THE MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA
सत्यं शिवं सुन्दरम्
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CERTIFICATE

This is to certify that the following publications have arisen out of the research work carried out by my Ph.D. student Ms. Monica Chauhan who wishes to submit this thesis entitled, **"Design and Synthesis of Some Novel Anti-tubercular Agents"** to The Maharaja Sayajirao University of Baroda, Vadodara for the award of Ph.D. in Pharmacy.

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A. PUBLICATION
Research/Review Papers

1. Prashant R. Murumkar, Rahul B. Ghuge, **Monica Chauhan**, Rahul R. Barot, Sharmishtha Sorathiya, Kailash M. Choudhary, Karan D. Joshi & Mange Ram Yadav. Recent developments and strategies for the discovery of TACE inhibitors. *Expert Opinion on Drug Discovery*, **2020**, 15(7), 779-801.
2. Rahul B. Ghuge, Prashant R. Murumkar, Kailash M. Choudhary, Karan D. Joshi, **Monica Chauhan**, Rahul R. Barot and M. R. Yadav. Development of Steroidal Aromatase Inhibitors as Potential Anti-breast cancer agents. *Current Enzyme Inhibition*, **2020**, 16, 1-18.

3. **Monica Chauhan**, Rahul Barot, Rasana Yadav, Karan Joshi, Sadaf Mirza, Rupesh Chikhale, Mange Ram Yadav and Prashant R Murumkar. The Mycobacterium cell wall: An alluring drug-target against Tuberculosis. *Journal of Medicinal Chemistry* (Communicated; under revision; manuscript ID: jm-2022-01945f)
4. **Monica Chauhan**, Rasana Yadav, Niyati Patel, Yash Parekh, Mange Ram Yadav and Prashant R Murumkar. Molecular docking, ADMET prediction and molecular dynamics simulations of hydantoin derivatives as DprE1 inhibitors. *Journal of Molecular graphics and Modelling* (Communicated; manuscript ID: JMGM-D-23-00103).
5. **Monica Chauhan**, Chintu Prajapati, Sadaf Mirza, Rahul Barot, Rasana Yadav, Dhruvi Kakadiya, Ravi Vijayvargia, Bijaya Haobam, M R Yadav and Prashant Murumkar Design, synthesis, biological evaluation and molecular dynamics of some novel 3-phenylpyrazolo[1,5-*a*]pyrimidine-2,7(1*H*,4*H*)-dione based compounds as anti-tubercular agents. *European Journal of Medicinal Chemistry* (Communicated).

Book chapters

6. Mange Ram Yadav, Prashant R. Murumkar, Rahul B. Ghuge, Rahul R. Barot, **Monica Chauhan** and Rasana Yadav. "*Biological Activity Spectrum of Oxadiazoles as a Privileged Scaffold in Medicinal Chemistry*". *in*: Advances in Medicine and Biology. Volume 174, Edt: Leon V. Berhardt, Nova Science Publishers, USA, **2021**, 1, pp. 1-87.
7. Mange Ram Yadav, Prashant R. Murumkar, Rahul B. Ghuge, Rahul R. Barot, **Monica Chauhan**. *Exploring Decaprenylphosphoryl-β-D-ribose 2'-Epimerase 1 (DprE1): A Target for Anti-Tubercular Drugs*. *in*: TUBERCULOSIS: Integrated Studies for a Complex Disease. Volume VIII, Edt: Prof. Nima Rezaei, Springer. **2023**, 24, pp. 497-536. Book ISBN: 978-3-031-15954-1.
8. Mange Ram Yadav, Prashant R Murumkar, Rahul Barot, Rasana Yadav, Karan Joshi, **Monica Chauhan**. Role of computational modelling in drug discovery for Alzheimer's disease. *in*: Current Trends in Computational modelling for Drug Discovery. Edt: Supratik Kar. *Springer Nature* (Under publication)

Patents

9. Novel 3-phenylpyrazolo[1,5-*a*]pyrimidine-2,7(1*H*,4*H*)-diones as potential anti-tubercular agents and the process of their preparation. Application number-202221064596, dated 11/11/2022.
10. Novel dihydrochalcone fused pyrazolones as potential anti-tubercular agents and the process of their preparation. Docket number-16793, dated 14/02/2023.