicrobial Activities of 2-Furylidne-5-chloro-7-substituted coumaran-3-one from 2, 3, 5, substituted- $\beta$ -(2'furyl) Acrotylphenone | S. V. Kolhe                                    | Chemistry | International Research Journal of Natural and Applied Sciences Vol. 4, Issue 3 pp-24-27 | March 2017 | ISSN (2349-4077)   |     |
| 3<br>4 | Thermodynamic parameters of glucose & its Cu(II) metal complex by ultrasonic technique                                                                   | G. B. Andhale, Dr. S. P. Wagh, A. R. Somwanshi | Chemistry | Bionano Frontier                                                                        | July 2017  | ISSN No. 0974-0678 | --  |
| 3<br>5 | Removal of Cr(VI) by using Butea frondosa Tree bark: Adsorption technique                                                                                | A. R. Somwanshi                                | Chemistry | International Journal of researches in Biosciences , Agriculture & Technology           | July 2017  | ISSN 2347-5174     | --- |
| 3<br>6 | "Evaluation of Physico Chemical Parameters of river Purna Akola District, Maharashtra, India"                                                            | A. R. Somwanshi                                | Chemistry | IJBAT                                                                                   | July 2017  | ISSN 2347-5174     | --- |
| 3<br>7 | Study of metal-ligand and proton ligand stability constant of Ba(II),                                                                                    | Dr. S. P. Wagh, G. B. Andhale                  | Chemistry | International Journal or reaserch in                                                    | July 2017  | ISSN No. 2347-517X |     |

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|    | Sr(II), Ni(II), & Cu(II), with A, B Unsaturated Ketimines by Ph Metrically                                                                       |                                                       |           | bioscience, Agriculture & Technology                                      |                   |                    |                     |
| 38 | Thermodynamic parameters of glucose & its Cu(II) metal complex by ultrasonic technique                                                           | G. B. Andhale<br>Dr. S. P. Wagh,<br>A. A.R. Somwanshi | Chemistry | Bionano Frontier                                                          | July 2017         | ISSN No. 0974-0678 |                     |
| 39 | Study of metal-ligand and proton ligand stability constant of Ba(II), Sr(II), Ni(II), & Cu(II), with A, B Unsaturated Ketimines by Ph Metrically | G.B.Andhale                                           | Chemistry | International Journal or reaserch in bioscience, Agriculture & Technology | July 2017         | ISSN No. 2347-517X | --                  |
| 40 | Thermodynamic parameters of glucose & its Cu(II) metal complex by ultrasonic technique                                                           | G.B.Andhale                                           | Chemistry | Bionano Frontier                                                          | July 2017         | ISSN No. 0974-0678 | --                  |
| 41 | Thermodynamics study of some substituted schiff's bases at different concentration in 70% (dioxane+ water) Solvent by Viscometrically            | G.B.Andhale                                           | Chemistry | Aayushi International Interdiscitlinary Research Journal (AIIRJ)          | 2018              | ISSN No. 2349-638x | www.aiirjournal.com |
| 42 | " Synthesis of some Heterocyclic Compounds Derived From Chalcone"                                                                                | S. V. Kolhe, A. R. Somwanshi                          | Chemistry | Aayushi International Interdiscipli nary research Journal (AIIRJ)         | 22-23 March 2018. |                    |                     |
| 43 | Thermodynamics study of some                                                                                                                     | G. B. Andhale                                         | Chemistry | Aayushi Internation                                                       | 2018              | ISSN No. 2349-     | --                  |



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|        | substituted schiff's bases at different concentration in 70% (dioxane+ water) Solvent by Viscometrically                                | Dr. S. P. Wagh,                  | y          | al Interdiscitli nary Research Journal (AIIRJ)                                        |            | 638x             |                                                                      |
| 4<br>4 | A Study of acoustic parameters of 2-(diphenylmethoxy ) N,N dimethylethanamine in different mixtures of solvents at 299K                 | Jumle R.M. & Wasnik Usha         | Chemistr y | Internation al Journal of Innovative Science Engineering and Technology Vol.6 Issue 6 | June 2019  | ISSN 2348-7968   | <a href="http://www.ijaiset.com">www.ijaiset.com</a>                 |
|        | Adsorption of Co(II) metal ions from aqueous on to activated carbon prepared from                                                       |                                  |            |                                                                                       |            |                  |                                                                      |
| 4<br>5 | Refractometric study of substituted ketimine under different concentration in DCM water mixture at 308K                                 | G. B. Andhale<br>Dr. S. P. Wagh, | Chemistr y | Research Journey International Research Journal                                       | Feb. 2019  | ISSN 2348-7143   | <a href="http://www.researchjourney.Net">www.researchjourney.Net</a> |
| 4<br>6 | Studies on biodiversity pf common weeds and its medicinal value of akot region                                                          | S.N.Patole<br>A.R.Somva nshi     | Chemistr y | Ajanta                                                                                | March 2019 | ISSN 2277-5730   | <a href="http://www.sjifactor.com">www.sjifactor.com</a>             |
| 4<br>7 | Studies in ultrasonic parameters of aromatic substituted ketimines drugs under different concentration in 75% DCM Water mixture at 303K | G. B. Andhale<br>Dr. S. P. Wagh, | Chemistr y | Internation al Journal of research and analytical review(IJRA R)                      | 2019       | E-ISSN 2348-1269 | <a href="http://www.ijrar.org">www.ijrar.org</a>                     |

