



Ahmad Akbari

Professor

College: Faculty of Architecture and Art

Department: Carpet

Welcome to Dr. Ahmad Akbari web site

#### Education

Degree	Graduated in	Major	University
BSc	1992	B.Sc. in Textile engineering (Textile chemistry and fibre science)	Esfahan University of technology
MSc	1997	M. Sc. in Textile engineering (Textile chemistry and fibre science)	Amirkabir University
Doctoral	2003	Ph.D. in Textile engineering (Textile chemistry and fibre science)	Paul Sabatier University (Toulouse III)

#### Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
University of Kashan	Professor of Textile Chemistry	Tenured	Full Time	38

#### Work Experience

Dean of Institute, Institute of Carpet, University of Kashan (2015-Present)

Education Vice Chancellor of Faculty, Faculty of Architecture & Art, University of Kashan (2018-Present)

Dean of Faculty, Faculty of Architecture & Art, University of Kashan (2016-2018)

Dean of Faculty, Faculty of Architecture & Art, University of Kashan (2005-2011)

## Awards

The best Researcher of the year award from University of kashan (2003, 2006, 2008, 2010, 2012, 2014, 2017, 2019)

The best Teacher of the year award from University of kashan (2008, 2009, 2010, 2011, 2013, 2017, 2020)

The best Researcher of the year award in Esfahan Province (2011, 2012, 2018)

The selected researcher of the year award from University of Kashan (2016, 2018)

## Course Topics

### Teaching Experience (2003-up to now) Graduate & Undergraduate

#### B.Sc

- Dyeing of wool and cotton
- Dyeing of synthetic fibres
- Natural dyeing
- Color technology
- Color chemistry
- Analytical chemistry
- Textile finishing
- Organic chemistry I, II

#### M.Sc

- Polymer and its application in nanotechnology
- Color and glaze
- Advanced colour chemistry
- Advanced fiber chemistry
- Supramolecular Chemistry
- Surface Chemistry

## Journal Membership

*Journal of Iranian Handicrafts*

## Membership in Scientific Societies

Iran Carpet Scientific Association

Textile Science and Technology Association of Iran

## Papers in Conferences

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1. A. Akbari, Preparation of hollow fibre nanofiltration membranes by photo polymerization and its application to treatment of textile dye effluents, 5th Textile engineering national conference, Teheran, (۲۱-۲۳) Ordibehesht ۱۳۸۳.
2. A. Akbari, S. Desclaux, J.C. Remigy, P. Aptel, Treatment of textile dye effluents using a new photografted nanofiltration membrane, Communication oral, International Congress On Membrane and Membrane Processes (ICOM), Toulouse-France, July 7-12, 2002.
3. A. Akbari, S. Biquet, S. Desclaux, J.C. Remigy, P. Aptel, Preparation and characterization of a new photografted nanofiltration membrane; Application to treatment of textile effluents, International Congress On Membrane and Membrane Processes (ICOM), Toulouse-France, July 7-12, 2002.
4. A. Akbari, S. Biquet, S. Desclaux, J.C. Remigy, P. Aptel, New photografted nanofiltration membranes, International Congress On Membrane and Membrane Processes (ICOM), Toulouse-France, July 7-12, 2002.
5. A. Akbari, M. Homayounfal, M. Arami, M. Amini, Preparation and characterization of polysulfone Nano structure membranes via photografted polymerization, ICNN2008, Tabriz, 28-30 Oct. 2008.
6. M. Amini, M. Arami, M. Homayounfal, A. Akbari, Treatment of acid dyes textile effluents by modified ultrafiltration membrane, CIRAT-3, Sousse, Tunisia, 2008.
7. A. Akbari, A. Yunessnia Lehi, M. Bojaran, V. Jabbari, Consideration of temperature effects on the morphology of PVDF membrane by SEM and AFM, 9th international seminar on polymer science and technology, Teheran, 17-21 October 2009.
8. A. Akbari, A. Yunessnia Lehi, M. Bojaran, V. Jabbari, The influence of inorganic nanoparticle on the PVDF polymeric membrane: effects on the morphology and crystallinity, 9th international seminar on polymer science and technology, Teheran, 17-21 October 2009.
9. A. Akbari, S. Biquet, J.C. Remigy, P. Aptel, Application de la nanofiltration au traitement des effluents de teinturerie, 8<sup>me</sup> Congr<sup>s</sup> Francophone de G<sup>nie</sup> des Proc<sup>d</sup>s, In R<sup>cents</sup> Progr<sup>s</sup> en G<sup>nie</sup> Chimique; Eau, Air, Sols, Environnement, Nancy - France, 17-19 Octobre, 2001.
10. A. Akbari, M. Homayoonfal, Separation of ions from water by nanofiltration membrane based polysulfone prepared via photografting Acid acrylic, IChEC12, Tabriz, 1387.
11. M. Arami, A. Akbari, M. Amini, M. Homayounfal, N. M. Mahmoodi, Control of polysulfone ultrafiltration membrane characterization by changing molecular weight of additives and UV irradiation parameters, IChEC12, Tabriz, 1387.
12. A. Akbari, M. Homayounfal, Preparation of polysulfone nano-structured membrane for sulphate ions removal from water, First international conference on Advances in wastewater treatment and, University of Tehran, Tehran, Iran, 10-12 November 2009.

