CURRICULUM-VITAE

Name **Prof. Dr. HARI R. PAWAR**

Date of Birth June 02, 1981

Address Flat No. C14, Kanchanganga Housing Society, Near Mahatma Society, Kothrud, Pune. Phone:02025364988

Pune-411 038, MAHARASHTRA, INDIA

Email: haripawar2010@gmail.com

Affiliations: Department of Chemistry, Post-graduate and Research center, MES Abasaheb Garware College, Karve Road, Pune-411 004, Maharashtra, India.
Tel. No. (020) 41038263

Present position Professor in Chemistry, PhD Supervisor. Student completed 01 and currently 4 Students are working for PhD

Academic qualifications

Degree	Year	Institute	Class
B.Sc. (Chemistry)	April 2002	Pune University	**I**
M.Sc. (Organic Chemistry)	April 2004	Pune University	**I**
CSIR-UGC-NET	June 2004	CSIR, New Delhi	Qualified
UGC- SET	August 2004	Pune University	Qualified
GATE	February 2005	IIT NewDehli	94.33%tile
Ph.D	Sept. 2020	SPPU Pune	Awarded

Title of Thesis: CATALYATIC ACTIVITY OF Ru- BASED HETEROGENOUS CATALYST FOR ORGANIC TRANSFORMATIONS

Broad Area of Research: Organic synthesis, Catalysis, Bio-organic Chemistry, Nanomaterials for Organic Transformations.

(**a) Achievements**:

- CSIR-NET, GATE (Qualified twice)
- Secured SAKAL India Loan Scholarship for PhD
- Completed Ph.D
- Overall Performance in teaching based on Average score: Excellent (4.08/5) (#Analysis is done by the Department of Statistics AGC)

(b) Research Experience:

(1) Ph.D. Work:

Visible Light Photocatalysis: Visible light is safe, inexpensive, renewable energy source and part of solar light. Our aim is to investigate strategies to use transition metal photosensitizers that can catalyze photochemical reactions under visible light. Worked on designing and synthesis of metal based heterogenised catalyst for cycloaddition reactions such as Cu, Ru, based nanocomposites on various support and evaluation of their potentiality and sustainability for the organic reactions. Another area of our research consist of utilsation of photocatalyst for environmental remediation. We are also focusing on design, synthesis and exploration of biological activities of organic compounds.

(2) Collaborative Research Work:

1. A research project on designing and synthesis of semiconducting nanocomposites such as Cd-Se, Ru/MMT, Ru-Cu, Bi-Pd has been undertaken in collaboration with Scientist from National Chemical Laboratory, Pune. The work involves structural characterization of these materials as well as their catalytic efficiencies towards C-C, C-N, and C-S bond forming reactions under the theme of "Green Chemistry".
2. Another research project involves designing and synthesis of biologically active scaffolds such as oxazoles and tetrazoles and exploring its biological activities in collaboration with department of Pharmacy WPU Pune. .

(3) Teaching Experience:

1. Assistant Professor in Organic Chemistry at Department of Chemistry, at Department of Chemistry, Abasaheb Garware College, Pune from August, 2005.
2. Recognized (PG) Post Graduate teacher from Savitribai Phule Pune University, Pune.
3. Worked as Resource Person for Chemistry Olympiad at Various levels.

4. Working as Coordinator and resource person for various competitive examinations like UPSC/MPSC Civil services, CSIR-NET, UGC-SET and GATE examinations.

(c) Innovative Processes adopted in Teaching and Learning:

1. Project/activity based learning, Group discussions, online teaching and Seminars**.**

(d) Achievements of Students in Examinations/Co Curricular and Extra Curricular Activities:

1.Several students are CSIR-NET, SET and GATE Qualified

2. IIT-JAM Qualified

3. Selections in Civil services MPSC and UPSC

4. Selections as best NSS student.

5. M. Sc. students Selected in District and State level **Avishkar competition**

6. Selections in Project/lecture and research based competitions

7. Campus/Job selections

(e) Admistrative, Co-curricular and Profession development related responsibilities:

1. Worked as **InCharge of ACS Association of Chemistry Students** during academic years 2011-2016.

2. Coordinator for the **UGC Scheme 12th Plan** of Entry into Services Scheme for the civil services coaching during academic years 2010-2015.

