# **IFTIKHAR ALI (Ph.D)**

## **Associate Professor**

Thomson Reuters ISI Cumulative Impact Factor (JCR) ~ 300 Google scholar Profile:

https://scholar.google.co.kr/citations?user=z2X8wqIAAAAJ&hl=en Citation 1385, h-index 22

Department of Textile Engineering

Mehran University of Engineering and Technology, Jamshoro.

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### **EDUCATION**

#### Ph.D

(September 2012 – Feb 2016) Hanyang University, Seoul, Republic of Korea

### **Master of Engineering (Textile Engineering)**

(January 2008 - April 2011)

Mehran University of Eng: and Tech: Jamshoro, Pakistan

## **Bachelor of Engineering (Textile Engineering)**

(January 2002 - April 2006)

Mehran University of Eng. and Tech: Jamshoro, Pakistan (1st Position)

#### PROFESSIONAL EXPERIENCE

23rd Jan 2006 to 23rd June 2006

Associate Professor 22nd December 2017 till date	Mehran University of Engg: & Technology Jamshoro, Pakistan
<b>Assistant Professor</b> 14 <sup>th</sup> March 2016 to 21 <sup>st</sup> December 2017	Mehran University of Engg: & Technology Jamshoro, Pakistan
<b>Lecturer</b> 31st January 2007 to 13th March 2016	Mehran University of Engg: & Technology Jamshoro, Pakistan
Assistant Merchandiser 24 <sup>th</sup> June 2006 to 30 <sup>th</sup> Jan 2007	Synergies Sourcing (Pvt.) Ltd Karachi
Lab Chemist	Lucky Textile Mills, Karachi

#### ACADEMIC EXCELLENCE

- 1. Awarded **Gold Medal** for Faculty Top for the year 2006 in faculty of Engineering and Technology, MUET, Jamshoro.
- 2. Awarded **Silver Medal** for 1<sup>st</sup> Position in B.E Textile MUET, Jamshoro.
- 3. **HEC HRDI Scholarship for PhD** in 2012 by HEC, Pakistan
- 4. Received **Best Research Paper Award 2015/16** by HEC, Pakistan.
- 5. MUET Alumni Excellence Award (for extraordinary services in the career) 2023.
- 6. Nominated for the **Best Engineer of Pakistan** Award by Pakistan Engineering Council for the year 2006.
- 7. Nominated for the **Presidential Award of Ezaz-e-Sabgat** for the year 2006.

#### ADMINISTRATIVE EXPERIENCE and PROFESSIONAL MEMBERSHIP

- 1. **Principal Investigator**, Smart Energy Textile Materials Research Lab (SETMRL), Mehran University of Engineering and Technology, Jamshoro.
- 2. **Convener, Curriculum Review Committee**, Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
- 3. **Deputy Advisor Student's Affairs**, Mehran University of Engineering and Technology, Jamshoro (22-02-2017 to 14-12-2021).
- 4. **Member National Curriculum Review Committee,** (HEC)/ Pakistan Engineering Council.
- 5. **Member Interview Committee,** Student Financial Aid office, Mehran University of Engineering and Technology, Jamshoro.
- 6. **In charge Textile Testing and Quality Control Lab**, Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
- 7. **In charge Composite Materials Lab**, Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
- 8. **Member/Secretary, Industry Advisory Board**, Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
- 9. **Member Program Committee,** Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
- 10. **Member,** *Technical Textiles Research Group*, Department of Textile, Mehran University of Engineering and Technology, Jamshoro.
- 11. **Member Board of Studies (Textile)**, Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
- 12. **Member Board of Studies (Nanomaterials),** Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
- 13. **Member Board of Studies,** Department of Metallurgy and Materials Engineering,

- Mehran University of Engineering and Technology, Jamshoro.
- 14. **Member Department Management Review Committee**, department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
- 15. **Convener, Auction Committee,** Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
- 16. **Member** Hostel allotment committee, Mehran University of Engineering and Technology, Jamshoro
- 17. **Lifetime Member** Pakistan Engineering Council.
- 18. **Member of Textile Institute of Manchester**, United Kingdom.
- 19. **Approved Ph.D Supervisor**, Higher Education Commission of Pakistan.

