

# MOHAMMAD **SAEID RASHIDI N**EZHAD

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<u>SaeidRashidiN@Gmail.com</u>

<u>SaeidRashidiN</u> in

## SUMMARY

A motivated student interested in research, learning, and making progress, with brilliant experiences and honors such as managing Nanotechnology Scientific Association, achieving valuable scientific Olympiad medals, and more.

*Creative, responsible, and hard-working to meet the best performance.* 

Eager to experiment and accurate analysis of scientific phenomena.



## EDUCATION

Master of Science in Materials Science and Engineering Sharif University of Technology 2022 – PRESENT

Bachelor of Science in Materials Science and Engineering Sharif University of Technology 2017 – 2022 | GPA 3.7/4 Thesis: Synthesis and Comparison of a Wide Range of Gold and Silver Nanoparticles with Different Morphologies for use in Novel Drug Delivery Systems for Cancer Treatment Supervisor: Dr. Abdolreza (Arash) Simchi | cnam.ir

High School Diploma in Mathematics and Physics | Allameh Helli High School (NODET) 2013 – 2017 | GPA 19.8/20

## A

- > Biomaterials
- Smart Drug Delivery Systems

**RESEARCH INTERESTS** 

> Tissue Engineering

- > Nanotechnology
- > Nanocomposite Hydrogels
- > In-vivo Biomedical Implants

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## EXPERIENCES

**Research Center of Nanostructured and Advanced Materials** | <u>**RCNAM</u>** | **2021 – Present** *I'm so proud to be a member of* <u>*Prof. Simchi*</u> *'s extraordinary biomaterials team*.</u>

Currently, I'm doing research in the <u>Research Center of Nanostructured and Advanced Materials</u> (<u>CNAM</u>) at Sharif University of Technology (SUT).

#### President of Sharif Nanotechnology Scientific Association | <u>INIC</u> | 2021 – Present

In August 2021, with a majority of votes in the <u>Sharif Student Scientific Association of Nanoscience</u> <u>and Nanotechnology</u> election, I was selected as the president and selected again in 2022.

This association is a subset of the <u>IRAN Nanotechnology Innovation Council (INIC)</u> in the <u>Vice-</u> <u>Presidency for Science and Technology</u>.

The most important goals of this association are:

- Development and promotion of nanotechnology
- > Training nanotechnology specialists
- > Publication the Journal of Nanoscience and Nanotechnology
- > Support for selected researches
- > Holding workshops and training classes

Advanced Industrial Corrosion and Wear Resistance Coatings | INEF, PEDCO, and ICST | 2020 As a member of the <u>National Elites Foundation of Iran (INEF)</u>, I was involved in an industrial research project at the request of the <u>Petroiran Development Company (PEDCO)</u> with the help of the <u>Institute</u> for Color Science and Technology (ICST).

My responsibility was to research and develop **nanostructured coatings**.

#### The Concentration of Low-grade Hematite Soil by Modern Methods | SUT and AIIDG | 2019

As a member of the research team in the <u>Department of Materials Science and Engineering</u> at Sharif University of Technology (SUT), I participated in this project at the request of the <u>Arzesh</u> <u>International Investment Development Group (AIIDG)</u> and was involved in all stages, from extracting the soil to achieve a high-quality product.

#### Author and Editor of Educational Books and Mock Exams | CCE | 2017 – 2020

I have cooperated with the biggest organization that prepares students for university admission in Iran <u>(Cultural Center of Education (CCE))</u>. In this organization, I used to create and edit **chemistry questions** for more than 100 mock exams and **publish** more than 10 most circulated **educational chemistry books** for high school students.



