

## Sasan Ghanbari Asl

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<https://sasanganbari.github.io>

### EDUCATION

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**Sharif University of Technology** Tehran, Iran

M.Sc., Chemical Engineering-Biomedical Engineering 2013-2015

**GPA: 3.25/4** Overall.

Thesis: Optimization of Cell Proliferation on MicroCarriers Composed of Acellular Heart Matrix and Chitosan

**Semnan University** Semnan, Iran

B.Sc. in Chemical Engineering 2008-2012

**GPA: 3.84/4** Overall.

Thesis: Mass Transfer of Blood Oxygen in the Vessel

**Danesh High-School** Lorestan, Iran

High-school Diploma, Physics and Mathematics 2003-2007

**GPA: 4/4** Overall.

### RESEARCH INTERESTS

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Tissue engineering, Biomaterials, Nanobiotechnology, Biomedical Sciences, Pharmaceuticals, Drug Delivery, Regenerative Medicine, Supramolecular Polymers.

### ACADEMIC PUBLICATIONS

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- **Sasan Ghanbari Asl**, Shohreh Mashayekhan, and Mehdi Khanmohammadi. "A cellular cardiac matrix-based porous microcarrier as a cell delivery system in myocardial tissue engineering application." *Iranian Polymer Journal* 31, no. 9 (2022): 1079-1091 (<https://doi.org/10.1007/s13726-022-01059-3>).
- Pourfarhangi, Kamyar Esmaeili, Shohreh Mashayekhan, **Sasan Ghanbari Asl**, and Zahra Hajebrahimi. "Construction of scaffolds composed of acellular cardiac extracellular matrix for myocardial tissue engineering." *Biologicals* 53 (2018): 10-18 (<https://doi.org/10.1016/j.biologicals.2018.03.005>).

### CONFERENCE PRESENTATIONS

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- **Sasan Ghanbari Asl**, Shohreh Mashayekhan, Mohammad J. Abd Khodaei, and Farzaneh Sivandzadeh, "Construction of Novel Microcarriers Composed of Accellular Heart Matrix for Tissue Engineering", The 9<sup>th</sup> International Chemical Engineering Congress & Exhibition (IChEC 2015), Shiraz, Iran, 26-28 Dec., 2015.
- **Sasan Ghanbari Asl**, and Ramin Nayebzadeh, "A Diffusion-Compartmental Model for Transdermal Drug Delivery from a Matrix-Type Device", International Conference on Engineering, Arts Management and Environment, Poland, Szczecin, 12 Dec., 2014.
- **Sasan Ghanbari Asl**, Kamyar Esameili Pour Farhangi, Shohreh Mashayekhan, and

Samaneh Moghaddasi," The Behavior of Cardiac Progenitor Cells on Scaffold Composed of Accelular Heart Matrix and Chitosan", (Persian), 15<sup>th</sup> Iranian National Chemical Engineering Congress, Tehran, Iran, 17-19 Feb., 2015.

- **Sasan Ghanbari Asl**, Kamyar Esameili Pour Farhangi, and Shohreh Mashayekhan, "Construction of Scaffold Composed of Accelular Heart Matrix for Heart Tissue Engineering Application", (Persian), 1<sup>st</sup> Conference on Novel Approaches of Biomedical Engineering in Cardiovascular Diseases, Tehran, Iran, 22-23 Jan., 2015.
- **Sasan Ghanbari Asl**, "Mass Transfer of Blood Oxygen in the Vessel", The 2<sup>nd</sup> National Conference on Heat and Mass Transfer (IChMT 2014), Semnan, Iran, 19-20 Nov., 2014.
- **Sasan Ghanbari Asl**, and Hossein Ashrafian, "Nanotechnology in Tissue Engineering", (Persian), The 4<sup>th</sup> National Conference on Applications of Chemistry in Novel Technologies (CAAT), Isfahan, Iran, 13 Nov., 2014.

## **AWARDS AND HONORS**

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**Ranked within top three students** 2015

- Based on GPA of 3.25/4 in Chemical Engineering department, In full duration of Master of Science, Ranking by Sharif University of Technology, Iran.

**Received straight Admission offer for Ph.D. in Chemical Engineering** 2015

- Tuition fee and entrance exam waived as award for being talented student, Sharif University of Technology, Iran.

**Received Scholarship for MSc in Chemical Engineering** 2013

- 24 Months Scholarship in duration of Master of Science, Sharif University of Technology, Iran.

**Ranked within top Five students** 2012

- Based on GPA of 3.84/4 in Chemical Engineering department, In full duration of Bachelor of Science, Ranking by Semnan University, Iran.

## **LANGUAGES**

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**English (Full professional proficiency), Persian (Native)**

### **TOEFL**

- **Overall Score of 91** (Reading: 28, Listening: 20, Speaking: 19, Writing: 24)

## WORK EXPERIENCE

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### Environment Department-Biomaterial Lab. in Tabriz Refinery

Tabriz, Iran

- Environmental, Health and Safety Manager December 2018-Present

## RESEARCH EXPERIENCE

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### Biomedical Research Institute, Sharif University of Technology

Tehran, Iran

*Research Assistant*

September 2014- September 2015

- Research Area: Design and Fabrication of Polymeric Carriers for Tissue Engineering Applications.

### School of Chemical Engineering, Semnan University

Semnan, Iran

*Undergraduate Research Assistant*

September 2011- September 2012

- Mass Transfer of Blood Oxygen in the Vessel

### School of Chemical Engineering, Semnan University

Semnan, Iran

*Group Leader*

September 2010- January 2011

- A voluntary project introduced for BSc students to Design "Tissue Engineering Heart Patch"

## TEACHING EXPERIENCES

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### School of Chemical Engineering, Sharif University of Technology

Tehran, Iran

*Teacher Assistant*

September 2013- September 2015

- Teaching Assistant Area: Heat Transfer, Thermodynamics, Engineering Mathematics, Mass Transfer.

### School of Chemical Engineering, Semnan University

Semnan, Iran

*SENIOR Mentor of Freshman students*

September 2011- September 2012

- Train and advise a team of first-year students

## SKILLS

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- Cell Culture (Proficient)
- MATLAB Programming (Proficient)
- Microsoft Office (Proficient)
- Comsol Multiphysics (Expert)
- Aspen Plus (Expert)
- Design Expert (Proficient)
- Image J (Expert)

## REFERENCES

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Dr. Mohammad Javad Abdkhodaei  
Associate Professor  
Sharif University of Technology  
[abdmj@sharif.edu](mailto:abdmj@sharif.edu)

Dr. Shohreh Mashayekhan  
Assistant Professor  
Sharif University of Technology  
[mashayekhan@sharif.edu](mailto:mashayekhan@sharif.edu)

Dr. Behnam Khoshandam  
Associate Professor  
Semnan University  
[bkhoshandam@semnan.ac.ir](mailto:bkhoshandam@semnan.ac.ir)