

Curriculum Vitae



1. Name : **DEBASIS CHATTOPADHYAY**
2. Mother's name : Smt. Madhuri Chattopadhyay
3. Father's name : Late Gurudas Chattopadhyay
4. Date of birth : 30th August, 1968
5. Communication address and telephone nos. :
18, Kailash Bose Lane,
Howrah, West Bengal,
Pin – 711 101
Phone: (033) 26380723
Mobile: +91 9432780183/7024720583
E-Mail: debasisdchatterjee@rediffmail.com
debasisdchatterjee@gmail.com

6. Professional qualifications:

Sl. no.	Degree	Year of passing	University	Name of Institution	Class/Grade
1.	B.Sc. (Tech) in Textile Technology	1990	University of Calcutta	College of Textile Technology*, Serampore, Hooghly, WB	1 st
2.	Master of Textile Technology (M. Text)	1993	University of Bombay	Victoria Jubilee Technical Institute**, Matunga, Bombay	1 st
3	Doctorate of Philosophy (PhD)	Ongoing (2017-2022)	University of Calcutta	Department of Jute & Fibre Technology, Institute of Jute Technology, Kolkata	Thesis has been submitted on 23 rd March, 2022

* Present Name is Government College of Engineering & Textile Technology

** Present Name is Veermata Jeejiby Technical Institute.

7. List of publications:

Details are provided in Annexure – I.

8. Papers presented in conferences/symposium:

Details are provided in Annexure – II.

9. Details of sponsored/consultancy projects handled:

Details are provided in Annexure – III.

10. Employment (in descending chronological order starting with the present employer)

Details are provided in Annexure – IV.

11. Details about nature of work in different organisations:

Details are provided in Annexure - V.

12. Details of extension activities:

Details are provided in Annexure- VI

13. Training programme conducted & participated:

Details are provided in Annexure – VII.

14. Achievement/Recognition:

i) Prizes / Medals / Awards / Distinction:

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**".

ii) Scholarship received:

Qualified in "GATE 1992" for Post Graduation Study (Percentile Score – 82.63).

15. Publons/Web of Science Research ID: AAJ- 2520- 2020

16. Orcid ID: 0000- 0003- 1184- 9205

17. Any other awards/activities:

- 1) Reviewer of research papers for Journal of Natural Fibres, Journal of the Textile Institute, Sericologia, Indian Journal of Fibre and Textile Research and Indian Journal of Natural Fibres.
- 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) Invitee (Guest) faculty and external examiner of Indian Institute of Handloom & Textile Technology, Guwahati, Assam during January, 2007 to March, 2011 for the subjects spinning, fibre science, textile testing and wet processing.
- 5) Invitee (Guest) faculty and external examiner of Indian Institute of Handloom & Textile Technology, Champa, Chhattisgarh during April, 2011 to July, 2017 for the subjects spinning, fibre science, textile testing and wet processing.
- 6) Assistant Guide for students of Diploma in Handloom & Textile Technology, Indian Institute of Handloom Technology, Guwahati, Assam regarding their short-term project during January, 2007 to March, 2011.
- 7) Assistant Guide for students of Diploma in Handloom & Textile Technology, Indian Institute of Handloom Technology, Champa, C.G. regarding their short-term project during April, 2011 to July, 2017.
- 8) Faculty of Post Cocoon Silk Technology for the students of Post Graduate Diploma in Sericulture under affiliation of the Ranchi University at Central Tasar Research and Training Institute, Ranchi, Jharkhand.
- 9) Guide for case studies for the students of Post Graduate Diploma in Sericulture under affiliation of the Ranchi University at Central Tasar Research and Training Institute, Ranchi, Jharkhand.
- 10) Assistant Guide for the Bachelor and Master Degree students from other Universities/Institutes/Colleges pursuing projects at Central Tasar Research and Training Institute, Ranchi, Jharkhand.

