

## Curriculum vitae

### **Dr. Mahmoud Azami, (PhD in Biomaterials), Associate Professor**

Department of Tissue Engineering, School of Advanced Technologies in Medicine, Tehran University of Medical Sciences.

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#### **Educational Background:**

##### 1. Ph.D

Biomedical engineering-Biomaterials, Amirkabir university of Technology (Polytechniques),  
Tehran, Iran, 2010

Thesis Title: Biomimetic scaffold for bone tissue engineering

Supervisor: Prof. F. Moztarzadeh, Dr F. Orang, Prof. M. Rabiee

##### 2. M.S

Biomedical engineering-Biomaterials, Amirkabir university of Technology (Polytechniques),  
Tehran, Iran, 2006

Thesis Title: Bone tissue engineering using gelatin/hydroxyapatite scaffold

Supervisor: Prof. F. Moztarzadeh, Dr F. Orang

### 3. B.Sc

Material science and engineering, Sharif University of Technology, Tehran, Iran, 2003

Thesis Title: Heat treatment of selective laser sintering bodies

Supervisor: Prof. A. Simchi

### **Research Interests**

- Additive manufacturing (3D printing) methods application in tissue engineering
- Biomaterials synthesis (Calcium phosphate, Bioactive glasses ...)
- Scaffold for tissue engineering
- Bone tissue engineering
- Biomimetic scaffolds for bone repair
- Biomineralisation
- Design and synthesis of nano and micro structural materials for medical applications
- Nanotechnology in medicine and tissue engineering
- Controlled drug delivery systems

### **Technological activities**

- **Co-Founder of Abtin Teb Fannavar Company (2016)**
- **Chairman of the board of Abtin Teb Fannavar Company**
- **Pilot production of porous bone substitutes based on bioactive glass and calcium phosphates**
- **Production of 3D printing machine for biomedical applications**

## Research Papers

Scopus H-index :31

Total citations (June 28, 2022): 2996 reported by [Google Scholar](#)

1. Samani, Saeed; Bonakdar, Shahin; Farzin, Ali; Hadjati, Jamshid; Azami, Mahmoud; A facile way to synthesize a photocrosslinkable methacrylated chitosan hydrogel for biomedical applications, *International Journal of Polymeric Materials and Polymeric Biomaterials*, 70,10,2021
2. Alizadeh, Akram; Moradi, Lida; Katebi, Majid; Ai, Jafar; Azami, Mahmoud; Moradveisi, Borhan; Ostad, Seyed Nasser; Delivery of injectable thermo-sensitive hydrogel releasing nerve growth factor for spinal cord regeneration in rat animal model, *Journal of Tissue Viability*, 29, 4, 2020
3. Samadian, Hadi; Mobasheri, Hamid; Azami, Mahmoud; Faridi-Majidi, Reza; Osteoconductive and electroactive carbon nanofibers/hydroxyapatite nanocomposite tailored for bone tissue engineering: in vitro and in vivo studies, *Scientific Reports*, 10, 1, 2020
4. Hasanzadeh, Elham; Mahmoodi, Narges; Basiri, Arefeh; Esmaeili Ranjbar, Faezeh; Hassannejad, Zahra; Ebrahimi-Barough, Somayeh; Azami, Mahmoud; Ai, Jafar; Rahimi-Movaghar, Vafa; Proanthocyanidin as a crosslinking agent for fibrin, collagen hydrogels and their composites with decellularized Wharton's-jelly-extract for tissue engineering applications, *Journal of Bioactive and Compatible Polymers*, 35, 6, 2020
5. Sabouri, Leila; Farzin, Ali; Kabiri, Azadeh; Milan, Peiman Brouki; Farahbakhsh, Mojtaba; Mehdizadehkashi, Abolfazl; Kajbafzadeh, Abdolmohammad; Samadikuchaksaraei, Ali; Yousefbeyk, Fatemeh; Azami, Mahmoud; Mineralized human amniotic membrane as a biomimetic scaffold for hard tissue engineering applications, *ACS Biomaterials Science & Engineering*, 6, 11, 2020
6. Ranjbar, Faezeh Esmaeili; Foroutan, Farzad; Hajian, Mahdieh; Ai, Jafar; Farsinejad, Alireza; Ebrahimi-Barough, Somaye; Dehghan, Mohammad Mehdi; Azami, Mahmoud; Preparation and characterization of 58S bioactive glass based scaffold with Kaempferol-

