Parham Taghizadegan

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**Education

- **BSc: Material Science and Engineering** / Sharif University of Technology (SUT) Sep. 2019 – Present
  - Overall Average: 18.63/20 (110 Credits)

- **Diploma**: **Mathematics and Physics** / Mehraein High School Jul. 2013 – Jul. 2019
  - Overall Average: 19.88/20

**Research Interests

- Electrochemistry
- Energy Storage Systems (Specifically Batteries)
- Energy Materials
- Coating and Surface Engineering
- Nanostructured and Advanced Materials
- Water Splitting

**Honors And Awards

- Admission of master's degree program in Material Science and Engineering at Sharif University of Technology Sep. 2023

- **Ranked 2nd (Silver Medal)** among other competitors in Material Science and Engineering Olympiad for University Students Summer 2022

- **Ranked 2st** among 68 students in B.Sc. of Material Engineering, Sharif University of Technology Sep. 2021 – Aug. 2022

- **Ranked 2nd** among 68 students in B.Sc. of Material Engineering, Sharif University of Technology Sep. 2020 – Aug. 2021

- **Ranked 1st** among 68 students in B.Sc. of Material Engineering, Sharif University of Technology Sep. 2019 – Aug. 2020

- **Top 3** in the High school

**Experiences

*Research Experience

- Researcher at Research Center of Nanostructured and Advanced Materials (CNAM), Department of Materials Science and Engineering, Sharif University of Technology (SUT) Sep. 2021 – Present

  Projects:
  - Improving Stability of Fe2O3 as Anode Active Material by Coating Nickle-Based Metal-Organic Framework for Li-ion Batteries (Pending)
  - Improving Stability of Bi2Te3 as Anode Active Material by Coating amorphous ZrO2 for Li-ion Batteries (Pending)
  - Synthesizing and Characterization of a Nickle-Based PBA Cathode Materials for aquas K-ion Battery

- Researcher at Iran's National Elites Foundation Dec. 2021 – Sep. 2022

  Project: Reducing weight and enhancing function of lead acid battery grids by using carbon-based economical materials

*Internships

▪**Sharif Nano Pars** Summer 2022

Sharif Nano Pars is a group of university professors in the field of nanotechnology together innovate high tech nano products. All new developed products proposed by the research group would be commercialized by Sharif Nano Pars (SNP) Nano Coating experts and introduced to the market worldwide. Management: Prof. Abolghsem Dolati

*Teaching Experiences

- **Teaching Assistant** - Physical Metallurgy I, Prof. Majid Pouranvari* Spring 2022
- **Teaching Assistant** - Physical Chemistry of Materials, Prof. Seyed Khatiboleslam Sadrnezhaad* Fall 2022
- **Teaching in Bootcamp** – Energy Storage Systems: From Zero to Hero* Spring 2022

**Memberships

▪Member of the Scientific Association of MSE Department Sep. 2022 – Present

▪Member of Iran's National Elites Foundation Dec. 2021 – Present

**Certificates

- Sharif Lithium Battery Day, Dr. Ali Esfandiar, Sharif University of Technology (Certificate of Attendance) Jul. 2021

▪Nanotechnology and Nanosensors (Part I) Online Course, TECHNION - Israel Institute of Technology (Course by Coursera)

Overall Score: 98.13/100 Sep. 2021

**Languages

- Persian: Native
- English: Fluent

**Highlight Courses

- Physical Metallurgy I: 20/20
- Physical Metallurgy II: 20/20
- Crystallography and Lab: 20/20
- Mechanical Properties of Materials I: 20/20
- Principles of Programming (Python Programing Language): 20/20
- Numerical Methods: 20/20
- Kinetics in Material Science: 19.5/20
- General Chemistry I: 20/20
- General Chemistry Lab I: 20/20
- Principles of Solidification and Casting: 19.5/20
- Mechanics of Materials: 19.5/20 (Top Mark)
- Electronic Properties of Materials: 19/20 (Top Mark)
- Thermodynamics of Materials I: 18.4/20
- Principles of Materials Science and Engineering: 18/20
- Thermodynamics of Materials II: 19.5/20

* Certification is available upon request.

**Skills

*Laboratory Skills:

- Electrochemical Tests: Working experience with Autolab instrument for conducting electrochemical tests (EIS, CV, GCD, …)
- Analyzing characterization results of NMR and XRD method
- Battery assembling and testing

*Engineering Software:

- Crystallography: Xpert High Score
- Engineering: HSC Chemistry, ImageJ
- Programming Language: Python, MATLAB
- Tools: Adobe Photoshop, Adobe InDesign, OriginPro
- O.S. and Related: Microsoft Windows, Microsoft Office (Word, Excel and PowerPoint)

*Others:

- Thrive in a team environment and enjoy working closely with others

**References

- Available upon request