18. Languages known:

Hindi¹, English, Bengali & Deutsch (German)²

- 1) Passed Hindi Praveen and Pragya Examinations conducted by the Hindi Teaching Scheme, Ministry of Home Affairs, Department of Official Language, Government of India.
- 2) Passed Level I (*A1, Start Deutsch 1) with 84.50 % score from Goethe Institute, Munich, Germany under guidance of Dr. V. Viswanathan, Coimbatore Centre, Goethe Institute, Max Müller Bhavan, Chennai.

19. 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.

20. References:

1. Dr. S. M. Chatterjee,
Ex- Vice Chancellor, Bengal Engineering & Science University, Shibpur, Howrah, West Bengal and Ex- Principal, Government College of Engineering & Textile Technology, Serampore, Hooghly, West Bengal.
"Ashakunja"; 5/55, Dum Dum Road,
Kolkata, Pin- 700030,
Phone: (033) 25575537
Mobile: 09830070020.
E-Mail: smchatterjee@rediffmail.com
2. Dr.V. Subramanian,
Director, Jaya Engineering College,
33, Hari Apartments, Sripuram, 1st Street,
Royapettah, Chennai, Pin- 600014,
Phone: (044) 28111910, Mobile: 09367794874.
E- Mail: ysubram@hotmail.com
3. Prof. (Dr.) Arijit Chakraborty, Professor & HOD,
Department of Textile Technology,
Government College of Engineering & Textile Technology,
12, William Carey Road, Serampore, Hooghly,
West Bengal, Pin- 712201,
Phone: (033) 26623156/2475
Mobile: 09434364043
E-Mail: Profarijit@rediffmail.com

21. Declaration:

I do hereby declare that the above information is true to the best of my knowledge and belief.



(Debasis Chattopadhyay)

Annexure - I

Details of Publications

A. Peer reviewed journals:

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 catalyzed 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*; 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.

B. Other journals:

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.

C. Monograph/Book chapters:

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.

D. Technical report/Project report etc.

(a) South India Textile Research Association (SITRA) Focus

1. "Fly & fluff generation in a spinning mill and its control"; Vol. 16, September, 1998, No. 3
2. "Indigenous textile machinery- state of art"; Vol. 16, January 1999, No. 5
3. "Influence of cots and aprons on yarn quality"; Vol. 18, No. 2, July 2000
4. "Total quality management in textile mills – concept and application"; Vol. 18, September 2000, No.3.
5. "Index of blend irregularity – concept and application"; Vol. 18, November 2000, No. 4
6. "Specialty polyester fibres – an insight"; Vol. 19, March 2002, No. 6
7. "Manufacture of high-quality yarns in fine & superfine counts using Indian cottons – some clues"; Vo. 20, May 2002, No. 1
8. "Smart fabrics"; Vol. 20, July 2002, No. 2
9. "Special types of regenerated cellulosic fibres – a glimpse"; Vol. 20, November 2002, No. 4
10. "Spandex fibres – scope and application"; Vol. 20, January 2003, No. 5
11. "High performance man-made fibres"; Vol. 21, May 2003, No. 1
12. "Yarn quality requirements for high-speed knitting & weaving"; Vol.21, September 2003, No.3
13. "Technical yarns manufactured in ring spinning system – Part I"; Vol.22, May 2004, No.1
14. Technical yarns manufactured in ring spinning system – Part II"; Vol.22, July 2004, No.1
15. "Cotton stickiness and its effect on spinning process and yarn quality"; Vol.22, November 2004, No.4
16. "Yarn quality requirements for shuttle less looms – Part I"; Vol.22, January,2005, No.5
17. "Yarn quality requirements for shuttle less looms-Part II"; Vol. 22, March, 2005, No.6.

