



1. Name: Dr. Debasis Chattopadhyay

Designation: Scientist- D (Reeling & Spinning)

Date of Birth: 30th August, 1968

Address (Office): Regional Silk Technological Research Station,
Central Silk Technological Research Institute,
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2. Educational Qualifications:

Degree	Year of passing	University	Name of Institution	Class/ Grade
B.Sc. (Tech) in Textile Technology	1990	University of Calcutta	College of Textile Technology*, Serampore, Hooghly, WB	1 st
Master of Textile Technology (M. Text)	1993	University of Bombay	Victoria Jubilee Technical Institute**, Matunga, Bombay	1 st
Doctorate of Philosophy (PhD)	2023	University of Calcutta	Department of Jute & Fibre Technology, Institute of Jute Technology, Kolkata	-----

* Present Name is Government College of Engineering & Textile Technology

** Present Name is Veermata Jeejiby Technical Institute.

3. Experience:

Sl. No.	Organization	Post held	Period of employment	
			From	To
1.	Central Silk Technological Research Institute and Central Tasar Research & Training Institute, Central Silk Board, Ministry of Textiles, Government of India	Scientist- D	August, 2020	Till date
2.	Central Silk Technological Research Institute & Central Tasar Research & Training Institute, Central Silk Board, Ministry of Textiles, Government of India	Scientist- C	January, 2015	July, 2020
3.	Central Silk Technological Research Institute, Central Silk Board, Ministry of Textiles, Government of India	Scientist – B	January, 2007	December, 2014
4.	The South India Textile Research Association, (SITRA) Coimbatore, Tamil Nadu	Senior Scientific Officer	June, 1998	December, 2006
5.	Mahavir Spinning Mills Ltd., Hoshiarpur, Punjab, (A unit of Vardhman Group)	Process Development Officer (R & D)	October, 1995	May, 1998
6.	Jayashree Textiles, Rishra&Vikram Woolens, Gwalior, Hooghly, W.B. (A Unit of Aditya Birla Group)	R & D Officer	August, 1993	September, 1995
9.	The Kalyani Spinning Mills Ltd., Habra, 24 Parganas, W.B. (A Govt. of W.B. Undertaking)	Technical Supervisor	July, 1990	June, 1991

4. Areas of research interest: Silk reeling, spun silk, spinning, technical textiles.

5. Ongoing research projects/exploratory works:

A. As co- Investigator (Projects of CSTRI, Bengaluru):

- 1) Bio- finishing of tasar silk fabric using enzymes (TOT- on- field trials).
- 2) Survey of mulberry silk reelers in Malda region (MTS 13002MI).
- 3) Studies on tasar cocoons drying using CSTRI conveyor drier and pressurized cooking technology (TOT- on- field trials).

B. As co- Investigator (Projects of CTR&TI, Ranchi):

- 1) Studies on storage practice of tropical tasar cocoons for better cooking efficiency, reeling parameters and yarn quality (CYR- 04013MI).
- 2) Evaluation and popularization of improved technologies developed in the field of tasar sector for central and north India- Validation and popularization of cooking package developed for three eco- races (TOT- on- field trials) (MOE 04014MI).

