

## Rayat Shikshan Sanstha's Yashavantrao Chavan Institute of Science, Satara (Autonomous) Lead College of Karmaveer Bhaurao Patil University, Satara

### **Faculty Profile**

| ** | <b>General information</b> |  |     |
|----|----------------------------|--|-----|
|    | Name                       | : Dr. Rajkumar Vishwanath Hangarge       | 1   |
|    | Designation                | : Assistant Professor                    | P.  |
|    | Department                 | : Chemistry                              | 1   |
|    | Educational Qualification  | : M.Sc. B.Ed. SET. Ph.D.                 |     |
|    | Date of Appointment        | : 06/01/2020                             |     |
|    | Teaching Experience        | : UG: 4 years                            |     |
|    |                            | PG: 4 years                              |     |
|    | <b>Research Experience</b> | : 17 years                               |     |
|    | <b>Research Area</b>       | : Synthetic Organic and Medicinal Chemis | try |
|    |                            |  |     |

#### \* Educational Qualification Details (undergraduate onwards)

| Sr.<br>No. | College/University                    | Degree | Subjects                                     | Year | Class/<br>Percentage |
|------------|---------------------------------------|--------|--|------|----------------------|
| 1          | Dr. B.A. M. Univeristy,<br>Aurangabad | B.Sc.  | Physics, Chemistry &<br>Analytical Chemistry | 1995 | 69.50                |
| 2          | Dr. B.A. M. Univeristy,<br>Aurangabad | M.Sc.  | Organic Chemistry                            | 1998 | 66.75                |
| 3          | S.R.T.M. University, Nanded           | B.Ed.  | Science and<br>Mathematics                   | 1997 | 65.20                |
| 4          | Dr. B.A. M. Univeristy,<br>Aurangabad | Ph.D.  | Chemistry                                    | 2003 | NA                   |

### \* Academic and Administrative Responsibilities

| Sr.<br>No. | Position               | Organization  | Date/Duration |
|------------|------------------------|---|---------------|
| 1          | N.S.S. Program Officer | Y.C. I. S., Satara                                      | 18-10-2022    |
| 2          | Co-ordinator           | Drug Chemistry, Y.C. I. S.,<br>Satara                   | 06-09-2022    |
| 3          | Vice President         | Institutional Innovation<br>Council, Y.C. I. S., Satara | 21/08/2021    |
| 4          | Chairman               | Science Poster Activity,<br>Y.C. I. S., Satara          | 21/08/2021    |

### \* <u>Awards/Honors/Recognitions/Scholarship etc.</u>:

| Sr. | Name of the             | Awarding Organization | Date and year |  |  |
|-----|-------------------------|-----------------------|---------------|--|--|
| No. | award/honor/recognition | Awarung Organization  | Date and year |  |  |
|     |                         |                       |               |  |  |

| 1 | Senior Research Fellowship | Council of Scientific and<br>Industrial Research, New Delhi | July 2001    |
|---|----------------------------|---|--------------|
| 2 | Postdoctoral Fellowship    | Katholeke University, Leuven,<br>Belgium                    | May 2002     |
| 3 | PG Teacher recognition     | Karmaveer Bhaurao Patil<br>University, Satara               | March 2023   |
| 4 | Ph.D. Guide recognition    | Karmaveer Bhaurao Patil<br>University, Satara               | March 2023   |
| 5 | PG Teacher recognition     | Savitribai Phule Pune<br>University, Pune                   | Januray 2021 |
| 6 | Ph.D. Guide recognition    | Savitribai Phule Pune<br>University, Pune                   | Januray 2021 |

### \* <u>Membership to Professional Organizations/Associations:</u>

| Sr.<br>No. | Membership type<br>(Annual/Life/any other)   | Organization/Association                       | Date and year |
|------------|--|--|---------------|
| 1          | Member of Board of Life<br>Long Learning and | Karmaveer Bhaurao Patil University,<br>Satara. | 06-03-2023    |
|            | Extension                                    |  |               |

### **\*** <u>Worked as Editor/Reviewer to Journals/Books/Proceedings etc.</u>

| Sr. | Name of the                            | ISSN/ISBN | Assignment        | Publisher | Publication |
|-----|--|-----------|-------------------|-----------|-------------|
| No. | Journal/Book/Proceedings               | No.       | (Editor/Reviewer) |           | year        |
| 1   | Frontier Areas in Chemical<br>Sciences |           | Editor            |           | 2023        |