(b) SITRA Research Report

1. Study of nepping potential of Indian cottons; Vol. 43, January 1999, No. 12
2. Yarn quality improvement with "SITRA Con-Hair system" in manual cone winder; Vol. 46, July 2001, NO. 3
3. Influence of flat tops and vario-comb on production of super fine yarns to meet international quality standards from low micronaire Indian cottons; Vol. 46, December 2001, No. 10

(c) SITRA News Letter (Technical Notes)

1. "How to improve breaking elongation of cotton yarns"; Vol. 39, No. 4, July-August 1998
2. "Performance of indigenous and imported yarn conditioning machines – A Comparison"; Vol. 39, No. 5, September-October 1998

3. "Nep size distribution in Indian and imported cottons – some observations"; Vol. 40, No. 1, January-February 1999
4. "Thin places in cotton yarn – reasons and remedies"; Vol. 40, No.2, March-April 1999
5. "Measures for reducing choking of rotary filter in ring frame"; Vol. 40, No. 3, May-June 1999
6. "How to rate a mill for air pollution"; Vol. 40, No. 4, July-August 1999
7. "Impact of yarn tension controller in auto winder on yarn quality"; Vol. 40, No. 5, September-October 1999
8. "To what extent basic yarn characteristics contribute to imperfections during winding"; Vol. 40, No. 6, November-December 1999
9. "Colour non-uniformity in man-made fibre fabrics"; Vol. 41, No.1, January-February 2000
10. "Polyester/viscose blended yarns for hosiery applications – some considerations"; Vol. 41, No. 2, March-April 2000
11. "Impact of life of cylinder wire and grinding on card neps"; Vol. 41, No. 3, May-June 2000
12. "Influence of carding process parameters on yarn neps – a case study"; Vol. 41, No. 5, September – October 2000
13. "Flame retardancy of textile materials – some considerations"; Vol. 42, No. 2, March-April 2001
14. "Sewing thread for technical applications"; Vol. 42, No. 4, July – August 2001
15. "Antistatic fibres – a bird's eye view"; Vol. 42, No. 5, September-October 2001
16. "Influence of fibre & yarn properties on weaving & knitting performance", Vol. 42, No. 6, November-December 2001
17. "Manufacture of cotton lycra core spun yarn"; Vol. 43, No. 1, January-February 2002
18. "Influence of classimat faults on fabric formation"; Vol. 43, No. 1, January-February 2002
19. "Application of artificial neural network for yarn and fabric manufacture"; Vol. 43, No. 2, March-April 2002
20. "Geo textiles"; Vol. 43, No. 3, May-June 2002
21. "Ballistic protective clothing"; Vol. 43, No. 4, July-August 2002
22. "Quality requirements of cottons needed by the textile industry in 2006-07"; Vol. 44, No. 1, January-February 2003
23. "What is the influence of bobbin holder tension on yarn quality"; Vol. 44, No. 2, March-April 2003
24. "Thermal insulation properties of fabrics"; Vol. 44, No. 3, May-June 2003
25. "Fibre quality – process variables – yarn quality mapping to produce high quality yarns – Part I"; Vol.45, No.4, July-Aug. 2004
26. "Fibre quality – process variables – yarn quality mapping to produce high quality yarns – Part II"; Vol.45, No.5, Sept.-Oct. 2004
27. "A study on the properties of ring spun folded yarns"; Vol.45, No.6, Nov. – Dec. 2004
28. "Factors influencing tenacity of rotor spun yarns"; Vol-46, No-3, May-June, 2005.
29. "Blending of jute/silk – experiments carried out at SITRA"; Vol-46, No.4, July- Aug, 2005.

30. "Measures to achieve low hairiness in spun yarns"; Vol-46, No-5, Sep-Oct, 2005.
31. "Bamboo – A new eco-friendly cellulose fibre"; Vol-46, No-6, Nov-Dec, 2005.

(d) SITRA News Letter (Projects)

1. "Nepping behavior of some Indian cottons and critical nep size"; Vol. 39, No. 6, November-December 1998
2. "An air-jet attachment in cone winder to improve yarn quality"; Vol. 40; No. 6, November-December 1999
3. "Scope and constraints of specialty polyester fibres"; Vol. 41, No. 3, May-June 1999
4. "Use of variable wire density flat tops for improving the nep removal efficiency of cards"; Vol. 41, No. 4, July-August 2000
5. "What is the impact of different wire point population flat tops on reduction of smaller size neps in carded sliver using Indian cottons"; Vol. 42, No. 2, March-April 2001
6. "Manufacture of high-performance technical textiles using friction spinning technology"; Vol. 42, No. 5, September-October 2001
7. "Development of protective fabrics using friction spinning technology"; Vol. 44, No., March-April 2003
8. "Application of ANN for prediction of ring yarn properties and process variables – Part – I"; Vol.44, N0.6, Nov.-December 2003.
9. "Application of ANN for prediction of ring yarn properties and process variables"; Part-II, Vol. 45, No.1, Jan-Feb, 2004.
10. "Heavy density fabrics"; Vol.45, No.3, May-June, 2004.
11. "Yarn quality requirement for shuttle less looms"; Vol.46, No.1, Jan – Feb., 2005
12. "Spinning of coir blended yarns in jute spinning system"; Vol-46, No-3, May-June 2005.