- containing Zein coating for bone tissue engineering, *Journal of Biomedical Materials Research Part B: Applied Biomaterials*, 109, 9, 2021
7. Beheshtizadeh, Nima; Baradaran-Rafii, Alireza; Sistani, Maryam Sharifi; Azami, Mahmoud; An In-Silico Study on the Most Effective Growth Factors in Retinal Regeneration Utilizing Tissue Engineering Concepts *Journal of Ophthalmic & Vision Research*, 16, 1, 2021
  8. Derakhshani, Atefe; Hesaraki, Saeed; Nezafati, Nader; Azami, Mahmoud; Comparative analysis of gelatin and hydroxyethyl cellulose scaffolds crosslinked by silane coupling agent, *Journal of Tissues and Materials*, 3, 3, 2020
  9. Farmani, Ahmad Reza; Nekoofar, Mohammad Hossein; Ebrahimi Barough, Somayeh; Azami, Mahmoud; Rezaei, Nima; Najafipour, Sohrab; Ai, Jafar; Application of Platelet Rich Fibrin in Tissue Engineering: Focus on Bone Regeneration, *Platelets*, 32, 2, 2021
  10. Saremi, Jamileh; Khanmohammadi, Mehdi; Azami, Mahmoud; Ai, Jafar; Yousefi-Ahmadipour, Aliakbar; Ebrahimi-Barough, Somayeh; Tissue-engineered nerve graft using silk-fibroin/polycaprolactone fibrous mats decorated with bioactive cerium oxide nanoparticles, *Journal of Biomedical Materials Research Part A*, 2021
  11. Beheshtizadeh, Nima; Asgari, Yazdan; Nasiri, Noushin; Farzin, Ali; Ghorbani, Mohammad; Lotfibakhshaiesh, Nasrin; Azami, Mahmoud; A network analysis of angiogenesis/osteogenesis-related growth factors in bone tissue engineering based on in-vitro and in-vivo data: A systems biology approach, *Tissue and Cell*, 72, 2021.
  12. Sahrapeyma, Hamed; Asefnejad, Azadeh; Azami, Mahmoud; Sadroddiny, Esmaeil; Fabrication of fibrous poly ( $\epsilon$ -caprolactone) nano-fibers containing cerium doped-bioglasses nanoparticles encapsulated collagen, *Journal of Applied Polymer Science*, 138, 41, 2021
  13. Azami, Mahmoud; Beheshtizadeh, Nima; Identification of regeneration-involved growth factors in cartilage engineering procedure promotes its reconstruction, *Regenerative Medicine*, 0, 2021
  14. Derakhshani, Atefe; Hesaraki, Saeed; Nezafati, Nader; Azami, Mahmoud; Fabrication and Evaluation of Physical and Biological Properties of Hydroxyethyl Cellulose/Hyaluronic Acid-Based Scaffolds Used for Second-Degree (Partial-Thickness) Burns Wounds Healing, *Journal of Advanced Materials and Technologies*, 9, 4, 2021

