

## Curriculum Vitae

### Dr. Omprakash B. Pawar

Assistant Professor  
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### Objective

To use my skills and experience and thereby promote a positive atmosphere and higher quality education among students.

### Short Biography

Dr. O. B. Pawar completed his master's degree in the discipline of Chemistry with a specialization in Organic Chemistry from S. R. T. M. University, Nanded in 2004 with First Class. He completed his Ph. D. degree from Dr. Babasaheb Ambedkar Marathwada University, Aurangabad in March 2012. He worked as a Lecturer at Modern Arts, Commerce & Science College, Shivajinagar, Pune, and Assistant Professor at Kohinoor Arts, Commerce & Science College, Khultabad, he was selected as Assistant Professor at an MPSC and appointed at the Government of Maharashtra's Rajaram College, Kolhapur. He published 08 research articles in national and international peer-reviewed journals, 02 book chapters, and 02 patents. In the master's degree program, 15 students have completed their research project in PG dissertation under his guidance. He has 14 years of research experience and more than 10 years of teaching experience. He worked on various administrative positions and committees in his past career, including duties assigned by the Hon'ble District Collector and the Department of Higher and Technical Education.

### Academic Records

#### Ph. D. (26<sup>th</sup> March, 2012)(Chemistry)

**Thesis Title:** "Development of useful synthetic methodologies for organic reactions"

Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, MH, India.

#### B. Ed. (Science, Math)

Government Education College, Nanded, MH, India. (S. R. T. M. University, Nanded, MH, India.) 2005, First Class with distinction.

#### M. Sc. (Organic Chemistry)

Department of Chemistry, Yeshwant College, Nanded, MH, India. (S. R. T. M. University, Nanded, MH, India.) 2004, First division.

**B. Sc.**

**(Chemistry, Physics, Computer Science)**

B. S. College, Basmathnagar, Dist. Hingili, MH. India. (S. R. T. M. University, Nanded, MH, India.) 2002, First division.

## Teaching Experience

Name of the Organization	Designation	From... to...	Years
P. E. Society's Modern College of Arts, Science and Commerce, Shivajinagar, Pune.	Lecturer in Chemistry <i>on contract basis</i>	07 Aug 2006 to 31 Dec 2011	U. G. Level:3. 5 years P. G. Level:2. 5 years
Kohinoor Education Society's Kohinoor College, Khultabad	Assistant Professor	01 Aug 2012 To 14 Sept 2015	U. G. Level:3. 1 years P. G. Level:2. 0 years
Government of Maharashtra Rajaram College, Kolhapur	Assistant Professor	15 Sept 2015 To 16 Aug 2021	U. G. Level:6. 0 years P. G. Level:4. 0 years
Government Institute of Forensic Science, Aurangabad	Assistant Professor	17 Aug 2021 To 24 July 2023	U. G. Level: 2. 0 years P. G. Level: 2. 0 years
Government of Maharashtra Rajaram College, Kolhapur	Assistant Professor	25 July 2023 To Till date	

## Courses Taught

Class	Subject (s)
F. Y. B. Sc.	Organic Chemistry
	Physical Chemistry
	Inorganic Chemistry
	Basic of Forensic Chemistry
	Chemistry Practicals
	Basic Forensic Chemistry Practicals
F. Y. B. Sc. (Biotechnology)	Fundamental Chemistry
	Chemistry Practicals

<b>S. Y. B. Sc</b>	Organic Chemistry Inorganic Chemistry Analytical Chemistry Chemistry Practicals
<b>T. Y. B. Sc</b>	Organic Chemistry + Industrial Chemistry + Analytical Chemistry
<b>M. Sc. Part-I</b>	Organic Chemistry Organic Chemistry Practicals
<b>M. Sc Part-II</b> <b>(Analytical Chemistry &amp; Forensic Chemistry)</b>	Organic Chemistry Environmental and Analysis of Industrial Material Analytical Chemistry and Chromatography Methods of Chemical Analysis Inorganic Chemistry Practicals

### Examination Work

Academic Year	Nature of Work
<b>2012 – 2023</b>	B. Sc. I Practical Examination: Internal Examiner B. Sc II and III Practical Examination: External Examiner M. Sc I and II Practical Examination: External Examiner Paper setter, Theory paper Examiner CAP Director, University Theory Exam Sr. Supervisor