Annexure- II

Papers presented in Conferences/Symposium

1. Chellamani, K. P., Chattopadhyay, D. & Thanabal, V. (1999), Nepping behavior of Indian cottons, *Proceedings of the 40th Joint Technological conference of ATIRA, BTRA, NITRA & SITRA*, Coimbatore, India.
2. Chellamani K. P., Chattopadhyay D. & Thanabal V. (2000). Yarn quality improvement with an air jet attachment in cone winding, *Proceedings of the 41st Joint Technological Conference ATIRA, BTRA, NITRA & SITRA*, Mumbai, India.
3. Chellamani K. P., Chattopadhyay, D. & Arulmozhi, M. (2001). Yarn quality for knitting – A new perspective, *Proceedings of the 56th All India Textile conference*, Textile Association of India, Solapur, Maharashtra, India.
4. Chellamani, K. P., Chattopadhyay, D. & Arulmozhi, M. (2001). Manufacturing process & essential quality characteristics of yarns for technical textiles, *Proceedings of the International Seminar on Technical Textiles*, Silk & Art Silk Mills Research Association, Mumbai, India.
5. Chellamani, K. P. & Chattopadhyay, D. (2001). Fibres and polymers for implant- able medical applications, *Proceedings of the National Level Symposium on Medical Textiles*, Jaya Engineering College, Chennai, India.
6. Chellamani, K. P., Chattopadhyay, D. & Thanabal, V. (2002). Influence of wire point density in cards & combers on neps in sliver and on yarn quality, *Proceedings of the 43rd Joint Technological conference ATIRA, BTRA, NITRA & SITRA*, New Delhi, India.
7. Chellamani, K. P., Chattopadhyay, D. & Kumar, P. R. (2003). Modern developments in spinning and spinning preparatory machines – a bird's eye view, *Proceedings of the National Technical Convention on Present Scenario of Spinning Segment in Textile Industries*, Jaipur, India.
8. Chellamani, K. P., Chattopadhyay, D. & Kumar, P.R. (2004) Electronic process control in textile mills, *Proceedings of the National Level Seminar on Energy Management in Textile Industry*, SIMA TEXSPARES, Coimbatore, India.

9. Chellamani, K. P., Chattopadhyay, D. & Kumar, P.R. (2004). Application of artificial neural network for predicting ring yarn properties and process variables, Proceedings of the 45th Joint Technological Conference of ATIRA, BTRA, NITRA & SITRA, Mumbai, India.
10. Chellamani, K. P., Chattopadhyay, D. & Vijayakumar, K.A. (2004). Spinning of coir blended yarns in jute spinning system for enhancing product quality, Proceedings of the Conference, Central Coir Research Institute, Coir Board, Kalavoor, Alleppey, Kerala India.
11. Chellamani, K. P., Chattopadhyay, D., Ravindran, M. P.S. & Kumar, T.P.R. (2005). Quality Profile of Spun Yarns used in Shuttleless Looms, an Exploratory Study, Proceedings of the 46th Joint Technological Conference of ATIRA, BTRA, NITRA & SITRA, Ahmedabad, India.
12. Chellamani, K.P., Chattopadhyay, D. and Vittopa M. K. (2006). Studies on spinning behavior and anti-fungal properties of bamboo Fibres, Proceedings of the 47th Joint Technological Conference of ATIRA, BTRA, NITRA & SITRA, New Delhi, India.
13. Mitra, G., Moon, M. A., Chattopadhyay, D. & Basu, A. (2013). Development of tasar cocoon reeling technology, Proceedings of the 26th National Convention of Textile Engineers & National Seminar on “Futuristic Fibres- 2013”, Institution of Engineers (India), M.P. State Center, Bhopal, M.P. India.
14. Chattopadhyay, D., Chakraborty, A. & Chatterjee, S. M. (2013). Prospects of Eri Silk Fibre in Modern Textile Scenario, Proceedings of the 26th National Convention of Textile Engineers & National Seminar on “Futuristic Fibres- 2013”, Institution of Engineers (India), M.P. State Center, Bhopal, M.P. India.

