[**Dr. Zahra Talebi**](http://ztalebi.iut.ac.ir/)

***(Assistant Professor of Textile Engineering Department)***

## ***Personal::***

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**Nationality:** Iranian

## ***Education:***

### ****2001-2005:  BSc:** Textile Engineering, Yazd University.**

### ****2005-2007:  MSc :**Textile Engineering, Amirkabir University of **Technology.****

### ****2009-2014:  PhD:**** **Textile Engineering, Amirkabir University of Technology**

### (Thesis subject: Production and characterization of aerogel fibrous nanocomposite for thermal insulation applications)

***Awards:***

* ***First rank graduated student, B.Sc., Yazd University, Textile Engineering Department. (2005)***
* ***IUT Award for the best university teacher of the Undergraduate students. (2016)***

***Research Fields*:**

* **Aerogels and Xerogels**
* **Mechanically Strong Organic-inorganic Hybrid Aerogels**
* **Aerogel Blankets**
* **Sol-gel Materials**
* **Advanced Fibrous Thermal Insulators**
* **Dental Composites**
* **Nanostructured Materials**
* **Fiber Reinforced Nanocomposites**
* **Melt Spinning of Fibers**

 ***Teaching Experiences:***

* **Synthesis of nanoparticles in the finishing processes (Graduate Course)**
* **Finishing (Undergraduate Course)**
* **Polymer Materials (****Undergraduate Course)**
* **Fiber Science (Undergraduate Course)**
* **Chemistry of Technical Textiles (Undergraduate Course)**

***Research Publications:***

***Journal papers:***

[1] Z. Talebi, P. Soltani, N. Habibi, F. Latifi, Silica aerogel/polyester blankets for efficient sound absorption in buildings, Construction and Building Materials, 220 (2019) 76-89.

[2] R. Abedkarimi, H. hasani, P. Soltani, Z. Talebi, Experimental and computational analysis of acoustic characteristics of warp-knitted spacer fabrics Journal of The Textile Institute, In Press (2019).

[3] M. Afrashi, D. Semnani, Z. Talebi, P. Dehghan, M. Maheronnaghsh, Novel multi-layer silica aerogel/ PVA composite for controlled drug delivery, Materials Research Express, 6 (2019).

[4] S. Salimian, W.J. Malfait, A. Zadhoush, Z. Talebi, M. Naeimirad, Fabrication and evaluation of silica aerogel-epoxy nanocomposites: Fracture and toughening mechanisms, Theoretical and Applied Fracture Mechanics 97 (2018) 156–164.

[5] M. Afrashi, D. Semnani, Z. Talebi, P. Dehghan, M. Maherolnaghsh, Comparing the drug loading and release of silica aerogel and PVA nano fibers, Journal of Non-Crystalline Solids, 503–504 (2019) 186–193.

[6] Z. Talebi, N. Habibi, A. Zadhoush, Surface modification of basalt fibers by nanostructured silica aerogel, Fibers and Polymers, 19 (2018) 1843-1849.

[7] S. Salimian, A. Zadhoush, Z. Talebi, B. Fischer, P. Winiger, F. Winnefeld, Sh. Zhao, M. Barbezat, M.M. Koebel, W.J. Malfait, Silica aerogel-Epoxy nanocomposites: Understanding epoxy reinforcement in terms of aerogel surface chemistry and epoxy-silica interface compatibility, ACS Applied Nano Materials, 1 (2018) 4179-4189.

[8] F. Latifi, Z. Talebi, H. Khalili, M. Zarrebini, Effect of processing parameters and pore structure of nanostructured silica aerogel on the physical properties of aerogel blankets, Materials Research Express, 5 (2018) 055020.

[9] H. Najafi, A. Zadhoush, Z. Talebi, S.P. Rezazadeh Tehrani, Influence of porosity and aspect ratio of nanoparticles on the interface modification of glass/epoxy composites, Polymer Composites, 39 (2018) 3073-3080.

[10] Z. Talebi Mazraeh-shahi, A. Mousavi Shoushtari, A.R. Bahramian, M. Abdouss, Synthesis, pore structure and properties of polyurethane/silica hybridaerogels dried at ambient pressure, Journal of Industrial and Engineering Chemistry 21 (2015) 797–804.

[11] Z. Talebi Mazraeh-shahi, A. Mousavi Shoushtari, A.R. Bahramian, M. Abdouss, Synthesis, structure and thermal protective behavior of silica aerogel/PET nonwoven fiber composite, Fibers and Polymers 15 (2014) 2154-2159.

[12] Z. Talebi Mazraeh-shahi, A. Mousavi Shoushtari, M. Abdouss, A.R. Bahramian, Relationship analysis of processing parameters with micro and macrostructure of silica aerogel dried at ambient pressure, Journal of Non-Crystalline Solids, 376 (2013) 30–37.

[13] Z. Talebi Mazraeh-Shahi, M.R.M. Mojtahedi, Effect of blending two fiber-grade polypropylenes with different molecular weight distributions on the physical and structural properties of melt-spun filament yarns, The Journal of The Textile Institute, 101 (2010) 547–555.

***Conference* *papers:***

[1] F. Latifi, Z. Talebi, H. Khalili, M. Zarrebini, Effect of Synthesis Conditions on Pore Structure and Physical Properties of Silica Aerogel Dried at Ambient Pressure, International Congress of Sciences and Innovative Technologies, 2018, pp. 1-7.

[2] Z. Talebi Mazraeh-shahi, A. Mousavi Shoushtarib, A.R. Bahramianc, A New Approach for Synthesizing the Hybrid Silica Aerogels, in: 5th International Biennial Conference on Ultrafine Grained and Nanostructured Materials, UFGNSM15, 2015.

[3] Z. Talebi Mazraeh-shahi, A. Mousavi Shoushtarib, A.R. Bahramianc, A New Method for Measuring the Thermal Insulation Properties of Fibrous Silica Aerogel Composite, in: 5th International Biennial Conference on Ultrafine Grained and Nanostructured Materials, UFGNSM15, 2015.

[4] Z. Talebi Mazraeh-shahi, A. Mousavi Shoushtari, A.R. Bahramian, M. Abdouss, Preparation and Characterization of PET Nonwoven/silica Aerogel Composite for Thermal Insulation, in: 4th International Conference on Ultrafine Grained and NanoStructured Materials , UFGNSM, 2013.

[5] Z. Talebi Mazraeh-shahi, A. Mousavi Shoushtari, M.R.M. Mojtahedi, A. Haji, Effect of Blending Two Fiber-grade Polypropylenes with Different Molecular Weight Distributions on the Physical and Crimp Properties of Textured Yarns, in: The International Istanbul Textile Congress-Turkey, 2013.

[6] Z. Talebi Mazraeh-shahi, A. Mousavi Shoshtari, M. Abdouss, Effect of Processing Parameters on the Pore Texture and Properties of the Mesoporous Silica Mmaterials, in: 10th International Seminar of Polymer Science and Technology, ISPST, 2012.