

Prof. Jitendra Pratap Singh

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❖ Awards:

1. **Vigyan Bhushan Award** received for commendable contribution in the field of Science and Technology.

❖ Administrative Portfolio:

1. Dean Students welfare (Since March 2024)
2. Professor In-charge Training and Placement (Since 2015)
3. Professor In-charge, Incubation Center (Since 2021)
4. Chief Hostel warden (Since March 2024)
5. President, Institution Innovation Council of MHRD (Since 2017)
6. Coordinator, Startup cell (Since 2017)
7. Member, Board of Studies, Textile Technology, UPTTI Kanpur.
8. Member of Scholarship committee.
9. Member of various committees related to staff and student affairs like promotion committee, anti-ragging committee, scholarship committee, and cultural program committee; purchase committee, admission committee etc.

❖ Interaction with other university and institutes:

1. Member, Board of Studies (Textile group), Dr. APJ Abdul Kalam Technical University, Lucknow.
2. Co-Convener, Industry Consultation Committee (Textile) at Dr. APJ Abdul Kalam Technical University, Lucknow.
3. Worked as center superintendent and observer for AKTU semester examinations for many years at different centers like SRMS Unnao, BBD Lucknow, SVNIT Barabanki, ANSAL Institute of Engg & Tech, Lucknow etc.
4. Visited CIPET Lucknow as external examiner for projects and various subjects for many years.
5. Team member of inspection committee for affiliation and course approval for colleges affiliated to AKTU Lucknow.
6. Worked as observer in various competitive examinations conducted by NTA and CBSE for many years.
7. Working as coordinator for RDC (Textile) at AKTU Lucknow.

❖ Ph. D. Guided:

3 Ph.D. (Awarded), 5 (In progress)

❖ M. Tech. Guided:

10 (Awarded)

❖ **Patent:**

1. 01 (424510-001), Detachable Auxetic Shoe Insole with Piezoelectric Nano generator, 24/07/2024.

❖ **Sponsored research project:**

S. No	Project Title	PI Name	CO-PI Name	Amount	Status	Date Of Start	Date of completion	Funding Agency
1.	Design and development of strategies for controlling the pore geometries of centimeter long hollow porous fibres	Dr. Jitendra Pratap Singh	--	9, 74,800/-	Completed	10.08.2022	06.02.2024	DMSRDE, DRDO Kanpur

❖ **Membership of Professional Bodies:**

1. Petron Member of the Textile Association (India).

❖ **Editorial Board Member of Journals:**

1. Journal of Textile Science and Engineering, OMIC Publication, U.S.A.
2. Journal of Advance research in Textile Engineering, Austin Publication, U.S.A

❖ **Books and book chapters published:**

1. J.P. Singh & Swadesh Verma, Woven Terry fabric –Manufacturing and quality management, Elsevier Ltd. (UK). (ISBN-978-0-08-100686-3)
2. J. P. Singh, et al. Advances in Textile Materials and Processes, IIP Publication. (ISBN 978-1-68576-250-6), 2021.
3. J. P. Singh, Book chapter on Woven Textiles for Filtration in Woven Textiles: Principles, Technologies and Applications, Second Edition, Elsevier Ltd. (UK). (ISBN:978-0-08-102497-3), 2020.
4. J. P. Singh, et al. Book Chapter, Woven Fabric Production, In Textile Calculation, Elsevier Ltd. (UK). (ISBN: 978-0323990417), June 2023.

❖ **Seminar/workshop/conference organized:**

S. No.	Name	Institution	Role	Level	Year
1	ATMP 2021	UPTTI Kanpur	Convener	International	2021
2	RTCTT 2020	NMU Jalgaon /UPTTI Kanpur	Organizing Secretary	National	2020
3	National Conference	UPTTI Kanpur	Convener	National	2020
4	International conference ATMP2019	UPTTI Kanpur	Organizing Secretary	International	2019
5	ICAMPT-2017	UPTTI Kanpur & UICT, NMU Jalgaon	Joint Organizing Secretary	International	2017
6	Entrepreneurship summit	UPTTI innovation and start up cell	Organizing secretary	National	2018
7	Faculty Development	UPTTI & CIMCO	Coordinator	National	2018

	program				
8	Research Methodology	UPTTI Kanpur & IRDT Kanpur	Coordinator	National	2016
9	Quality Management in Engineering Materials	UPTTI Kanpur & AKTU Lucknow	Coordinator	National	2016
10	Strategic planning and management for technical institutions	NITTTR Chandigarh & UPTTI Kanpur	Coordinator	National	2015
11	Propelling growth through innovation	The Textile Association (India) Delhi	Member, Technical program	National	2013
12	39th Textile Research Symposium	IIT Delhi & Textile machinery society Japan	Member, Technical program	International	2020