3. National Service Scheme **NSS Programme Officer** (2019- 2023)

4. Worked as committee member in NAAC in for the criteria VI.

5. Member of Indian Council of Chemist, India.

6. Worked as member of admission committee for PG and UG admissions

7. Ph D Coordinator for college.

(f) Research Projects and Consultancy Services:

1. Research project entitled "Greener route for C-C coupling reaction using visible light catalyzed semiconducting nanocomposities." grant sanctioned Rs.3,40000/ by U.G.C., New Delhi (submitted)

2. Research project on “Magnetically separable nanocomposities as efficient heterogeneous catalyst towards synthesis of oxazoles and tetrazoles, grant sanctioned Rs. 1,30000/ by BCUD,SPPU, Pune, (submitted).
3. Consultancy related to combustion series catalyst of Lumipro India Pvt. Ltd. Tathtwade MIDC, Pune.

(g) List of Publications:

1. Anil R. Wade, Hari R. Pawar, M. V. Biware and R. C. Chikate Synergism in semiconducting nanocomposities: Visible light photocatalysis towards formation of C-S, and C-N bonds. *Green Chemistry,* 2015, 17, 3879, (Impact factor 9.04), Scopus indexed journal.
2. Hari R. Pawar, Alok P. Jakhade, and Rajeev C. Chikate," Effect of enhanced RuO_2 layer on the sustainability of Ru/MMT catalyst towards [3+2] dipoar cycloaddition reaction" ChemistrySelect, 2017, 2, 6949– 6956 , ChemPubSocEurope,Wiley-VCH Verlag GmbH & Co. KGaA, Weinheim (Impact factor 1.82), Scopus indexed journal.
3. Jyoti Waikar, Hari Pawar, & Pavan More "Review on CO oxidation by noble and non noble metal based catalyst", *Catalysis in Green Chemistry and Engineering*, 2019*,* 2(1):11–24, Scopus indexed journal.
4. Hari R Pawar, Narendra R Kamble, Vinod T Kamble "Effective Synergetic catalytic system for the efficient synthesis of multicomponent Biginelli type pyrimidinone derivatives", *IJSTR.. Chem.* 2019, 8, 2889–2899. (Impact factor 3.72), Scopus indexed journal.
5. Hari R. Pawar, Narendra R. Kamble and Vinod T. Kamble "Chemoselctive room temperature and solvent free synthesis of thio esters using effective synergistic catalytic system", *Rasyan Journal of Chemistry ,* 2019, 55(6), 210-213, Scopus indexed journal.
6. Narendra R. Kamble, Hari R. Pawar and Vinod T. Kamble "$NbCl_5$ and $AgClO_4$ Promoted Regio-Selective Acylation of Indoles", *Asian journal of Chemistry*, 2019, 32, 2 317-321, (impact factor 2.1), Scopus indexed journal.
7. Hari R. Pawar, and Rajeev C. Chikate," one pot solvent free synthesis of N-substituted tetrazoles using RuO_2/MMT catalyst" *Journal of Molecular Structure*, 2020, 1225, 128985, (impact factor 2.45), Scopus indexed journal.
8. Nitin H. Kolhe, Shridhar S. Jadhav, Dilip R. Thube, Sushma J. Takate, Ashok V. Bankar, Sanjay T. Moharekar Hari R. Pawar, Shubhangi S. Moharkar," New Mn(II), Co(II), Ni(II) and Cu(II) homoleptic complexes with 6-chloro-5-7-dimethyl-4oxo-4H-chromene-3-

carbaldehydes and its heteroleptic complexes with quinoline-8 ol: synthesis, characterization and antimicrobial activity" *Research on Chemical Intermediates*, 2020, online, (impact factor 2.27), Scopus indexed journal.

