

# **NILOOFAR ESLAHI**

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## **1. Education**

- PhD in Textile Engineering (Textile Chemistry & Fiber Science) 2009-2013  
*Amirkabir University of Technology, Tehran, Iran*  
GPA: 18.92 out of 20
- Master of Textile Engineering (Textile Chemistry & Fiber Science) 2007-2009  
*Amirkabir University of Technology, Tehran, Iran*  
GPA: 18.61 out of 20
- Bachelor of Textile Engineering (Textile Chemistry & Fiber Science) 2003-2007  
*Amirkabir University of Technology, Tehran, Iran*  
GPA: 17.43 out of 20

## **2. Academic Dissertations**

- Ph.D. Thesis: Production of Nanoparticles from Protein Fibers by Enzymatic Hydrolysis
- M.S. Thesis: Reconstructing of Spectral Reflectance by Using Weighted Canonical Correlation Regression
- B.S. Project: Using FWA and BTCA to Improve the UV Protection of Cotton Fabrics

## **3. Research and Teaching Activities**

- Lecturer in dyeing of natural fibers laboratory Since 2010
- Advising/supervising B.S. and M.S. projects Since 2011
- Teacher assistant in coloration technology 2010-2011
- Lecturer in dyeing of synthetic fibers laboratory 2010

## **4. Awards and Honors**

- Granted credit for postdoctoral research from BMN 2014
- Certificated and participated in a summer school (workshops) held by Stem Cell Technology Research Center (Tehran, Iran) on Stem Cells, miRNA and Tissue Engineering 2014
- Admitted to Center of Exceptional Talents at Amirkabir University of Technology 2005-2013
- First class honors in Textile Engineering Faculty for PhD 2012
- First class honors in Textile Engineering Faculty for postgraduate studies 2009
- First class honors in Textile Engineering Faculty for undergraduate studies 2007

- Granted credit for straight admittance to the MSc program 2007
- Ranked top 1% in the university entrance exam for B.S. Degree 2003

## 5. Journal Papers

- Eslahi, N., Dadashian, F., Hemmati Nejad, N., & Rabiee, M. Evaluation of wool nanoparticles incorporation in chitosan/gelatin composite films, *Journal of Applied Polymer Science*, Vol. 131, No. 11, 2014, DOI: 10.1002/APP.40294.
- Eslahi, N., Hemmati Nejad, N., & Dadashian, F. From feather waste to valuable nanoparticles, *Particulate Science and Technology*, Vol. 32, No. 3, PP. 242-250, 2014, DOI:10.1080/02726351.2013.851135.
- Eslahi, N., Moshggo, Sh., Khalili Azar, Sh., Dadashian, F., & Hemmati Nejad, N. Application of extracted feather protein to improve the shrink resistance of wool fabric, *Journal of Industrial Textiles*, published online before print: 17 Dec 2013, DOI: 10.1177/1528083713516666.
- Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Optimization of enzymatic hydrolysis of wool fibers for nanoparticles production using response surface methodology, *Advanced Powder Technology*, Vol. 24, No. 1, PP. 416-426, 2013.
- Eslahi, N., Dadashian, F., & Hemmati Nejad, N. An Investigation on Keratin Extraction from Wool and Feather Waste by Enzymatic Hydrolysis, *Preparative Biochemistry and Biotechnology*, Vol. 43, No. 7, PP. 624-648, 2013.
- Aghanouri, A., Eslahi, N., & Babaei, V. Performances of classic and weighted versions of some selected methods in estimation of spectral data from camera responses, *Journal of Textiles and Polymers*, Vol. 1, No. 1, PP. 9-18, 2013.
- Karimi Rabbani, Sh., Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Nanocomposite film of recycled silk powder and polypropylene, *Journal of Textiles and Polymers*, Vol. 2, No. 2, PP. 60-64, 2014.
- Eslahi, N., Amirshahi, S. H., & Agahian, F. Recovery of spectral data using weighted canonical correlation regression, *Optical Review*, Vol. 16, No. 3, PP. 296–303, 2009.

