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Appendices

Acknowledgements

List of publications

About the author

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میں اپنے خاندان اور کشمیری دوستوں کا شکریہ ادا کرنا چاہتا ہوں۔ خاص طور پر، میرے والد، میری ماں، اور میرے دو قیمتی بھائی عزیز اور عدنان۔ اگر تم وہاں نہ ہوتے تو میں یہاں کبھی نہ ہوتا

List of publications.

- **Bhat, M.F.**, Luján, A.P., Saifuddin, M. and Poelarends, G.J., 2022. Chemoenzymatic Asymmetric Synthesis of Complex Heterocycles: Dihydrobenzoxazinones and Dihydroquinoxalinones. *ACS catalysis*, 12(18), pp.11421-11427.
- **Bhat, M.F.**, Luján, A.P., Saifuddin, M., Fodran, P., Poelarends, G.J., Multi-gram scale chemoenzymatic routes to diverse aminopolycarboxylic acids as potential metallo- β -lactamase inhibitors. (*manuscript submitted*)
- **Prats Luján, A.**, * **Bhat, M.F.**,* Saravanan, T. and Poelarends, G.J., 2022. Chemo-and Enantioselective Photoenzymatic Ketone Reductions Using a Promiscuous Flavin-dependent Nitroreductase. *ChemCatChem*, 14(8), p.e202200043.
- Luján, A.P., **Bhat, M.F.**, Tsaturyan, S., van Merkerk, R., Fu, H. and Poelarends, G.J., 2023. Tailored photoenzymatic systems for selective reduction of aliphatic and aromatic nitro compounds fueled by light. *Nature Communications*, 14(1), p.5442.
- Najmi, A.A., **Bhat, M.F.**, Bischoff, R., Poelarends, G.J. and Permentier, H.P., 2021. TEMPO-mediated electrochemical *N*-demethylation of opiate alkaloids. *ChemElectroChem*, 8(13), pp.2590-2596.

About the author

Mohammad Faizan Bhat was born on January 15, 1990, in Srinagar, Jammu and Kashmir, India. He completed his Bachelor's degree in Pharmaceutical Sciences from the University of Kashmir in 2014, followed by a Master's degree in Pharmaceutical Chemistry from the Indian Institute of Technology, Banaras Hindu University (BHU), in 2016. In October 2018, he embarked on his doctoral journey in the Department of Chemical and Pharmaceutical Biology at the University of Groningen, The Netherlands, under the guidance of Prof. dr. Gerrit J. Poelarends. His doctoral research delved into chemoenzymatic and photobiocatalytic strategies for chemical synthesis, the findings of which are detailed in this thesis.