## Papers in Journals

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1. ربابه تقی زاده بروجنی، احمد اکبری، عبدالسلیم قره بائی، بررسی اثر امواج فراصوت بر فرایند عصاره گیری و قدرت رنگی، گلجام، ISC، date-error.
2. سید کاظم موسوی، اختراسادات موسوی، احمد اکبری، بهینه سازی فرآیند استخراج رنگزای طبیعی نیل به کمک امواج، ISC، date-error، مافوق صوت به منظور کاهش آلودگیهای زیست محیطی، انسان و محیط زیست.
3. Polystyrene nanofibers containing ZIF-8 and ZnO nanoparticles as an effective fibrous respiratory mask filter for rejection of air pollutions, polymer bulletin, Vol. 1, pp. 1, 2024 08 07, JCR.
4. Polystyrene nanofibers containing ZIF-8 and ZnO nanoparticles as an effective fibrous respiratory mask filter for rejection of air pollutions, polymer bulletin, Vol. 1, pp. 1, 2024 08 07, JCR.
5. مریم سادات مرصعی، علی صالح آبادی، احمد اکبری، الموزا. داوی، عسیل ا الجبوری، یوساما اس التیماری، مسعود. صلواتی، Ultrasound-assisted synthesis of Dy<sub>2</sub>Mo<sub>3</sub>O<sub>12</sub>-Dy<sub>2</sub>O<sub>3</sub> nanostructures for enhanced

electrochemical hydrogen storage, *International Journal of Hydrogen Energy*, Vol. 64, pp. 766, 2024 04 01, SCOPUS, JCR.