## **CONFERENCE PRESENTATIONS**

- Synthesis of Ag/Au core-shell using seed-mediated growth process for biomedical applications | 2021
- Nanocomposite Hydrogels and Their Applications in Smart Drug Delivery Systems and Tissue Engineering | 2021
- > The Structure and Properties of **Bone Tissue** | 2021
- Nanostructured Diamond-Like Carbon (DLC) Coatings and Their Applications as In-vivo Biomedical Implants Coating | 2020
- Stress-Corrosion Cracking (SCC) in **Brass Alloys** | 2020
- Structure, Manufacturing Methods, and Applications of Graphene and Graphene Nanocomposites | 2019
- > Applications of the Jules-Thompson Effect in Materials Science and Engineering | 2019
- *Gas Refrigerant Inversion Curve* and Performance Improvement of *Linde Refrigerator* Components | 2019
- > Artificial Photosynthesis and Carbon Stabilization in Carbon Dioxide | 2017
- > Novel Method of Glyoxylic Acid Electrosynthesis | 2016

## HONORS AND AWARDS

- Gold Medal (1<sup>st</sup> rank in Iran) of 26<sup>th</sup> Scientific Olympiad for University Students in the field of Materials Science and Engineering | Nov 2021
- Silver Medal (2<sup>nd</sup> rank in Iran) of 25<sup>th</sup> Scientific Olympiad for University Students in the field of Materials Science and Engineering | May 2021
- *Credit* for pursuing *graduate study without entrance exam* at the field and time of desire | 2021
- Selected as the President of <u>Sharif Nanotechnology Scientific Association</u> with a majority of votes in election | 2021
- > Reaching the *final stage* of the *National Nanotechnology Competition* | 2021
- Introduced as the top student by <u>Department of Materials Science and Engineering</u> of Sharif University of Technology | 2021
- Admission in the fourth course of <u>Nano-Startup</u> by gaining the third rank in Iran among all the bachelor's degree students of all fields | 2020
- Ranked fourth in Iran in Nano Teaching Ability Test among all participants from the field of Materials Science and Engineering | 2020
- > Author and editor of more than ten most circulations chemistry educational books | 2017 2020
- Holds the highest grade in one course at the Department of Materials Science and Engineering since its establishment by gaining the wonderful grade 21.7/20 | 2019
- > Ranked top 0.5% of participants in Iran universities entrance exam for B.Sc. degree | 2017
- Top graduated student of <u>National Organization for Development of Exceptional Talents and</u> <u>Young Scholars</u> with 19.8/20 GPA | 2017
- > The *leader* of the expedition team to the *National Chemistry Marathon competitions* and winning the *Bronze Statue* | 2016
- > Ranked first in the second stage exam of Talented Students Chemistry Olympiad | 2016
- > Achieving the top rank in Mathematical Olympiad of Iran's Elite Scholars | 2010
- The top talented student by obtaining the only full score from the test of intelligence and creativity in the Olympiad Center of <u>MENSA International High IQ Society</u> according to the standards of <u>World Talent Organization</u> from the beginning of this test till now | 2007

## INVENTION

#### Synthesis of Strong Nanostructured Detergent Powder using Food Waste | IFIA | 2012

During middle school, I spent three months at the **Inventions and Innovations Club of the Modern Research Institute**. My main idea was using **food waste** like walnut and almond peels to synthesis a very strong **nanostructured detergent powder**. I formed a team, and we could come up with a **valuable invention**, which was able to attract the opinion of the judges in the **International Invention Competition** held by the <u>International Federation of Inventors' Associations (IFIA)</u> and was selected as **the best**.

## **SELECTED COURSES**

- > Nanotechnology Applications Workshop
- General Chemistry and Laboratory
- > Programming
- > Mechanical Properties of Materials
- Inventions and Innovations Club
- > Effective Communication
- Practical Principles of Career Success from the Perspective of International Experiences
- LANGUAGES
  - > Persian (Native)

- > Material Selection
- > Familiarity with microscopes
- > Composite Materials
- > Electronic Properties of Materials
- > Entrepreneurship
- > Team building and Leadership
- Writing and Transmitting Scientific and Engineering Contents
- English (Fluent)

## REFERENCES

- > Prof. Abdolreza (Arash) Simchi | <u>cnam.ir</u> | <u>simchi@sharif.edu</u>
- > Dr. Gholamreza Pircheraghi | sharif.edu/~pircheraghi | pircheraghi@sharif.edu
- Dr. Mojtaba Movahedi | sharif.edu/~m\_movahedi | m\_movahedi@sharif.edu
- > Dr. Reza Alizadeh | <u>sharif.edu/~r.alizadeh | r.alizadeh@sharif.edu</u>