6. Number of publications:

National: 33

1. Sen, A., Chatterjee (Chattopadhyay), D. & Tarafder, N. (1989). A study of the test specimen length, rate of traverse & capacity of the machine on yarn strength, *Textile Trends*, 32 (7), 51- 57.
2. Sett, S. K., Pal, D. D., Malik, R. K., Chattopadhyay, D. & Chatterjee, S. M. (1994). Surface modification of alkali and amine treated PET-fabric, *The Textile Industry & Trade Journal*, 32 (1 & 2), 27- 33.
3. Chellamani, K. P. & Chattopadhyay, D. (1998). Fly and fluff generation in a spinning mill and its control, *Asian Textile Journal*, 8 (11), 86- 91.
4. Chellamani, K. P., Chattopadhyay, D. & Thanabal, V. (1999). Indian cotton and influence of mechanical processing on nep generation, *Asian Textile Journal*, 9 (4), 120- 126.
5. Chellamani, K. P. & Chattopadhyay, D. (1999). Influence of cots and aprons on yarn quality, *Asian Textile Journal*, 9 (11), 69- 71.
6. Chellamani, K. P. & Chattopadhyay, D. (2000). Tools for TQM implementation in a spinning mill, *Asian Textile Journal*, 10 (11), 140- 146.
7. Doraiswamy, I., Chellamani, K. P. & Chattopadhyay, D. (2001). Production of yarn from Angora rabbit hair, *Asian Textile Journal*, 11 (2), 47- 49.
8. Chellamani, K. P., Chattopadhyay, D. & Arulmozhi, M. (2001). Yarn quality for knitting- a new perspective, *Asian Textile Journal*, 11 (2), 57- 62.
9. Chellamani, K. P., Chattopadhyay, D. & Arulmozhi, M. (2001). Spinning and non-woven exhibits in ITME 2000: A bird's eye view: Part I, *Colourage*, 48 (4), 59- 64.
10. Chellamani, K. P., Chattopadhyay, D. & Arulmozhi, M. (2001). Spinning and non-woven exhibits in ITME 2000: A bird's eye view: Part II, *Colourage*, 48 (6), 63- 70.
11. Chellamani, K. P., Chattopadhyay, D. & Arulmozhi, M. (2001). Impact of life of cylinder wire and grinding on card neps, *Asian Textile Journal*, 11 (8), 50.
12. Doraiswami, I., Chellamani, K. P., Chattopadhyay, D. & Arulmozhi, M. (2001). Manufacturing process and essential quality characteristics of yarns for technical textiles: Part I: Manufacturing process, *Asian Textile Journal*, 11 (8), 61- 75.
13. Chellamani, K. P., Chattopadhyay, D. & Arulmozhi, M. (2001). Polyester/viscose blended yarns for hosiery applications, *Asian Textile Journal*, 11 (9), 64.
14. Chellamani, K. P., Chattopadhyay, D. & Arulmozhi, M. (2001). Measures for reducing choking of rotary filter in ring frame, *Asian Textile Journal*, 11 (9), 64.
15. Doraiswami, I., Chellamani, K. P., Chattopadhyay, D. & Arulmozhi, M. (2001). Manufacturing process and essential quality characteristics of yarns for technical textiles: Part II: Essential quality characteristics, *Asian Textile Journal*, 11 (9), 70- 84.
16. Doraiswamy, I., Chellamani, K. P. & Chattopadhyay, D. (2002). SITRA's Con-Hair system in manual cone winding machine: technology, usefulness for manmade fibres/blended yarns and economics, *Asian Textile Journal*, 12 (1), 38- 43.
17. Chellamani, K. P., Chattopadhyay, D. & Basu, A. (2002). Advanced technologies for yarn & fabric manufacture, *The Indian Textile Journal*, 112 (1), 35- 39.
18. Doraiswamy, I., Chellamani, K. P. & Chattopadhyay, D. (2002). Newer fibres & newer techniques to face the emerging challenges, *Indian Textile Review*, 28, 9- 24.
19. Basu, A., Chellamani, K. P. & Chattopadhyay, D. (2003). Jute for the manufacture of technical textiles, *Asian Textile Journal*, 13 (4), 77- 82.
20. Chellamani, K.P., Chattopadhyay, D. & Thanabal, V. (2003). Development of protective fabrics using friction spinning technology, *Asian Textile Journal*, 13 (6), 78- 83.

21. Chellamani, K. P., Chattopadhyay, D., Ravindran, M. P. S. & Kumar, P. R. (2003). High performance manmade fibres, *Asian Textile Journal*, 13 (8), 69- 74.
22. Chellamani, K. P., Chattopadhyay, D. & Kumar, P. R. (2004). Technical yarns manufactured in ring spinning system, *Asian Textile Journal*, 14 (3), 83- 89.
23. Chellamani, K. P., Chattopadhyay, D. & Kumar, P. R. (2004). Electronic process control in textile mills”, *Textile Magazine*, 45 (7), 83-88.
24. Chellamani, K. P., Chattopadhyay, D. & Kumar, P. R. T. (2005). Yarn quality requirements for shuttle less looms, *Asian Textile Journal*, 15 (4), 47- 52.
25. Chellamani, K. P., Chattopadhyay, D. & Kumar, P. R. T. (2005). Yarn quality requirements for shuttle less looms, *Textile Magazine*, 47 (6), 66- 71.
26. Chellamani, K. P., Chattopadhyay, D. & Kumar, P. R. T. (2005). Abrasion resistance of polyester air jet yarns, *Textile Magazine*, 47 (6), 44-47.
27. Chellamani, K. P., Chattopadhyay, D. & Ravindran, M. P. S. (2006). From jute yarn to high performance technical textiles, *Textile Magazine*, 48 (1), 24- 30.
28. Chattopadhyay, D., Munshi, R., Padaki, N. V., Mishra, S. N. & Roy, S. (2010). Spinning of eri silk yarn using Amber Charka technique, *Indian Silk*, 48 (7), 18- 20.
29. Munshi, R., Padaki, N. V., Chattopadhyay, D. & Mishra, S. N. (2011). Mordanting effect on properties of mulberry silk dyed with selected natural dyes, *Indian Silk*, 1 (12), 26- 29.
30. Munshi, R., Chattopadhyay, D. & Mitra, G. (2015). Quality characteristics and reeling performance of muga and tasar silk cocoons in comparison with mulberry silk cocoons, *Indian Journal of Natural Fibres*, 2 (1), 21- 28.
31. Chattopadhyay, D., Mitra, G. & Munshi, R. (2015). Modern techniques for utilization of tasar silk wastes to convert yarn, *Indian Journal of Natural Fibres*, 2 (1), 41- 49.
32. Munshi, R., Mazumdar, S., Gupta, P. D. & Chattopadhyay, D. (2016). Studies on standardization on degumming process for different eco- races of eri silk cocoons, *Indian Journal of Natural Fibres*, 3 (1), 69- 76.
33. Chattopadhyay, D., Mitra, G., Moon, M. A., Ramdass, S. V. & Kolarkar, P. J. (2017). Cocoon characters of tropical tasar in different states, *Indian Silk*, 8 (5- 7), 24- 27.

