

Rayat Shikshan Sanstha's

Yashavantrao Chavan Institute of Science, Satara (Autonomous) Lead College of Karmaveer Bhaurao Patil University, Satara

Faculty Profile

Seneral information

Name : Dr. Rajkumar Vishwanath Hangarge

Designation : Assistant Professor

Department : Chemistry

Educational Qualification : M.Sc. B.Ed. SET. Ph.D.

Date of Appointment : 06/01/2020 **Teaching Experience** : UG: 4 years

PG: 4 years

Research Experience : 17 years

Research Area : Synthetic Organic and Medicinal Chemistry

Educational Qualification Details (undergraduate onwards)

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

Academic and Administrative Responsibilities

| Sr. 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., Satara | 06-09-2022 |
| 3 | Vice President | Institutional Innovation Council, Y.C. I. S., Satara | 21/08/2021 |
| 4 | Chairman | Science Poster Activity, Y.C. I. S., Satara | 21/08/2021 |

$\begin{tabular}{l} & Awards/Honors/Recognitions/Scholarship\ etc. \end{tabular}$

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

Internal Quality Assurance Cell (IQAC), YCIS, Satara

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

Membership to Professional Organizations/Associations:

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

❖ Worked as Editor/Reviewer to Journals/Books/Proceedings etc.

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

* Research Projects (Ongoing/Completed)

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

Research Guidance:

Number of students (M.Phil)
 Number of students (Ph.D.)
 1) Completed: NIL
 2) Registered: NIL
 2) Registered: 01

Details of Research Publications

A) Patent

| Sr. No. | Title | Patent No. | Indian/US/ Any other | Granting date |
|------------|---|------------------|-------------------------|---------------|
| 1 | Process for the preparation of phosphoric acid mono-(14-methoxymethyl-piperidin-4-yl) ester | US20130296569A1 | US | 07/11/2013 |
| 2 | Heterocyclyl compounds | US9573944B2 | US | 21/02/2017 |
| 3 | Heterocyclyl compounds as MEK inhibitors | US9428499B2 | US | 30/08/2016 |
| 4 | Heterocyclyl compounds as MEK inhibitors | US9555035B2 | US | 31/01/2017 |
| 5 | Composto, salfarmaceuticamenteaceitável e composiçãofarmacêutica | BR112014022713B1 | BR | 08/09/2021 |
| 6 | Heterocyclyl compounds as MEK inhibitors | WO2016009306A1 | PCT | 21/01/2016 |
| 7 | Heterocyclyl compounds | US9827247B2 | US | 28/11/2017 |
| 8 | Heterocyclyl compounds as MEK inhibitors | US9969731B2 | US | 15/05/2018 |

B) Books/Book Chapters

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

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

C) Datasets Submission

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

D) Research papers:

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

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

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

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

E) Paper Presentation in Conference /Seminar/ Symposia:

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

F) Citation Index

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

Participation in Orientation/Refresher/FDP/Short Term/Training Programs:

| | Turticipation in Orientation/Mericsner/1 D1/Short Term/11anning 110grams. | | | | | |
|-----------|--|---|--------------------------|--|--|--|
| Sr. No | Name of the programme | Organizing institute | Date | | | |
| 1 | Faculty Development Program in Drug Chemistry | Department of Chemistry, Y.C.I. S., Satara | 08/09/2021 | | | |
| 2 | Regional Meet Institution's Innovation Council MoE's Innovation Cell | MoE's Innovation cell (Govt. of India) at Symbiosis International University, Pune | 01/08/2022 | | | |
| 3 | Refresher Course in Chemistry | HRDC Gujrat University, Ahmedabad-380009 | 16/08/2021 to 29/08/2021 | | | |
| 4 | Faculty Development Program on "Effective Ways To Develop E-content For Teaching-Learning" | UGC-HRDC, SPPU, Pune at KTHM College, Nashik | 21/05/2020 to 30/05/2020 | | | |
| 5 | Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, 4 Week Orientation | Teaching Learning Centre, Ramanujan College University of Delhi | 26/06/2020 to 24/07/2020 | | | |

Participation in Conference/Seminar/Symposia/Workshop/Any other programs:

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

Resource person in Conference/Seminar/Workshop/Any other programs:

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

Internal Quality Assurance Cell (IQAC), YCIS, Satara

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

Signature of Faculty