#### RESEARCH GRANTS

- 1. National Research Project for Universities by Higher Education Commission of Pakistan of 8.5 million PKR. "Synthesis of printable and conductive nano carbon ink and its potential application in textile structured solar cells". Status: Ongoing.
- 2. National Research Project for Universities by Higher Education Commission of Pakistan of 11.8 million PKR. "Fabrication of Flexible Dye-sensitized Solar Cells based on Textile Coated with Carbon Nanocomposite as Counter Electrode Material". Status: Ongoing.
- 3. National Research Project for Universities by Higher Education Commission of Pakistan of 7.1 million PKR. "Development of Transparent and Conductive Textile Composite Fabric for Solar Energy Applications". Status: Completed.
- **4.** National Research Project for Universities by Higher Education Commission of Pakistan of 10.0 million PKR. "**Development of graphene coated multifunctional nonwoven materials**". **Status: Completed.**
- **5.** Startup Research Grant by Higher Education Commission of Pakistan of 0.5 million PKR. "**Production of conductive fabric by pad batch process**". **Status: Completed**

#### **Workshops Conducted**

- **1.** "Writing and Successful Funding Proposal" on 13th April 2021 at the department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro, Pakistan.
- **2.** "Proposal Writing for Funded Projects" on 9<sup>th</sup> March 2021 at Quaid-e-Awam University of Engineering, Science & Technology (QUEST) Nawabshah, Pakistan.
- 3. "Writing a Successful Research Proposal" on 9th April 2021 (online), IEEE talk series on Indigenous Research Outcome to Impact Industry and Society. Host IEEE and Lahore College Women University, Pakistan.

- 4. Creating Classrooms in QOBE Software on 2<sup>nd</sup> October 2019, at Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro, Pakistan.
- 5. Creating Class activities and activity weights in QOBE Software 20<sup>th</sup> October 2020, at Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro, Pakistan.
- 6. Assessing results and analyzing results on QOBE Software on 30<sup>th</sup> October 2022, at Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro, Pakistan

## **Capacity Building**

Established a whole new lab "Smart Energy Textile Materials Research Lab' at the Department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro, equipped with more than 30 specialized machines.

## Conference(s) Organized/Chaired/Co-Chaired/Session Chair

- Served as Conference Co-chair for the International Conference "Textile Nexus 2021" (ISBN 978-969-7710-04-1) at Mehran University of Engineering and Technology. https://textile-nexus.muet.edu.pk/nexus-team/
- Served as Co-Organizer for International Conference on Advanced Materials and Processing (ICAMP 2017) at Mehran University of Engineering and Technology. https://www.muet.edu.pk/icamp-17
- Session Chair, International Conference on Energy, Environment and Sustainable Development" from November 14<sup>th</sup> – 16<sup>th</sup>, 2018 at Mehran University of Engineering and Technology, Jamshoro Pakistan.
- Session Chair, in International Conference on Green and Sustainable Environment (ICGSE 2023), SMIU, Karachi on March 8-9, 2023.
- Keynote speaker in International Conference on Green and Sustainable Environment (ICGSE 2023), SMIU, Karachi, on March 8-9, 2023.
- Session Chair, FES-Photonics 2023 International Conference at GIKI, Swabi, Pakistan on March 14-17, 2023.

#### **INTERNATIONAL TRAININGS**

- **1.** Hands on Experience on Theta-Lite Tensiometer (water contact angle measurement), at Biolin Scientific, Helsinki, Finland from February 28<sup>th</sup> to 2<sup>nd</sup> March 2020.
- 2. "Seminar on Textile Production and Management for Pakistan", sponsored by Ministry of Commerce, Hubei Vocation College of Biotechnology, from Nov 4<sup>th</sup> to Nov 17<sup>th</sup>, 2019, in Wuhan, the People's Republic of China.
- **3.** Two weeks (13-12-2004 to 23-12-2004) internship in Weaving department of Lucky Textile Mills, Karachi.
- **4.** Three weeks (16-06-2003 to 05-07-2003) internship in Wet Processing department of Lucky Textile Mills, Karachi.

#### PAYBACK TO THE SOCIETY

- **1. Teacher Coordinator (2017, 2018, 2022, 2023, 2024) in the BIG EVENT** organized by Mehran University of Engineering and Technology, Jamshoro
- **2. Coordinator** for **Medical Camp** (12<sup>th</sup> April 2018) for blood donation for thalassemia patients organized by Mehran University of Engineering and Technology, Jamshoro

#### **PUBLICATIONS**

#### **Book Chapter(s)**

- **1. Iftikhar Ali Sahito**, Awais Khatri. "Smart and Electronic Textiles", Chapter 12 in Advanced Textile Testing Techniques edited by Sheraz Ahmed, Abher Rasheed, Ali Afzal, Faheem Ahmed, CRC Press (Taylor and Francis Group) 09/2017; 295-314 [ISBN: 978-1-4987-8470-2].
- 2. Mazhar Hussain Peerzada, Sadaf Aftab Abbasi, Abdul Sattar Larik, Noor Ahmed Sanbhal, Iftikhar Ali Sahito. Fabrication of Rapid Cured Composites, Chapter 4 in "Rapid Cure Composites, Materials, Processing and Manufacturing (Elsevier)". 1st Edition May 17, 2023. Paperback ISBN: 9780323983372 eBook ISBN: 9780323985352.