International: 18

1. Chellamani, K. P., Chattopadhyay, D. & Kumaraswamy, K. (2000). Yarn quality improvement with an air jet attachment in cone winding, *Indian Journal of Textile & Fibre Research*, 25 (4), 289- 294.
2. Chellamani, K. P., Chattopadhyay, D. & Thanabal, V. (2003). Influence of wire point density in cards and combers on neps in sliver and yarn quality, *Indian Journal of Textile & Fibre Research*, 28 (1), 9- 15.
3. Mitra, G., Moon, M. A., Chattopadhyay, D. Thimmareddy, G. & Roy, S. (2012). Studies on the variability of cocoon characters and quality parameters of yarn produced from tropical tasar cocoon, *Sericologia*, 52 (1), 613- 615.
4. Chattopadhyay, D., Chakraborty, A. & Chatterjee, S. M. (2016). Structural characteristics of eri silk cocoons and fibres, *Sericologia*, 56 (4), 205- 218.
5. Munshi, R., Mazumdar, S. & Chattopadhyay, D. (2016). Physical properties of microwave cured polycarboxylic acid cross- linked silk catalysed with nano TiO₂ photocatalyst and potassium sodium tartrate, *Sericologia*, 56 (4), 235- 246.
6. Chattopadhyay, D., Chakraborty, A. & Chatterjee, S. M. (2017). Studies on degumming of eri silk cocoons, *The Journal of The Textile Institute*, 108 (8), 1327- 1339; doi: 10.1080/00405000.2016.1247617.
7. Chattopadhyay, D., Chakraborty, A. & Chatterjee, S. M. (2018). Studies on structural and fibre quality characteristics of eri silk cocoons in different seasons and places,

- The Journal of The Textile Institute*, 109 (4), 543- 551; doi: 10.1080/00405000.2017.1361118.
8. Chattopadhyay, D., Munshi, R. & Chakravorty, D. (2018). Studies on distribution of filament length and non- broken filament length for tropical tasar and muga silk cocoons vis-à-vis mulberry silk cocoons, *The Journal of The Textile Institute*, 109 (9), 1202- 1207; doi: 10.1080/00405000.2017.1422307.
 9. Chattopadhyay, D. & Khan, Z. M. S. (2018). Quality characteristics and frequency distribution of filament and non- broken filament length of tropical tasar cocoons, *Sericologia*, 58 (3 & 4), 189- 197.
 10. Khan. Z. M. S., Chattopadhyay, D. & Sahay, A. (2019). Optimization of cocoon softening procedure for tasar eco- races to achieve higher silk recovery, quality and retention of natural colour, *Sericologia*, 59 (3 & 4), 128- 142.
 11. Chattopadhyay, D., Chakraborty, A. & Chatterjee, S. M. (2020). Fibre length of eri silk cocoons and influence of staple cutting during spinning preparatory process, *Journal of Natural Fibres*, 19 (7), 2660- 2674; doi: 10.1080/15440478.2020.1821286.
 12. Banerjee, R., Chattopadhyay, D. & Khan, Z. M. S. (2020). Prediction of cocoon shell weight of tasar (*Antheraea mylitta Drury*) silkworm using LASSO regression, *International Journal of Current Microbiology and Applied Sciences*, 9 (6), 1- 5; doi: 10.20546/ijcmas.2020. xx.
 13. Chattopadhyay, D., Khan, Z. M. S. & Paul, T. K. (2020). Development of motorized tasar reeling charkha for enhancement of productivity and quality, *Sericologia*, 60 (3 & 4), 112- 118.
 14. Bhat, P.N., Ghosh, J., Malali, K.B., Padaki, N.V., Mitra, G., Chattopadhyay, D., Khan, Z.M.S. & Nanjegowda, B. (2022). Grading of tasar silk yarn- development of method and procedures, *Plant Archives*, 22 (Sp. Issue), 200- 203; doi: 10.51470/PLANTARCHIVES.2022.v22.specialissue.038.
 15. Chattopadhyay, D., Padaki, N.V., Lakhra, A.P., Gope, S., Kumar, S. & Sathyanarayana, K. (2022). Studies on effect of stifling and storage on single cocoon characteristics and reeling performance of Daba ecorace, *Plant Archives*, 22 (Sp. Issue), 218- 225; doi: 10.51470/PLANTARCHIVES.2022.v22.specialissue.041.
 16. Chattopadhyay, D., Chakraborty, A. & Chatterjee, S.M. (2023). Influence of fibre length and comber noil extraction in long staple worsted spinning on eri silk yarn quality, *Textile Research Journal*, 93 (5- 6), 1211- 1236; doi: 10.1177/00405175221128033.
 17. Chattopadhyay, D., Chakraborty, A. & Chatterjee, S.M. (2023). Microstructural characteristics of eri silk fibre in different layers of cocoon, *Journal of Natural Fibres*, 20 (1), 1- 22; doi: 10.1080/15440478.2022.2146828.
 18. Khan, Z.M.S., Chattopadhyay, D., Behera, S.K., Kumar, A & Sahu, U.K. (2023). Design and fabrication of a solar operated cooking device for softening of tasar cocoons, *Indian Journal of Fibre and Textile Research*, 48 (3), 353- 358; doi: 10.56042/ijftr.v48i3.6061.

