

Personal Information

Name: Khosrow Khalifeh

Date of Birth: March 20, 1975

Marital Status: Married (with one daughter)

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Professional Summary

Associate Professor of Biophysics at the University of Zanjan with over a decade of experience in teaching and research. Focuses on protein folding, molecular biophysics, bioinformatics, and Systems Biology using both experimental and *in silico* methods. Active researcher with publications in international peer-reviewed journals, and extensive experience in mentoring students.

Education

Ph.D. in Biophysics (2010) Tarbiat Modares University, Tehran, Iran.
Research: The kinetic and thermodynamic behavior of wild-type and mutant Firefly Luciferase.

M.Sc. in Biophysics (2005) Tarbiat Modares University, Tehran, Iran.
Research: Chemical modification of lysozyme and its effect on protein refolding kinetics.

B.Sc. in Biology (2000) Shahid Chamran University, Ahvaz, Iran.

Academic Experience

Associate Professor of Biophysics (2017 - Present) - University of Zanjan, Zanjan, Iran.

Assistant Professor of Biophysics (2010 - 2017) - University of Zanjan, Zanjan, Iran.

Teaching Areas

Biophysical Chemistry, Molecular Biophysics, Radiation Biophysics, Bioinformatics,

Research Interests

Protein folding, and stability. Enzyme dynamics and protein engineering (Chondroitinase ABC I, Photoproteins).

Bioinformatics and Systems Biology.

Selected Resent Publications

Khalifeh, K., et al. (2026) A systems biology approach to find representative genes in Acute Myeloid Leukemia. **Plos one**.

Khalifeh, K., et al. (2026) A novel multi-objective optimization framework using NSGA-II for gene co-expression network inference. **Computational Biology and Chemistry**.

Khalifeh, K., et al. (2025) The Charge-driven Engineering of Mnemiopsin 2: Impact of Serine 35 Mutation on Activity and Stability. **photochemical and photobiological sciences**.

Khalifeh, K., et al. (2025) Structural and functional effects of helix dipole moment in photoprotein Mnemiopsin 2. **Scientific Reports**.

Khalifeh, K., et al. (2025). In vitro reversible photoinactivation in a novel variant of Mnemiopsin **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**,

Khalifeh, K., et al. (2022). Evolutionary adaptation of DHFR via expression of enzyme isoforms... **Biological Chemistry**, 403(7), 643.

Khalifeh, K., et al. (2022). Comparing similar versions of a connecting helix on the structure of Chondroitinase ABC I. **Enzyme and Microbial Technology**.

Khalifeh, K., et al. (2021). The stabilities of Ca^{2+} -regulated ctenophore and coelenterate apophotoproteins. **ACS Chemical Biology**, 16(8).

Khalifeh, K., et al. (2020). Bioinformatics and experimental studies on the structural roles of a surface-exposed α -helix at the C-terminal domain of Chondroitinase ABC I. **International Journal of Biological Macromolecules**.

Khalifeh, K., et al. (2020). An evolution-based designing and characterization of mutants of cyclomaltodextrinase: Molecular modeling and spectroscopic studies. **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**.

Khalifeh, K., et al. (2020). A comparative analysis of dipeptides distribution in eukaryotes and prokaryotes by statistical mechanics. **Physica A: Statistical Mechanics and its Applications**.

Khalifeh, K., et al. (2019) Designing and construction of novel variants of Chondroitinase ABC I to reduce aggregation rate. **Archives of Biochemistry and Biophysics**.

Khalifeh, K., et al. (2019) Thermodynamics of protein folding: methodology, data analysis and interpretation of data. **European Biophysics Journal**.

Authored chapters in Elsevier volumes:

Khalifeh, K., et al. (2022) **Chapter 12:** Spectroscopic methods to study protein folding kinetics: Methodology, data analysis, and interpretation of the results. Book title: Advanced Spectroscopic Methods to Study Biomolecular Structure and Dynamics. **Academic Press (Elsevier).**

Khalifeh, K., et al. (2022). **Chapter 25:** Chondroitinase ABC I as a novel candidate for reducing damage in spinal cord injury. Book Title: Diagnosis and Treatment of Spinal Cord Injury. **Academic Press (Elsevier).**