❖ Invited Lectures delivered:

S. No.	Name	Institution	Program	Level	Year
1	Future of Technical Textiles in India	CCSHAU Hisar	FDP	National	2024
2.	Textile fabrics	BND PG Kanpur	FDP	National	2022
3	Research Methodology	UPTTI Kanpur & IRDT Kanpur	Application of Matlab	National	2016
4	Quality Management in Engineering Materials	UPTTI Kanpur & AKTU Lucknow	Quality management through objective evaluation	National	2016
5	Quality Management in Engineering Materials	UPTTI Kanpur & AKTU Lucknow	Quality management through fractal evaluation	National	2016
6	Quality Management in Engineering Materials	UPTTI Kanpur & AKTU Lucknow	Invisibility through material engineering	National	2016
7	Workshop for clothing technologists	Ordinance factories Institute of Learning, Kanpur	Camouflaging: Concepts and development	National	2015
8	Workshop for clothing technologists	Ordinance factories Institute of Learning, Kanpur	Latest trademark fabrics and their physical properties	National	2015

9	Workshop for clothing technologists	Ordinance factories Institute of Learning, Kanpur	Camouflaging: Principle and printing method	National	2015
10	Textile Testing Workshop	UPTTI Kanpur	Fabric Testing	National	2009

❖ FDP/Workshop/Training Program/Industrial training attended:

S. No.	Name of program	Institution	Start Date	End date
1.	Deeksharambh (Student Induction Program)	NIT Patna	August 2020	August 2020
2.	8 module courses	AICTE	2019	2019
3.	FDP	IIM Jammu	Nov 2019	Nov 2019
4.	STTP on Predictive analysis using R	IIT Roorkee	June 2019	June 2019
5.	Workshop on Academic plan: Enhancing skill and placement	--	Aug 2019	Aug 2019
6.	STTP on Start-up and enterprise promotion	Institute of Entrepreneurship Development Lucknow	Aug 2019	Aug 2019
7.	industrial training	M/S Mahabir Jute Mills Ltd	June 2019	June 2019
8.	Mathematical modelling & Research Methodology	HBTU Kanpur	Oct 2018	Oct 2018
9.	Innovation in solar based application & recent trends	Institute of Technology Gopeshwar	June 2018	June 2018
10.	FDP	DST, Govt. of India, New Delhi	March 2018	March 2018
11.	PDP	IIM Indore	Dec 2017	Dec 2017
	FDP on Modern advances in Textiles	---	Oct 2017	Oct 2017
12.	STTP on Fundamentals and applications of Nanomaterials	National Institute of Technical Teachers training and Research, Kolkata	2016-12-23	2016-12-30
13.	Workshop on Design, Development and Evaluation of High Quality Fabric	Indian Institute of Technology	2016-12-13	2016-12-13
14.	Faculty development programme: Application of Nanotechnology in Textile Engineering	UPTTI Kanpur/AKTU Lucknow	2016-01-18	2016-01-23
15.	Short Term QIP programme: Textile	Indian Institute of Technology	2016-	2016-

	Structures & Structural Composites	Delhi	02-15	02-18
16.	Short term QIP programme: Nonwoven processes & products	Indian Institute of Technology Delhi	2014-05-12	2014-05-17
17.	Faculty development programme: Academic Audit	National Institute of Technical Teachers training and Research, Bhopal	2014-07-21	2014-07-25
18.	Faculty development programme: Total quality in Pedagogical Training in Engineering Education	Engineering Staff College of India Hyderabad	2009-03-02	2009-03-07