Books/Monographs/Book Chapters: 4

1. Chellamani, K. P. and Chattopadhyay, D. (1999). *Yarns and Technical Textiles*, The South India Textile Research Association (SITRA), Coimbatore, India.
2. Chellamani, K. P., Chattopadhyay, D. and Kumar, T. P. R. (2004). *Yarn quality requirements and techno- economics of shuttle less looms*, The South India Textile Research Association (SITRA), Coimbatore, India.
3. Chattopadhyay, D., Khan, Z. M. S. and Sahay, A. (2020). Recent developments in tasar silk post cocoon technology (pp. 184- 212), *Current status and recent advances in tasar sericulture*, Central Tasar Research and Training Institute, Central Silk Board, Ranchi, India.

4. Chattopadhyay, D. &Sathyanarayana, K. (2023). Post cocoon technologies (pp. 141- 171), *Handbook of tropical tasar sericulture*, Central Tasar Research and Training Institute, Central Silk Board, Ranchi, India.

7. Important/Recent Publications/Popular Articles:

1. Indian Standard IS 17618: 2021: Tasar raw silk- grading and test methods, Published by Bureau of Indian Standards, New Delhi (as co- investigator of the project entitled Tasar silk testing and grading- development of methods and standards funded by Central Silk Board, Ministry of textiles, Bengaluru).
2. उत्पादकता और गुणवत्ता बढ़ाने के लिए मोदराईजड तसर धागाकरण चरखे का बिकाश, रेशमबानी, दिसम्बर, 2020.
3. तसर कोसा पकाने/मुलायम करने की नव विकसित विधि, रेशमबानी, जून, 2022 .
4. पकाने को विभिन्न विधियों से उत्पादित तसर धागे को बुनाई निष्पादन का तुलनात्मक मुल्लायन, रेशमबानी, जून, 2023 .

8. Patents Granted: Nil

9. Achievement/Recognition- Prizes / Medals / Awards / Distinction:

- 1) Recipient of "**Century Mills**" Best Technical Book Award sponsored by the Textile Association, Mumbai, in the year 2000 for the Monograph "**Yarns and Technical Textiles**".
- 2) Recipient of "Shri Kanaiyalal Motilal Award" sponsored by ATIRA, Ahmedabad, as best technical research paper in the year 1999 for the paper entitled "Study of nepping potential of Indian cottons".
- 3) Recipient of "Shri Kanaiyalal Motilal Award" sponsored by ATIRA, Ahmedabad, as best technical research paper in the year 2004 for the paper entitled "Application of artificial neural network for predicting ring yarn properties and process variables".
- 4) **Publons/Web of Science Research ID: AAJ- 2520- 2020**
- 5) **Orcid ID: 0000- 0003- 1184- 9205.**

10. Membership of Institution: Life Member of the Indian Natural Fibre Society, National Institute of Natural Fibre Engineering & Technology (NENFET), Indian Council of Agricultural Research (ICAR), Kolkata, Membership No. TNIFS/LM- 292/08/15.