Zeyad Adil Hameed HAMEED

Ph.D. in Biochemistry

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Professional Summary

I am a highly driven Ph.D. in Biochemistry at Çankırı Karatekin University, specializing in enzyme kinetics, molecular modeling, antioxidants, and biochemical research. With a robust foundation in both research and teaching, I am deeply committed to advancing scientific discovery while nurturing the next generation of scientists. My expertise lies in developing innovative experimental approaches and computational models to address complex biochemical challenges. I am eager to contribute to cutting-edge research and collaborate within a dynamic academic or industrial research environment, aiming to make impactful contributions to the field of biochemistry.

Key Skills

- Enzyme Kinetics and Assays: Proficient in enzymatic activity analysis and enzyme inhibition (G6PD, 6PGD, AChE, BChE, Elastase, Carbonic Anhydrases, α-Glucosidase, Tyrosinase, Lipase, Cholesterol esterase, α-Amylase, Xanthine Oxidase, PKM2, and Lactate Dehydrogenase).
- **Antioxidant Assays**: Proficient in antioxidant assays (Phenolic, Flavonoid, DPPH, ABTS, FRAP, Cuprac, and Metal chelating).
- **Enzyme Purification**: In vitro purification of some enzymes (G6PD, 6PGD, GR, and Xanthine Oxidase)
- **Molecular Docking and Modeling**: Skilled in using software such as Molegro Virtual Docker for computational simulations.
- **Molecular dynamics (MD) simulation**: Skilled in using software such as GROMACS 2022.2.
- **Analytical Techniques**: Experienced in spectroscopy (UV-Vis).
- Chemical Synthesis: Proficient in organic compound synthesis, including heterocyclic compounds, and uses programs (Avogadro and ChemDraw).
- **Bioinformatics**: Familiar with protein structure analysis, database searches, and molecular modeling.
- **Research Methodology**: Strong expertise in experimental design, data collection, and statistical analysis.
- **Laboratory Management**: Experienced in managing laboratory protocols and ensuring compliance with safety standards.

- **Problem Solving**: Adept at troubleshooting experimental issues and optimizing procedures.
- **Communication and Collaboration**: Skilled at delivering presentations, preparing reports, and collaborating with multidisciplinary teams.
- **Teaching and Mentoring**: Proficient in designing lesson plans, delivering lectures, and mentoring students in research projects.
- Languages: Fluent in Arabic, English, and Turkish for academic and professional communication.

Education

Ph.D. in Biochemistry (2022-2025)

Chemistry

College of science

Çankırı Karatekin University, Çankırı, Turkey

• Thesis: Investigation Of The Effects Of Phenoxy Chalcones On Some Enzyme Activities By In Vitro And In Silico Methods.

M.Sc. in Biochemistry (2020–2022)

Chemistry

College of science

Çankırı Karatekin University, Çankırı, Turkey

• Thesis: The inhibitory effects investigation of metal complexes with coumarin Schiff base on G6PD activity.

B.Sc. in Chemistry (2013–2019)

Chemistry

College of science

Mosul University, Mosul, Iraq

• Gained hands-on experience in clinical chemistry while working in a private laboratory conducting human body tests.

Experience

Teaching Assistant (2021–2025)

Chemistry

College of science

Çankırı Karatekin University, Çankırı, Turkey

- Taught undergraduate courses in Biochemistry and supported laboratory sessions.
- Mentored undergraduate students in research projects, focusing on enzyme kinetics and biochemical analysis.

Publications

- 1. "Investigation of the efficacy on tyrosinase enzyme of 5-substituted-1H-tetrazole derivatives synthesized with Pd-containing nanoparticles." Journal of Chemical Sciences, 136 (2), 22, 2024.
- 2. "Turgenia latifolia (L.) Hoffm: Chemical profiling and antioxidant, anti-inflammatory, and anticancer activities" Bulletin of the Chemical Society of Ethiopia 39 (5), 937-953
- 3. "Investigation of α -glucosidase and α -amylase inhibitory effects of phenoxy chalcones and molecular modeling studies."
 - Journal of Molecular Recognition, 36 (11), e3061, 2023.
- 4. "Evaluation of insecticidal and enzyme activity potentials of essential oils and extracts of *Chenopodium botrys* against storage product pests." Bulletin of Biotechnology, 4 (1), 7-12, 2023.
- 5. "Synthesis and characterization of novel 1,3,4-oxadiazole derivatives from sulfaethiazole."
 - Iraqi Journal of Pharmacy, 21 (3), 128-135, 2024.
- 6. "In-situ Gelling System: A Promising Delivery Method for Treating Periodontitis." Iraqi Journal of Pharmacy, 21 (3), 89-101, 2024.
- "Investigation of α-glucosidase inhibitory effects of some 7diethylaminocoumarinthiazole derivatives and molecular modeling studies."
 2nd International Karatekin Science and Technology Conference, Çankırı, Türkiye, 21 -22 Aralık 2023, ss.597-602.
- 8. "Impact of cefotaxime on hepatic enzymes and some laboratory parameters." 2nd International Karatekin Science and Technology Conference, Çankırı, Türkiye, 21 22 December 2023.
- 9. "Kolinesteraz İnhibitörleri Olarak Tetrazol Bağlantılı Fenotiyazinlerin Sentezi: Moleküler Yerleştirme ile Birleştirilmiş İn vitro Yaklaşım." Eurasia Biochemical Approaches & Technologies Congress, Tokat, Türkiye, 24 27 October 2024. ss.1-2.
- 10. "The Inhibition Effects Investigation Of Metal Complexes With Coumarin Schiff Base On G6PD Activity."

- 1st International Karatekin Science and Technology Conference, Çankırı, Türkiye, 21 22 August 2023.
- 11. "Exploring Extracts As Lipase Inhibitors In Vitro: A Promising Approach For Obesity Management."
 - 2nd International Karatekin Science and Technology Conference, Çankırı, Türkiye, 21 22 December 2023.
- 12. "Tyrosinase Inhibitors: Uncovering Tyrosinase Inhibitors In Vitro For Skin Hyperpigmentation Management."
 - 2nd International Karatekin Science and Technology Conference, Çankırı, Türkiye, 21 22 December 2023.

Projects

 "Investigation of the Effects of Fruit Extracts of Acacia tortilis on Glucose-6-Phosphate Dehydrogenase and 6-Phosphogluconate Dehydrogenase Enzymes" (Çankırı Karatekin University - Scientific Research Projects Coordinatorship - Project No. FF260722B10 -2022-2024 / Project Manager: Dr. Ali Rıza TÜFEKÇİ – Researcher: Zeyad Adil Hameed HAMEED)

Languages

Arabic: NativeEnglish: AdvancedTurkish: Proficient

Technical Skills

- Molecular modeling tools: Molegro Virtual Docker, Schrödinger Suite.
- Expertise in laboratory techniques for enzyme kinetics, biochemical analysis, and protein-ligand docking.
- Advanced proficiency in Microsoft Office Suite (Word, Excel, PowerPoint).
- Familiarity with bioinformatics tools and software for protein and enzyme structure analysis.

References

1. Prof. Dr. Şevki ADEM

Çankırı Karatekin University

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2. Prof. Dr. Volkan EYÜPOĞLU

Çankırı Karatekin University

Contact: +90 555 615 1456 | <u>volkan@karatekin.edu.tr</u>

3. Dr. Ali Rıza Tüfekçi

Çankırı Karatekin University

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