15. Kazemi, Mansure; Nazari, Bahareh; Ai, Jafar; Lotfibakhshaesh, Nasrin; Samadikuchaksaraei, Ali; Tavangar, Seyed Mohammad; Azami, Mahmoud; Preparation and characterization of highly porous ceramic-based nanocomposite scaffolds with improved mechanical properties using the liquid phase-assisted sintering method: Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 233,9,2019
16. Hasanzadeh, Elham; Ebrahimi-Barough, Somayeh; Mirzaei, Esmaeil; Azami, Mahmoud; Tavangar, Seyed Mohammad; Mahmoodi, Narges; Basiri, Arefeh; Ai, Jafar; Preparation of fibrin gel scaffolds containing MWCNT/PU nanofibers for neural tissue engineering: Journal of Biomedical Materials Research Part A, 107,4,2019
17. Vojoudi, Elham; Ai, Jafar; Baghaban Eslaminejad, Mohamadreza; Azami, Mahmood; Kajbafzadeh, Abdol-Mohammad; Ebrahimi, Somayeh; A novel inexpensive method for preparation of silk nanofibers from cocoons: Eurasian Chemical Communications, 1,3,2019
18. Basiri, Arefeh; Farokhi, Mehdi; Azami, Mahmoud; Ebrahimi-Barough, Somayeh; Mohamadnia, Abdolreza; Rashtbar, Morteza; Hasanzadeh, Elham; Mahmoodi, Narges; Eslaminejad, Mohamadreza Baghaban; Ai, Jafar; A silk fibroin/decellularized extract of Wharton's jelly hydrogel intended for cartilage tissue engineering: Progress in biomaterials, 8,1,2019
19. Farshadi, Maryam; Johari, Behrooz; Erfani Ezadyar, Elham; Gholipourmalekabadi, Mazaher; Azami, Mahmoud; Madanchi, Hamid; Haramshahi, Seyed Mohammad Amin; Yari, Abazar; Karimizade, Ayoob; Nekouian, Reza; Nanocomposite scaffold seeded with mesenchymal stem cells for bone repair: Cell Biology International, 43,12,2019
20. Goodarzi, Arash; Khanmohammadi, Mehdi; Ebrahimi-Barough, Somayeh; Azami, Mahmoud; Amani, Amir; Baradaran-Rafii, Alireza; Ai, Armin; Farzin, Ali; Ai, Jafar; Alginate-based hydrogel containing taurine-loaded chitosan nanoparticles in biomedical application: Archives of Neuroscience, 6,2,2019
21. Fani, Nesa; Farokhi, Mehdi; Azami, Mahmoud; Kamali, Amir; Bakhshaesh, Nasrin Lotfi; Ebrahimi-Barough, Somayeh; Ai, Jafar; Eslaminejad, Mohamadreza Baghaban; Endothelial and osteoblast differentiation of adipose-derived mesenchymal stem cells using a cobalt-doped CaP/Silk fibroin scaffold: ACS Biomaterials Science & Engineering, 5,5,2019

22. Kazemi, Mansure; Dehghan, Mohammad Mehdi; Azami, Mahmoud; Biological evaluation of porous nanocomposite scaffolds based on strontium substituted  $\beta$ -TCP and bioactive glass: An in vitro and in vivo study: *Materials Science and Engineering: C*, 105, 2019
23. Zarkesh, Ibrahim; Halvaei, Majid; Ghanian, Mohammad Hossein; Bagheri, Fatemeh; Sayahpour, Forough Azam; Azami, Mahmoud; Mohammadi, Javad; Baharvand, Hossein; Eslaminejad, Mohamadreza Baghaban; Scalable and cost-effective generation of osteogenic micro-tissues through the incorporation of inorganic microparticles within mesenchymal stem cell spheroids: *Biofabrication*, 12, 1, 2019
24. Rashtbar, Morteza; Hadjati, Jamshid; Ai, Jafar; Jahanzad, Issa; Azami, Mahmoud; Shirian, Sadegh; Ebrahimi-Barough, Somayeh; Sadroddiny, Esmaeil; Characterization of decellularized ovine small intestine submucosal layer as extracellular matrix-based scaffold for tissue engineering: *Journal of Biomedical Materials Research Part B: Applied Biomaterials*, 106, 3, 2018
25. Sharif, Shiva; Ai, Jafar; Azami, Mahmoud; Verdi, Javad; Atlasi, Mohammad Ali; Shirian, Sadegh; Samadikuchaksaraei, Ali; Collagen-coated nano-electrospun PCL seeded with human endometrial stem cells for skin tissue engineering applications: *Journal of Biomedical Materials Research Part B: Applied Biomaterials*, 106, 4, 2018
26. Naseri-Nosar, Mahdi; Salehi, Majid; Farzamfar, Saeed; Azami, Mahmoud; The single and synergistic effects of montmorillonite and curcumin-loaded chitosan microparticles incorporated onto poly (lactic acid) electrospun film on wound-healing: *Journal of Bioactive and Compatible Polymers*, 33, 3, 2018
27. Naseri-Nosar, Mahdi; Farzamfar, Saeed; Salehi, Majid; Vaez, Ahmad; Tajerian, Roksana; Azami, Mahmoud; Erythropoietin/aloe vera-releasing wet-electrospun polyvinyl alcohol/chitosan sponge-like wound dressing: in vitro and in vivo studies: *Journal of Bioactive and Compatible Polymers*, 33, 3, 2018
28. Rashtbar, Morteza; Hadjati, Jamshid; Ai, Jafar; Shirian, Sadegh; Jahanzad, Issa; Azami, Mahmoud; Asadpuor, Shiva; Sadroddiny, Esmaeil; Critical-sized full-thickness skin defect regeneration using ovine small intestinal submucosa with or without mesenchymal stem cells in rat model: *Journal of Biomedical Materials Research Part B: Applied Biomaterials*, 106, 6, 2018