6. زینب خانی آرانی، احمد اکبری، Influence of laser-induced for modification of polyacrylonitrile membranes by grafting of 2- hydroxyethyl methacrylate in the presence of visible light photoinitiator, *DESALIN WATER TREAT*, Vol. 269, pp. 65, 2022 09 12, JCR.
7. سیده روناک حسینی، احمد اکبری، Effects of chitosan and piperazine on surface morphology and mebeverine hydrochloride removal in polyurea thin film composite membranes, *BRAZ J CHEM ENG*, Vol. 1, pp. 1, 2022 03 04, JCR.
8. مهناز امیری ابراهیم اباد، عباس پرداختی، میثم احمدی زیدآبادی، احمد اکبری، مسعود صلواتی، Magnetic nickel ferrite nanoparticles: Green synthesis by *Urtica* and therapeutic effect of frequency magnetic field on creating cytotoxic response in neural cell lines, *COLLOID SURFACE B*, Vol. 172, pp. 244, 2018 10 11, ISI.
9. مریم سادات مرصعی، علی صالحی، احمد اکبری، سید حسن توسلی، مسعود صلواتی، Enhanced dye sensitized solar cells efficiency by utilization of an external layer of  $\text{CaCe}_2(\text{MoO}_4)_4:\text{Er}^{3+}/\text{Yb}^{3+}$  nanoparticles, *J ALLOY COMPD*, Vol. 769, pp. 732, 2018 08 11, ISI.
10. مریم دانشمند، محمد اتوکش، احمد اکبری، محمدرضا کوثری، احمد طیبی، Synthesis of "L-cysteine–graphene oxide" hybrid by new methods and elucidation of its uptake properties for  $\text{Hg}(\text{II})$  ion, *SEP SCI TECHNOL*, Vol. 53, pp. 843, 2017 12 11, ISI.
11. منیژه کامرانی، احمد اکبری، آرش یونس نیالهی، Chitosan-modified acrylic nanofiltration membrane for efficient removal of pharmaceutical compounds, *Journal of Environmental Chemical Engineering*, Vol. 6, pp. 583, 2017 12 11, ISI.
12. کامران رحیمی، روح اله میرزایی محمد آبادی، احمد اکبری، نورالله میرغفاری، Preparation of nanoparticle-modified polymeric adsorbent using wastage fuzzes of mechanized carpet and its application in dye removal from aqueous solution, *J CLEAN PROD*, Vol. 178, pp. 373, 2017 12 11, ISI.
13. مریم دانشمند، محمد اتوکش، احمد اکبری، محمدرضا کوثری، احمد طیبی، Synthesis of "L-cysteine–graphene oxide" hybrid by new methods and elucidation of its uptake properties for  $\text{Hg}(\text{II})$  ion, *SEP SCI TECHNOL*, Vol. 53, pp. 843, 2017 12 11, ISI.
14. مهناز امیری ابراهیم اباد، احمد اکبری، میثم احمدی، عباس پرداختی، مسعود صلواتی، Synthesis and in vitro evaluation of a novel magnetic drug delivery system; proecological method for the preparation of  $\text{CoFe}_2\text{O}_4$  nanostructures, *J MOL LIQ*, Vol. 249, pp. 1151, 2017 11 11, ISI.
15. آرش یونس نیالهی، احمد اکبری، A Novel Nanofiltration Membrane Prepared with PAMAM and Graphene oxide for Desalination, *Journal of Nanostructure*, Vol. 7, pp. 331, 2017 10 11, ISI, ISC.
16. آرش یونس نیالهی، احمد اکبری، Thin-film composite membranes incorporated with large-area graphene oxide sheets and adjustable surface charges, *Polymers for advanced technologies*, Vol. 29, pp. 795, 2017 09 11, SCOPUS.
17. مهناز امیری ابراهیم اباد، مسعود صلواتی، احمد اکبری، طاهره غلامی، Removal of malachite green (a toxic dye) from water by cobalt ferrite silica magnetic nanocomposite: Herbal and green sol-gel autocombustion synthesis, *INT J HYDROGEN ENERG*, Vol. 42, pp. 24846, 2017 09 11, ISI.
18. آرش یونس نیالهی، احمد اکبری، Novel membrane adsorbents prepared by waste fibers of mechanized carpet for Persian Orange X removal, *Environmental Nanotechnology, Monitoring & Management*, Vol. 8, pp. 209, 2017 08 11, SCOPUS.
19. مهناز امیری ابراهیم اباد، مسعود صلواتی، احمد اکبری، راضیه رضوی، Sol–gel auto-combustion synthesise and characterization of a novel anticorrosive cobalt ferrite nanoparticles dispersed in silica matrix, *J MATER SCI-MATER EL*, Vol. 1, pp. 1, 2017 04 11, ISI.
20. حسن کریمی مله، فاطمه امینی، احمد اکبری، معین شجاعی، Amplified electrochemical sensor employing  $\text{CuO}/\text{SWCNTs}$  and 1-butyl-3-methylimidazolium hexafluorophosphate for selective analysis of sulfisoxazole in the presence of folic acid, *J COLLOID INTERF SCI*, Vol. 495, pp. 61, 2017 02 11, ISI.
21. آرش یونس نیالهی، سید جلال الدین موسوی راد، احمد اکبری، Pre-treatment of textile wastewaters containing Chrysophenine using hybrid membranes, *Membrane Water Treatment*, Vol. 8, pp. 89, 2017 01 11, ISI.
22. مهناز امیری ابراهیم اباد، مسعود صلواتی، احمد اکبری، A magnetic  $\text{CoFe}_2\text{O}_4/\text{SiO}_2$  nanocomposite fabricated by the sol-gel method for electrocatalytic oxidation and determination of L-cysteine, *MICROCHIM*

ACTA, Vol. 1, pp. 1, 2016 12 11, ISI, SCOPUS.

