

CURRICULUM VITAE

Dr. Shubham Joshi
Bhilwara, Rajasthan



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Professional Profile

Experienced researcher in **Technical Textiles and Functional Materials** with a strong record of international research collaborations in **Sustainable and Bio-Based Textiles**. Author of multiple peer-reviewed articles and patents, recipient of international awards, and experienced in interdisciplinary, globally collaborative environments.

Research Interest

- Sustainable textiles and circular economy
- Smart and functional textile coatings
- Antimicrobial and biopolymeric finishes
- Textile waste recycling and bio-based innovations

Professional Experience

Academic

- 1. Assistant Professor (Tenure Faculty), Veermata Jijabai Technological Institute (VJTI), Mumbai, Maharashtra, India**
(February 2026- present)
- 2. Assistant Professor, Sri Guru Gobind Singh College of Engineering and Technology (SGGS), Nanded, Maharashtra, India**
(July 2025- February 2026)
- 3. Assistant Professor, MLV Textile and Engineering College, Bhilwara, Rajasthan, India**
(August 2024 – May 2025)
 - Curriculum design: M. Tech (Technical Textiles) & B. Tech (Textile Technology).
- 4. Assistant Professor-II, Bannari Amman Institute of Technology, Sathya Mangalam, T.N., India**
(April 2022 – July 2024)
 - Worked as an Assistant Professor-II, contributing to the academic growth of the institution through innovative teaching methods and research.
- 5. Assistant Professor, Uttar Pradesh Textile Technology Institute Kanpur, U.P., India**

(September 2018 - September 2021)

- Part of World Bank-funded TEQIP-III program (International), mentored 30+ undergraduate and post graduate projects, Developed Innovation Incubation Center Laboratory for Advanced research activities.
- 6. Research Fellowships, Dr. BR Ambedkar National Institute of Technology, India (August 2015- August 2018)**
- International Collaboration: University of Bolton, UK (Ph.D. program)

Industrial

- 7. Shift Officer (Quality Assurance), Nahar Spinning Mills Ltd., Bhopal, M.P., India (June 2012 - July 2013)**
- Worked as a Shift Officer in Quality Assurance, ensuring the quality of products and compliance with industry standards.

Education Qualification

- 1. Ph.D. in Textile Technology, Dr. B.R. Ambedkar National Institute of Technology, Jalandhar, India, in collaboration with University of Bolton, U.K. (Collaborative) (01/06/2022)**
- Thesis: “Study on Antimicrobial Finishes on Solvent Induced Modified Polyester Fabric for Hygiene Applications”
- 2. M. Tech in Textile Engineering and Management, Dr. B.R. Ambedkar National Institute of Technology, Jalandhar, India (17/08/2015)**
- Project: “Influence of In-situ Parameters on Serviceability of Chemically Treated Jute Geotextiles in Unpaved Roads”
- 3. B. Tech in Textile Technology, MLV Textile and Engineering Collage, Bhilwara, India (04/07/2012)**

Publications

1. Joshi, S., Kambo, N., Dubey, S. (2025), Functional Textile from Agro-industrial Waste” *Scrivener Publishing Wiley, USA.*
2. Joshi, S., Kambo, N., Dubey, S., Panday, R., Kowshiga, A. T., Nandhini, E., & Deepadharushini, D. (2024). Banana leaf extract-based emulsions for multifunctional healthcare textiles. *Indian Journal of Fibre & Textile Research (IJFTR)*, 49(2), 173-180.
3. Pandey, R., Dubey, A., Mishra, G. P., Ahuja, A., Kambo, N., Joshi, S., & Shrivastava, S. (2024). Cellulosic crystallinity and antimicrobial activity of cactus cilia. *Physica Scripta*, 99(6), 065005.
4. Joshi, S., Midha, V., & Rajendran, S. (2023). Multifunctional waterproof breathable PU-coated polyester based woven textiles for healthcare clothing's. *Progress in Organic Coating, Elsevier*, 178.