#### \* <u>Research Projects</u> (Ongoing/Completed)

| Sr.<br>No. | Title of Project    | Duration | Amount<br>Sanctioned<br>(in Lakhs) | Agency | Status<br>(Ongoing/<br>Completed) |
|------------|---------------------|----------|------------------------------------|--------|-----------------------------------|
| Majo       | or Research Project |          |                                    |        |                                   |
| 1          |                     |          |                                    |        |                                   |
| 2          |                     |          |                                    |        |                                   |
| Mino       | or Research Project | J        |                                    |        |                                   |
| 1          |                     |          |                                    |        |                                   |
| 2          |                     |          |                                    |        |                                   |

### \* <u>Research Guidance:</u>

- Number of students (M.Phil)
- 1) Completed: NIL 2) Registered:NIL
- Number of students (Ph.D.)
- 1) Completed: *NIL* 2) Registered: 01
- \* Details of Research Publications

## A) Patent

| Sr.<br>No. | Title  | Patent No.       | Indian/US/<br>Any other | Granting date |
|------------|--|------------------|-------------------------|---------------|
| 1          | Process for thepreparation<br>ofphosphoric acid mono-(1<br>4-methoxymethyl-piperidin-4-<br>yl) ester | US20130296569A1  | US                      | 07/11/2013    |
| 2          | Heterocyclyl compounds   | US9573944B2      | US                      | 21/02/2017    |
| 3          | Heterocyclyl compounds as<br>MEK inhibitors  | US9428499B2      | US                      | 30/08/2016    |
| 4          | Heterocyclyl compounds as<br>MEK inhibitors  | US9555035B2      | US                      | 31/01/2017    |
| 5          | Composto,<br>salfarmaceuticamenteaceitável<br>e composiçãofarmacêutica                               | BR112014022713B1 | BR                      | 08/09/2021    |
| 6          | Heterocyclyl compounds as MEK inhibitors   | WO2016009306A1   | РСТ                     | 21/01/2016    |
| 7          | Heterocyclyl compounds   | US9827247B2      | US                      | 28/11/2017    |
| 8          | Heterocyclyl compounds as<br>MEK inhibitors  | US9969731B2      | US                      | 15/05/2018    |

# **B) Books/Book Chapters**

| Sr.<br>No. | Title  | Publisher | Year of<br>Publication | ISBN No | Type<br>(Reference/Text) |
|------------|--|-----------|------------------------|---------|--------------------------|
| 1          | Effect of Citric Acid<br>on pH of Tea<br>Solutions         |           | 2023                   |         |                          |
| 2          | Palladium Catalyzed<br>Coupling Chemistry                  |           | 2023                   |         |                          |
| 3          | Current Treatment<br>for Diabetes                          |           | 2023                   |         |                          |
| 4          | Inorganic materials in medicinal chemistry                 |           | 2023                   |         |                          |
| 5          | Covalent inhibitors  |           | 2023                   |         |                          |
| 6          | Selective oxidation of<br>aromatic compounds<br>(p-cresol) |           | 2023                   |         |                          |

|   | Structure- Property | 2023 |  |
|---|---------------------|------|--|
| _ | Relation of         |      |  |
| 7 | Nanomaterials-Thin  |      |  |
|   | Film Deposition     |      |  |
| 8 |                     | 2023 |  |

# C) Datasets Submission

| Sr.<br>No. | Title | Accession No. | Data base | Year of<br>publication |
|------------|-------|---------------|-----------|------------------------|
| 1          |       |               |           |                        |
| 2          |       |               |           |                        |
| 3          |       |               |           |                        |
| 4          |       |               |           |                        |