9. Shivaji M. Jagadale, Abhijit P. Chavan, Yogita K. Abhale, Hari R. Pawar, Abhijit Shinde, Vivek D. Bobade, Pravin C. Mhaske, "Synthesis and antimycobacterial screening of new thiazole and pyrazole clubbed 1,2,3-triazol derivatives" *Journal of Heterocyclic chemistry,* submitted.
10. Chetan Harak, Dilip Satpute, Nitin Kolhe, Anil Wade, Sagar Balgude.., Hari Pawar Morphology controlled fabrication of Fe_2O_3/GCN composites: a comparative study of hydrothermal and sonochemical synthesis methods for efficient sunlight driven photocatalysis for environmental remediation, *Emergent Materials,* Springer 2023, 6, 1797-1807, (Impact factor 4.04), Scopus indexed journal
11. Chetan Harak, Nitin Kolhe, Sagar Balgude.., Dilip Satpute, Hari Pawar, Enhanced supercapacitor performance of a $CuFe_2O_3$/g-C3N4 composite material: synthesis, characterization, and electrochemical analysis, *RSC Advances*, 2024, 14, 4917-4929. (Impact factor 3.9), Scopus indexed journal.
12. Onkar Kachi**,** Hari Pawar, Anuruddha Chabukswar, Nagesh Pawar.., Design, Synthesis and Evaluation of Antifungal activity of pyrazoleacetamide derivative recently accepted, *Medicinal Chemistry* , Bentham science, (Impact factor 2.3), Scopus indexed journal.
13. Abdul Shaikh, Pravin Mhaske**,** Hari Pawar, Vivek Bobade.., An efficient synthesis of new 3,5-bis (2-arylthiazol-4-yl)-1,2,4-oxadiazole derivatives and their antimicrobial evaluation efficient synthesis of new 3,5-bis(2-arylthiazol-4-yl)-1,2,4-oxadiazole derivatives and their antimicrobial evaluation, *Journal of Heterocyclic Chem*., Wiley, 2023,16,6,976-986, (Impact factor 2.03), Scopus indexed journal
14. Kundan Jangam, Sagar Balgude, Hari Pawar, Sunil Patange and Paresh More.., Effect of cobalt substitution in Zn1-xCoxFeCrO$_4$ ferri-chromate emerging light absorber for degradation of model textile dye *Surfaces and Interfaces* 33 (2022) 102189, (Impact factor 4.03), Scopus indexed journal
15. Kundan Jangam, Sagar Balgude, Hari Pawar, Sunil Patange and Paresh More., Influence of Cu–Mg substituted $ZnFe_2O_4$ ferrite as a highly efficient nanocatalyst for dye degradation and 4-nitrophenol reduction, *Journal of Physics and Chemistry of Solids* 167 (2022) 110783, (Impact factor 4.03), Scopus indexed journal.

(h) Presentations and Talk delivered:

1) Delivered invited talk in State Level Workshop on topic of **"Preparation for CSIR-NET, UGC-SET and GATE Examinations in Chemical Sciences**" to M.Sc students, at Birla College, Kalyan.
2) Delivered invited talk in State Level Workshop on topic of **"Preparation for CSIR-NET, UGC- SET and GATE Examinations in Chemical Sciences**" to M.Sc students, at Rayat Shikshan Sanstha's Yashwantrao Chavan College, Satara, 2018.
3) Delivered invited Lecture on topic of **"Elucidation of Structure and Stereochemistry of organic molecules using spectroscopic techeniques**" to M.Sc students, at Rajgad Pratisthan's Anantrao Thopte College, Bhor, Pune. 2017.
4) Delivered invited talk in short term course on topic of **"Research Methodology in Organic Chemistry**" to M.Sc students at Rayat Shikshan Sanstha's Annasaheb Awate College Manchar, Pune.
5) "**Magnetically separable catalyst towards synthesis of tetrazoles and oxazoles**" Tushar Gholap, Aadil Tamboli and Hari R. Pawar, State Level Avishkar conference 2017 at SPPU, Pune
6) **Photochemical synthesis of benzazoles using CdSe/MMT catalyst under visible**", Anil Wade**,** Hari R. Pawar and Rajeev C. Chikate, National Conference on Chalcogenides at DIAT, Pune 2016
7) Thesis Presentation on "**Ru-based heterogeneous catalyst towards organic transformations**" Hari R. Pawar, Raman Memorial Conference, Dept. of Physics, Savitribai Phule Pune University, Pune, 2020.
8) Oral presentation on "**RuNP's as catalyst towards synthesis of C-Substituted tetrazoles**" Hari R. Pawar, Sagar N Dakhane and Rajeev C.Chikate, International Conference on Functional Material and its applications at KTHM college, Nashik, 2018.
9) Oral Presentation on "**Ru-based heterogeneous catalyst towards synthesis of N-Substituted tetrazoles**" Hari R. Pawar and Rajeev C. Chikate, International Conference on Functional Material and its applications at HV Desai & COEP college, Pune, 2019.
10) Poster presentation "**Photochemical synthesis of benzazoles under visible light using [Ru(bipy)$_3$]/MMT as photocatalyst**, Hari R. Pawar, Sagar Yewale, Pranay Sagare, Saksham Nale, Raman Memorial Conference, SPPU, Pune, 2019
11) Delivered Invited lecture on the topic Natural Product Chemistry at **Mahatma Phule College Pimpri, Pune**, on 15 April.2023.

12) Delivered Invited lecture on the topic Natural Product Chemistry at **Mahatma Phule College Pimpri, Pune**, on February 2024.
13) Submitted **Ph. D Thesis** of student **Mr. Anil Ram Wade** on December 2023 to SPPU, Pune under the supervision of **Prof. Hari Pawar.**
14) Conducted **Pre placement activity for M Sc students** in association with BARTI-SYNGENFLOW Lab LLP and Dept of Chemistry MES-AGC