### Experience of Admiration

- ✓ Worked as IQAC Coordinator.
- ✓ Worked as Director, CAP (BSc. SY Examination) Shivaji University, Kolhapur in 2019.
- ✓ Worked as Co-ordinator, Dr. Balkrishna Library, Rajaram College, Kolhapur for AY 2020-21.
- ✓ Worked as Co-ordinator, Chem-Club, Department of Chemistry, Rajaram College, Kolhapur for AY 2020-21.
- ✓ Worked as a BoS member, at Rajashri Chhatrapati Shahu College, Kolhapur to design the curriculum of a skill-based course.
- ✓ Worked as venue officer for various CET examinations.
- ✓ Worked as a member of the verification committee for B.Ed. Colleges.
- ✓ Worked as a senior supervisor for university examinations.
- ✓ Worked as Co-ordinator for various college/institute level committees.
- ✓ Worked as a Convener for a two-day national workshop on “Google Apps for Education and Moodle” organized by IQAC, Rajaram College, Kolhapur, 2-3 July 2020.
- ✓ Worked as Convener for a National workshop on “Academic Integrity and Quality Measuring Tools in Research and Publication” organized by IQAC and Dr. Balkrishna Library, Rajaram College, Kolhapur, 31<sup>st</sup> May 2020.
- ✓ Worked as Treasury for a National workshop on “Academic Integrity and Quality Measuring Tools in

Research and Publication” organized by IQAC and Dr. Balkrishna Library, Rajaram College, Kolhapur, 31<sup>st</sup> May 2020.

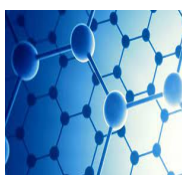
## Area of Research Interest

### Green Chemistry

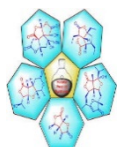


We developed a novel method for the synthesis of biologically important heterocycles using a green approach. The multicomponent synthesis includes ultrasonic-assisted one post-synthesis, microwave-assisted, and ionic liquid catalyzed or mediated and using the greener water-soluble catalyst.

### Material Sciences



We developed a Cellulose sulphuric acid catalyst for organic synthesis and Biosynthesis of Au and Ag-based nano-materials for the study of its application in forensics to the visualization of LFPs, photocatalytic degradation, and antimicrobial activity.



### Total synthesis of biologically active Compounds

We developed a novel method for the total synthesis of biologically active heterocyclic compounds.

## Research Skill

- ✓ Experience in all aspects of techniques for separation and purification of the reaction products.
- ✓ Worked on Microwave-induced organic synthesis and Ultrasonic wave-induced organic synthesis.
- ✓ Expertise in the handling of conventional as well as modern synthetic reagents and reactions.
- ✓ Expert hand for the synthesis of target heterocyclic molecules and non-heterocyclic molecules.
- ✓ Capable of doing research work with ionic liquid, EPZ10<sup>R</sup> catalyst.
- ✓ Familiar with chemistry-related software like ISIS Draw, and Chemdraw.

## Research Project

Year	Title	Funding Agency	Sanctioned amount	Status
2018-20	Concise total synthesis of (±)-Rhazinal and exploring novel synthetic methodology using multi-component reaction strategy.	Shivaji University, Kolhapur under Research Initiation Scheme (RIS)	95,000.00	Completed

## Papers/Posters presented in conference/seminar

1. Synthesis of calcium oxide nanoparticles from waste hen egg shells for enhanced development of latent fingerprints. **Pawar, O. B.** Presented at National conference on “Innovative Inclinations and Sustainable Technologies in Chemical Sciences” held at Department of Chemistry, Deogiri College, Aurangabad, MH, India. 22<sup>nd</sup> February 2023.
2. Seralite SRC-120 resin catalyzed solvent-free one-pot rapid synthesis of aminoalkyl naphthols under microwave irradiation. **Pawar, O. B.** Presented at Fourth National Conference on “Advances in