### **Refereed Journal Articles**

46. Comprehensive review of carbon materials as counter electrodes in dye-sensitized solar cells: Efficiency assessment and deposition methods

Hamna Siddiqui, Usama Ali, <u>Iftikhar Ali Sahito,</u> Samander Ali Malik, Kyung Chul Sun, Naveed Mengal

Materials Science in Semiconductor Processing 172, 108074, impact factor 4.2

45. Rapid and high adsorption of methylene blue dye onto graphene coated nonwoven fabric using vacuum infusion coating

Rabia Panhwar, Iftikhar Ali Sahito, Awais Khatri, Seong Hoon Jeong The Journal of The Textile Institute, 1-9, **impact factor 4.0** 

44. Elucidating the role of etchants induced photo- and electro-activity in holey graphene oxide and graphene quantum dots composites for textile electrode applications

*Kyung Chul Sun, Mumtaz Ali, <u>Iftikhar Ali Sahito</u>, Jung Woo Noh, Sung Hoon Jeong* Synthetic Metals, Volume 295, May–June 2023, 117340, **impact factor 4.4** 

43. Carbon nanomaterials staked with nonwoven (EG/PAN/CQDs) composite as a counter electrode for enhanced photons and photocatalytic efficiency

N Syed, Y Feng, R Fahad, <u>IA Sahito</u>, J Huang

Frontiers in Energy Research 10, 1025045, impact factor 2.6

42. Sustainable flame retardant treatment for cotton fabric using non formaldehyde cross linking agent

S Brohi, A Shaikh, I Jameel, M Hamza, AA Memon, IA Sahito, N Mengal Mehran University Research Journal of Engineering and Technology 42 (1), 56-61,

## impact factor 0.6

41. Characterization of Etched Graphite Nanoplates and Their Nonwoven Electrode Applications

Kyung Chul Sun, Mumtaz Ali, <u>Iftikhar Ali Sahito</u>, Jung Woo Noh and Sung Hoon Jeong

ECS Journal of Solid-State Science and Technology, Page, (June 2022, Vol 11, **impact factor 2.483** 

40. Facile Preparation of a Wet-Laid Based Graphite Nanoplate and Polyethylene Terephthalate Staple Fiber Composite for Textile-Structured Rollable Electronics

Kyung Chul Sun, Mumtaz Ali, Aima Sameen Anjum, Jung Woo Noh, <u>Iftikhar Ali Sahito</u> and Sung Hoon Jeong

Journal of Electronic Materials, Page 5433-5441, (July 2021, Vol 50, impact factor 2.1

39. Improved photocatalytic activity of nonwoven fabric coated with graphene by a novel elevated temperature padding method

Rabia Panhwar, <u>Iftikhar Ali Sahito</u>, Awais Khatri and Kyung Chul Sun Materials Chemistry and Physics, Page 124294, (April 2021, Vol 262, **impact factor 4.778** 

38. Synergistic effect of thermal and chemical reduction of graphene oxide at the counter electrode on the performance of dye-sensitized solar cells

<u>Iftikhar Ali Sahito,</u> Kyung Chul Sun, Alvira Ayoub Arbab, Sung Hoon Jeong Solar Energy, Page 112-118, (September 2019), Vol 190, **impact factor 7.188** 

37. Enhanced Electrical and Thermal Performance of Wet-Laid Based Graphite-Laminated Carbon Non-woven Composite

Kyung Chul Sun, <u>Iftikhar Ali Sahito,</u> Jung Woo Noh, Yeong Og Choi, Se-Joon Park, Alvira Ayoub Arbab, Sung Hoon Jeong, Yeon Sang Kim

Journal of Electronic Material, Page 1-7, (June 2019), impact factor 2.1

36. Impact of Types of Orthophthalic Unsaturated Polyester Matrix on Tensile Strength of Woven Roving Fibers as Reinforcement