❖ **Research Paper Published in International & National Journals:**

1. Shanu Prabhakar, **J P Singh**, Kamal Kumar, Shiv Govind Prasad, Debmalya Roy (**2024**), Chromium adsorption efficiency by functional polymeric nanocomposite membrane: A case study for environmental sustainability, Journal of Polymer Research, 2024. (**Impact Factor: 2.6**)
2. Manish Kr. Singh, **J P Singh**, H. C. Joshi , Rohitashaw Singh , Uttam Saha & Mayank Dwivedi (**2024**), Rayon Based Activated Carbon Fabric with controlled porosity: Advanced Barrier Against Chemical Warfare Agent (CWA), IJFTR, 2024.
3. Kamal Kumar, Apurba Das, Prashant Vishnoi, **J P Singh (2024)**, Shanu Prabhakar & Ashok Kumar Yadav, A Thermal and electrical properties of multi-layer fabrics assembly for protective clothing, IJFTR, 2024.
4. Mona Verma, Divya Dogra, Saroj Yadav and **J P Singh (Dec, 2023)**, Effect of Natural Dyes and Different Mordant Treatments on Ultra-Violet Protection Property of Cotton Fabric, Journal of Cellulose Chemistry and Technology, 57 (7-8), 877-889(2023).
5. Kumar, K., Das, A., Vishnoi, P., & **Singh, J P (March, 2023)**. Moisture management Properties and drying behavior of knitted fabrics for inner layer applications. IJFTR, 48, pp. 91-98.
6. Kumar, K., Das, A., Vishnoi, P., & **Singh, J P (June, 2022)**. Water vapour and air transmission of multilayer fabric ensembles. IJFTR, 47, pp. 199-205.
7. Prabhakar, S., **Singh, J P**, Roy, D., & Prasad, N. E. (**January, 2022**). Stable 3D hierarchical scaffolds by origami approach: Effect of interfacial crosslinking by nanohybrid shish-kebab assemblies. Materials & Design, 213, 110353.
8. Prabhakar, S., **Singh, J P**, & Roy, D. (**September, 2022**). Fabrication and optimization of processing parameters of 2D/3D arrays of composite PET electrospun nanofibrous webs. IJFTR, 47, pp. 302-308.
9. Prabhakar, S., **Singh, J P**, Kumar, K., Kumar, P., & Roy, D. (**January, 2021**). A strategy for assembling the multilayer polymeric nanofibers on nonwoven fabric with controlled porosity. The Journal of The Textile Institute, 113(2), pp. 224-233.
10. Ram, S. K., & **Singh, J P (March, 2021)**. Tensile behavior of woven velour printed terry fabrics. Indian Journal of Fibre & Textile Research (IJFTR), 46(1), pp. 29-33.

11. **Singh, J P, & Ram, S. K. (March, 2020).** Designing woven velour printed terry fabric for improved colour fastness. *International Journal of Clothing Science and Technology*. 32(4) pp. 551-569.
12. **Singh, J P, & Ram, S. K. (June, 2020).** Factor affecting absorbency behaviour of woven velour printed terry fabrics, *Indian Journal of Fibre & Textile Research*, Vol. 45, June 2020, pp. 164-168.
13. Chauhan, V K, **Singh, J P, & Debnath, S. (September, 2020).** Bursting behavior of polyester needle-punched filter fabrics. *Indian Journal of Fibre & Textile Research (IJFTR)*, 45(3), pp. 253-259.
14. **14.** Chauhan, V K, **Singh, J P, & Debnath, S. (June, 2020).** Investigation on filtration properties of polyester needle-punched dust filter. *The Journal of the Textile Institute*, 111(6), pp. 897-905.
15. Debnath, S., Chauhan, V. K., & **Singh, J P (August, 2020).** Air permeability of needle-punched filter media—virgin and recycled polyester. *The Journal of the Textile Institute*, 111(8), 1159-1165.
16. V K Chauhan, **J P Singh, Bharti Singh, (June, 2020),** Synthesis and study of electrical properties of polyanyliene and polyester nano composites, *Indian Journal of Fibre and Textile Research*, 45,pp. 215-219.
17. Chauhan, V. K., **Singh, J P, & Debnath, S. (October, 2020).** Tensile behavior of virgin and recycled polyester nonwoven filter fabrics. *Journal of Industrial Textiles*, 50(4), pp. 483-511.
18. **J P Singh & B. K. Behera, (December, 2018).** Designing Terry fabric for improved serviceability, *Indian Journal of Fibre and Textile Research*, Vol, 43, pp. 415-420.
19. **J P Singh & Vinaykumar Chauhan, (2018).** Characterization of virgin and recycled polyester fibre, *Journal of material science and engineering*, 7(2), 2018.
20. **Singh, J P, Shrivastava, A., Mukophadhyaya, K., Prasad, D., & Sharma, V. (May, 2017).** Design and development of composite nonwoven filter for pre-filtration of textile effluents using nano-technology. *J. Mater. Sci. Eng*, 6(3), 2169-0022.
21. **J P Singh & B. K. Behera, (2016).** Prediction of geometry of loop formed on terry fabric surface using mathematical and FEM modelling, *Journal of material science and engineering*, Vol. 6, pp. 1-7.
22. **Singh, J P, Uttam, M., & Shakyawar, D. B. (October, 2016).** Designing High Performance Safety Belts. *J Textile SciEng*, 6(275), 2.
23. **Singh, J P (July, 2016).** Evaluating the Effect of Weft Yarn Characteristics on Fabric Texture Using Image Analysis Techniques. *J Textile SciEng*, 6(261), 2.
24. Devendra Prasad & **J P Singh, (2015).** Quantum gravity – Unification of general relativity and quantum mechanics, *ISRJ*, 3(18).
25. **Singh, J P, & Behera, B. K. (March, 2015).** Performance of terry towel. *Indian Journal of Fibre & Textile Research (IJFTR)*, 40(1), pp. 112-121.