Annexure - III
Details of sponsored/consultancy projects handled

Sl. no.	Title of the project	Whether completed or in progress	Duration (Years)	Amount of grant (Rs.in lakhs)	Sponsoring/Funding agency	Co- investigator if any
A. Sponsored projects						
1.	Study of nepping potential of Indian cottons and the influence of mechanical processing on nep generation with special emphasis to low maturity hybrid cottons	Completed	2.0	24.92	Ministry of Textiles, Govt. of India	K.P. Chellamani & V. Thanabal
2.	Yarn quality improvement with an air jet attachment in cone winder	Completed	2.0	27.90	Ministry of Textiles, Govt. of India	K.P. Chellamani & V. Thanabal
3.	Design and fabrication of different types of flat tops for carding and use of vario comb in combers for removal of smaller size neps towards producing yarns meeting international quality standards	Completed	2.0	30.00	Ministry of Textiles, Govt. of India	K.P. Chellamani & V. Thanabal
4.	Development of a technology package for specialty polyester fibres	Completed	2.0	31.00	Ministry of Textiles, Govt. of India	K.P. Chellamani, M. Arulmozhi & V. Thanabal
5.	Spinning of coir blended yarns in jute spinning system	Completed	1.0	9.50	Coir Board, Govt. of India, Ernakulam, Cochin.	K.P. Chellamani & K.A. Vijay Kumar
6.	Development of three-dimensional fabrics using para-aramid filament yarns	Completed	1.0	8.50	Naval Physical & Oceanographic Laboratory, DRDO, Cochin.	K.P. Chellamani & M.P.S.Ravindran

Sl. no.	Title of the project	Whether completed or in progress	Duration (Years)	Amount of grant (Rs.in lakhs)	Sponsoring/Funding agency	Co- investigator if any
7.	Development of new reeling machine for tropical tasar cocoons regarding enhancement of productivity and quality	Completed	1.0	9.65	Central Silk Board, Bangalore	T.K.Paul, U.C.Javali,A.K.Paul, Kiran Malali, M.Roy, C.S.Dewangan, & H.R.Gowda
8.	Modifications in the existing reeling and spinning machines for commercial utilization in tasar sector	Completed	1.0	20.00	Central Silk Board, Bangalore	M.A.Moon, T.K.Paul, U.C.Javali, A.K.Paul, G.Mitra, M.Roy, K.Sathyanarayana
9.	Studies on reeling performance of fresh and defective cocoons of tasar of tasar as well as quality characteristics of yarn produced	Completed	2.00	1.00	Central Silk Board, Bangalore	G. Mitra
10.	Development of eco- race specific package for production of quality tasar yarns	Completed	2.00	10.40	Central Silk Board, Bangalore	Z. M. S. Khan
11.	Grading of tasar silk yarn- development of methods and procedures	Completed	3.0	23.00	Central Silk Board, Bangalore	P. N. Bhat Dr. N. V. Padaki J. Ghosh G. Mitra R. Raghu Z. M. S. Khan
12.	Studies on utilization of solar energy in tasar post cocoon technology operations	Completed	3.0	50.73	Ministry of New & Renewable Energy (MNRE) and Central Silk Board, Bangalore	Z. M. S. Khan
13.	Studies on storage practices of tropical tasar cocoons for better cooking efficiency, reeling parameters and yarn quality	On- going	2.0	18.50	Central Silk Board, Bangalore	Dr. N. V. Padaki