*Ghulam Mustafa Memon, Rafique Ahmed Jhatial, <u>Iftikhar Ali Sahito\*</u>, Alvira Ayoub Arbab Journal of Industrial Textiles, Page 1006-1019, Vol 50, Issue 06, impact factor 3.721* 

- 35. Optimization of screen-printing process for functional printing *Ali Muhammad, Long Lin, Faisal Shaikh, <u>Iftikhar Ali Sahito</u>, Imran Aslam Pigment and Resin Technology, (June 2019), impact factor 1.60*
- 34. Nonwoven Polyethylene Terephthalate Paper Loaded with Enzyme Coupled Multiwall Carbon Nanotubes for Superior Photocatalytic Activity for Water Remediation

Alvira Ayoub Arbab, Rabia Almas Arain, Raja Fahad Qureshi, <u>Iftikhar Ali Sahito</u>, Kyung Chul Sun, Sung Hoon Jeong

Fibers and Polymers, Page 770-778, (January 2019), impact factor 2.5

33. Self-assembled Nitrogen-doped graphene quantum dots (N-GQDs) over graphene sheets for superb electro-photocatalytic activity

Rabia Riaz, Mumtaz Ali, <u>Iftikhar Ali Sahito</u>, Alvira Ayoub Arbab, T. Mailyalagan, Aima Sameen Anjum, Min Jae Ko and Sung Hoon Jeong.

Applied Surface Science, Page 1035-1046, (June 2019), impact factor 7.392

32. Fabrication of conductive and printable nano carbon ink for wearable electronic and heating fabrics

Alvira Ayoub Arbab, Anam Ali Memon, Kyung Chul Sun, Joo Young Choi, Naveed Mengal, **Iftikhar Ali Sahito** and Sung Hoon Jeong.

Journal of Colloid and Interface Science, Page 95-106, (Dec 2018), **impact factor 9.965** 

31. Synthesis of solution processed f-CNT@ Bi<sub>2</sub>S<sub>3</sub> hybrid film coated linen fabric as a free-standing textile structured photo catalyst

Anam Ali Memon, Alvira Ayoub Arbab, Supriya A. Patil, Naveed Mengal, Kyung Chul Sun, <u>Iftikhar Ali Sahito</u>, Sung Hoon Jeong and Hak Sung Kim. Journal of Catalysis A, Page 87-95, (June 2018), impact factor 8.047

30. Electrocatalytic Porous Nanocomposite of Graphite Nanoplatelets Anchored with Exfoliated Activated Carbon Filler as Counter Electrode for Dye Sensitized Solar Cells *Kyung Chul Sun, Anam Ali Memon, Alvira Ayoub Arbab, <u>Iftikhar Ali Sahito</u>, Moo Sung Kim, Sang Young Yeo, Yeong Og Choi, Yeon Sang Kim, and Sung Hoon Jeong Solar Energy, Page 95-101, (April 2018), impact factor 7.188* 

29. Facile Fabrication and Comparative Exploration of High Cut Resistant Woven and Knitted Composite Fabric Using Kevlar and Polyethylene

Anam Ali Memon, Mazhar Hussain Peerzada, <u>Iftikhar Ali Sahito</u>, Sadaf Aftab Abbassi and Sung Hoon Jeong

Fashion and Textiles, page 5-11, volume 5 (March 2018), impact factor 2.765

28. An Evidence for Organic N-Doped Multiwall Carbon Nanotube Heterostructure and its Superior Electrocatalytic Properties for Promising Dye-Sensitized Solar Cell

Alvira Ayoub Arbab, Anam Ali Memon, <u>Iftikhar Ali Sahito</u>, Naveed Mengal, Kyung Chul Sun, Mumtaz Ali and Sung Hoon Jeong

Journal of Materials Chemistry A, (March 2018), impact factor 14.511

27. An organic route for the synthesis of cationic porous graphite nanomaterial used as photocatalyst and electrocatalyst for dye-sensitized solar cell

Alvira Ayoub Arbab, Naveed Mengal, <u>Iftikhar Ali Sahito</u>, Anam Memon and Sung Hoon Jeong

Electrochimica Acta, Page 43-53, (March 2018), impact factor 7.335

26. A promising hybrid graphite counter electrode doped with fumed Silica nano-spacers for efficient quasi solid-state dye sensitized solar cells

Naveed Mengal, Alvira Ayoub Arbab, Anam Memon, <u>Iftikhar Ali Sahito</u> and Sung Hoon Jeong

Electrochimica Acta, Page 246-255, (Jan 2018), impact factor 7.335

25. Enhanced ionic mobility and increased efficiency of dye sensitized solar cells by adding lithium chloride in poly(vinyldine fluoride) nanofiber as electrolyte medium

