

Sasan Ghanbari Asl

Tabriz, Iran, sasi.ghanbar1991@gmail.com, +989392894127

EDUCATION

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

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

ACADEMIC PUBLICATIONS

- **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.
- Pourfarhangi, Kamyar Esmaeili, Shohreh Mashayekhan, **Sasan Ghanbari Asl**, and Zahra Hajebrahami. "Construction of scaffolds composed of acellular cardiac extracellular matrix for myocardial tissue engineering." *Biologicals* 53 (2018): 10-18.

CONFERENCE PRESENTATIONS

- **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 9th 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), 15th 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), 1st 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 2nd 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 4th National Conference on Applications of Chemistry in Novel Technologies (CAAT), Isfahan, Iran, 13 Nov., 2014.

AWARDS AND HONORS

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

English (Full professional proficiency), Persian (Native)

TOEFL

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

WORK EXPERIENCE

Environment Department in Tabriz Refinery

Tabriz, Iran

- Environmental, Health and Safety Manager

December 2018-Present

RESEARCH EXPERIENCE

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

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

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

REFERENCES

Dr. Mohammad Javad Abdkhodaei
Associate Professor
Sharif University of Technology
abdmj@sharif.edu

Dr. Shohreh Mashayekhan
Assistant Professor
Sharif University of Technology
mashayekhan@sharif.edu

Dr. Behnam Khoshandam
Associate Professor
Semnan University
bkhoshandam@semnan.ac.ir