Reyhane Ghorbani Nia

CONTACT Information

Department of Chemical Engineering,

University of Tehran

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EDUCATION

University of Tehran (UT), Tehran, Iran

09/2018 - 06/2022 (expected)

B.Sc. in Chemical Engineering (In progress)

GPA (up to now): 16.61/20, The last three semesters: 17.72/20 (3.78/4)

Advisor: Prof. Abbas Ali Khodadadi

Shahid Iranmanesh High School, Kerman, Iran

2014 - 2018

High School Diploma in Mathematics and Physics GPA: 19.82/20 (4.0/4.0)

RESEARCH INTERESTS

• Drug Delivery

• Machine Learning

• Biosensors

• Protein Engineering

Biotechnology

Nanotechnology

• Catalysis

Relevant Courses

• Engineering Mathematics (19.25/20)

• Application of Mathematics in Chemical Engineering (19.25/20)

• Physical Chemistry (19/20)

• Calculus II (17/20)

• Kinetic and Reactor Design (18.5/20)

• Fluid Mechanics (18.5/20)

• Heat Transfer (17.5/20)

• Fundamentals of Genetic Engineering (18.38/20)

• Differential Equations (17/20)

• Computer Programming (19/20)

• General Microbiology (19/20)

• Transmission and Distribution of Natural Gas (18.75/20)

• Unit Operation (in progress)

• Process Control (in progress)

• Refining Processes (in progress)

• Biochemistry Engineering (in progress)

Honors and Awards -Ranked among \mathbf{top} 10% of all students at the Department of Chemical Engineering, University of Tehran (up to now)

-M.Sc. Admission from Department of Chemical Engineering, University of Tehran. Exempted from M.Sc. university entrance exam as an exceptional talent student, 2021

-Chemical Engineering Community best member award, 2019

-Certificated for attending "The Second National Conference on Water Consumption Management (Loss Reduction and Reuse Approach)", 2019

-Chemical Engineering Scientific Society Journal best member award, 2018-2019

-Ranked 504^{th} among more than $150,\!000$ participants in the national university entrance exam, 2018

RESEARCH EXPERIENCE

• B.S. Thesis Project

Catalysis & Nanostructured Materials Research Lab University of Tehran, Tehran, Iran September 2021 - Present

Mentor: Prof. Abbas Ali Khodadadi

Encapsulating milk-derived Micro-RNAs in lipid nanoparticles.

• Research Assistant

Catalysis & Nanostructured Materials Research Lab University of Tehran, Tehran, Iran Summer 2021

Mentor: Prof. Abbas Ali Khodadadi

Applications of Indirect Biosensors in the Detection of Lung Cancer Using Respiratory Exhaust Gases.

Work Experience

• Internship Project: Iranian National Algae Culture Collection University of Tehran, Iran Summer 2021

Mentor: Prof. Omid Tavakoli

Micro Algae Bio-sensors as pH indicators in the food industry and environmental pollution

• Editor of Chemical Engineering Scientific Society Journal University of Tehran, Iran

2018-2019

ANALYTICAL & COMPUTER SKILLS

- Programming Languages: MATLAB, Python, C/C++
- Simulation and Design Tools: Hysis Aspen, Simulink
- Laboratory Equipments: UV-Vis, SEM, TEM, AFM, XRD
- Technical Tools: LATEX, Microsoft Office, AutoCAD

TEACHING ASSISTANT EXPERIENCE

Physical Chemistry,
Differential Equations,
Applications of Mathematics in Chemistry,

Spring 2021 - Fall 2021

Fall 2019

Fall 2019

Language Skills

- Persian (Farsi): Native
- English:
 - TOEFL Best Scores: Reading: 24, Writing: 24, Speaking: 26, Listening: 21, Total: 95

ACADEMIC AND PROFESSIONAL REFERENCES

- Prof. Abbas Ali Khodadadi, E-mail:khodadad@ut.ac.ir Professor, School of Chemical Engineering, University of Tehran.
- Prof. Omid Tavakoli, E-mail: otavakoli@ut.ac.ir Assistant Professor, School of Chemical Engineering, University of Tehran.
- Prof. Hedayat Azizpour, E-mail:h.azizpour@ut.ac.ir
 Assistant Professor, School of Chemical Engineering, University of Tehran.