<u>Iftikhar Ali Sahito\*</u>, Zeeshan Khatri, Farooq Ahmed, Kyung Chul Sun, Sung Hoon Jeong Journal of Materials Science, Page 13920-13929, (Aug 2017), **impact factor 4.682** 

24. Fiber Quality Evaluation of Pakistan's Locally Developed Cotton Varieties for Yarn Manufacturing

Awais Khatri, <u>Iftikhar Ali Sahito</u>, Farooq Ahmed, Imran Khatri. Journal of Natural Fibers, page 1-9, (July 2017), **Impact factor 3.507** 

23. An electrocatalytic active lyocell fabric cathode based on cationically functionalized and charcoal decorated graphite composite for quasi solid-state dye sensitized solar cell

Naveed Mengal, Alvira Ayoub Arbab, <u>Iftikhar Ali Sahito</u>, Anam Ali Memon, Kyung Chul Sun, Sung Hoon Jeong

Solar Energy, Vol: 155, 110-120 (June 2017), impact factor 7.188

22. A PVdF-based electrolyte membrane for a carbon counter electrode in dye-sensitized solar cells.

Kyung Chul Sun, Alvira Ayoub Arbab, <u>Iftikhar Ali Sahito</u>, Muhammad Bilal Qadir, Bum Jin Choi, Soon Chul Kwon, Sang Young Yeo, Sung Chul Yi and Sung Hoon Jeong RSC Advances, Vol: 7, 20908-20918 (June 2017), **impact factor 4.036** 

21. Synthesis of highly photo-catalytic and electro-catalytic active textile structures carbon electrode and its application in DSSCs

Anam Ali Memon, Alvira Ayoub Arbab, <u>Iftikhar Ali Sahito</u>, Kyung Chul Sun, Naveed Mengal, Sung Hoon Jeong

Solar Energy, Vol: 150, 521-531 (May 2017), impact factor 7.188

20. Facile fabrication of activated charcoal decorated functionalized multi-walled carbon nanotube catalyst for high performance quasi solid-state dye sensitized solar cells

Anam Ali Memon, Alvira Ayoub Arbab, <u>Iftikhar Ali Sahito</u>, Naveed Mengal, Kyung Chul Sun, Muhammad Bilal Qadir, Yun Seon Choi, Sung Hoon Jeong

Electrochimica Acta, Vol. 234, 53-62 (April 2017), impact factor 7.335

19. Graphene nanosheets as counter electrode with phenoxazine dye for efficient dye sensitized solar cell

*Iftikhar Ali Sahito*, Kyung Chul Sun, Woosung Lee, Jae Pil Kim and Sung Hoon Jeong Organic Electronics, Vol 44, 32-41 (January 2017), **impact factor 3.868** 

18. A complete carbon counter electrode for high performance quasi solid-state dye sensitized solar cell

Alvira Ayoub Arbab, Mazhar Hussain Peerzada, <u>Iftikhar Ali Sahito</u> and Sung Hoon Jeong

Journal of Power Sources, Vol 343, 412-423 (January 2017), impact factor 9.794

17. Fabrication of a flexible and conductive lyocell fabric decorated with graphene nanosheets as s stable electrode material

Naveed Mengal, <u>Iftikhar Ali Sahito</u>, Alvira Ayoub Arbab, Kyung Chul Sun, Muhammad Bilal Qadir, Anam Ali Memon, Sung Hoon Jeong

Carbohydrate Polymers, 152, 19-25 (Nov 2016), impact factor 10.723

16. Citric Acid Based Durable and Sustainable Flame-Retardant Treatment for lyocell Fabric

Naveed Mengal, Uzma Syed, Samander Ali Malik, <u>Iftikhar Ali Sahito</u>, Sung Hoon Jeong Carbohydrate Polymers 153, 78-88 (Nov 2016), **impact factor 10.723** 

15. Highly Functional TNTs with Superb Photocatalytic, Optical, and Electronic Performance Achieving Record PV-efficiency of 10.1 % for 1D based DSSC

Muhammad Bilal Qadir, Yuewen Li, <u>Iftikhar Ali Sahito</u>, Alvira Ayoub Arbab, Kyung Chul Sun, Naveed Mengal, Anam Ali Memon and Sung Hoon Jeong

Small, Vol 12, Issue 33, 4508-4520 (September 2016), impact factor 15.153

14. Flexible and Conductive Cotton Fabric Counter Electrode Coated with Graphene Nanosheets for High Efficiency Dye Sensitized Solar Cell

<u>Iftikhar Ali Sahito</u>, Kyung Chul Sun, Alvira Ayoub Arbab, Muhammad Bilal Qadir, Choi Yun Seon, Jeong Sung Hoon.