Sl. no.	Title of the project	Whether completed or in progress	Duration (Years)	Amount of grant (Rs.in lakhs)	Sponsoring/Funding agency	Co- investigator if any
B. Consultancy projects						
1.	Manufacture of high-performance technical textiles using friction spinning technology	Completed	2.0	10.00	In- House	K. P. Chellamani, & V. Thanabal
2.	Application of artificial neural network for predicting ring yarn properties and process variables	Completed	2.0	4.50	In-House	K. P. Chellamani, & V. Thanabal
3.	Yarn quality requirement for different types of looms	Completed	2.0	6.50	In-House	K. P. Chellamani & P. Ramesh Kumar
4.	A study on manufacture of heavy density fabrics	Completed	2.0	5.25	In-House	K. P. Chellamani & V. Thanabal
5.	Utilization of waste during extraction of fibres from pineapple leaves while using SITRA decorticating machine	Completed	0.5	2.5	SITRA & M/s Mushroom Growers Welfare Society, Agartala, Tripura.	K. P. Chellamani & M. K. Vittopa
6.	A Study on the spinning and knitting behaviour of bamboo fibres	Completed	1.0	5.0	In-House	K.P. Chellamani & M.P.S.Ravindran

Annexure – IV
Employment
(in descending chronological order starting with the resent employer)

Sl. No.	Employer	Post held (Place of posting)	Pay scale	Pay	Period of employment	
					From	To
1.	Central Tasar Research & Training Institute, Central Silk Board, Ministry of Textiles, Government of India	Scientist- D (Ranchi, Jharkhand)	Level 12 (7 th CPC)	Rs. 94, 100/-	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 (Ranchi, Jharkhand & Bilaspur, Chhattisgarh)	16,500 – 31,000/-	21, 620/- Basic + 6, 600/- Grade	January, 2015	July, 2020
3.	Central Silk Technological Research Institute, Central Silk Board, Ministry of Textiles, Government of India	Scientist – B (Bilaspur, Chhattisgarh & Guwahati, Assam)	16,500 – 31,000/-	20, 060/- Basic + 5,400/- Grade	January, 2007	December, 2014
4.	The South India Textile Research Association, (SITRA) Coimbatore, Tamil Nadu	Senior Scientific Officer (Coimbatore)	8,000 - 275 - 13,500/-	25, 000/-	June, 1998	December, 2006
5.	Shreyans Spinning Mills- Worsted Division, Ludhiana, Punjab	Assistant Manager (R & D) (Ludhiana, Punjab)	12, 000- 25, 000	15, 000/-	January, 1998	May, 1998
6.	Mahavir Spinning Mills Ltd., Hoshiarpur, Punjab, (A unit of Vardhman Group)	P.D.C. Officer (R & D) (Hoshiarpur, Punjab)	4,000 - 500 - 10,000/-	10, 000/-	October, 1996	December 1997
7.	Jayashree Textiles, Rishra, Hooghly, W.B. (A Unit of Aditya Birla Group)	Technical Officer (Rishra, Hooghly, W.B.)	2,000 - 400 - 8,000/-	6, 000/-	March 1995	July 1996

Sl. No	Employer	Post Held (Place of posting)	Pay Scale	Pay	Period of Employment	
					From	To
8.	Woolworth India Limited, A unit of Uniworth Group, Raipur, M.P.	Technical Trainee (Raipur, Chhattisgarh)	N.A.	Rs. 5000/- (Consolidated)	August, 1994	February, 1995
9.	The Kalyani Spinning Mills Ltd., Habra, 24 Parganas, W.B. (A Govt. of W.B. Undertaking)	Technical Supervisor (Habra, W. B.)	470 - 152 - 1,230/-	1, 500/-	June 1991	July 1992

