Curriculum Vitae

Samander Ali Malik (Dr.-Ing.)

Associate Professor Address: Department of Textile Engineering, Mehran University of Engineering & Technology Jamshoro, 76062 Jamshoro, Pakistan Email: <u>samander.malik@faculty.muet.edu.pk</u> Mob: +92-333-7280839 Phone: +92-22-2772250-72 (Ext. 6110) Home Address: Bungalow # A-26/6, Mehran University Employees Cooperative Housing Society Jamshoro



Education

2017	Institute of Textile Machinary and High performance Material Technology (ITM), Technische Universität Dresden, Dresden Germany PhD (DrIng.) – Magna cum laude (Very good)				
2011	Mehran University of Engineering & Technology, Jamshoro M.E. (Textile Engineering) – CGPA 3.90/4.00				
2008	Mehran University of Engineering & Technology, Jamshoro B.E. (Textile Engineering) – CGPA 3.86/4.00, 3rd position				
2002	BISE, Larkana, Govt. C&S Degree College, Shikarpur Intermediate (Pre-Engineering) – B Grade (62%)				
2000	BISE, Larkana, Govt. High School # 1 Shikarpur Matriculation (Science) – A Grade (74.47%)				

Language skills

Saraiki:	Mother tongue
Sindhi:	Excellent
Urdu:	Excellent
English:	Very good
German:	Fair/B1

Professional Experience

- Associate Professor, Textile Engineering Mehran University of Engineering & Technology Jamshoro, 76062 Jamshoro, Pakistan (11.07.2019 - Present)
- Assistant Professor, Textile Engineering, Mehran University of Engineering & Technology Jamshoro, 76062 Jamshoro, Pakistan (30.01.2013 – 11.07.2019)
- Lecturer, Textile Engineering, Mehran University of Engineering & Technology Jamshoro, 76062 Jamshoro, Pakistan (22.12.2009 – 29.01.2013)
- Lecturer/Lab. Lecturer, (contract) Textile Engineering, Mehran University of Engineering & Technology Jamshoro, 76062 Jamshoro, Pakistan - (15.01.2009 – 21.12.2009)

 Quality Assurance Officer, Mustaqeem Dyeing and Printing Industries (Pvt.) Ltd. S.I.T.E, Karachi, Pakistan - (01.04.2008 – 31.12.2008)

Research Activities

HEC Approved Supervisor: Yes

Research Interests

• Barrier Textiles

Protective and comfort properties of OR-textiles

Textiles for filtration

• Simulation and Modelling

Neural network and statistical methods for process and properties prediction and optimization

- Hybrid yarns for composites
- Clothing Comfort

Research Projects

S. #	Project Title	Duration	Funding agency	Amount In Rs.	Role	Status
01	PSF/RES/S-MUET/ Engg (155): Dyeing of polyester fabric With Natural (Henna) Dye Using Radcure technique	2 years 04.2018 - 03.2020	PSF	1,064,676	P.I	Completed
02	SRGP #1846: Evaluation of barrier effectiveness and comfort properties of surgical gowns	1 year 03.2018 - 02.2019	HEC	4,72,000	P.I	Completed
03	NRPU 12808 - Fabrication of flexible dye-sensitized solar cells based on textile coated with carbon nanocomposite as counter electrode material	3 years 01-2021 - 12-2023	HEC	11,849,065	Co- P.I.	On-going

Thesis Projects

a) Written by Applicant

- i) PhD Thesis: Analysis and modelling of air permeability and yarn crimp of woven barrier fabrics using artificial neural network, Defended at ITM TU-Dresden, Germany on 23. 06.2017.
- ii) M.E Thesis: Effect of blend ratio and spinning variables on the physical properties and Imperfections of PC blended yarn, Defended at Mehran UET Jamshoro on 15.12.2011
- iii) B.E. Thesis: Comparison of Quality and Properties of PC (52:48) blended ring spun yarn, produced by Intimate and Creel blending, defended at Mehran UET Jamshoro in Feb 2018.

- **13.10.2020:** A training session on Internal Quality Audit ISO 9001-2015, organized by QEC MUET Jamshoro with cooperation of Lloyd's Register (Trainer: Engr Raheel Ehsan)
- 04-11-2019 to 17-11-2019: Two weeks training on Seminar on Textile Production and Management for Pakistan officials, Trade and Commerce ministry of China, in Wuhan China
- **09-10/01/2019: Two days training on** "Internal Quality Audit under the scope of ISO 9001-2015", organized by MUET Jamshoro with cooperation of Lloyd's Register (Trainer: Engr Raheel Ehsan)
- 03-04/08/2015: Two days course on "Multivariate statistics" organized by Dr. Robert Schlicht, Institute of Forest growth and forest computer sciences at TU-Dresden in Tharandt, Germany.
- 02/2009: Participated in a 15 days teacher training course held at Mehran UET Jamshoro, through HEC Pakistan