Journal of Power Sources Vol: 319, 90-98 (July 2016), impact factor 9.794

13. A Novel Activated-Charcoal-Doped Multiwalled Carbon Nanotube Hybrid for Quasi-Solid-State Dye-Sensitized Solar Cell Outperforming Pt Electrode

Alvira Ayoub Arbab, Kyung Chul Sun, <u>Iftikhar Ali Sahito</u>, Muhammad Bilal Qadir, Yun Seon Choi, Sung Hoon Jeong.

ACS applied materials & interfaces, 8 (11), 7471-7482 (Feb 2016), **impact factor 10.383** 

12. Fabrication of textile fabric counter electrodes using activated charcoal doped multi walled carbon nanotube hybrids for dye sensitized solar cells

Alvira Ayoub Arbab, Kyung Chul Sun, <u>Iftikhar Ali Sahito</u>, Anam Ali Memon, Yun Seon Choi, Sung Hoon Jeong.

Journal of Materials Chemistry A 4 (4), 1495-1505 (Jan 2016), impact factor 14.511

11. Highly efficient and durable dye-sensitized solar cells based on a wet-laid PET membrane electrolyte

Kyung Chul Sun\*, Iftikhar Ali Sahito\*, Jung Woo Noh, Sang Young Yeo, Jung Nam Im,

Sung Chul Yi, Yeon Sang Kim, Sung Hoon Jeong.

Journal of Materials Chemistry A 4 (2), 458-465 (Nov 2015), impact factor 14.511

10. Integrating high electrical conductivity and photocatalytic activity in cotton fabric by cationizing for enriched coating of negatively charged graphene oxide

<u>Iftikhar Ali Sahito</u>, Kyung Chul Sun, Alvira Ayoub Arbab, Muhammad Bilal Qadir, Sung Hoon Jeong.

Carbohydrate Polymers 130, 299–306 (Oct 2015), **impact factor 10.723** 

9. Composite multi-functional over layer: A novel design to improve the photovoltaic performance of DSSC

Muhammad Bilal Qadir, Kyung Chul Sun, <u>Iftikhar Ali Sahito</u>, Alvira Ayoub Arbab, Bum Jin Choi, Sung Chul Yi, Sung Hoon Jeong.

Solar Energy Materials & Solar Cells 140, 141–149 (Sep 2015), impact factor 7.305

8. Fabrication of highly electro catalytic active layer of multi walled carbon nanotube/enzyme for Pt-free dye sensitized solar cells

Alvira Ayoub Arbab, Kyung Chul Sun, <u>Iftikhar Ali Sahito</u>, Muhammad Bilal Qadir, Sung Hoon Jeong

Applied Surface Science 349, 174–183 (Sep 2015), impact factor 7.392

7. Graphene coated cotton fabric as textile structured counter electrode for DSSC <u>Iftikhar Ali Sahito</u>, Kyung Chul Sun, Alvira Ayoub Arbab, Muhammad Bilal Qadir, Sung Hoon Jeong.

Electrochimica Acta 173, 164–171 (Aug 2015), impact factor 7.335

6. Multi-walled carbon nanotube coated polyester fabric as textile based flexible counter electrode for dye sensitized solar cell

Alvira Ayoub Arbab, Kyung Chul Sun, <u>Iftikhar Ali Sahito</u>, Muhammad Bilal Qadir and Sung Hoon Jeong

Physical Chemistry Chemical Physics, 17, 12957 12969 (April 2015), **impact factor 3.945**.

5. Spindle Speed Optimization of a Ring Spinning Machine for Better Surface Irregularity and Hairiness of Yarn and Fabric

Iftikhar Ali Sahito, Alvira Ayoub Arbab and Sung Hoon Jeong

Textile Science and Engineering, 52, 1-5 (Jan 2015), Korean Fiber Society.

- 4. Reactive Dyeing of Bio Pretreated Cotton Knitted Fabric
  - Alvira Ayoub Arbab, <u>Iftikhar Ali Sahito</u> and Sung Hoon Jeong

Textile Coloration and Finishing 2014, Vol. 26, No. 4, (Dec 2014) Korean Fiber Society.

