

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

## **Associate Professor**

**Thomson Reuters ISI Cumulative Impact Factor (JCR) ~ 200**

Department of Textile Engineering  
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Date of Birth: 17<sup>th</sup> April 1982

### **EDUCATION**

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#### **Ph.D**

(September 2012 – February 2016)

Department of Organic and Nano Engineering, 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 (1<sup>st</sup> Position)

### **PROFESSIONAL EXPERIENCE**

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#### **Associate Professor**

22<sup>nd</sup> December 2017 till date

**Mehran University of Engg: & Technology  
Jamshoro, Pakistan**

#### **Assistant Professor**

14<sup>th</sup> March 2016 to 21<sup>st</sup> December 2017

**Mehran University of Engg: & Technology  
Jamshoro, Pakistan**

#### **Lecturer**

31<sup>st</sup> January 2007 to 13<sup>th</sup> March 2016

**Mehran University of Engg: & Technology  
Jamshoro, Pakistan**

### **ACADEMIC EXCELLENCE**

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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. Nominated for the **Best Engineer of Pakistan** Award by Pakistan Engineering Council for the year 2006.
4. Nominated for the **Presidential Award of Ezaz-e-Sabqat** for the year 2006.

#### **ADMINISTRATIVE EXPERIENCE**

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1. **Departmental Coordinator** for Student Financial Aid office, Mehran University of Engineering and Technology, Jamshoro.
2. **In charge Textile Testing and Quality Control Lab**, department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
3. **In charge Nonwoven Materials Lab**, department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
4. **In charge Composite Materials Lab**, department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
5. **Deputy Advisor Student's Affairs**, Mehran University of Engineering and Technology, Jamshoro.
6. **In charge Time Table Committee**, department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.

#### **PROFESSIONAL MEMBERSHIP**

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1. **Member Board of Studies**, department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
2. **Member National Curriculum Review Committee**, Pakistan Engineering Council
3. **Member Departmental Purchase Committee**, department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
4. **Member Department Management Review Committee**, department of Textile Engineering, Mehran University of Engineering and Technology, Jamshoro.
5. **Life time Member** Pakistan Engineering Council
6. **Member Textile Institute of Manchester**, United Kingdom
7. **Approved Ph.D supervisor**, Higher Education Commission of Pakistan
8. **Member** Program Committee, Outcome Based Evaluation (OBE), Mehran University of Engineering and Technology, Jamshoro.
9. **Member Technical Textiles Research Group**, Department of Textile, Mehran University of Engineering and Technology, Jamshoro.
10. **Member Board of Studies**, Department of Metallurgy and Materials Engineering,

## **PUBLICATIONS**

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### **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].

### **Refereed Journal Articles**

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

**Iftikhar Ali Sahito**, *Kyung Chul Sun, Alvira Ayoub Arbab, Sung Hoon Jeong*  
Solar Energy, Page 112-118, (September 2019), Vol 190, **impact factor 4.674**

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

*Kyung Chul Sun, **Iftikhar Ali Sahito**, 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 1.676**

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

*Ghulam Mustafa Memon, Rafique Ahmed Jhatial, **Iftikhar Ali Sahito**\*, Alvira Ayoub Arbab*  
Journal of Industrial Textiles, Accepted, **impact factor 1.884**

35. Optimization of screen-printing process for functional printing

*Ali Muhammad, Long Lin, Faisal Shaikh, **Iftikhar Ali Sahito**, Imran Asalam*  
Pigment and Resin Technology, Accepted (June 2019), **impact factor 0.8**

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, **Iftikhar Ali Sahito**, Kyung Chul Sun, Sung Hoon Jeong*  
Fibers and Polymers, Page 770-778, (January 2019), **impact factor 1.493**

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

*Rabia Riaz, Mumtaz Ali, **Iftikhar Ali Sahito**, 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 5.155**