## **D) Research papers:**

| Sr.<br>No | Title of paper   | Journal/proceedi<br>ng details<br>(Name, volume,<br>page no, year of<br>publication etc.) | ISSN<br>No    | Listed<br>in<br>Scopus/<br>Web of<br>Science<br>/ UGC<br>Care | Impa<br>ct<br>facto<br>r<br>(If<br>any) |
|-----------|--|---|---------------|---|---|
| 1         | Characterization and Antimicrobial<br>Activities of Some 2-(1,3-Diphenyl-1H-<br>pyrazol-4-yl)-3-chlorochromones and 2-<br>(1,3-Diphenyl-1H-pyrazol-4-yl)-4- (2-<br>hydroxyphenyl)-2,3-dihydro-1,5-<br>benzothiazepines | Korean J.<br>Med.Chemistry<br>2, 84-91, 2000  | 1225-<br>0058 | Scopus  | 1.241                                   |
| 2         | Microwave Induced Synthesis of 3-<br>Methyl-4-[(chromon-3-yl)methylene]-1-<br>phenylpyrazolin-5-(4H)-ones with<br>Alumina Support and in Solvent-Free<br>Conditions  | Synthetic<br>Communications<br>32 (4), 497-503,<br>2002                                   | 0039-<br>7911 | Scopus  | 1.937                                   |
| 3         | Microwave Induced Abramov Reaction of<br>3-Formylchromone with<br>Trialkylphosphites   | Synthetic<br>Communications<br>32 (17), 2633-<br>2636, 2002                               | 0039-<br>7911 | Scopus  | 1.937                                   |
| 4         | Synthesis of Newer Selenadiazoles (II)<br>and Thiadiazoles (III) from Their<br>Chroman-4-one Precursors  | Indian J.<br>Chem.,Sect. B:<br>Org.Chem. Incl.<br>Med.Chem. 42                            | 0376-<br>4699 | Scopus  | 0.456                                   |

|    |  | (01), 189-191,<br>2003  |               |        |       |
|----|--|---|---------------|--------|-------|
| 5  | A Facile Synthesis of 1,3,4,6-Tetrahydro-<br>1,6-benzodiazocine-2,5-diones   | Russian Journal<br>of Organic<br>Chemistry 40 (4),<br>575-577, 2004                               | 10704<br>280  | Scopus | 0.8   |
| 6  | Borate Zirconia Mediated Knoevenagel<br>Condensation Reaction in Water   | Journal of<br>Korean Chemical<br>Society<br>49 (4), 377-380,<br>2005                              | 1225-<br>0058 | Scopus | 1.241 |
| 7  | Ceric Ammonium Nitrate Catalyzed<br>Efficient and Chemo selective Method for<br>Protection and Deprotection of 4-Oxo-4H-<br>1-benzopyran-3-carbaldehydes | Indian J.<br>Chem.,Sect. B:<br>Org.Chem. Incl.<br>Med.Chem. 44B,<br>2409-2411, 2005,              | 0376-<br>4699 | Scopus | 0.456 |
| 8  | Synthesis and Antibacterial activities ofα-<br>hydroxyphosphonates and α-<br>acetyloxyphosphonates derived from 2-<br>Chloroquinoline-3-carbaldehyde     | ARKIVOC<br>11, 196-204,<br>2006   | 1424-<br>6376 | Scopus | 0.689 |
| 9  | Simple and High Yielding Synthesis of<br>New α-Aminophosphonates fromImines  | Phosphorus,Sulfu<br>r, and Silicon and<br>the Related<br>Elements<br>183 (6), 1461-<br>1470, 2008 | 042-<br>6507  | Scopus | 1.052 |
| 10 | Simple and Efficient Synthesis of New O,O-Diethyl Phosphorothioates  | Russian Journal<br>of Organic<br>Chemistry<br>45 (3), 430-433,<br>2009                            | 10704<br>280  | Scopus | 0.8   |
| 11 | Synthesis of newer coumarinoacetyl pyrazoles and their antimicrobial activities  | Indian Journal of<br>Heterocyclic<br>Chemistry 9(4),<br>315-316, 2000                             | 09711<br>627  | Scopus | 0.307 |
| 12 | Synthesis of new pyrroles and their biological activities  | Hindustan<br>Antibiotic<br>Bulletin 41(1-4),<br>32-34, 1999,                                      | 0018-<br>1935 | Scopus | 0.1   |