5. Kamalraj, D., Subramaniam, V., & Joshi, S. (2023). Influence of different gauge length and strain rate parameters on tensile properties of Kevlar® 29 yarn. *Indian Journal of Fibre and Textile Research (IJFTR)*.
6. Panday, R., Kambo, N., Jose, S., & Joshi, S. et.al. (2022). A comparative study of phenotypic variability and physico-mechanical properties of dual-purpose flax fiber varieties in India. *Journal of Natural Fibre*, 19(17).
7. Midha, V., Joshi, S., & Dhakuri, A. (2022). Surgical Gowns Fabrics in Infection Control and Comfort Measures at Hospitals. *Indian Journal of Fibre and Textile Research, (IJFTR)* 47.
8. Joshi, S., Kambo, N., Dubey, S., Shukla, P., & Pandey, R. (2021). Onion (*Allium cepa* L.) peel-based nano emulsion treatment on cotton and cotton-blends fabrics. *Journal of Natural Fibre*, 1.
9. Joshi, S., Midha, V., & Rajendran, S. (2021). The Influence of Trichloroacetic acid-Methylene chloride (TCAMC) on the Structure of PET Polyester Fabrics. *Indian Journal of Fibre and Textile Research (IJFTR)*.
10. Joshi, S., Midha, V., & Rajendran, S. (2021). Investigation on durable bio-polymeric antimicrobial finishes to chemically modified textile fabrics using solvent induction system. *Tekstilec*, 64(1).
11. Joshi, S., Midha, V., & Rajendran, S. (2021). Vitis vinifera treatment on polyester structures to develop physiologically comfortable healthcare and hygiene textiles. *Journal of the Institution of Engineers: E*, 1.
12. Regar, M.L., Amjad, A.I., & Joshi, S.(2021). Effect of Solvent treatment on Siro and Ring spun TFO polyester yarn. *Tekstilec* ,64(1).
13. Joshi,S., Midha,V.&Rajendran,S.(2021). Vitis vinifera treatment on polyester structures to develop physiologically comfortable healthcare and hygiene textiles. *Journal of the Institution of Engineers: E* ,1.
14. Regar,M.L.,Amjad,A.I.&Joshi,S.(2021). Effect of Solvent treatment on Siro and Ring spun TFO polyester yarn. *Tekstilec* ,64(1).
15. Midha,V.&Joshi,S. & Kumar,S.S. (2017). Performance of chemically treated jute geotextile in Unpaved roads at different in- situ conditions. *Journal of the Institution of Engineers: E* ,98.

Patents

1. **Preparation Of Nano-Emulsion Derived from Industrial Green Waste for Textile Applications.** Patent number: 202211029044 **Granted** on dated 28/08/2024.
2. **A Novel Green Agricultural Waste Based Nano emulsions for Textile Application.** Patent no. 202211029043, **Granted** on dated 21/08/2024.

Awards

- “**International Young Scientist Award 2022**” awarded by *Sciencefather Society*, India.
- “**The Institution prize 2018**” award by *Institute of Engineers Society*, India.