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| 48 | Studies in interaction between bivalent transition and alkaline earth metal ion with substituted ketimine drugs under 75%DCM water mixture at 302 pH metrically | G. B. Andhale<br>Dr. S. P. Wagh, | Chemistry | International Journal of Advanced Scientific Research and Management | 2019 | ISSN 2455-6378 | <a href="http://www.ijasrm.com">www.ijasrm.com</a> |
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### Books published:

| Name of the Author | Title of the book                                                                                                                | Year      |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------|
| Dr.S.P.Wagh        | 1 Chemical Kinetics and Catalysis.<br>2 Environmental Pollution and Water Analysis : Shanur Dam And Water Supply Scheme for Akot | 2013-2014 |
| Dr. S. P. Wagh     | 1 Text Book of Chemistry B.Sc. I Sem. II<br>2 Text Book of Chemistry B.Sc. II Sem. III                                           | 2014-2015 |
| Dr. R. M. Jumle    | Text Book of Chemistry B.Sc. I Sem. II                                                                                           | 2014-2015 |

### Conference attended by Faculties

#### 2013-14

| Name of the faculty | International | National | State | Total |
|---------------------|---------------|----------|-------|-------|
| Dr. S. P.Wagh       | 01            | 02       | --    | 03    |
| Dr. R. M.Jumle      | 01            | 03       | --    | 04    |
| Dr. S. V.Kolhe      | --            | 02       | --    | 02    |
| Mr. G. B.Andhale    | --            | 01       | --    | 01    |

#### 2014-15

| Name of the faculty | International | National | State | Total |
|---------------------|---------------|----------|-------|-------|
| Dr. S. P.Wagh       | 01            | 03       | --    | 04    |
| Dr. R. M.Jumle      | 02            | 04       | --    | 06    |
| Dr. S. V.Kolhe      | 03            | 04       | --    | 07    |
| Mr. A.R.Somvanshi   | --            | 02       | --    | 02    |
| Mr. G. B.Andhale    | --            | 02       | --    | 02    |

#### 2015-16

| Name of the faculty | International | National | State/Regional | Total |
|---------------------|---------------|----------|----------------|-------|
| Dr. S. P.Wagh       | --            | 02       | 02             | 04    |
| Dr. R. M.Jumle      | --            | 04       | 02             | 06    |
| Dr. S. V.Kolhe      | --            | 01       | 02             | 03    |
| Mr.A.R.Somvanshi    | --            | 01       | 02             | 03    |

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|------------------|----|----|----|----|
| Mr. G. B.Andhale | -- | 02 | 02 | 04 |
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**2016-17**

| <b>Name of the faculty</b> | <b>International</b> | <b>National</b> | <b>State/</b> | <b>Total</b> |
|----------------------------|----------------------|-----------------|---------------|--------------|
| Dr. S. P.Wagh              | --                   | 03              | 02            | 05           |
| Dr. R. M.Jumle             | --                   | 01              | 02            | 03           |
| Dr. S. V.Kolhe             | 01                   | 03              | 02            | 06           |
| Mr.A.R.Somvanshi           | --                   | 03              | 01            | 04           |
| Mr. G. B.Andhale           | --                   | 03              | 01            | 04           |

**2017-18**

| <b>Name of the faculty</b> | <b>International</b> | <b>National</b> | <b>State</b> | <b>Total</b> |
|----------------------------|----------------------|-----------------|--------------|--------------|
| Dr. S. P.Wagh              | 02                   | 01              | --           | 03           |
| Dr. R. M.Jumle             | 03                   | --              | --           | 03           |
| Dr. S. V.Kolhe             | 02                   | 01              | --           | 03           |
| Mr.A. R. Somvanshi         | 02                   | 01              | --           | 03           |
| Mr. G. B.Andhale           | 02                   | 01              | 01           | 04           |

**2018-19**

| <b>Name of the faculty</b> | <b>International</b> | <b>National</b> | <b>State</b> | <b>Total</b> |
|----------------------------|----------------------|-----------------|--------------|--------------|
| Dr. S. P.Wagh              | --                   | --              | 01           | 01           |
| Dr. R. M.Jumle             | --                   | --              | 04           | 04           |
| Dr. S. V.Kolhe             | --                   | --              | 01           | 01           |
| Mr.A.R.Somvanshi           | 01                   | 02              | --           | 03           |
| Mr. G. B.Andhale           | --                   | 01              | 01           | 02           |