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 6.361**
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, **Iftikhar Ali Sahito**, Sung Hoon Jeong and Hak Sung Kim.*  
Journal of Catalysis A, Page 87-95, (June 2018), **impact factor 4.630**
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, **Iftikhar Ali Sahito**, 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 4.807**
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, **Iftikhar Ali Sahito**, Sadaf Aftab Abbassi and Sung Hoon Jeong*  
Fashion and Textiles, page 5-11, volume 5 (March 2018), **impact factor 0.850**
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, **Iftikhar Ali Sahito**, Naveed Mengal, Kyung Chul Sun, Mumtaz Ali and Sung Hoon Jeong*  
Journal of Materials Chemistry A, (March 2018), **impact factor 10.733**
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, **Iftikhar Ali Sahito**, Anam Memon and Sung Hoon Jeong*  
Electrochimica Acta, Page 43-53, (March 2018), **impact factor 5.383**
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, **Iftikhar Ali Sahito** and Sung Hoon Jeong*  
Electrochimica Acta, Page 246-255, (Jan 2018), **impact factor 5.383**
25. Enhance ionic mobility and increased efficiency of dye sensitized solar cells by adding lithium chloride in poly(vinylidene fluoride) nanofiber as electrolyte medium

***Iftikhar Ali Sahito\****, Zeeshan Khatri, Farooq Ahmed, Kyung Chul Sun, Sung Hoon Jeong  
Journal of Materials Science, Page 13920-13929, (Aug 2017), **impact factor 3.442**

24. Fiber Quality Evaluation of Pakistan's Locally Developed Cotton Varieties for Yarn Manufacturing  
*Awais Khatri, ***Iftikhar Ali Sahito***, Farooq Ahmed, Imran Khatri.*  
Journal of Natural Fibers, page 1-9, (July 2017), **Impact factor 1.252**
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, ***Iftikhar Ali Sahito***, Anam Ali Memon, Kyung Chul Sun, Sung Hoon Jeong*  
Solar Energy, Vol: 155, 110-120 (June 2017), **impact factor 4.807**
22. A PVdF-based electrolyte membrane for a carbon counter electrode in dye-sensitized solar cells.  
*Kyung Chul Sun, Alvira Ayoub Arbab, ***Iftikhar Ali Sahito***, 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 3.019**
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, ***Iftikhar Ali Sahito***, Kyung Chul Sun, Naveed Mengal, Sung Hoon Jeong*  
Solar Energy, Vol: 150, 521-531 (May 2017), **impact factor 4.807.**
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, ***Iftikhar Ali Sahito***, Naveed Mengal, Kyung Chul Sun, Muhammad Bilal Qadir, Yun Seon Choi, Sung Hoon Jeong*  
Electrochimica Acta, Vol: 234, 53-62 (April 2017), **impact factor 5.383.**
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 3.680**
18. A complete carbon counter electrode for high performance quasi solid-state dye sensitized solar cell  
*Alvira Ayoub Arbab, Mazhar Hussain Peerzada, ***Iftikhar Ali Sahito*** and Sung Hoon Jeong*  
Journal of Power Sources, Vol 343, 412-423 (January 2017), **impact factor 7.467**
17. Fabrication of a flexible and conductive lyocell fabric decorated with graphene nanosheets as a stable electrode material  
*Naveed Mengal, ***Iftikhar Ali Sahito***, Alvira Ayoub Arbab, Kyung Chul Sun, Muhammad*

*Bilal Qadir, Anam Ali Memon, Sung Hoon Jeong*  
Carbohydrate Polymers 152, 19-25 (Nov 2016), **impact factor 6.044.**

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

*Naveed Mengal, Uzma Syed, Samander Ali Malik, Iftikhar Ali Sahito, Sung Hoon Jeong*  
Carbohydrate Polymers 153, 78-88 (Nov 2016), **impact factor 6.044.**

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, Iftikhar Ali Sahito, 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 9.598**

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

*Iftikhar Ali Sahito, 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 7.467.**

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, Iftikhar Ali Sahito, Muhammad Bilal Qadir, Yun Seon Choi, Sung Hoon Jeong.*

ACS applied materials & interfaces 8 (11), 7471-7482 (Feb 2016), **impact factor 8.456.**

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, Iftikhar Ali Sahito, Anam Ali Memon, Yun Seon Choi, Sung Hoon Jeong.*