23. آرش یونس نیالهی، احمد اکبری، Membrane Capsules with Hierarchical Mg(OH)<sub>2</sub> Nanostructures as Novel Adsorbents for Dyeing Wastewater Treatment in Carpet Industries, J TAIWAN INST CHEM E, Vol. 70, pp. 391, 2016 11 11, ISI.
24. وحیدرضا عباسپور، سیدمجید مجلی رستمی، احمد اکبری، Tabas coal preparation plant wastewater treatment with membrane technology, WATER SCI TECHNOL, Vol. 74, pp. 333, 2016 04 11, ISI.
25. احمد اکبری، مریم همایونفال، Sulfonation and mixing with TiO<sub>2</sub> nanoparticles as two simultaneous solutions for reducing fouling of polysulfone loose nanofiltration membrane, KOREAN J CHEM ENG, Vol. 33, pp. 2439, 2016 04 11, ISI.
26. احمد اکبری، زهرا فخارشاکری، سیدمجید مجلی رستمی، A novel positively charged membrane based on polyamide thin-film composite made by cross-linking for nanofiltration, WATER SCI TECHNOL, Vol. 73, pp. 776, 2016 02 11, ISI.
27. احمد اکبری، سعیده محتشم خانی، سیدمجید مجلی رستمی، Second modification of a polyamide membrane surface, journal of applied polymer science, Vol. 1, pp. 1, 2016 02 11, ISI.
28. ذبیح اله ضرغامی، احمد اکبری، علیمحمد لطیفی، محمد علی امانی، Design of a new integrated chitosan-PAMAM dendrimer biosorbent for heavy metals removing and study of its adsorption kinetics and thermodynamics, BIORESOURCE TECHNOL, Vol. 205, pp. 230, 2016 01 11, ISI.
29. حسن جهانگیری، آرش یونس نیالهی، احمد اکبری، Hierarchical nanostructures as novel antifouling agents in nanofiltration process, DESALINATION, Vol. 375, pp. 116, 2015 08 11, ISI.
30. احمد اکبری، عصمت علی یاری زاده، سیدمجید مجلی رستمی، مریم همایونفال، Novel sulfonated polyamide thin-film composite nanofiltration membranes with improved water flux and anti-fouling properties, DESALINATION, Vol. 377, pp. 11, 2015 08 11, ISI.
31. احمد اکبری، حسنا سلیمانی، سیدمجید مجلی رستمی، Preparation and characterization of a novel positively charged nanofiltration membrane based on polysulfone, journal of applied polymer science, Vol. 132, pp. 1, 2015 06 11, ISI.
32. احمد اکبری، زهرا دریکوندی، سیدمجید مجلی رستمی، Influence of chitosan coating on the separation performance, morphology and anti-fouling properties of the polyamide nanofiltration membranes, J IND ENG CHEM, Vol. 28, pp. 268, 2015 03 11, ISI.
33. آرش یونس نیالهی، احمد اکبری، حسنا سلیمانی، Preparation of novel NF membrane via interfacial cross-linking polymerization, membrane water treatment, Vol. 6, pp. 173, 2015 01 11, ISI.
34. آرش یونس نیالهی، احمد اکبری، زهرا قایدامینی هارونی، Preparation of Novel Thin-Film Composite Nanofiltration Membranes for Separation of Amoxicillin, journal of Nanostructure, Vol. 4, pp. 199, 2014 09 11, ISC.
35. احمد اکبری، مسعود همدانیان، مجید بوجاران، آرش یونس نیالهی، وحید جباری، The Role of Solution and Coagulation Temperatures in Crystalline Structure, Morphology, Roughness, Pore Diameter Distribution, and Separation Properties of Nanoporous Membranes Fabricated Via Phase Inversion, Separation Science and Technology, Vol. 47, pp. 1866, 2012 02 09, SCOPUS, JCR.
36. احمد اکبری، فرهاد جوکار ششده، وحید جباری، Novel nanofibrous membrane fabricated via electrospinning of wastage fuzzes of mechanized carpet used for dye removal of the carpet dyeing wastewater, Journal of Environmental Science and Health, Part A, Vol. 47, pp. 847, 2011 06 24, SCOPUS, JCR.
37. مسعود همدانیان، احمد اکبری، وحید جباری، Electrospun Titanium Dioxide Nanofibers: Fabrication, Properties and Its Application in Photo-Oxidative Degradation of Methyl Orange (MO), Fibers and Polymers, Vol. 12, pp. 880, 2011 06 15, SCOPUS, JCR.
38. احمد اکبری، مریم همایونفال فینی، وحید جباری، Effect of solution chemistry and operating conditions on the nanofiltration of acid dyes by a nanocomposite membrane, Water Science & Technology, Vol. 64, pp. 2404, 2011 03 14, SCOPUS, JCR.
39. مریم همایونفال فینی، احمد اکبری، محمدرضا مهرنیا، Preparation of polysulfone nanofiltration membranes by UV-assisted grafting polymerization for water softening, desalination, Vol. 263, pp. 217, 2010 06 24, JCR.
40. احمد اکبری، مریم همایونفال فینی، محمدوحید جباری، Synthesis and characterization of composite polysulfone membranes for desalination in nanofiltration technique, Water Science & Technology, Vol.

62,pp. 2655,2010 01 15,SCOPUS ,JCR.

