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Towards a single-molecule FRET study of Frauenfelder's nonexponential rebinding of CO in myoglobin

Eskandari Alughare, Z.

Citation

Eskandari Alughare, Z. (2022, June 23). *Towards a single-molecule FRET study of Frauenfelder's nonexponential rebinding of CO in myoglobin*. *Casimir PhD Series*. Retrieved from <https://hdl.handle.net/1887/3348505>

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Note: To cite this publication please use the final published version (if applicable).

Curriculum Vitae

I was born on 13th December 1979 in Falavarjan-Isfahan, Iran. I received my Bachelor in Pure Chemistry at the University of Isfahan-Iran in 2003. I was accepted for my first master in the field of Organic Chemistry under supervisory of Prof. M.A. Karimi Zarchi at University of Yazd, where my thesis was about a polymeric catalyst for organic synthesis. I received my master in 2005. From 2005-2010, I could obtain many experiences in the subject of organic chemistry synthesis in the presence of green reusable catalyst under supervisory of Prof. I. Mohammadpoor at chemistry department in the University of Isfahan. During 2005-2012, I have worked as part-time lecturer for bachelor students teaching organic chemistry, physical organic chemistry, spectroscopy, organic chemistry laboratory. These experiences pushed me into the depth of organic chemistry knowledge. In 2013 I had a research collaboration at Radboud University in the field of Peptide-Protein interaction and protein synthesis. In 2014, I worked as R&D manager in a project at Iron-Making company in Isfahan-Iran, where we could successfully innovate and develop a hybrid organic-inorganic polymer binder to reuse the waste fine coke at high temperature. In December 2015, I was accepted for my second master in Erasmus Mundus program founded by European Commission. I studied in the field of Chemical Innovation and Regulation at the University of Bologna; Italy and the University of Algarve/Tecnico Lisboa; Portugal. My master thesis was about tip-specific functionalization of gold nanorod with DNA as a nano-biosensor under supervisory of Dr. Pedro Paulo. In May 2018, I joined the single molecule optics group of Prof. Michel Orrit at Leiden University in the project of FRET study for Myoglobin protein and CO binding-unbinding to Myoglobin. In June 2020, I was awarded a grant by the HRSMC PhD mobility program for a visit to Prof. Don Lamb in chemistry department of LMU at Munich, Germany. From 2018-2021 I assisted in teaching the bachelor course biomolecular physics of Prof. Martina Huber at Leiden University. From 2019-2021, I served the Casimir PhD platform for organizing the winter-summer schools, workshops, and various courses for PhDs. From 2020-2021 I served in the LION PhD council.

List of Publications

1. Karimi Zarchi M A, **Eskandari Z.** A Mild and Clean Synthesis of Alkyl Azides from Alkyl Halides Mediated by Poly(4-vinylpyridine)-Supported Sodium Azide Under Nonaqueous Conditions (2011) Journal of applied polymeric science 121: 1916–1920.
2. Mohammadpoor-Baltork I, Moghadam M, Tangestaninejad S, Mirkhani V, **Eskandari Z.** A Green and Selective Synthesis of 2-Aryloxazines and 2-Aryltetrahydropyrimidines (2011) Journal of Heterocyclic Chemistry 48: 479-483.
3. Mohammadpoor-Baltork I, Moghadam M, Tangestaninejad S, Mirkhani V, **Eskandari Z.** H₃PW₁₂O₄₀: An Efficient and Recyclable Heterogeneous Catalyst for the Selective Synthesis of 2-Aryl-5,6-dihydro-4*H*-1,3-oxazines and 2-Aryl-1,4,5,6-tetrahydropyrimidines (2010) Z. Naturforsch. 65b: 461-469.
4. Mohammadpoor-Baltork I, Moghadam M, Tangestaninejad S, Mirkhani V, **Eskandari Z.** Ultrasound promoted selective synthesis of 2-aryl-5,6-dihydro-4*H*-1,3-oxazines catalyzed by K-10 and KSF montmorillonite clays: A practical procedure under mild and solvent-free conditions (2010) Ultrasonics Sonochemistry 17: 857-862.
5. Mohammadpoor-Baltork I, Moghadam M, Tangestaninejad S, Mirkhani V, **Eskandari Z.** Chemoselective Synthesis of 2-Aryloxazines and 2-Aryltetrahydropyrimidines Using Nano-SiO₂ as a Reusable Solid Acid Catalyst under Thermal Conditions and Microwave Irradiation (2010) J. Iranian Chem. Soc. 8: S 17- S 27.

Acknowledgements

I am so glad for all support, guidance, and help that I have received during the four years of my PhD at Leiden University.

At the beginning, I would like to express my deep gratitude to Prof. Michel Orrit that offered me this possibility to combine Chemistry with Biophysics, for his guidance, support, and patience, and for the freedom I was given in my research. I would like to give my special thanks to Prof. Gerard Canters who taught me how to think deeply on chemical aspect of the research project, and answering all of my questions about chemistry, proteins, biochemistry and biophysics.

I would like to thank also to my second promotor, Prof. Sylvestre Bonnet, for following my progress in the project and for all of his suggestions, guidance, and support.

I owe a big and special thank to my daily supervisor Dr. Christopher Engelhrad who helped me with all fields of chemistry, protein, optics, and confocal microscopy. Special thanks for his patience, and for the time to teach me how to do research and how to think and understand problems fundamentally.

I greatly acknowledge Prof. Don Lamb in Ludwig-Maximilians-Universität München (LUM). I am so happy that we had the collaboration with his group, and for the duration of my visit. I acknowledge Damir and Ganesh Agham that helped me for the labeling of Myoglobin and preparation of Myoglobin states.

I gratefully acknowledge Henriette Van Leenuwen and Yvonne Kerkhof for all administration procedures and academic steps which have a lot of paper work on time, and also thanks to Henriette for her guidance when I had questions and for our nice conversations on coffee table.

I wish to appreciate my sincere gratitude to Prof. Martina Huber during my assistant teaching for the course of Molecular Physics for bachelor student of Leiden University. I would like to thank Lionel Ndamba and Laura van Opdam for training me in the protein labelling, protein purification, working with HPLC, FPLC, Liquid-Mass Chromatography, and SDS-page filtration. My thanks go to Harmen van der Meer for excellent mechanical support, and also to Peter van Veldhuizen, and René Overgauw. I would like to thank all of MoNOS members: Dr. Patrick Späth, Dr. Biswajit Pradhan, Dr. Weichung Zhang, Dr. Amin Moradi, Dr. Sergi Pud, Dr. Sids, Dr. Zoran Ristanovic, Dr. Xuxing Lu, Dr. Deep Punji, Dr. Subhasis Adhikari, Jacco Ton (specially for his great kindness to translate my summery-thesis into Dutch), Robert Smit, Dr. Martin Baaske, Dr. Martin Caldarola, Dr. Wiebke Albrecht, Nasrin Asghari, Jaccuil Labramunoz, Pryianshi Klara, and Dr. Thomas Jollans.

I am thankful to all of my colleagues in the Casimir PhD platform and the LION PhD committee.

Finally, I would like to thank my husband, Payam: although there is not a word in the human dictionary to thank you, I would say from my heart, great thank for your love, warm support, and all of your scientific help in programming and data analysis. I am deeply grateful that you have been sharing with me the sadness and happiness, and for your encouragement to reach high. Lastly, many thanks to our parents for supporting us.