- 3. Influence of Traveler Weight on Quality and Production of Cotton Spun Yarn *Abdul Khalique Jhatial, Pardeep Kumar Gianchandani, Uzma Syed, <u>Iftikhar Ali Sahito</u> Science international, Vol. 4 No. 08 (May 2012).*
- Passage of moisture due to perspiration in fabrics
   *Noorullah Soomro*, *Iftikhar Ali Sahito* and Alvira Ayoub Arbab
   Journal of Material Science and Engineering, David Publishing Company, USA, Vol. 2, No. 2, (Feb 2012).
- 1. Effect of temperature on individual and combined treatment of pectinases and pectate lyases enzymes on cotton knitted fabric

  Alvira Ayoub Arbab, Iftikhar Ali Sahito, Noorullah Soomro

Kohan Textile Journal, Middle East Textile Journal, Vol. 5, No. 10, (Dec 2011).

## Refereed Conference papers

1. Advancing Solar Efficiency: A Novel Tandem DSSC/Perovskite Design for Optimized Performance in Dye-Sensitized Solar Cells

Hamna Siddiqui, Samander Ali Malik, Raja Fahad Ashraf, Kyung Chul Sun, <u>Iftikhar Ali</u> <u>Sahito</u>, Naveed Mengal

Presenter: Iftikhar Ali Sahito

Presented at the 2nd International Conference on Sustainability: Developments and Innovations, Riyadh, KSA 18<sup>th</sup> to 22<sup>nd</sup> Feb 2024.

- 2. Fabrication of the Flexible dye-sensitized and Perovskite-based tandem Solar Cell *Hamna Siddiqui, <u>Iftikhar Ali Sahito</u>, Samandar Ali Malik and Naveed Mengal* 1st International Conference on Green and Sustainable Environment (ICGSE) 8<sup>th</sup> to 9<sup>th</sup> March 2023, Sindh Madarasat ul Islam University, Karachi.
- Progress on use of Aluminum waste for the development of conductive textiles
   Suman Kumari, Pardeep Kumar Gianchandani, <u>Iftikhar Ali Sahito</u>
   1st International Conference on Green and Sustainable Environment (ICGSE) 8<sup>th</sup> to
   9<sup>th</sup> March 2023, Sindh Madarasat ul Islam University, Karachi.
- Development Of Biodegradable Bag with Cotton Waste Reinforcement
   Mairah Bano, Umayya Saleem, Altaf Ali, <u>Iftikhar Ali Sahito</u>
   1st International Conference on Green and Sustainable Environment (ICGSE) 8<sup>th</sup> to
   9<sup>th</sup> March 2023, Sindh Madarasat ul Islam University, Karachi.
- 5. 2D Based Flexible Electrodes for Dye-sensitized Solar Cells

  Abdul Hameed, Hamna Siddiqui, Samander Ali Malik, <u>Iftikhar Ali Sahito</u>, Naveed

  Mengal.

  1st International Conference on Croon and Sustainable Environment (ICCSE)

1st International Conference on Green and Sustainable Environment (ICGSE) 8<sup>th</sup> to 9<sup>th</sup> March 2023, Sindh Madarasat ul Islam University, Karachi.

- 6. Density optimization of stainless steel and cotton composite fabric as transparent and conductive substrate for dye sensitized solar cell *Javeria Mughal, Saima Brohi, Mazhar Hussain Peerzada, and Iftikhar Ali Sahito Textile Nexus 9th to 10th June 2021, MUET Jamshoro*
- 7. Copper and cotton composite fabric for transparent and conductive woven structure for Dye sensitized solar cell Saima Brohi, Javeria Mughal, Rabia Panhwar, Mazhar Husssain Peerzada, and Iftikhar Ali Sahito

Textile Nexus 9th to 10th June 2021, MUET Jamshoro

- 8. Investigation of antibacterial activity of Aloe-Vera, neem extract and AgCl on cotton fabric Kanwal Fatima Ansari, Samander Ali Malik, <u>Iftikhar Ali Sahito</u>, and Naveed Mengal Textile Nexus 9th to 10th June 2021, MUET Jamshoro
- 9. Fabrication of flexible cotton fabric electrode
  Presented at 4<sup>th</sup> International Conference on value addition (Covitex 17) 27-28 March
  2017 at National Textile University, Faisalabad, Pakistan.