## 6. Conference Papers

- Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Production of nanoparticles from waste protein fibers by enzymatic hydrolysis, The 9<sup>th</sup> National Textile Engineering Conference, Amirkabir University of Technology, Tehran, Iran, 2014.
- Eslahi, N., Hemmati Nejad, N., & Dadashian, F. Nanocomposite film of wool nanoparticles/chitosan/gelatin, UFGNSM 2013 (4th international conference on Ultrafine Grained and Nanostructured Materials), Tehran, Iran, 2013.
- Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Nanoparticles production from wool and feather by green processes, ATC-12 (the 12th Asian Textile Conference), Shanghai, China, 2013.
- Moshggo, Sh., Khalili Azar, Sh., Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Enhancing the shrink-resistance of wool fabric by feather protein, ATC-12 (the 12th Asian Textile Conference), Shanghai, China, 2013.
- Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Production of feather nanoparticles by enzymatic hydrolysis, ICNF2013 (*First International Conference on Natural Fibers*), Guimarães, Portugal, 2013.

- Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Keratin extraction from wool and feather waste through enzymatic hydrolysis, *The International Istanbul Textile Congress: Innovative and Functional Textiles*, Istanbul, Turkey, 2013.
- Moshggo, Sh., Khalili Azar, Sh., Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Surface modification of wool fabric with extracted feather protein, *The International Istanbul Textile Congress: Innovative and Functional Textiles*, Istanbul, Turkey, 2013.
- Eslahi, N., Dadashian, F., & Hemmati Nejad, N. From waste wool fibers to valuable nanoparticles, *CIRAT-5 (International Conference of Applied Research in Textile)*, Monastir, Tunisia, 2013.
- Eslahi, N. & Dadashian, F. Production of nano wool powder by an environmentally friendly process, *BiPoCo2012 (International Conference on Bio-based Polymers and Composites)*, Siofok, Hungary, 2012.
- Eslahi, N., Amirshahi, S. H., & Agahian, F. Optimization of sample selection process for spectral recovery attempt, *AIC2009 (11th Congress of the International Colour Association)*, Sydney, Australia, 2009.
- Eslahi, N., Harifi, T., Hemmati Nejad, N., & Agahian, F. Using FWA and BTCA to improve the UV protection of cotton fabrics, *AUTEX2008 (World Textile Conference)*, Biella, Italy, 2008.

## **7. Patents**

- Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Production of nanoparticles from waste wool fibers, Iran patent 79085, 2013.
- Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Production of nanoparticles from chicken feathers, Iran patent 79086, 2013.
- Moshggo, Sh., Khalili Azar, Sh., Eslahi, N., Dadashian, F., & Hemmati Nejad, N. Surface modification of wool fabric using recycled feather protein, Iran patent 81839, 2014.

## **8. Professional membership**

- Iranian's Nanotechnology Community since 2010

## **9. Lab Skills**

- SEM, DLS, FTIR, UV-Vis, XRD, SDS-PAGE, DSC and TGA
- In vitro and MTT assays

## **10. Language Skills**

- ESOL: First Certificate in English (FCE), 2009.
- IELTS (Overall=7.5), 2009.

## **11. Computer Skills**

- MATLAB
- ICDL (Microsoft Excel, Access, PowerPoint,...)
- Design-Expert software
- Origin Lab

## 12. Research Interests

- Biomaterials, Tissue Engineering, Nanotechnology, Biocomposites, Regenerative Therapies, Biotechnology, Biodegradable and Biocompatible Polymers, Enzymes, Smart Medical Textiles, Fiber science

## 13. References

- Prof. Abdolreza Simchi (my current supervisor), Professor, Department of Material Science and Engineering, Sharif University of Technology, Tehran, Iran. Phone: +98-21-66165261, Email: [simchi@sharif.edu](mailto:simchi@sharif.edu)
- Dr. Fatemeh Dadashian (my PhD supervisor), Associate Professor, Department of Textile Engineering, Amirkabir University of Technology, Tehran, Iran. Phone: +98-21-64542691, Email: [dadashia@aut.ac.ir](mailto:dadashia@aut.ac.ir)
- Prof. Seyed Hossein Amirshahi (my M.S. supervisor), Professor, Department of Textile Engineering, Amirkabir University of Technology, Tehran, Iran. Phone: +98-21-64542642, Email: [hamirsha@aut.ac.ir](mailto:hamirsha@aut.ac.ir)
- Prof. Farzaneh Vahabzadeh (my PhD examiner), Professor, Department of Chemical Engineering, Amirkabir University of Technology, Tehran, Iran. Phone: +98-21-64543161, Email: [far@aut.ac.ir](mailto:far@aut.ac.ir)
- Prof. Mohammad Haghikish, Professor, Department of Textile Engineering, Amirkabir University of Technology, Tehran, Iran. Phone: +98-21-64542668, Email: [mhkish@aut.ac.ir](mailto:mhkish@aut.ac.ir)

More references would be provided upon request