



**Joy Sarkar**  
Assistant Professor  
**Research Area**

## Biography

Welcome to my webpage. This is Joy Sarkar and currently, I am serving as an Assistant Professor at the Department of Textile Engineering (TE) of Khulna University of Engineering and Technology (KUET). I have received Bachelor of Science in Textile Engineering from Bangladesh University of Textiles (BUTex) and pursuing M.Sc. in the same university. After completion of my graduation, I have served as a merchandiser at Opex and Sinha Textile Group and then as a lecturer at World University of Bangladesh. As Ready Made Garments (RMG) is the top export item of Bangladesh, it is a must to produce efficient and effective textile engineers with modern and updated technological knowledge so that they can contribute in the national development. Besides technical proficiency, we want our graduates to be true patriots and law-abiding citizens and thus working to produce such graduates through technical and moral guidance. I would like to welcome you again to explore different sections of the profile.

## Education

### M.Sc. in Textile Engineering

Bangladesh University of Textiles, ( )  
(Continuing)

### B.Sc. in Textile Engineering

Bangladesh University of Textiles, ( ) Group: Apparel Manufacturing Engineering,

### Higher Secondary Certificate

Notre Dame College, (2005)

## Research Interest

## Publication

### Books

### Journals

14. Sarkar, J., Faruque, M. A. A. and Khalil, E. (2022), "Predicting the tearing strength of laser engraved denim garments using a fuzzy logic approach," *Heliyon*, Elsevier Ltd., vol. 08, no. 01
13. Sarkar, J., Rifat, N. M. and Faruque, M. A. A. (2022), "Predicting the tensile strength of bleach washed denim garments by using fuzzy logic modeling," *Journal of Engineered Fibers and Fabrics*, Sage Publishing, vol. 17, no. 2022, pp. 1-11
12. Sarkar, J., Prottoy, Z. H., Bari, M. T. and Faruque, M. A. A. (2021), "Comparison of ANFIS and ANN modeling for predicting the water absorption behavior of polyurethane treated polyester fabric," *Heliyon*, Elsevier, vol. 7, no. 9, pp. e08000
11. Faruque, M. A. A., Syduzzaman, M., Sarkar, J., Bilisik, K. and Naebe, M. (2021), "A Review on the Production Methods and Applications of Graphene-Based Materials," *Nanomaterials*, MDPI, vol. 11, no. 9, pp. 2414
10. Sarkar, J., Mondal, M. S. and Khalil, E. (2020), "Predicting fabric GSM and crease recovery angle of laser engraved denim by fuzzy logic analysis," *Journal of Engineering and Applied Science*, RUET, vol. 4, no. 1, pp. 52-64
9. Sarkar, J., Faruque, M. A. A. and Mondal, M. S. (2021), "Modeling the seam strength of denim garments by using fuzzy expert system," *Journal of Engineered Fibers and Fabrics*, Sage Pub, vol. 16, no. 2021, pp. 1-10
8. (2015), "Investigation on Physico-Chemical Properties of 100% Cotton Woven Fabric Treated with Titanium Dioxide," *American Journal of Applied Chemistry (DOI: 10.11648/j.ajac.20150302.15)*, Science Publishing Group, vol. 3, no. 2, pp. 65-68
7. Solaiman, M., Rahman, M. M., Khalil, E. and Sarkar, J. (2014), "Consequences of Enzyme Rinse on Physical Properties of Knit Garments," *International Journal of Research in Advent Technology (E-ISSN: 2321-9637)*, vol. 2, no. 10, pp. 112-116
6. Khalil, E., Sarkar, J., Rahman, M. and Solaiman, M. (2014), "Influence of Enzyme and Silicone Wash on the Physico-Mechanical Properties of Non-Denim Twill Garments," *International Journal of Scientific & Technology Research (ISSN: 2277-8616)*, vol. 3, no. 10, pp. 231-233
5. Sarkar, J., Khalil, E. and Solaiman, M. (2014), "Effect of Enzyme Washing Combined with Pumice Stone on the Physical, Mechanical and Color Properties of Denim Garments," *International Journal of Research in Advent Technology (E-ISSN: 2321-9637)*, vol. 2, no. 9, pp. 65-68
4. Solaiman, M., Khalil, E., Rahman, M. and Sarkar, J. (2014), "Efficiency Losses Calculation and Identify Causes of Losses of Circular Knitting Machine during Knit Fabric Production," *Journal of Manufacturing Science and Technology (DOI: 10.13189/mst.2014.020501)*, Horizon Research Publishing, vol. 2, no. 5, pp. 93-96
3. Khalil, E., Solaiman, M., Sarkar, J. and Rahman, M. M. (2014), "Evaluation of Physico-Mechanical Properties of 1 $\bar{A}$ —1 Interlock Cotton Knitted Fabric Due to Variation of Loop Length," *International Journal for Research in Applied Science and Engineering Technology (ISSN: 2321-9653)*, vol. 2, no. IX, pp. 193-197
2. Khalil, E. and Sarkar, J. (2014), "Effect of Hardness of Water on Fixation and Total Wash off Percentage of Reactive Dyes When Applied to Cellulosic Fiber," *International Journal of Scientific and Research Publications (2250-3153)*, vol. 4, no. 9
1. Sarkar, J. and Khalil, E. (2014), "Effect of Industrial Bleach Wash and Softening on the Physical, Mechanical and Color Properties of Denim Garments," *IOSR Journal of Polymer and Textile Engineering (p-ISSN: 2348-0181)*, vol. 1, no. 3, pp. 46-49

### Conference

5. Rasel, M. S. and Sarkar, J. (2019), "Analysis of the influence of different dry processes on the properties of denim garments," *International Conference on Mechanical Engineering and Renewable Energy 2019 (ICMERE 2019)*, CUET
4. Sarkar, J., Mondal, M. S., Hasan, N., Ahmed, M. K. and Tushar, F. A. (December, 2020), "Investigation on the Performance of Self-Cleaning Activity for TiO<sub>2</sub> Treated Textile Fabrics and Laundry Effect on Their Durability," *International Conference on Mechanical, Industrial and Energy Engineering (ICMIEE)*, KUET
3. Rifat, N. M. and Sarkar, J. (2018), "Influence of Industrial Bleach Wash on the Physical and Comfort Properties of Denim Garments," *International Conference on Mechanical, Industrial and Energy Engineering (ICMIEE)*

2. (2018) , "Sizing of warp yarn with a different concentration of animal fat and acids and determination of the performance in comparing with conventional sized yarn ," ***International Conference on Mechanical, Industrial and Energy Engineering (ICMIEE)***
1. Sarkar,J. ,Khalil,E. and Rahman,M. A. (2015) , "Technical study of the effect of CO2 Laser surface engraving on the physical properties of denim fabric," ***International Conference on Mechanical Industrial and Materials Engineering (ICMIME)***