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30. Namini, Mojdeh Salehi; Bayat, Neda; Tajerian, Roxana; Ebrahimi-Barough, Somayeh; Azami, Mahmoud; Irani, Shiva; Jangjoo, Saranaz; Shirian, Sadegh; Ai, Jafar; A comparison study on the behavior of human endometrial stem cell-derived osteoblast cells on PLGA/HA nanocomposite scaffolds fabricated by electrospinning and freeze-drying methods: *Journal of orthopaedic surgery and research*, 13, 1, 2018
31. Kazemi, Mansure; Azami, Mahmoud; Johari, Behrooz; Ahmadzadehzarajabad, Maryam; Nazari, Bahareh; Kargozar, Saeid; Hajighasemlou, Saieh; Mozafari, Masoud; Soleimani, Mansooreh; Samadikuchaksaraei, Ali; Bone Regeneration in rat using a gelatin/bioactive glass nanocomposite scaffold along with endothelial cells (HUVEC s): *International Journal of Applied Ceramic Technology*, 15, 6, 2018
32. Tehrani, Tina Zahedi; Cheimeh, Mina Bagheri; Ebrahimi-Barough, Somayeh; Azami, Mahmoud; Shirian, Sadegh; Atyabi, Seyed Mohammad; Bayat, Neda; Tajerian, Roxana; Salah, Shilan; Ahmadi, Akbar; Comparison of Cell proliferation and adhesion of human osteoblast differentiated cells on electrospun and freeze-dried PLGA/Bioglass scaffolds: *Archives of Neuroscience*, 5, 3, 2018
33. Vaez, Seyed Ahmad; Ebrahimi-Barough, Somayeh; Soleimani, Masoud; Kolivand, Sedighe; Farzamfar, Saeed; Tafti, Seyed Hossein Ahmadi; Azami, Mahmoud; Noorbakhsh, Farshid; Ai, Jafar; The cardiac niche role in cardiomyocyte differentiation of rat bone marrow-derived stromal cells: comparison between static and microfluidic cell culture methods: *EXCLI journal*, 17, 2018
34. Shamosi, Atefeh; Mehrabani, Davood; Azami, Mahmoud; Ebrahimi-Barough, Somayeh; Siavashi, Vahid; Ghanbari, Hossein; Sharifi, Esmaeel; Roozafzoon, Reza; Ai, Jafar; Differentiation of human endometrial stem cells into endothelial-like cells on gelatin/chitosan/bioglass nanofibrous scaffolds: *Artificial cells, nanomedicine, and biotechnology*, 45, 1, 2017

35. Sharifi-Aghdam, Maryam; Faridi-Majidi, Reza; Derakhshan, Mohammad Ali; Chegeni, Arash; Azami, Mahmoud; Preparation of collagen/polyurethane/knitted silk as a composite scaffold for tendon tissue engineering:Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine,231,7,2017
36. Salehi, Majid; Naseri-Nosar, Mahdi; Ghorbani, Sadegh; Farzamfar, Saeed; Azami, Mahmoud; Wet-electrospun PCL/PLLA blend scaffolds: effects of versatile coagulation baths on physicochemical and biological properties of the scaffolds:Regeneration, Reconstruction & Restoration,2,1,2017
37. Zarkesh, Ibrahim; Ghanian, Mohammad Hossein; Azami, Mahmoud; Bagheri, Fatemeh; Baharvand, Hossein; Mohammadi, Javad; Eslaminejad, Mohamadreza Baghaban; Facile synthesis of biphasic calcium phosphate microspheres with engineered surface topography for controlled delivery of drugs and proteins:Colloids and Surfaces B: Biointerfaces,157,,2017
38. Ghorbani, Masoud; Ai, Jafar; Nourani, Mohammad Reza; Azami, Mahmoud; Beni, Batool Hashemi; Asadpour, Shiva; Bordbar, Sima;Injectable natural polymer compound for tissue engineering of intervertebral disc: In vitro study:Materials Science and Engineering: C,80,,2017
39. Alizadeh, Aliakbar; Moztarzadeh, Fathollah; Ostad, Seyed Naser; Azami, Mahmoud; Geramizadeh, Bitia; Hatam, Gholamreza; Bizari, Davood; Tavangar, Seyed Mohammad; Vasei, Mohammad; Ai, Jafar;Synthesis of calcium phosphate-zirconia scaffold and human endometrial adult stem cells for bone tissue engineering:Artificial cells, nanomedicine, and biotechnology,44,1,2016
40. Bagher, Zohreh; Azami, Mahmoud; Ebrahimi-Barough, Somayeh; Mirzadeh, Hamid; Solouk, Atefeh; Soleimani, Mansooreh; Ai, Jafar; Nourani, Mohammad Reza; Joghataei, Mohammad Taghi; Differentiation of Wharton's jelly-derived mesenchymal stem cells into motor neuron-like cells on three-dimensional collagen-grafted nanofibers:Molecular neurobiology,53,4,2016
41. Bagher, Zohreh; Ebrahimi-Barough, Somayeh; Azami, Mahmoud; Safa, Majid; Joghataei, Mohammad Taghi; Cellular activity of W harton's J elly-derived mesenchymal stem cells on electrospun fibrous and solvent-cast film scaffolds:Journal of Biomedical Materials Research Part A,104,1,2016



