

Date: 02.05.25

CERTIFICATE

This is to certify that the thesis entitled, “**Design, Synthesis And Biological Evaluation of Some Novel Anti-malarial Agents**” submitted for the award of Ph.D. Degree in Pharmacy by **Ms. Rasana Yadav** incorporated original research work carried out by her under my supervision and no part of this work has been previously submitted for any degree.

Supervisor

(Dr. Prashant R Murumkar)

Head

(Pharmacy Department)

Dean

(Faculty of Pharmacy)

Date: 02.05.25

CERTIFICATE

This is to certify that the following publications have arisen out of the research work carried out by my Ph. D student **Ms. Rasana Yadav** who wishes to submit this thesis entitled, “**Design, Synthesis And Biological Evaluation of Some Novel Anti-malarial Agents**” to The Maharaja Sayajirao University of Baroda, Vadodara for the award of Ph. D in Pharmacy.

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Research/ review articles

- Gavale, S.; Vishwakarma, S.; Soni, S.; Pathan, S.; **Yadav, R.**; Murumkar, P. R.; Kadu, R. Synergistic Exploration of Thiazole Derivatives: Synthesis, Antimicrobial Activity, and Computational Insights. *J. Mol. Struct.* **2025**, 141772.
- Chauhan, M.; Prajapati, C.; Mirza, S.; Barot, R.; **Yadav, R.**; Barmade, M.; Kakadiya, D.; Vijayvargia, R.; Haobam, B.; Baidya, A. T. K.; Kumar, R.; Yadav, M. R.; Murumkar, P. Design, Synthesis, Biological Evaluation, and Molecular Dynamics of Some Novel 3-Phenylpyrazolo[1,5-a]pyrimidine-2,7(1H,4H)-dione Based Compounds as Anti-tubercular Agents. *J. Biomol. Struct. Dyn.* **2024**, 42 (17), 9031–9049.
- Chauhan, M.; Barot, R.; **Yadav, R.**; Joshi, K.; Mirza, S.; Chikhale, R.; Srivastava, V. K.; Yadav, M. R.; Murumkar, P. R. The *Mycobacterium tuberculosis* Cell Wall: An

Alluring Drug Target for Developing Newer Anti-TB Drugs-A Perspective. *Chem. Biol. Drug Des.* **2024**, *104* (3), e14612.

Book Chapters

- Murumkar, P. R.; **Yadav, R.**; Barot, R.; Shah, R.; Srivastava, V.; Yadav, M. Exploration of Computational Approaches in Toxicity Prediction. In *Artificial Intelligence in Chemical Sciences: Concepts, Models, and Applications*; CRC Press, **2025**; pp 29.
- Yadav, M. R.; Murumkar, P. R.; Joshi, K.; Barot, R.; **Yadav, R.** Approved Cholinesterase Inhibitor-Based Derivatives: Synthesis and Their Biological Evaluation. In *Natural Product-Based Synthetic Drug Molecules in Alzheimer's Disease: Therapeutic & Theranostic Agents*; Springer Nature Singapore, **2023**; pp 157–183.
- Ruikar, D. B.; Joshi, K.; **Yadav, R.**; Deshmukh, G. J.; Manekar, S.; Murumkar, P. R. Chromene and Its Derivatives in the Treatment of SARS-CoV-2 Virus Infection. In *The Role of Chromenes in Drug Discovery and Development*; Bentham Science Publishers, **2023**; pp 164–189.
- Yadav, M. R.; Murumkar, P. R.; Barot, R.; **Yadav, R.**; Joshi, K.; Chauhan, M. Role of Computational Modeling in Drug Discovery for Alzheimer's Disease. In *Current Trends in Computational Modeling for Drug Discovery*; Springer International Publishing, **2023**; pp 57–107.
- Yadav, M. R.; Murumkar, P. R.; **Yadav, R.**; Joshi, K. Structure-Based Virtual Screening in Drug Discovery. In *Cheminformatics, QSAR and Machine Learning Applications for Novel Drug Development*; Academic Press, **2023**; pp 69–88.
- Yadav, M. R.; Murumkar, P. R.; Ghuge, R. B.; Barot, R. R.; Chauhan, M.; **Yadav, R.** Biological Activity Spectrum of Oxadiazoles as a Privileged Scaffold in Medicinal Chemistry. In *Advances in Medicine and Biology*; Vol. 174; Nova Science Publishers, **2020**; pp 292.