41. احمد اکبری,ساندرين دسکلو,جان کریستوف روش,جان کریستوف ریمیژی,Application of nanofiltration hollow fibre membranes, developed by photografting, to treatment of anionic dye solutions,Journal of Membrane Science,Vol. 297,pp. 243,2007 04 01,JCR.
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43. احمد اکبری,ساندرين دسکلو,جان کریستوف روش,فیلیپ اپتل,جان کریستوف ریمیژی,New UV-photografted nanofiltration membranes for the treatment of colored textile dye effluents,Journal of Membrane Science,Vol. 286,pp. 342,2006 10 17,JCR.
44. تی گوما بیلینگو,احمد اکبری,مایکل جان کلیفتون,جان کریستوف ریمیژی,Numerical simulation of a UV photografting process for hollow-fiber membranes,Journal of Membrane Science,Vol. 278,pp. 308,2005 12 15,JCR.
45. سی کوسرند,ساندرين رواکس,احمد اکبری,پییر امار,Improvement of a method for the characterization of ultrafiltration membranes by measurements of tracers retention,Journal of Membrane Science,Vol. 238,pp. 177,2004 04 04,JCR.
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48. حسن کریمی مله,معین شجاعی,فاطمه امینی دهقانی,احمد اکبری,Analysis of Levodopa in the Presence of Vitamin B6 Using Carbon Paste Electrode Modified with 1-Butyl-3 methylimidazolium Hexafluorophosphate and CuO Nanoparticles,ELECTROANAL,0000 00 11,ISI ,SCOPUS.
49. مهناز امیری ابراهیم اباد,مسعود صلواتی,پرداختی عباس,میثم احمدی,احمد اکبری,Caffeine: A novel green precursor for synthesis of magnetic CoFe<sub>2</sub>O<sub>4</sub> nanoparticles and pH-sensitive magnetic alginate beads for drug delivery,MAT SCI ENG C-MATER,0000 00 11,ISI.
50. آرش یونس نیالهی,احمد اکبری,Thin-film composite membranes incorporated with large-area graphene oxide sheets and adjustable surface charges,POLYM ADVAN TECHNOL,0000 00 11,ISI.
51. احمد اکبری,نقیسه استادمرادی,سیدمجید مجلی رستمی,مریم همایونفال,Role of Organic Acids in Flux Enhancement of Polyamide Nanofiltration Membranes,Chemical Engineering & Technology,0000 00 11,ISI.
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53. Masood Hamadani, Ahmad Akbari, Vahid Jabbari,Electrospun Titanium Dioxide Nanofibers: Fabrication, Properties and Its Application in Photo-Oxidative Degradation of Methyl Orange (MO),Fibers and Polymers,Vol. 12,pp. 880-885,2011.
54. Masoud Amini, Mokhtar Arami, Niyaz Mohammad Mahmoodi, Ahmad Akbari,Dye removal from colored textile wastewater using acrylic grafted nanomembrane,Desalination,Vol. 267,pp. 107–113,2011.
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57. A. Akbari, M. Homayonfal and V. Jabbari,Synthesis and characterization of composite polysulfone membranes for desalination in nanofiltration technique,Water Science and Technology (WST),Vol. 62,pp. 2655-2663,2010.
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60. M. Amini, M. Arami, A. Akbari, N. M. Mahmoodi, Preparation of Nanofiltration Membranes via UV Photo-grafting Technique for Separation of Acid Dyes at Different pH Values, *Color.Sci. Tech*, Vol. 2, pp. 237-247, 2008.
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62. A. Akbari, S. Desclaux, J.C. Rouch, J.C. Remigy, P. Aptel, New UV-photografted nanofiltration membranes for the treatment of colored textile dye effluents, *J. Membr. Sci*, Vol. 286, pp. 342-350, 2006.
63. T. Goma, Bilongo, A. Akbari, M.J. Clifton and J. , C. Remigy, Numerical simulation of a UV photografting process for hollow-fiber membranes, *J. Membr. Sci*, pp. 308-317, 2006.
64. C. Causserand, S. Rouaix, A. Akbari and P. Aimar, Improvement of a method for the characterization of ultrafiltration membranes by measurements of tracers retention, *J. Membr. Sci*, pp. 177-190, 2004.
65. A. Akbari, J.C. Remigy, P. Aptel, Treatment of textile dye effluents using a polyamide based nanofiltration membrane, *Chem. Eng. Prog*, pp. 601-609, 2002/08/20.
66. A. Akbari, S. Desclaux, J.C. Remigy, P. Aptel, Treatment of textile dye effluents using a new photografted nanofiltration membrane, *Desalination*, Vol. 149, pp. 101-107, 2002.