Journal of Materials Chemistry A 4 (4), 1495-1505 (Jan 2016), **impact factor 10.733.**

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 10.733.**

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

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

Carbohydrate Polymers 130, 299–306 (Oct 2015), **Impact factor 6.044.**

9. Composite multi-functional over layer: A novel design to improve the photovoltaic performance of DSSC  
*Muhammad Bilal Qadir, Kyung Chul Sun, **Iftikhar Ali Sahito**, Alvira Ayoub Arbab, Bum Jin Choi, Sung Chul Yi, Sung Hoon Jeong.*  
Solar Energy Materials & Solar Cells 140, 141–149 (Sep 2015), **impact factor 6.019.**
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, **Iftikhar Ali Sahito**, Muhammad Bilal Qadir, Sung Hoon Jeong*  
Applied Surface Science 349, 174–183 (Sep 2015), **impact factor 5.155.**
7. Graphene coated cotton fabric as textile structured counter electrode for DSSC  
**Iftikhar Ali Sahito**, *Kyung Chul Sun, Alvira Ayoub Arbab, Muhammad Bilal Qadir, Sung Hoon Jeong.*  
Electrochimica Acta 173, 164–171 (Aug 2015), **impact factor 5.383.**
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, **Iftikhar Ali Sahito**, Muhammad Bilal Qadir and Sung Hoon Jeong*  
Physical Chemistry Chemical Physics, 17, 12957–12969 (April 2015), **impact factor 3.906.**
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, **Iftikhar Ali Sahito** 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 Khaliq Jhatial, Pardeep Kumar Gianchandani, Uzma Syed, **Iftikhar Ali Sahito**\**  
Science international, Vol. 4 No. 08 (May 2012).
2. 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. Fabrication of flexible cotton fabric electrode  
Presented at 4<sup>th</sup> International Conference on value addition (Covitex17) 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.*
2. 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.*
3. Synthesis and fabrication of highly electrocatalytic active cationic functionalized MWCNT electro catalyst for efficient quasi solid-state dye sensitized solar cell  
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.  
*Alvira Ayoub Arbab, Kyung Chul Sun, Iftikhar Ali Sahito, Muhammad Bilal Qadir, Choi Yun Seon, Jeong Sung Hoon.*
4. 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.*
5. Optimization of reactive dyeing in catalases treated bleached bath  
Presented in Asian Textile Conference, October 23-26, 2013, Shanghai, China  
*Alvira Ayoub Arbab, Iftikhar Ali Sahito, Eun Jong Son, Sung Hoon Jeong.*
6. 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.*
7. Optimizing spindle speed of ring spun yarn  
Presented in "The Fiber Society Spring 2013 International Conference on Fibrous Materials"  
The conference was held in Geelong, Australia in May 22-24, 2013



*Iftikhar Ali Sahito, Alvira Ayoub Arbab, Sung Hoon Jeong.*

8. 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.*
9. Reuse of waste water in dyeing process  
Presented in Korean Fiber Society, International Textile Conference April 16-18, 2013 at Daegu, South Korea.
10. 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.*
11. 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.*
12. 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.*

## **RESEARCH GRANTS**

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1. Startup Research Grant by Higher Education Commission of Pakistan of 0.5 Million PKR. **“Production of conductive fabric by pad batch process”**. Status: Completed in 2019
2. National Research Project for Universities by Higher Education Commission of Pakistan of 10.0 Million PKR. **“Development of graphene coated multifunctional nonwoven materials”**. 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: Ongoing.
4. 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.

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

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### **Practical Workbook of Textile Testing & Quality Control-II**

Second Term Final Year Students B.E Textile

### **Practical Workbook of Textile Testing & Quality Control-I**

First Term Final Year Students B.E Textile

### **Practical Workbook of Textile Testing & Quality Control**

Second Term Third Year Students B.E Textile

### **Practical Workbook of Fabric Manufacturing-II**

First Term Third Year Students B.E Textile

## **PROFESSIONAL MEMBERSHIP**

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Member Pakistan Engineering Council (Life time)

Textile Institute Manchester, UK (Life time)