- Materials Science and Applied Biology” held at Department of Chemistry, Dr. Patangrao Kadam Mahavidyalaya, Burla, MH, India. 27-28<sup>th</sup> January 2022.
3. Microwave assisted and VB<sub>1</sub> catalyzed cyclocondensation reaction for the synthesis of 4(3H)-Quinazolinones. **Pawar, O. B.** Presented at International Conference on “Recent Trends in Pure and Applied Sciences” held at Dr. Patangrao Kadam Mahavidyalaya, Sangli, MH, India. 21-22<sup>nd</sup> January 2022.
  4. GO-VB<sub>1</sub> catalyzed simple and practical one-pot synthesis of 4H-3,1-benzoxazine. **Pawar, O. B.** Presented at the Two-day International Conference on “Sustainable Development in Chemistry and Scientific Applications” organized by Department of Chemistry, Sadguru Gadage Maharaj Mahavidyalaya, Karad, MH, India. 16-17<sup>th</sup> December 2021.
  5. Camphor sulfonic acid catalyzed simple and practical one-pot synthesis of Quinaldine-4-carboxylate derivatives via *Pfitzinger* reaction. **Pawar, O. B.** Presented at International E-Conference on “Sustainable and Futuristic Materials” organized by Department of Chemistry, Kamla Nehru Mahavidyalaya, Nagpur, MH, India. 29-30<sup>th</sup> November 2021.
  6. Ultrasound promoted and ionic liquid catalyzed cyclocondensation reaction for the synthesis of 4H-3,1-benzoxazinones. **Pawar, O. B.** Presented at Virtual International conference on “Multifunctional Advanced Materials” organized by Department of Chemistry, JVM’s Degree College, Airoli, Navi Mumbai, MH, India. 10<sup>th</sup> August 2021.
  7. GO-VB<sub>1</sub> catalyzed simple and practical one-pot synthesis of 1,6-dihydropyrazine-2,3-dicarbonitrile derivatives based on isocyanides. **Pawar, O. B.** Presented at National conference on “Recent trends in Chemistry and Materials Science” held at Shivaji University, Kolhapur, MH, India. 9<sup>th</sup> February 2019.
  8. A Simple and Practical Three-step Synthesis of 4,8-dimethyl-2H-furo[2,3-*h*]chromen-2-one. **Pawar, O. B.** Presented at International conference on “Advances in Chemical Sciences” held at Shivaji University, Kolhapur, MH, India. 1-3<sup>rd</sup> February 2018.
  9. CSA promoted one-pot synthesis of 3,4-dihydroquinoxalin-2-amine derivatives based on isocyanides. **Pawar, O. B.** Presented at National conference on “Innovation Research in Chemical Sciences” held at Shivaji University, Kolhapur, MH, India. 1-2<sup>nd</sup> February 2017.
  10. Ionic liquid promoted simple and practical one-pot synthesis of 3,4-dihydroquinoxalin-2-amine derivatives based on isocyanides. **Pawar, O. B.**; Shinde, N. D. Presented at International conference on “Recent Innovation in Nano-Bio-Polymer-Pharmaceutical Technologies” held at S. R. T. M. University, Nanded, MH, India. 13-14<sup>th</sup> January 2013.
  11. Microwave-assisted and cellulose sulphuric acid catalyzed cyclocondensation reaction for the synthesis of 4(3H)-quinazolinones. **Pawar, O. B.**; Shinde, N. D. Presented at National seminar on “*New Dimensions in Chemical Sciences*” held at P. G. College of Science, Saifabad. Osmania University, Hyderabad, A.P., India. 30<sup>th</sup> January 2010. (***This research article was awarded as the best poster presentation***)
  12. Alum-catalyzed solvent-free one-pot rapid synthesis of aminoalkylnaphthols under solvent-free conditions. **Pawar, O. B.**; Shinde, N. D. Presented at National conference on “*Emerging trends in Chemical sciences*” held at Department of Chemistry, Bundelkhand University, Jhansi, U.P., India. 24-26<sup>th</sup> February 2010.

## Research Publications

### 2022

1. An efficient and green synthesis of tetrahydrobenzo[*b*]Pyran derivatives using [(EMIM)Ac] at room temperature. Katariya, A. P.; Yadav, A. R.; **Pawar, O. B.**; Pisal, P. M.; Sangshetti J. N.; Katariya M. V.; Deshmukh S. U. *Chemistry Select.* **2022**, 7, 184.

### 2013

2. Thiamine hydrochloride: An efficient catalyst for one-pot synthesis of quinoxaline derivatives at ambient temperature. **Pawar, O. B.**; Chavan, F. R.; Suryawanshi, V. S.; Shinde, V. S.; Shinde, N. D. *J. Chem. Sci.* **2013**, 125(1), 159.

### 2012

3. A simple, precise, and highly efficient analytical method for the estimation of the trace amount of iron present in Bisphenols. Shinde, N. D.; Patil, L. S.; Suryawanshi, V. S.; Pawar, O. B.; Gaikwad, S. S. *Int. J. Chem Sci.* **2012**, *10*, 949.

**2011**

4. An improved, highly efficient method for the synthesis of Bisphenol. Patil, L. S.; Suryawanshi, V. S.; Pawar, O. B.; Shinde, N. D. *E-J. Chem.* **2011**, *7*, 65.

