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

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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.

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