BABAK ROUSHANGAR ZINEH

Ph.D. of production and Manufacturing

Address: Tohid ave. No38, Tabriz, IRAN

Tel: +989141088724

Email: b.roshangar@yahoo.com

B. D.: 02/14/1988

EDUCATION

-University of Tabriz

Bachelor of mechanical engineering- Production and manufacturing **2006-2010**

dissertation: 'optimization of blow molding process used in Bioengineering'

-university of Kermanshah-ulum tahgigat

master of mechanical engineering- Production and manufacturing **2010-2013**

thesis: optimization of piezo electric transducers used in medical applications

-University of Tabriz

Ph. D of mechanical engineering- Production and manufacturing **2013-2018**

Thesis: Study on the effects of composition, porosity and structure design on the mechanical and biological properties of AL/SF/HA/PCL based cartilage scaffolds fabricated by Bio-Print process

TEACHING EXPERIENCE

1-University of Tabriz

-Advanced welding process

-Advanced machining

2-Payam noor university of Tabriz

-Engineering mathematics

-engineering design

-turbo machines

-assembly design

3- Two years of experience in Karadeniz Teknik University (KTU) in ph. d degree of mechanical engineering-production and manufacturing (fatigue life of metals)

RELATED EXPERIENCE

1-Fatigue testing machines **2012**
For testing bio material during the different periods of changing loads.

2-Fatigue testing machine for air plane structures in different temperature conditions. **2016**

3- 3D-bioprinter with High technology **2018**
Very accurate with advanced technology for printing bio materials. Competitive with those exists in world.

4-**advanced mixing machines for special gel form materials.**

PUBLICATIONS AND PAPERS

1- Roshangar Babak, jafar soleimani rad, Roya ansaree, Leila roshangar. 'Effect of low frequency electromagnetic field on cardiovascular system: An ultra-structural and Immunohistochemical study'. Scholars research library, December 2011. ISSN 0976-1233.

2-Experimental study on the effects of electro-discharge machining process parameters on the fatigue strength of 16MnCr5 alloy steels, Mohammadreza Shabgard, Babak Roushangar.

3--Roushangar Zineh, Babak & Reza Shabgard, Mohammad & Roshangar, Leila. Mechanical and biological performance of printed alginate/methylcellulose/halloysite nanotube/polyvinylidene fluoride bio-scaffolds. Materials Science and Engineering C. 92. 779-789. 10.1016/j.msec.2018.07.035, (2018).

4--Roushangar Zineh, Babak & Reza Shabgard, Mohammad & Roshangar, Leila. An Experimental Study on the Mechanical and Biological Properties of Bio-Printed Alginate/Halloysite Nanotube/Methylcellulose/Russian Olive-Based Scaffolds. **Advanced pharmaceutical bulletin**.;8(4):643. (2018).

5-Babak Roushangar Zineh, Mohammad Reza Shabgard, Leila Roshangar, Kamal Jahani, experimental and Numerical study on the performance of Printed Alginate/Hyaluronic acid/Halloysite Nanotube/Polyvinylidene Fluoride Bio-Scaffolds, **Materials Science and Engineering C**. (2018)

6-Roshangar Babak, 'Review of Power Harvesting from Piezoelectric ceramics which is used in MEMs: SSH technique and Nonlinear Conversion Enhancement', First **national conference of MEMs**, Khoy-Iran, (2011).

LANGUAGES

Persian- native language
Turkish– speak fluently and read/write with high proficiency
English– speak, read, and write with high skills.

Courses and tests:

2012	**161/170**	**GRE**
2013	**62.5/100**	**YDS**
2013	**84/100**	**Tomer**

expertise:

-Softwares: Catia, Solidworks, Ansys, Matlab, Minitab, COMSOL Multiphysics, Arduino, Marilyn, 3d hosts.

-Bio scaffolds

-microfluidics

-fatigue life of medical implants

-Maintaining and repair of CNC machines

-production of accurate mechanical systems

-Bio printer systems.

-building of fatigue testing machines

-building of extra low temperature systems.

- Reverse Engineering

-Pneumatic and hydraulic system designs and production

-ability of production and manufacturing of new developed **electro-mechanical** and **bio-mechanical** systems.