|    | Synthesis and characterization of some3-   | Indian Journal of  |               | Scopus | 0.307      |
|----|--|--|---------------|--------|------------|
| 13 | styryl chromones   | Heterocyclic<br>Chemistry 10(3),<br>233-234, 2001  | 09711<br>627  |        |            |
| 14 | Lithium chloride mediated synthesis of 3-<br>methyl-4-[(chroman-3-yl) methylene]-1-<br>phenylpyrazolin-5-(4H)-ones   | Indian Journal of<br>Heterocyclic<br>Chemistry 11(4),<br>329-330, 2002                   | 09711<br>627  | Scopus | 0.307      |
| 15 | Knoevenagel condensation reactions in an ionic liquid  | Green Chemistry<br>4(3), 266-268,<br>2002  | 14639<br>262  | Scopus | 11.03<br>4 |
| 16 | Water mediated uncatalyzed facile<br>synthesis of ylidenenitriles of 4-oxo-(4H)-<br>1-benzopyran-3-carbaldehyde  | Green Chemistry 3, 310-312, 2001   | 14639<br>262  | Scopus | 11.03<br>4 |
| 17 | Synthesis of 3-methyl-4-[(chromon-3-<br>yl)methylene]-1-phenylpyrazolin-5-(4H)-<br>ones catalysed by MCM-41-SO3H   | Mendeleev<br>Communications<br>12(5), 209-210,<br>2002                                   | 0959-<br>9436 | Scopus | 1.837      |
| 18 | Environmentally benign synthesis of 3-<br>methyl-4-[(1, 3-diphenyl-1H-pyrazol-4-<br>yl)-methylene]-1-phenylpyrazolin-5-(4H)-<br>ones in an ionic liquid          | Mendeleev<br>Communications<br>13(2), 79-79,<br>2003                                     | 0959-<br>9436 | Scopus | 1.837      |
| 19 | Selective Regeneration of Carbonyl<br>Compounds from Aldoximes and<br>Ketoximes, Catalysed by FeCl3 and SeO2   | Indian J.<br>Chem.,Sect. B:<br>Org.Chem. Incl.<br>Med.Chem.<br>41(6), 1302-1304,<br>2002 | 0376-<br>4699 | Scopus | 0.456      |
| 20 | One pot facile synthesisof 5-[3-(1,2-<br>benzisoxazolyl)]-2-aminopyrimidines<br>from 5-salicyloyl-2-aminopyrimidines   | Indian Journal of<br>Heterocyclic<br>Chemistry 11(4),<br>323-324, 2002                   | 09711<br>627  | Scopus | 0.307      |
| 21 | Magnesium Oxide Nanoparticles<br>Facilitates One Pot Wittig Reaction for<br>the Synthesis of Ethyl(2E)-3-(2-<br>chloroquinolin-3-yl)prop-2-enoate<br>Derivatives | Chemistry<br>&Biology<br>Interface 11, (5),<br>171-174, 2021                             | 2249-<br>4820 | Scopus | NA         |
| 22 | Peterson Olefination in an Ionic Liquid: A<br>Greener Approach   | Chemistry<br>&Biology  | 2249-<br>4820 | Scopus | NA         |

| Interface 11, 2, 57- |  |  |
|----------------------|--|--|
| 60, 2021             |  |  |

## **E)** Paper Presentation in Conference /Seminar/ Symposia:

| Sr.<br>No | Title of paper  | Name of the Conference<br>/Seminar/ Symposia Details<br>(Title, Date, Page No etc.)                                  | Level<br>(Intl/Natl/State<br>/Uni etc.) | Organizing<br>institute |
|-----------|---|--|---|-------------------------|
| 1         | Biosorption<br>potential for<br>methylene<br>blueby sieved<br>biomass of<br>Caryota Urens | International Conference on<br>Multidisciplinary Approach and<br>Innovations in Chemicals<br>Sciences-2022(MAICS-22) | International                           | Y.C.I.S.<br>Satara      |

## F) Citation Index

|           | Google Scholar | Scopus | Web of Science |
|-----------|----------------|--------|----------------|
| Citations | 575            | 403    |                |
| h-index   | 11             | 9      |                |
| i10-index | 13             |        |                |

### **\*** <u>Participation in Orientation/Refresher/FDP/Short Term/Training Programs:</u>

| Sr.<br>No | Name of the programme   | Organizing institute  | Date                     |
|-----------|---|---|--------------------------|
| 1         | Faculty Development Program<br>in Drug Chemistry  | Department of Chemistry,<br>Y.C.I. S., Satara   | 08/09/2021               |
| 2         | Regional Meet Institution's<br>Innovation Council MoE's<br>Innovation Cell  | MoE's Innovation cell<br>(Govt. of India) at<br>Symbiosis International<br>University, Pune | 01/08/2022               |
| 3         | Refresher Course in Chemistry   | HRDC Gujrat University,<br>Ahmedabad-380009   | 16/08/2021 to 29/08/2021 |
| 4         | Faculty Development Program<br>on "Effective Ways To<br>Develop E-content For<br>Teaching-Learning"   | UGC-HRDC, SPPU, Pune<br>at KTHM College, Nashik   | 21/05/2020 to 30/05/2020 |
| 5         | Ministry of Human Resource<br>Development<br>Pandit Madan Mohan<br>Malaviya National Mission on<br>Teachers and Teaching, 4<br>Week Orientation | Teaching Learning Centre,<br>Ramanujan College<br>University of Delhi                       | 26/06/2020 to 24/07/2020 |