26. **J P Singh** & B.K.Behera. (**April, 2015**) “Geometric modeling of woven terry fabric”, International Journal of Clothing science and Technology, Vol 27(2), pp.237-246.
27. **J P Singh**, Auxetic Textile Material, Asian Textile Journal, (**April, 2015**).
28. **J P Singh** & B.K.Behera, (**September, 2015**). “Compression behaviour of woven terry fabrics”, The Journal of the Textile Institute, Vol. 106(9), pp. 953-962.
29. B.K.Behera & **J P Singh**, (**January, 2015**). “Objective evaluation of aesthetic characteristics of woven terry structures using image analysis techniques”, Fibres & Polymers, 15(12), pp. 2633-2643.
30. **J P Singh**, Anuhbav G, Aprajita A, Himanshi S, Vandana J (**February, 2014**) Digital Image Processing Techniques: A Versatile System for Textile Characterization. J Textile SciEngg, Vol. 4(3), pp. 1-5.
31. **J.P.Singh**& B.K. Behera, (**December, 2014**). “Performance of terry towel-a critical review-Part-I: Water absorbency” Journal of Textile and Apparel Technology and Management, 9(1).
32. **J.P. Singh**, Nonwoven: A Versatile Fabric. J Textile SciEnggVol 4(2), 2-4, (**October, 2014**).
33. B.K.Behera & **J.P.Singh**, (**2014**). “Investigation of factors contributing to absorbency behaviour of terry fabric”, Research Journal of Textile and Apparel, Vol.18, No.3, pp. 133-141.
34. **J.P.Singh**, B.K.Behera & M. Matsudaira, (**May, 2014**). “Objective evaluation of terry fabric hand”, The Journal of the Textile Institute, 105(5), pp. 467-476.
35. **J.P. Singh** & B.K. Behera, (**January, 2014**). “Mathematical and FEM modelling of loop geometry” Indian Journal of Fibre and Textile Research.
36. **J. P. Singh**, R Mishra & B. K. Behera, (2014). Studies on compressibility of woven terry fabric, ACC Journal Natural sciences and Technology, 1 pp. 81-92.
37. **J.P.Singh** & Kalpana Singh, (**January, 2013**). Fibre examination in forensic science, Editorial in Journal of textile science and engineering, 3(2), pp. 1-2.
38. Kalpana Singh & **J.P.Singh**, (**July, 2013**). Fibre examination –The crucial evidence in forensic science, Asian Textile Journal, pp. 75-79.
39. Kalpana Singh & **J.P.Singh**, (**July, 2012**). “Biological Pest Control in Cotton- A life Line”, Asian Textile Journal, pp. 68-75.
40. **J.P. Singh** & B.K. Behera, (**February, 2012**). “Effect of washing treatment on the performance deterioration in terry fabrics” Indian Journal of Fibre and Textile Research.
41. **J.P.Singh**, “Intelligent Textiles”, Asian Textile Journal, 67-71, (**August, 2011**).
42. **J.P.Singh**, & M.Ramamoorthy, “Improving coolness in clothing”, Asian Textile Journal, 45-53, (**May, 2011**).

43. **J.P. Singh**, S.S.Doke & D.Sonowal, (**July, 2004**).Effect of fabric parameters on shear and mechanical parameters of suiting fabrics, Journal of Textile Association of India.