International Conference Papers

1. Joshi, S., Panday, S., Rana, D. (2025). A sustainable approach towards extraction and optimization of chickpea natural dye (*Cicer Arietinum*) on silk fabric. Philippine Textile Congress-2025.
2. Joshi, S., & Midha, V. (2021). Performance of neem oil treated polyester textile structure for healthcare applications. ATFC-2021. ISBN: NIFTJ/ATFC/2021 /030.
3. Joshi, S., & Kumar, M. (2019). Performance of microencapsulated aloe vera treated fabric samples. APA-2019.
4. Joshi, S., & Kumar, D. (2019). A critical review on application of geotextiles in embankment of dams. ATMP- 2019. ISBN: 978-93-88237-21-5.
5. Joshi, S., & Panday, A. (2019). A review on the development of new generation biocompatible fibres. ATMP- 2019. ISBN: 978-93-88237-21-5.
6. Joshi, S., Kumar, D., & Pundir, S. (2019). Cutting edge technology to incorporate antimicrobial functional finishes to the textiles. ATMP- 2019. ISBN: 978-93-88237-21-5.
7. Prakash, A., Joshi, S., & Uttam, M. (2019). Development of dssc (dye sensitized solar cell) by using natural dyes: a critical review. ATMP- 2019. ISBN: 978-93-88237-21-5.
8. Joshi, S., Rajput, S., & Bajpai, P. (2019). Performance of sustainable natural dyes on the antimicrobial properties of textiles. ATMP- 2019. ISBN: 978-93-88237-21-5.
9. Joshi, S., & Tripathi, P. (2019). A review on development of herbal garments (ayurveda). ATMP- 2019. ISBN: 978-93-88237-21-5.
10. Joshi, S., & Satyam (2019). Natural fibre based industrial products. ATMP- 2019. ISBN: 978-93-88237-21-5.
11. Mishra, I.P., Soni, & Joshi, S. (2019). IOT: A critical review .ATMP -2019 .ISBN :978 -93 -88237 -21 -5 .
12. Joshi, S., Singh Keshawat, Y. (2018). Elongation Behavior of Stretch Denim Fabric with filament weft yarn .ATMP -2018 .ISBN :978 -93 -88237 -21 -5 .
13. Joshi, S., Ramratan, & Choudhary, A.K. (2018). Study of the liquid moisture management in knitted T-shirt sportswear .ATMP -2018 .ISBN :978 -93 -88237 -21 -5 .
14. Joshi, S., Fatima, F. & Patel, A. (2018). Application of geotubes and geo-membranes as a temporary wall in flooded areas .ATMP -2018 .ISBN :978 -93 -88237 -21 -5 .
15. Joshi, S., Tiwari, S. & Mishra, A. (2018). PET Waste management – A step for better future .ATMP -2018 .ISBN :978 -93 -88237 -21 -5.

National Conference papers

1. Joshi, S., & Ali, A. (2019). A review on smart nano textile applications. JT& TT-2019.
2. Joshi, S., & Agnihotri, S. (2017). A Review on slow-release insect repellent durable finishes. ACST- 2018.

3. Joshi, S., & Midha, V. (2017). Influence of road design on the time dependent serviceability of chemically treated jute geotextile in unpaved roads. ACST- 2018.
4. Joshi, S., & Midha, V. (2017). A critical review on geotubes. ACST- 2018.

Book Chapter

- Joshi S, Kamal D. **Advanced Technical Textile Products**. Textile & 21st Century, 2022.
- Joshi S, Neelu Kambo, Saurabh Dubey. **“Functional Textile from Agro-industrial Waste”** *Scrivener Publishing Wiley, USA, 2025.*

Patents filed

- EFFECT OF DIFFERENT VARIETIES OF BANANA LEAF EXTRACT BASED NANO-EMULSION ON WOUND CARE APPLICATION Patent file no. 202241048410
- EXTRACTION AND CHARACTERIZATION OF FIBERS FROM SUGARCANE LEAVES Patent file no. 202241058009
- DEVELOPMENT OF ANTI VIRAL MASK USING NATURAL FLOWER Patent file no. 202241060311
- DEVELOPMENT OF BANANA LEAF EXTRACT BASED ANTIVIRAL TEXTILE FOR HEALTHCARE APPLICATION Patent file no. 202241061132.
- DEVELOPMENT OF HIGH VISIBILITY ACCESSORIES FOR GARMENT CONSTRUCTION Patent file No. 202341073709

GIAN Courses/ Faculty Development Program/ Workshop/ Short term course/ Symposium/ Training program attended