42. Sharifi, Esmaeel; Azami, Mahmoud; Kajbafzadeh, Abdol-Mohammad; Moztarzadeh, Fatollah; Faridi-Majidi, Reza; Shamousi, Atefeh; Karimi, Roya; Ai, Jafar; Preparation of a biomimetic composite scaffold from gelatin/collagen and bioactive glass fibers for bone tissue engineering:Materials Science and Engineering: C,59,,2016
43. Poursamar, S Ali; Lehner, Alexander N; Azami, Mahmoud; Ebrahimi-Barough, Somayeh; Samadikuchaksaraei, Ali; Antunes, A Paula M; The effects of crosslinkers on physical, mechanical, and cytotoxic properties of gelatin sponge prepared via in-situ gas foaming method as a tissue engineering scaffold:Materials Science and Engineering: C,63,,2016
44. Johari, Behrooz; Ahmadzadehzarajabad, Maryam; Azami, Mahmoud; Kazemi, Mansure; Soleimani, Mansooreh; Kargozar, Saied; Hajjghasemlou, Saieh; Farajollahi, Mohammad M; Samadikuchaksaraei, Ali; Repair of rat critical size calvarial defect using osteoblast-like and umbilical vein endothelial cells seeded in gelatin/hydroxyapatite scaffolds:Journal of Biomedical Materials Research Part A,104,7,2016
45. Samadikuchaksaraei, Ali; Gholipourmalekabadi, Mazaher; Erfani Ezadyar, Elham; Azami, Mahmoud; Mozafari, Masoud; Johari, Behrooz; Kargozar, Saeid; Jameie, Seyed Behnamedin; Korourian, Alireza; Seifalian, Alexander M;Fabrication and in vivo evaluation of an osteoblast-conditioned nano-hydroxyapatite/gelatin composite scaffold for bone tissue regeneration:Journal of Biomedical Materials Research Part A,104,8,2016
46. Sharifi, Esmaeel; Ebrahimi-Barough, Somayeh; Panahi, Maryam; Azami, Mahmoud; Ai, Arman; Barabadi, Zahra; Kajbafzadeh, Abdol-Mohammad; Ai, Jafar; In vitro evaluation of human endometrial stem cell-derived osteoblast-like cells' behavior on gelatin/collagen/bioglass nanofibers' scaffolds:Journal of biomedical materials research Part A,104,9,2016
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- toward motor neuron-like cells: *In Vitro Cellular & Developmental Biology-Animal*, 51,9,2015
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  58. Farokhi, Mehdi; Mottaghitalab, Fatemeh; Hadjati, Jamshid; Omidvar, Ramin; Majidi, Mohammad; Amanzadeh, Amir; Azami, Mahmoud; Tavangar, Seyed Mohammad; Shokrgozar, Mohammad Ali; Ai, Jafar; Structural and functional changes of silk fibroin scaffold due to hydrolytic degradation: *Journal of Applied Polymer Science*, 131,6,2014
  59. Farokhi, Mehdi; Mottaghitalab, Fatemeh; Shokrgozar, Mohammad Ali; Ai, Jafar; Hadjati, Jamshid; Azami, Mahmoud; Bio-hybrid silk fibroin/calcium phosphate/PLGA nanocomposite scaffold to control the delivery of vascular endothelial growth factor: *Materials Science and Engineering: C*, 35,,2014
  60. Navaei-Nigjeh, Mona; Amoabedini, Ghasem; Noroozi, Abbas; Azami, Mahmoud; Asmani, Mohammad N; Ebrahimi-Barough, Somayeh; Saberi, Hooshang; Ai, Armin; Ai, Jafar; Enhancing neuronal growth from human endometrial stem cells derived neuron-like cells in three-dimensional fibrin gel for nerve tissue engineering: *Journal of Biomedical Materials Research Part A*, 102,8,2014
  61. Moosavifar, Mir Javad; Moztarzadeh, Fathollah; Azami, Mahmoud; Preparation of mineralized electrospun fibers as a biomimetic nanocomposite: *International Journal of Polymeric Materials and Polymeric Biomaterials*, 63,11,2014
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## Course Teaching