## **\*** <u>Participation in Conference/Seminar/Symposia/Workshop/Any other programs:</u>

| Sr.<br>No. | Name of the event  | Organizing<br>institute   | Level (Intl/Natl/<br>State/Uni/Local etc.) | Date   |
|------------|--|---|--|--|
| 1          | International<br>Conference on<br>Multidisciplinary<br>Approach and<br>Innovations in<br>Chemicals Sciences-<br>2022(MAICS-22) | Y.C.I.S, Satara   | International                              | 25 <sup>th</sup> &26 <sup>th</sup><br>March 2022 |
| 2          | Two days workshop<br>on Project Based<br>Learnings   | Y.C.I.S, Satara   | Local                                      | 16 <sup>th</sup> March<br>2022                   |
| 3          | One day seminar on<br>"Science: Past,<br>Present & Future  | Lal Bahadur Shashtri<br>College of Arts,<br>Science &<br>Commerce, Satara         | University                                 | 29 <sup>th</sup> March<br>2022                   |
| 4          | One day workshop<br>on "Implementation<br>of NEP-2020"   | Karmaveer Bhaurao<br>Patil University,<br>Satara & IQAC, C.<br>S. College, Satara | University                                 | 2 <sup>nd</sup> March<br>2023                    |
| 5          |  |   |  |  |

## \* <u>Resource person in Conference/Seminar/Workshop/Any other programs:</u>

| <b>S.</b> | <u> </u>                | Level (Intl/Natl/      |                      |            |
|-----------|-------------------------|------------------------|----------------------|------------|
| No.       | Title of the event      | State/Uni./local etc.) | Organizer            | Date       |
|           |                         | Local                  | Lal bahadur          |            |
|           | Diabetic drug           |                        | ShastriCollege of    |            |
| 1         | development: Past and   |                        | Arts,Science         | 29/03/2022 |
|           | Present                 |                        | andCommerce,         |            |
|           |                         |                        | Satara               |            |
|           | Project design          | Local                  |                      |            |
|           | Development             |                        | YashavantraoChavan   |            |
| 2         | Demonstrate prototype   |                        | Institute ofScience, | 11-01-2023 |
|           | patent product          |                        | Satara               |            |
|           | publication             |                        |                      |            |
|           | A mmoo ahaa tawaada     | Local                  | YashavantraoChavan   |            |
| 3         | Approaches towards      |                        | Institute ofScience, | 08-09-2021 |
|           | drug and its synthesis  |                        | Satara               |            |
|           | Ducient hand learning   | Local                  | Yashavantrao         |            |
| 4         | Project based learning  |                        | Chavan Institute     | 16-03-2022 |
|           | (PBL)                   |                        | ofScience, Satara    |            |
| 5         | Durification Techniques | Local                  | Rayat Institute of   | 11.09.2022 |
| 5         | Purification Techniques |                        | Research             | 11-08-2022 |

|   |                       |          | andDevelopment     |            |  |
|---|-----------------------|----------|--------------------|------------|--|
| 6 | Current Trends in     | National | Squadron Life      | 26-06-2023 |  |
| 6 | Medicinal Chemistry   |          | Sciences Pvt. Ltd. | 20-00-2023 |  |
|   | Diabetic drug         | Local    | Yashavantrao       |            |  |
| 7 | development: Past and |          | Chavan Institute   | 13/10/2022 |  |
|   | Present               |          | ofScience, Satara  |            |  |

## \* Chaired Sessions in Conference/Seminar/Workshop etc.:

| S.<br>No. | Title of the event  | Level (Intl/Natl/<br>State/Uni./local etc.) | Organizer  | Date       |
|-----------|---|---|--|------------|
| 1         | One day international<br>conference on<br>Nanomaterials for<br>energy and<br>environmental<br>applications (IC-NEEA-<br>2023) | International                               | Lal bahadur<br>ShastriCollege of<br>Arts,Science<br>andCommerce,<br>Satara | 21-03-2023 |

Signature of Faculty