1. Global Initiative of Academic Networks (GIAN) course: Nonwoven Technology at NIT Jalandhar, Duration: 5 Days, Year: 2022. **International**
2. Faculty development program (FDP): Effective Online Teaching and Learning at Dr. SSBUI CET, Panjab University, Duration: 5 Days, Year: 2020
3. Training: Professional Development Training at IIM Kashipur, Duration: 5 Days, Year: 2019.
4. Training: Industrial Training at M/S Mahabir Syntex, Duration: 5 Days, Year: 2019
5. Workshop: Advance Pedagogy at IIT Gandhinagar, Duration: 5 days, Year: 2019
6. GIAN Course: **Medical Textile and Tissue Engineering** at NIT Jalandhar, Duration: 10 Days, Year: 2017. **International**
7. GIAN Course: **Air Pollution Control Techniques: Design and development** at NIT Jalandhar, Duration: 5 Days, Year: 2017. **International**
8. GIAN Course: **Nanotechnology: Synthesis, Characterization, Fabrication and Applications** at NIT Jalandhar, Duration: 5 Days, Year: 2016. **International.**

9. Workshop: Communication and Personality Development at UPTTI, Kanpur, Duration: 3 Days, Year: 2018
10. Symposium: Recent Advancement in Apparel Production and quality at NIT Jalandhar, Duration: 2 Days, Year: 2017
11. FDP: Apparel Product Design at NIT Jalandhar, Duration: 3 Days, Year: 2016
12. Training program: Medical Textiles at The South India Textile Research Association, Coimbatore, Duration: 15 Days, Year: 2016
13. Short term Course: Water Quality Management at NIT Jalandhar, Duration: 4 Days, Year: 2016
14. Workshop: Filter Media Characterization at NIT Jalandhar, Duration: 1 day, Year: 2014.

Course/ Event organized

1. Organized an international conference on “**Sustainable Textiles, Fashion and Craft-STFC- 2K23**” held on 30th March 2023 at BIT Sathya Mangalam, Tamil Nadu, India.
2. Organized a Technical event “Texarita 2K23” held on 18th October 2023 at BIT Sathya Mangalam, Tamil Nadu, India.
3. Organized an expert lecture on “Quality control in spinning” held on 1st December 2022 at BIT Sathya Mangalam, Tamil Nadu, India.
4. Organized an expert lecture on “Advances in quality assurance of textiles and garments” held on 17th September, 2022 at BIT Sathya Mangalam, Tamil Nadu, India.
5. Organized a workshop on “Synthesis and Characterization of polymer and fibrous material” January 22-24, 2020 at UPTTI Kanpur.
6. Organized an online hackathon on design and performance of components of PPE for fighting against COVID-19 April 24, 2020.
7. Organized an online webinar on stress management and self-care during COVID-19 on June 26, 2020.
8. Program co-convener of “**Industry academia meet 2019**” held on May 11 & 12, 2019 at UPTTI Kanpur.
9. Organized an expert lecture on “Nonwoven Technology” held on September 21, 2019 at UPTTI Kanpur.

Lecture (Guest/Invited)

- Delivered an invited speech on “**Performance of microencapsulated aloe vera treated fabrics**” in 2019 at conference organized by **Advanced Polymer Associations, India. International**
- Delivered a lecture on “**Comfort properties of textiles**” on 22 January 2020 at Uttar Pradesh Textile Technology Institute, Kanpur, India.

Technical Skills

- Computer skills (Microsoft office tools inc. word, excel, power point etc.)

- Statistical tools inc. Statistica, Mini tab, Design expert, Origin, Matlab etc.
- Garment tools inc. Fashion Reach, PC TEX, Tukatech software etc.
- Advanced testing instruments SEM, XRD, DSC, TGA, FTIR, Microbiology, Blood repellency, Contact Angle tester.

Supervising and mentoring activities

- Supervised a postgraduate student on a project titled “**Study on Multifunctional Properties of PU/Clay Coated Cotton and Polyester/Cotton Fabric.**”
- Provided guidance and supervision to over 80+ undergraduate students for their B. Tech projects.

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