

26/11/2024

CERTIFICATE

This is to certify that the thesis entitled, “**DESIGN, SYNTHESIS AND BIOLOGICAL EVALUATION OF SOME NOVEL HETEROCYCLIC COMPOUNDS AS ANTI-ALZHEIMER’S AGENTS**” submitted for the award of Ph.D. Degree in Pharmacy by **Joshi Karan Divyesh** incorporated original research work carried out by him under my supervision and no part of this work has been previously submitted for any degree.

Supervisor
(Dr. Prashant R. Murumkar)

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(Dr. Kirti Patel)

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26/11/2024

CERTIFICATE

This is to certify that the following publications have arisen out of the research work carried out by my Ph. D student Mr. Joshi Karan Divyesh who wishes to submit this thesis entitled, **“DESIGN, SYNTHESIS AND BIOLOGICAL EVALUATION OF SOME NOVEL HETEROCYCLIC COMPOUNDS AS ANTI-ALZHEIMER’S AGENTS”** to The Maharaja Sayajirao University of Baroda, Vadodara for the award of Ph. D in Pharmacy.

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1. Book Chapters

- Mange Ram Yadav, Prashant R. Murumkar, **Karan Joshi**, Rahul Barot, and Rasana Yadav. "Approved Cholinesterase Inhibitor-Based Derivatives: Synthesis and Their Biological Evaluation." In *Natural Product-based Synthetic Drug Molecules in Alzheimer's Disease: Therapeutic & Theranostic Agents*, pp. 157-183. Singapore: Springer Nature Singapore, 2023.
- Dipti B Ruikar, **Karan Joshi**, Rasana Yadav, Gajanan J. Deshmukh, Snehal Manekar, and Prashant R. Murumkar. "Chromene and its Derivatives in the Treatment of SARS-COV-2 Virus Infection." In *The Role of Chromenes in Drug Discovery and Development*, pp. 164-189. Bentham Science Publishers, 2023.
- Mange Ram Yadav, Prashant R. Murumkar, Rahul Barot, Rasana Yadav, **Karan Joshi**, and Monica Chauhan. "Role of computational modeling in drug discovery

for Alzheimer's disease." In *Current trends in Computational modeling for Drug Discovery*, pp. 57-107. Cham: Springer International Publishing, 2023.

- Mange Ram Yadav, Prashant R. Murumkar, Rasana Yadav and **Karan Joshi**. "Structure-based virtual screening in drug discovery." In *Cheminformatics, QSAR and Machine Learning Applications for Novel Drug Development*, pp. 69-88. Academic Press, 2023.

2. Research/Review article

- Monica Chauhan, Rahul Barot, Rasana Yadav, **Karan Joshi**, Sadaf Mirza, Rupesh Chikhale, Vijay Kumar Srivastava, Mange Ram Yadav, and Prashant R. Murumkar. "The Mycobacterium tuberculosis Cell Wall: An Alluring Drug Target for Developing Newer Anti-TB Drugs—A Perspective." *Chemical Biology & Drug Design* 104, no. 3 (2024): e14612.
- Prashant R Murumkar, Rahul B. Ghuge, Monica Chauhan, Rahul R. Barot, Sharmishtha Sorathiya, Kailash M. Choudhary, **Karan D. Joshi**, and Mange Ram Yadav. "Recent developments and strategies for the discovery of TACE inhibitors." *Expert Opinion on Drug Discovery* 15, no. 7 (2020): 779-801.
- Rahul B Ghuge, Prashant R. Murumkar, Kailash M. Choudhary, **Karan D. Joshi**, Monica Chauhan, Rahul R. Barot, and Mange R. Yadav. "Development of steroidal aromatase inhibitors as potential anti-breast cancer agents." *Current Enzyme Inhibition* 16, no. 1 (2020): 45-62.