  Iftikhar Ali Sahito, Kyung Chul Sun, Alvira Ayoub Arbab, Muhammad Bilal Qadir, Choi
  Yun Seon, Jeong Sung Hoon.
- 10. Conductive Cotton Fabric Electrode Coated with Graphene Nanosheets Presented at 1<sup>st</sup> International Conference on Advanced Materials and Processing 2017, 28<sup>th</sup> Feb- 2<sup>nd</sup> March 2017 at Mehran University of Engineering and Technology, Jamshoro, Pakistan. *Iftikhar Ali Sahito, Kyung Chul Sun, Alvira Ayoub Arbab, Muhammad Bilal Qadir, Choi Yun Seon, Jeong Sung Hoon.*

MWCNT electro catalyst for efficient quasi solid-state dye sensitized solar cell Presented at 1st International Conference on Advanced Materials and Processing 2017, 28th Feb- 2nd March 2017 at Mehran University of Engineering and Technology, Jamshoro, Pakistan.

Alvira Ayoub Arbab, Kyung Chul Sun, Iftikhar Ali Sahito, Muhammad Bilal Qadir, Choi Yun Seon, Jeong Sung Hoon.

Synthesis and fabrication of highly electrocatalytic active cationic functionalized

11.

- 12. Synthesis of highly porous TNTs and their application in Dye-sensitized Solar Cells Presented at 1<sup>st</sup> International Conference on Advanced Materials and Processing 2017, 28<sup>th</sup> Feb- 2<sup>nd</sup> March 2017 at Mehran University of Engineering and Technology, Jamshoro, Pakistan.

  Muhammad Bilal Qadir, Iftikhar Ali Sahito, Kyung Chul Sun, Alvira Ayoub Arbab, Choi Yun Seon, Jeong Sung Hoon.
- 13. Optimization of reactive dyeing in catalases treated bleached bath Presented in Asian Textile Conference, October 23-26, 2013, Shanghai, China *Alvira Ayoub Arbab, <u>Iftikhar Ali Sahito</u>*, *Eun Jong Son, Sung Hoon Jeong*.
- 14. Effect of rapid enzymatic single-bath treatment on cotton fabrics
  Presented in Asian Textile Conference, October 23-26, 2013, Shanghai, China *Iftikhar Ali Sahito*, Alvira Ayoub Arbab, Sung Hoon Jeong.
- 15. Optimizing spindle speed of ring spun yarn
  Presented in "The Fiber Society Spring 2013 International Conference on Fibrous
  Materials" May 22-24, 2013, Geelong, Australia.

  Iftikhar Ali Sahito, Alvira Ayoub Arbab, Sung Hoon Jeong.
- Effect of spindle speed of ring spinning machine on hairiness index and structure of single yarn
  Presented in Korean Fiber Society, International Textile Conference April 16-18, 2013 at Daegu, South Korea
  Iftikhar Ali Sahito, Alvira Ayoub Arbab, Sung Hoon Jeong.
- 17. Reuse of wastewater in dyeing process
  Presented in Korean Fiber Society, International Textile Conference April 16-18, 2013 at Daegu, South Korea.

  Alvira Ayoub Arbab, Iftikhar Ali Sahito, Seung Hoon Jeong.
- 18. Eco-friendly ginning technology for the processing of seed cotton 2<sup>nd</sup> International Conference on Energy, Environment and Sustainable Development (EESD 2012) 27-29 Feb 2012, Mehran University of Engineering and Technology, Jamshoro, Pakistan *Noorullah Soomro, Iftikhar Ali Sahito and Alvira Ayoub Arbab.*
- 19. Passage of moisture through perspiration in fabric
  Presented in "The Fiber Society 2011 International Conference on Fibrous Materials",
  Hong Kong Polytechnic University, Hong Kong during 25<sup>th</sup> to 27<sup>th</sup> May, 2011.

  Noorullah Soomro and Iftikhar Ali Sahito.
- 20. Influence of contaminated cotton on yarn production
  Presented in "The Fiber Society 2010 International Conference on Fibrous Materials"
  The conference was held in Bursa, Turkey during 12<sup>th</sup> to 14<sup>th</sup> May, 2010.

  Noorullah Soomro and Iftikhar Ali Sahito.

## **PUBLICATIONS (PRACTICAL WORK BOOK)**

## **Practical Workbook of Textile Testing & Quality Control (Fabric)**

Second Semester Final Year Students B.E Textile

## Practical Workbook of Textile Testing & Quality Control (Fiber and Yarn)

First Semester Final Year Students B.E Textile

## Practical Workbook of Textile Testing & Quality Control (Fiber, Yarn and Fabric)

Second Semester Third Year Students B.E Textile

## **Practical Workbook of Fabric Manufacturing (Weaving Machines and Mechanisms)**

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