Scientific Articles in Peer reviewed Journals & International conferences

Peer Review Journal Articles

IF JCR 2020

1. Khan, S. M.; **Malik, S. A**.; Gull, N.; Saleemi, S.; Islam, A.; Butt, M. T. Z. (2019) Fabrication and modelling of the macro-mechanical properties of cross-ply laminated fibre-reinforced polymer composites using artificial neural network. *Advanced Composite Materials*, 28(4), 409-423

I.F = [1.881]

- Qureshi, R.F.; Qureshi, K.; Khatri, Z.; Malik, S.A.; Rajput, A.W.; and Bhatti, I. (2018). Efficient removal of Indigo dye from aqueous solution by an innovative method of emulsion liquid membrane. *Industria textila*, 69(6), 472-477
 I.F = [0.469]
- Farooq, A.; Sarwar, M.I.; Ashraf, M.A.; Iqbal, D.; Hussain, A.; and Malik, S. (2018). Predicting Cotton Fibre Maturity by Using Artificial Neural Network. *Autex Research Journal*, 18(4), 429-433
 I.F = [1.0]
- Malik, S.A.; Gereke, T.; Aibibu, D.; Farooq, A.; Cherif, Ch. (2018). Prediction of yarn crimp in PES multifilament woven barrier fabrics using artificial neural network. *The Journal of The Textile Institute*, 109 (7), 942-951
 I.F = [1.239]
- 5. **Malik, S.A.;** Kocaman, T.; Gereke, T.; Aibibu, D.; Cherif, Ch. (2018). Prediction of porosity of barrier woven fabrics with respect to material, construction and processing parameters and its relation with air permeability. *Fibers and Textiles in Eastern Europe*, 26, 3(129), 71-79

I.F = [0.775]

6. Kocaman, R.T.; **Malik, S.A.;** Aibibu, D.; Gereke, T.; and Cherif, C. (2018). New Method for Insitu Measurement of Pore Size Deformation of Barrier Textiles under Biaxial Loading. *Journal of Textile Science & Engineering*, 8(2), 355, doi: 10.172/2165-8064.1000355

[**Indexed In**: Index Copernicus value: 83.27, PUBMED NLM ID:101725304, SIS indexed Journal ID: 4727, ISRA unique ID number: 30.04.2018.1424]

Malik, S.A.; Kocaman, T.; Kaynak H. K.; Gereke, T.; Aibibu, D.; Babaarslan O.; Cherif, Ch (2017). Analysis and prediction of air permeability of woven barrier fabrics with respect to material, fabric construction and process parameters. *Fibers & Polymers*, 18(10), 2005-2017
 I.F = [1.797]

- Mengal, N.; Syed, U.; Malik, S.A.; Sahito, I. A; Jeong, S.H. (2016). Citric acid based durable and sustainable flame retardant treatment for lyocell fabric. Carbohydrate Polymers, 153 (2016), 78-88.
 I.F = [7.182]
- Malik, S.A.; Farooq, A.; Gereke, T.; Cherif, C. (2016) Prediction of Blended Yarn Evenness and Tensile Properties by Using Artificial Neural Network and Multiple Linear Regression. *Autex Research Journal*, 16(2), 43-50
 I.F = [1.0]
- Malik, S.A.; Saleemi, S.; Mengal, N. (2016). Predicting Hydrophobicity of Silica Sol-Gel Coated Dyed Cotton Fabric by Artificial Neural Network and Regression. *Indian Journal of Fibre and Textile Research*, 41(1), 67-72
 I.F = [0.449]
- Malik, S.A.; Arain, R. A.; Khatri, Z.; Saleemi, S.; Cherif, C. (2015). Neural network modeling and principle component analysis of antibacterial activity of chitosan/AgCl–TiO₂ colloid treated cotton fabric. *Fibers and Polymers*, 16(5), 1142-1149
 I.F = [1.797]
- Saleemi, S.; Farooq, A.; Malik, S.A. (2015). "Study of Physical Properties of Nano-Silica Coated Cotton Textiles. *Mehran University Research Journal of Engineering & Technology*, 34(2), 202-207 – ISSN: 0254-7821

[Indexed In: HEC X category, Clarivate analytics ESCI, Chemical Abstract Services Source Index, etc]

- Saleemi, S.; Malik, S.A.; Syed, U.; Tanwari, A. (2014). Investigation of Wash Durability of Silica Nanoparticle Coated 100% Cotton Reactive Dyed Fabric Treated by Sol-Gel Technique. *Journal of Engineered Fibres and Fabrics*, 9(4), 16-23
- Malik, S.A.; Mengal, N.; Saleemi, S.; Abbasi, S. A. (2013). Blended yarn analysis: Part II -Influence of Twist Multiplier and Back Roller Cot Hardness on Mass Variation, Hairiness and Physical Properties of 15 Tex PES/CO Blended Ring Spun Yarn. *Journal of Natural Fibers*, 10(3), 271-281
 I.F = [2.622]
- Malik, S. A.; Tanwari, A.; Syed, U.; Qureshi, R. F.; Mengal, N. (2012). Blended yarn analysis: Part I - Influence of Blend Ratio and Break Draft on Mass Variation, Hairiness and Physical Properties of 15 Tex PES/CO Blended Ring Spun Yarn. *Journal of Natural Fibers*, 9(3), 197-206 I.F = [2.622]

