

# Zahra Ahmadi

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## Education

**(2006-2007) PhD. research scholar, NCSU (North Carolina State University)**

**(2001-2007) Amir Kabir University of Technology (polytechnic), Tehran/ Iran**

PhD student in Textile Engineering (Textile Chemistry and Fiber Sciences).

**(1999-2001) Amir Kabir University of Technology (polytechnic), Tehran/ Iran**

M.Sc student in Textile Engineering.

**(1994-1999) Amir Kabir University of Technology (Polytechnic), Tehran/Iran**

B. Sc in Textile Engineering.

## Experience

**(2009- now) Assistant professor in Applied Art Faculty of Art University, Tehran Iran**

**(2003-2005) Teaching in Technical Department of 17Shahrivar University, Karaj/Tehran/Iran**

**(2001-2006) expert in national research center of Persian carpet-department of weaving and finishing**

Supervisor in research project entitled, evaluation of different methods of shearing and cutting effect on the quality of hand-woven carpet. (National research center of Persian carpet)

Coworker in research project:

Investigation about the effect of different finishing methods on the hand-woven Persian carpet (national research center of Persian carpet)

Effect of degumming method on the efficiency of dyeing in silk fibers (national research center of Persian carpet)

**(1998-2001) Research center of synthetic fibers and textile industries, Tehran/ Iran**

Research Works in methods of stabilization of polypropylene fibers.

## Books

1. Ahmadi Zahra, "Washing, care and maintenance of handmade carpets, first edition of the National Carpet Center of Iran 2009.
2. Ahmadi Zahra, "Shearing in handmade carpets, published by Yasavoli Publications 2014.
3. Ahmadi Zahra, "Preliminary dyeing of handmade carpets" National Carpet Center of Iran 2018.
4. Ahmadi Zahra, "Quality Control in Handmade Carpets" Publications of the Association and Official Experts of the Judiciary, Adalat Publishing, 2020.

## Papers

- 1) Hooman Imani, Kamaladin Gharanjig, Zahra Ahmadi, A novel efficient method for eco-friendly deep dyeing of wool yarns by extracted madder dyes in the presence of additives, industrial Crops & Products 183 (2022) 114970.
- 2) Zahra Ahmadi, fateme gholami houjehgan, Evaluation of color sensitivity to dyeing parameters in natural dyeing with anthocyanin, j. of Textile and Polymer, June 2017, Vol. 5, No.2