1. **Biocompatibility of Materials:** 2008-2010, E-Learning Center, Amirkabir University of Technology,(M.S).
2. **Polymer Application in Medicine:** 2007-2010 Amirkabir University of Technology,(M.S).

3. **Biological assessments:** 2008-2009 Amirkabir University of Technology,(B.Sc).
4. **Introduction to Biomaterials:** 2011-2019 Tehran University of Medical sci,(Ph.D).
5. **Scaffold in Tissue Engineering:** 2011-2019 Tehran and Iran University of Medical sci,(Ph.D).
6. **3D Culture:** 2011-2019 Surface properties, Tehran University of Medical sci,(Ph.D).
7. **Ceramics and their applications in medicine:** 2015-2016 Semnan University.(MsC)
8. **Surface characterization of materials:** 2015-2016 Semnan University(MsC).
9. **Hydrogels and their applications in medicine:**2019, Material and Energy research center.(PhD, MsC).

### **Grants & Contracts:**

1. Investigation on the synthesis and mineralization of different polymeric nano fiber via wet electro-spinning for using as a scaffold for bone tissue engineering.

Status: Running, Executers: Mahmoud Azami, Sponser: TUMS-Reearch grant, Location: TUMS, 2014.

2. Preparation of nanocomposite scaffold from bioactive glass and strontium containing calcium phosphate via foam casting and implantation in an animal model for bone tissue engineering

Status: Running, Executers: Mahmoud Azami, Sponser: TUMS-Reearch grant, Location: TUMS, 2014.

3. Preparation of an injectable nanocomposite hydrogel bone scaffold containing mineralized polymeric nanofibers and in vitro and in vivo characterization

Status: Running, Executers: Mahmoud Azami, Sponser: TUMS-Research grant, Location: TUMS, 2015.

4. Differentiation of mesenchymal stem cells derived from Wharton's jelly to motor neurons-like on the PCL / Collagen scaffolds made by two methods: solvent casting / Freeze draying and electrospinning



Status: Finished, Executors: Mahmoud Azami, Sponser: INSF, Location: TUMS, Main Partners: Bahareh Bagher, 2012-2014

#### 5. Preparation of biomimetic gelatin/calcium phosphate scaffolds containing Mg and F ions

Status: Finished, Executors: Mahmoud Azami, Sponser: TUMS-Research grant, Location: TUMS, 2012-2013

### **Language Skills**

1. English

Speaking: Good, Reading: Good, Writing: Good

### **Thesis:**

#### **As Supervisor:**

1. Preparation of nanocomposite scaffold from bioactive glass and strontium containing calcium phosphate via foam casting and implantation in an animal model for bone tissue engineering

Mansoureh Kazemi, Ph.D, Tissue engineering

2. Preparation of an injectable nanocomposite hydrogel bone scaffold containing mineralized polymeric nanofibers and in vitro and in vivo characterization

Saeid Samani, Ph.D, Tissue engineering

3. Engineering of myocardial tissue using endometrial stem cells and hydrogel /Bioglass nanocomposite scaffolds

Zahra barabadi, Ph.D, Tissue engineering,

4. Compare the growth of osteoblasts differentiated from endometrial cells on hydrogel scaffolds prepared from bioglass nanofiber