**2010**

5. EPZ10<sup>R</sup> catalyzed simple and efficient synthesis of flavanones. Shinde, N. D.; Pawar, O. B.; Shinde, V. S.; Suryawanshi, V. S.; Chavan, F. R. *Org. Chem. Indian J.* **2010**, *3*, 15.
6. A novel, highly efficient azeotropic method of esterification of *p*-hydroxybenzoic acid. Shinde, N. D.; Patil, L. S.; Pawar, O. B. *Org. Chem. Indian J.* **2010**, *3*, 44.
7. Ultrasound promoted and ionic liquid catalyzed cyclocondensation reaction for the synthesis of 4(3*H*)-quinazolinones. Pawar, O. B.; Chavan, F. R.; Sakate, S. S.; Shinde, N. D. *Chin. J. Chem.* **2010**, *28*, 69.

**2009**

8. EPZ10 as a reusable heterogeneous catalyst for the synthesis of coumarins. Pawar, O. B.; Chavan, F. R.; Shinde, N. D. *Org. Chem. Indian J.* **2009**, *5*, 22.

### Patents

1. A Powdered Food Preservative Composition and Method of Preparation, Totewad, N. D.; Singh, A.; Sonawane, H. B.; Pawar, O. B.; Padhen, S. S. Australian Patent No. 2021104516, 24.07.2021.
2. Food Adulteration Detection Device, Totewad, N. D.; Kure, S. R.; Dhuldhag, U.; Kshirsagar, R.; Joshi, V. B.; Pawar, O. B.; Kamble, G.; Dhabadga, V. N. Indian Patent no. 360994-001, 13.05.2022.

### Books

1. Puse, R. K.; Kumar, A.; Mishra, D.; Pawar, O. B.; Valsakumari, M. K.; Kumar, A. A. "ZnS Nanoparticles for High-performance Supercapacitors" *Materials for Sustainable Energy Storage at the Nanoscale*, 1<sup>st</sup> ed., CRC Press, Taylor & Francis, 2023. (eBook ISBN: 9781003355755).
2. Bhagat, D. S.; Bumbrah, G. S. Thorat, B. R.; Deshmukh S. U.; Chawla, V.; Pawar, O. B. "Fluorescent Nanomaterials in Visualization of Latent Fingerprint" *Friction Ridge Analysis*, Springer, 143, 2023. (eBook ISBN: 978-981-99-4028-8).

### Participated in conference/seminar/workshop

1. Participated in the one-week National Online Faculty Development Programme on "Research Methodology" organized by Kamla Nehru Mahavidyalaya, Nagpur, MH, India. 02-07<sup>th</sup> May 2022.
2. Participated in the online national webinar on "Intellectual Property Rights Awareness for academic research" organized by the Department of Physics and IQAC, Madhavrao Patil College, Palam, MH, India. 11<sup>th</sup> January 2022.
3. Participated in the IP awareness training program organized by the Intellectual Property Office, New Delhi, India. 21<sup>st</sup> December 2021.
4. Participated in the one-day State level webinar on "Revised AQAR-2020-21" organized by IQAC, Willingdon College, Sangli, MH, India. 13<sup>th</sup> March 2021.
5. Participated in the one-day workshop on "New syllabus of B.Sc.-III (Physical Chemistry)" organized by the Department of Chemistry, Lal Bahadur College, Satara, and sponsored by Shivaji University, Kolhapur, MH, India. 17<sup>th</sup> February 2021.
6. Participated in the one-day Teachers' training workshop on "New changed syllabus of B.Sc.-III Chemistry" organized by the Department of Chemistry and IQAC, Dr. Patangrao Kadam Mahavidyalaya, Sangli, MH, India. 16<sup>th</sup> February 2021.
7. Participated in the one-day workshop on "New change in syllabus of M.Sc.-II (SEM-III) Physical Chemistry" organized by the Department of Chemistry, IQAC, Rajarshi Chhatrapati Shahu College, Kolhapur and Shivaji University, Kolhapur, MH, India. 21<sup>st</sup> January 2021.
8. Participated in the online national workshop on "Intellectual Property Rights" organized by the Department of Chemistry and IQAC, Deogiri College, Aurangabad in association with Rajiv Gandhi National Institute of Intellectual Property Management, Nagpur, MH, India. 12<sup>th</sup> January 2021.

9. Participated in the online National Faculty Development Programme on “ICT tools for effective teaching-learning” organized by the School of Mathematical Sciences, SRTM University, Nanded, MH, India. 11-16<sup>th</sup> May2020.
10. Participated in the one-week Faculty Development Programme on “Moodle learning and Management System” organized by IQAC and Department of Computer Science, Vivekanand College, Kolhapur in association with Spoken Tutorial IIT Bombay, Mumbai MH, India. 25-30<sup>th</sup> April2020.

Date: 02/10/2023

(Last Updated:02<sup>nd</sup> October, 2023)



**Dr. Omprakash B. Pawar**