- 3) Zahra Ahmadi, Narges Shayegh broujeni, Effectual parameters on the natural dyeing process, journal of Textile & polymer, No. 3, 2013.
- 4) Zahra Ahmadi, The effect of bio -mordant in dyeing woolen yarn with madder and weld, Color Science and Technology, 2021 Volume, No. 2, pp.41-58
- 5) Marieh Molla, Zahra Ahmadi, Extraction of Indigo dye from indigo plant, advanced materials and new coatings, Vol. 8, No. 32, Spring 2021, pp. 2332 - 2320.
- 6) Zahra Ahmadi, A Critique of the *Traditional Textiles of India*, Critical Research Journal of Humanities Texts and Books, August 10, 2017, No. 5 (69)
- 7) Pariya Manzoori, Zahra Ahmadi, Requirements in Designing Muslim Women Musicians cloth, Journal of Women and Culture, March 30, 2016.
- 8) Zahra Ahmadi, Feasibility study of anti -stain and waterproofing of handwoven silk carpets with silicone derivatives, Goljam journal, 93
- 9) Zahra Ahmadi, Bahareh Molavi, the effect of trade washing process on the quality of silk yarn dyed, Journal of Textile and Garment Science and Technology, Volume 9, Number 3, Number 35, 17-28, 2021
- 10) Ruh-olamin Shahedi, Zahra Ahmadi, A Review of Dye Extraction Methods from Weld, Studies in the World of color, Vol. 11, 17-32, 2021.
- 11) Zahra Ahmadi, Mehdi Safi, Neda Dahesh, Colorimetric analysis of Amo Oghli carpet with the aim of identifying the dyeing formulation, Journal of Textile Science and Technology and Garment, Vol. 9, No. 29, Pp. 58-49, 2021
- 12) Shahrzad Mirasheh, Zahra Ahmadi, A Study on the Status of the Iranian Carpet Museum from the Presentation Point of View, Rajshomar, Vol. 1, No. 1, Spring and Summer 2016, pp. 184-173
- 13) Zahra Ahmadi, Fatemeh Gholami Hojqaan, A Review of Antibacterial, Antimicrobial and Fungal Properties of Plant Compounds and Their Application in Textiles, Studies in the World of Color, Vol. 9, No. 1, Pp. 41-58, 2017.
- 14) Zahra Ahmadi, The Design Innovation Spectrum: *An Overview of Design Influences on Innovation for Manufacturing Companies*, International journal of design, Translation, Dastavard J, winter of 2017.
- 15) Zahra Ahmadi, The Manifestation of the Prophet's Personality in Applied Arts, Case Study: Hand-Woven Carpet, First International Congress of Islamic Culture and Civilization, October 17-17, 2021, Kish Free Zone University of Arts.
- 16) Zahra Ahmadi, Fateme Khodadadi, Up cycling for product design of jeans wastes with an economic and environmental approach, The 9th RMUTP International Conference on Science, Technology and Innovation for Sustainable Development, 21-22 June 2018.
- 17) Zahra Ahmadi, Amin Shahedi, Behrooz Esmaili, Shahram Noohi, Evaluation of herbal mordant efficiency and its Interaction with different natural dyes in the woolen yarns dyeing process, 14 th ATC, Hong Kong June 2017.
- 18) Fateme gholami, Zahra Ahmadi, Ancient color by New Natural Dyes used in the Persian hand woven, -, YOCOCU2014, 23-26 May 2014
- 19) Z. Ahmadi, Advantages and disadvantages of antique washing of hand-woven Carpet, Cimuset, 6-11 July Paris.2014.
- 20) Neda Dahesh, Reyhane Miri, Amir Safaie Marashi, Niloofar Hasan nezhad, Zahra Ahmadi, Effect of traditional dyeing pot in the properties of pile yarns in the natural dyeing process, YOCOCU, 23-26 May 2014.
- 21) Fateme gholami, Zahra Ahmadi, Fastness and Dyeing Properties of woolen yarn dyed by sunflower seed hulls, 13th ATC, Deakin University Australia, 3-6 Nov. 2015.
- 22) Vahid Hemmati Farsani, Zahra Ahmadi, Majid Tehrani, Improving the washing stability of dyed woolen yarn with natural dyes Pan, 12th National Conference on Textile Engineering, Yazd 1399
- 23) Fatemeh Solgi, Zahra Ahmadi, Evaluation and Comparison of Advertising Status of Hand woven and Machin made Carpets from the Perspective of Exhibition Participants August 2020, 12th National Conference on Textile Engineering, Yazd, 2021.
- 24) Mojgan Ardalani, Fatemeh Erfan, Shahla Shokoofian, Zahra Ahmadi, A Study on Virtual Education in the Corona Crisis (Case Study of the University of Arts), National Conference on the Exchange of Experiences of Universities and Higher Education Centers in Implementing E-Learning in the Covid Crisis, Khajeh Nasir al-Din Tusi University 19, 19-21 August 2020
- 25) Mahboubeh Kavousi, Zahra Ahmadi, "Design and fabrication of clothing arrays with a customizable approach" First National Conference on Fashion, Clothing and Textiles, Ghaemshahr Azad University, 11 May 2018.