❖ **Research presented in International & National conferences:**

1. **J.P.Singh** & B.K.Behera, “Compression behavior of terry fabric”, 39th Textile Research Symposium, Dec 2010, IITD, India.
2. **J.P.Singh** & B.K.Behera, “Objective evaluation of aesthetic characteristics of woven pile structures using image analysis techniques”, Autex-2012, June-2012, Zadar, Croatia.
3. **J.P.Singh** & B.K.Behera, “Mathematical & Finite Element Modelling of terry fabric loop geometry”, STRUTEX- 2012, Dec-2012.
4. **J.P.Singh** & B.K.Behera, “Compression behaviour of terry fabrics”, Autex-2013, May-2013, Dresden, Germany.
5. **J.P.Singh**, B.K.Behera & M. Matsudaira, “Objective hand evaluation of terry fabric”, 42nd Textile Research Symposium, August, 2013, Mount Fuji, Japan.
6. **J.P.Singh**, R. Mishra and B.K.Behera, “Studies on compressibility of woven terry fabrics”, TEXSCI-2013, Librec, Czech Republic.
7. **J.P.Singh** & B.K.Behera, “Designing terry fabric for improved performance”, International conference on Innovations in Textiles, Bhuvneshwer, India, April, 2013.
8. **J.P.Singh**, S. Tripathi, B.P.Dash & B.K.Behera, Optimization of processing conditions for production of 3D woven composites, 5th world 3D conference, 16-17 December, 2013, IIT Delhi, India.
9. **J.P.Singh**, B.K. Behera & M. Matsudaira, Objective evaluation of terry fabric, Indo-Czech international conference, KGCET, Coimbatore, 29-30 April, 2014.
10. **J.P.Singh** & Alok Kumar, Effect of fibre cross sectional shape on compression behaviour of polypropylene needle punched nonwoven, International conference on Technical textiles and nonwovens, 6-8 Nov, 2014, IIT Delhi, India.
11. **J.P.Singh**, M.Uttam & D.B. Shakyawar, Designing and Optimizing the Safety belts for their improved performance, AFSIT 2015.
12. **J.P. Singh**, M.Uttam & D B Shakyawar, Designing the high performance safety belts. RTCT-2016.
13. **J.P. Singh** & Mridul Kumar Gupta, Evaluating the effect of weft yarn characteristics on fabric texture using image analysis techniques, RTCT-2016.
14. **J.P. Singh** & B.K. Behera, Developing high quality terry fabrics by using objective evaluation, Textile Academia-IITD 2016.
15. **J.P.Singh**, Studies on the composite nonwoven filter for pre-filtration of textile effluents, ICAMTP-2017, UPTTI Kanpur.
16. J K Gautam, I P Mishra, **J. P. Singh** & Pramod Kumar, A review on Natural Fibre reinforced composite for automotive application, ICAMTP-2017, UPTTI Kanpur.
17. Sanjeev K Ram & **J.P. Singh**, Studies on the properties and performance of woven velour printed terry fabrics, ICAMTP-2017, UPTTI Kanpur.
18. Vinay K Chauhan & **J. P. Singh**, Effect of nonwoven areal density, depth of penetration and punch density on its strength and elongation, ICAMTP-2017, UPTTI Kanpur
19. Alok Kumar, **J. P. Singh**, Amit Kumar & Pragati Bajpai, Surface modification of UHMWPE composites, ICAMTP-2017, UPTTI Kanpur.
20. **J.P. Singh**, R. Mishra and B.K. Behera, Weavability of non-conventional worsted warp yarns, Prospects and Retrospect of small ruminant and rabbit production, December 7-9, 2011.
21. **J.P. Singh** & B.K. Behera, Designing terry fabric for improved serviceability, RAPT-2018.

22. **J.P.Singh**, Shanu Prabhakar, P. Kumar, Debmalya Roy, Kamal Kumar, Design and development of multilayer nonwoven composite filter for water purification using carbon based nano materials, ATMP-2018.
23. Sanjeev Kumar Ram and **J. P. Singh**, Factor affecting absorbency and tensile strength of woven valour printed terry fabrics, ATMP-2018.
24. PragyaBajpai and **J.P.Singh**, Woven textiles for filtration. ATMP-2018.
25. **J. P.Singh**, Pragati Bajpai, Alok Kumar, Optimization of surface treatments... with dissimilar materials, 58th JTC and Tech-Text 2019.
26. **J. P.Singh**, Shanu Prabhakar, P. Kumar, Debmalya Roy and Kamal Kumar, Water Purification by using carbon based nano materials, 58th JTC and Tech-Text 2019.
27. Shanu Prabhakar, **J. P. Singh**, Debmalya Roy, Hierarchical robust flexible nanofibers based multifunctional scaffolds with tuneable properties, ATMP-2021.
28. Shanu Prabhakar, **J. P. Singh**, Debmalya Roy, Formation of 3D scaffold structure from 2D PET/NT Nanofibrous web by the interfacial adhesion of PCL, ATMP-2021.
29. Shanu Prabhakar, **J. P. Singh**, Debmalya Roy, Design and development of polymeric nanocomposite membrane using silver coated activated carbon, APA-2019.
30. **J. P. Singh**, Shanu Prabhakar, Debmalya Roy, A strategy for assembling the multilayer polymeric nanofibers on nonwoven fabric with controlled porosity, APA-2019.