International Conferences Published in peer review Journals

- Gereke, T.; Döbrich, O.; *Malik, S.A.;* Kocaman, T.T.; Aibibu, D.; Schmidt, K.; Antonyuk, S.; Ripperger, S.; Cherif, Ch. Numerical micro-scale modelling of the mechanical loading of woven fabrics equipped with particles. Presented in 18th World Textile Conference AUTEX 2018, Istanbul Turkey, 20-22 June 2018. Published in: IOP conference series: Materials Science and Engineering, 460(1), 012006, 2018
- Kocaman, R.T.; *Malik, S.A.*; Aibibu, D.; Cherif, C. In situ determination of pore sizes of high density polyester woven fabrics under biaxial loading. Presented in: 17th World Textile Conference AUTEX 2017, Corfu Greece, 29-31 May 2017 – Published in: IOP conference series: Materials Science and Engineering, 254(14), 142011, 2017

International Conference publication

- 1. Kocaman, R. T.; *Malik, S. A.;* Aibibu, D.; Gereke, T.; Rief, S.; Cherif, Ch: Effect of end use stresses on the morphology of high density protective textiles. *56th Dornbirn Man-made Fibers Congress Dornbirn, Austria*, September 13–15, 2017
- Gereke, Th.; *Malik, S. A.*; Hübner, M.; Döbrich, O.; Cherif, Ch.: Finite element modeling of textile and composite mechanics (Poster P105). In: CD-Rom and short description. *Aachen-Dresden-Denkendorf International Textile Conference, Dresden*, 24.-25. November 2016, P. 278

- 3. *Malik, S. A.;* Kaynak H. K.; Gereke, T.; Aibibu, D.; Babaarslan O.; Cherif, Ch: Prediction of air permeability of multifilament woven barrier fabrics with reference to fabric and yarn parameters. *16th World Textile Conference AUTEX 2016, Ljubljana Slovenia,* 08-10 June 2016
- 4. *Malik, S. A.*; Gereke, T.; Aibibu, D.; Cherif, Ch: Modelling of the relationship between weaving process parameters and weave morphology of protective and filter textiles. *15th World Textile Conference AUTEX 2015, Bucharest Romania*, 10-12 June 2015
- 5. Gereke, T.; *Malik, S.A.;* Hübner, M.; Döbrich, O.; Cherif, Ch.: Structure and process simulation of technical textiles. *Poster:* 8th Aachen-Dresden International Textile Conference 2014, Dresden Germany, 28-29 Nov 2014
- 6. *Malik, S. A.*; Gereke, T.; Cherif, Ch.: Prediction of relationships between fabric constructional parameters and composite properties. *14th World Textile Conference AUTEX 2014, Bursa Turkey*, 26-28 May 2014

Conferences & Exhibitions attended

- 1. 2016: 16th World Textile Conference AUTEX 2016, Ljubljana Slovenia, 08-10 June 2016.
- 2. **2015**: *ITMA 2015* International Textile and garment Machinery exhibition, 12-19 November 2015 at Fiera Milano Rho, Milan Italy.
- 3. 2015:15th World Textile Conference AUTEX 2015, Bucharest Romania, 10-12 June 2015.
- 4. **2015:** *Techtextil 2015* International Trade Fair for Technical Textiles and Nonwovens, 4-8 May 2015, Frankfurt am Main Germany.
- 5. **2014:** 8th Aachen-Dresden International Textile Conference 2014, Dresden Germany, 28-29 Nov 2014.
- 6. 2014: 14th World Textile Conference AUTEX 2014, Bursa Turkey, 26-28 May 2014.
- 7. **2013:** 7th Aachen-Dresden International Textile Conference 2013, Aachen Germany, 28-29 November 2013.
- 8. **2013:** *Techtextil 2013* International Trade Fair for Technical Textiles and Nonwovens, 4-7 May 2013, Frankfurt am Main Germany.
- 9. 2013: 13th World Textile Conference AUTEX 2013, Dresden Germany, 22-24 May 2013.
- 10. **2012:** 2nd International Conference on Energy, Environment & Sustainable Development (*EESD-2012*), Mehran UET, Jamshoro, Pakistan.

Books

- 1. Air Conditioning in Textile Industry (Lab Experiments, B.Eng. Textile Engineering)
- 2. Fabric Design and Structure (Lab Experiments, B.Eng. Textile Engineering)