Esmaeil Sharifi, Ph.D, Tissue engineering,

**As Advisor/Consulter:**

1. Study of Three Dimensional Culture of Differentiated Endometrial Stromal Cells to Oligodendrocyte Progenitor Cells (OPCs) in Fibrin Hydrogel

Mohamad nabi Asmani, M.S, Tissue engineering, 2012

2. Three-dimensional culture of human endometrial stem cells differentiated into Neurons

Mona Navaei-nigjeh, M.S, Tissue engineering, 2012

3. Synthesis of bioglass -based scaffolds using electrospinning for tissue engineering and investigation of angiogenesis in the presence of endometrial stem cells

Zahra Shamus, Ph.D, Tissue engineering,

4. Tooth tissue engineering scaffolds using collagen / hydroxyapatite

Naghme Bahrami, Ph.D, Tissue engineering, 2013

5. Effect of endothelial cells, the endometrial stem cells and angiogenic factors on the activity of osteoblast cells grown on nanostructured Silk / PLGA

Mehdi Farokhi, Ph.D, Tissue engineering, 2013

6. Design and synthesis of electroactive and degradable poly- urethanes as a cardiovascular patch

Nafiseh Baheiraei, Ph.D, Tissue engineering,

7. Synthesis of zirconia nano-composite scaffolds - calcium phosphate for bone tissue engineering

Ali Alizadeh, Ph.D, Tissue engineering,

8. Preparation of gelatin calcium phosphate composite scaffolds - using electrospinning and mimic the structure of bone tissue

Mirjavad Mousavifar, M.S, Biomaterial-tissue engineering, 2012

9. Preparation of the nanocomposite scaffolds from gelatin / apatite using a double diffusion method

Amir Shahsavari, M.S, Biomaterial, 2012

10. Effect of hydroxyapatite - Gelatin nanocomposite structure with endothelial progenitor cells from bone marrow to repair a critical bone defect in a rat experimental model

Elham Yazdani-eazadyar, M.S, Medical Biotechnology, 2011

11. Effect of hydroxyapatite - Gelatin nanocomposite structure with stromall progenitor cells from bone marrow to repair a critical bone defect in a rat experimental mode

Mazaher Gholipour, M.S, Medical Biotechnology, 2010

12. Preparation of hybrid bone / cartilage nanocomposite scaffold from hydroxyapatite / hydrogel  
Majid Raz, M.S, Tissue engineering, 2010

13. Design and fabrication of nano- composite polymer - ceramic for use in multi-purpose sports floor

Mehdi Sabuhi-abiz, M.S, Sport engineering, 2009

14. Design and fabrication of polyurethane (PU) based nano- composites and evaluation of its performance in multi-purpose sports floors

Amin Hushafza, M.S, Sport engineering, 2009

15. Synthesis of nanocomposite scaffolds based on gelatin and bioactive glass nanoparticles and evaluation of its biological and biochemical activity

Masoud Mozafari, M.S, Biomaterials, 2009

16. Preparation of nanocomposite scaffolds based on gelatin/bioactive glass and evaluation of its biological properties

Saeid Maleknia, M.S, Biomaterials, 2008

17. A comparative study of bone regeneration between the demineralized bone matrix and hydroxyapatite/gelatin nanocomposite scaffolds  
Shima Tavakol, M.S, Nano medicine, 2008

## **Books**

1. Polymer applications in medicine (in Farsi)

Authors: M.Rabiei, M.Azami, Sh.Bonakdar

Publisher: Amirkabir University of Technology, 2009.

2. Bone and cartilage engineering (Translation to Farsi)

Authors: M.Azami, Frahad Ghomi, Seyyed Ali poursamar

Publisher: Amirkabir University Center, Iranian Academic Center for Education culture and Research publication, 2011,

## **Reviewing papers for science journals:**

- Journal of Biomedical Materials Research: Part B - Applied Biomaterials
- International Journal of Biological Macromolecules
- Journal of Biomedical Materials Research: Part A
- Ceramic International
- Progress in Biomaterials
- Material Today Communications
- Materials Science & Engineering C
- Scientific Reports
- Advanced Composite Letter
- European Polymer Journal
- Journal of Engineering in Medicine
- Journal of the Mechanical Behavior of Biomedical Materials
- ACS Biomaterials Science & Engineering

- Composites Science and Technology
- Journal of Polymeric Materials and Polymeric Biomaterials