- 26) Zahra Ahmadi, Fatemeh Gholami Houjaghan, Assessment of Antibacterial, and Colorimetric Properties of Woolen Yarns Dyed with Natural Dyes, The 10th International Conference TEXTEH 2021, Romania
- 27) Zahra Ahmadi, Fateme Mohseni Takalo, Introduction of Afshar's Handwoven in order to Revival the Forgotten Design, YOCOCU2014, Tbilisi, 3-4 Nov. 2020
- 28) Reyhaneh Miri, Narges Ahmadi, Zahra Ahmadi "Study of dyeing woolen yarn with indigo and cochineal dyes to obtain purple hue, the first national conference on natural dyes, Cultural Heritage and Tourism Research Institute, December 12-21, 2018
- 29) Marieh Molla, Zahra Ahmadi "Study of the effect of drying conditions of indigo plant on dyeing efficiency and quality" 11th National Conference on Textile Engineering, Gilan 2017.
- 30) Fatemeh Khodadadi, Zahra Ahmadi "A Review of Apparel Improvement in Iran, The First International Conference on Sustainable Development of Fashion and Apparel with Emphasis on Environment", Al-Zahra University, February 2016.
- 31) Neda Dahesh, Zahra Ahmadi, "Feasibility study of using non-destructive method for color similarity in old textiles", National Conference on Dyestuffs, Environment and Sustainable Development, Research Institute of Painting and Coating Science and Technology, December 4 and 5, 2016
- 32) Narges Ahmadi, Reyhaneh Miri, Zahra Ahmadi "Study of general stability and color values of green shade using indigo dye in combination with herbals, the first national conference on natural dyes, Heritage Research Institute Culture and Tourism, 21-22 ,2016.
- 33) Fargol Rokni, Zahra Ahmadi, Feasibility study of production and supply of kilims in the tourist city of Alamut, Fourth National Conference on Carpets, Birjand University, Decembre of 2016.
- 34) Zahra Ahmadi, Narges Ahmadi, Pathology of dyeing workshops in Kerman province, 4th National Carpet Conference, Birjand University, Decembre of 2016.
- 35) Zahra Ahmadi, Bahare Moulavi, Effect of trade washing on the silk yarns dyed by Madder and Walnut, 12th ATC, China Shanghai, 2013
- 36) Zahra Ahmadi, Improvement of the hydrophobicity of silk carpets by silicon substitute, 12th ATC, China Shanghai, 2013
- 37) Zahra Ahmadi, Fateme Gholami, Different behavior of some natural dyes in the wool dyeing process, 12th ATC, China Shanghai, 2013
- 38) Narges Shayegh, Zahra Ahmadi, Effect of metal salt in natural dyeing: concentration, kind and processing method, 12th ATC, China Shanghai, 2013
- 39) Zahra Ahmadi, M. Haghghat Kish, Richard Kotek, Crystallinity Changes in polypropylene Filaments Containing Organic pigments during UV Exposure, 10th ATC, Japan, 2009.
- 40) Zahra Ahmadi, Mahdi Safi, Identification of Natural Dyes in Persian Carpet, 10th ATC, Japan, 2009.
- 41) Zahra Ahmadi, Effect of Weaving Method on the Performance of Applied Scissor in the Persian Carpet Weaving, 10th ATC, Japan, 2009.
- 42) Z. Ahmadi, Effect of age and kind of madder in natural dyeing process, Autex, 10th World Textile Conference Vilnius, Lithuania - 21-23 June, 2010.
- 43) Z. Ahmadi, Effect of After Treatment Process on Woolen Dyed Properties by Madder Autex, 10th World Textile Conference Vilnius, Lithuania - 21-23 June, 2010 .
- 44) Z. Ahmadi, Optimization of Variables in the dyeing of woolen yarn by Madder in order to color matching, DHA, Derby, UK, 2011.
- 45) Zahra Ahmadi, Effect of Ammonia Solution in the Natural Dyes Hue, 27th DHA International Conference, Istanbul, Turkey, 8-11th October 2008.
- 46) Zahra Ahmadi, Mohammad Haghghat Kish, Harold Freeman, Richard Kotek, Ali Asghar Katbab, Photo stability of Isotactic Polypropylene Containing Mono-azo Pigment, Journal of Applied Polymer Science, Vol. 108, Pages: 2950-2957, (2008).
- 47) Zahra Ahmadi, Richard Kotek, M. Haghghat Kish, Crystallinity of Isotactic polypropylene Containing Organic pigments during UV Exposure, First International seminar on nano composite degradation and stabilization, Japan -Ishikawa- JAIST, 2007
- 48) Zahra Ahmadi, M. Haghghat Kish, Ali Asghar Katbab, Photo-Stability of Pigmented Isotactic Polypropylene .6th Iranian National Textile Conference, Iran, Isfahan, 2007
- 49) Zahra Ahmadi, Effect of PH on the Dying properties of woolen yarns by madder, International Istanbul Textile & Textile Machinery, IITM conferences, Istanbul, Turkey, 2006.
- 50) Zahra Ahmadi, M. Haghghat Kish, Effect of Tension on the light stability of polypropylene fibers, Second International textile conferences, Istanbul, Turkey, 2003.
- 51) Zahra Ahmadi, M Haghghat Kish, A.A. Katbab, Photo-Degradation of Isotactic Polypropylene under

- 52) Different Sources, 8th Asian Textile conference-Iran, Amir kabir university of technology, 2005.
- 53) Zahra Ahmadi, M. Haghghat Kish, Effect of Remafix Green on the Light Stability of Isotactic Polypropylene, Indo-Check Textile conference 2004
- 54) Zahra Ahmadi, M. Haghghat Kish, S. Sheari moghadam, A. Shams nateri, Stability of Electrical conductivity in polyester fibers coated by polyaniline, Indo-Check Textile conference 2004

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## Thesis

**Projects:** (2002-present) PhD thesis on the Effect of the level and kind of pigments on the light stability of polypropylene fibers under supervision of Professor M. Haghghat Kish from Amir Kabir University of technology from Iran, Dr Kotek & Dr Freeman from NCSU.

(1999-2001) M.Sc Thesis on The effect of tension on the light stability of polypropylene BCF yarns under supervision of Professor Dr. M. Haghghat Kish.

(1994-1999) Bachelor Thesis on the Stability of electrical conductivity in coated polyester with polyaniline under supervision of Professor Dr. M. Haghghat Kish.

## Awards:

1. First Selected researcher of the Ministry of Industry, Mines and Trade in 2008 "
2. Winning the third place in the second festival honoring the masters of handmade carpet researchers in 2015
3. Winning the title of top female researcher in the *Women of the Carpet Land Festival* in September 2017

## Skills:

Teaching ability in chemical fiber & technology science, Natural Dyeing, Textile Finishing, Dye and Fiber Identification, hand woven carpet.

Good knowledge in Polypropylene film & fiber production, light stability, pigmentation,...

## References:

### **Professor M. Haghghat Kish:**

Professor of Textile Engineering, Textile Engineering Department of Amir kabir University of Technology (Tehran Polytechnic), Tehran , Iran.

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### **Professor R.Kotek:**

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### **Professor H. Freeman**

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