Annexure – V

Details about nature of work in different organisations

1. Central Silk Board, Ministry of Textiles, Govt. of India:

Department- Post Cocoon Silk Technology

- a) Pursuing research projects approved by Central Silk Board, Ministry of Textiles, Bangalore as well as other outside organization as principal and co-investigator.
- b) Preparation of project proposals for sponsorship.
- c) Preparation of research papers for publications in peer- review and other journals.
- d) Conducting classes for post cocoon silk technology for students of Post Graduate Diploma in Sericulture (PGDS) under affiliation of the Ranchi University.
- e) Testing of cocoon, silk yarn, silk fabric and water samples collected from CSB Sub- Units, Directorate of Sericulture of State Government, NGO and other sources.
- f) Organizing and conducting different training programme like structural, quality enhancement, refresher, integrated skill development etc.
- g) Organizing field programmes like field visit, demonstration, field interaction, field awareness etc.
- h) Verification of performance for the machineries and equipments like CSTR certified handlooms, handloom up gradation, yarn dyeing, fabric dyeing, computer aided textile design (CATD), multi end reeling etc. established under Central Silk Board CDP/CSS/Silk Samagraha scheme.

2. The South India Textile Research Association (SITRA):

Department: Mechanical Processing (Spinning):

- a) Co – investigator of sponsored (Ministry of Textiles, Indian Cotton Mills Federation, Defence Research & Development Organization etc.) and in – house Projects.
- b) Conducting training programme for the supervisors and executives as per the requirement of the textile industries.
- c) Consultancy services for quality improvement, product diversification / development and quality management system (i.e., ISO 9001: 2000, Total Quality Management & Quality Circle.)
- d) Preparation of project proposal for sponsorship from agencies like Ministry of Textiles, Department of Science & Technology, Ministry of Defence etc.
- e) Preparation of project proposal for sanction from financial institutions (as per requirement of the entrepreneur).
- f) Preparation of research papers for publications.
- g) Additional in charge of Technical Textiles section in Mechanical Processing Department.

3. Shreyans Spinning Mills- Worsted Division:

Department: Research & Development (Spinning):

- a) In charge of quality control activities for spinning department.
- b) Research & development studies conducted in spinning department like process optimization, spinnability of fibres, trouble shooting, new product developments etc.
- c) Pursuing ISO 9000 activities for R & D Department (Spinning)

4. Mahavir Spinning Mills Ltd. (A unit of Vardhaman Group):

Department: Research & Development (Spinning):

- a) In charge of quality control activities for spinning department.
- b) Research & development studies conducted in spinning department like process optimisation, spinnability of fibres, trouble shooting, new product developments etc.,
- c) Conducting training programme for the marketing, sales & accounts personnel as per the requirement of organisation.
- d) Pursuing ISO 9000 activities for R & D Department (Spinning)

5. Jayashree Textiles (A unit of Aditya Birla Group):

Department: Production Planning & Development- Worsted Spinning:

- a) Production planning as per the requirement of marketing department.
- b) New product development
- c) Process control activities.

6. Woolworth India Ltd:

Undergone training in different departments of worsted spinning process.

7. The Kalyani Spinning Mills Ltd., (A Govt of W B undertaking):

Department: Spinning

- a) Shift In-charge of preparatory & spinning section.
- b) Monitoring the production & process control activities.

Annexure- VI

Details of extension activities

A. Establishment of spun silk units:

1. M/s Indi- Luo Enterprise, Eri Spun Silk Unit, Kokrajhar, Boroland Territorial Council (B.T.C), Assam during June, 2009. The spun silk unit was established with production capacity of 60 Kg. per 8 hours with 1080 spindle capacity, count range of 20 Nm to 120 Nm and Italian technology system.
2. M/s Fabric Plus Limited, Chaigaon, Boko, Kamrup, Assam during August, 2009. The spun silk unit established with production capacity of 60 Kg. per 8 ours with spindle capacity of 1080, count range of 20 Nm to 180 Nm and Japanese Technology System.

B. Technology trials in post cocoon sector:

1. The technology trials were carried out in post- cocoon sector at Kurawa Village, Dumka District, near Deoghar, Jharkhand State. The trail was initiated by the working group proposed by the Member Secretary, Central Silk Board in order to choose better option for conversion of tasar cocoons into yarn from the available technology/machinery. The trial was carried out during 05/06/2012 to 20/06/2012 on tasar cocoon cooking, reeling and spinning technologies. A total of five machines for reeling and four spinning machines manufactured by different agencies were considered for the trial. The data was analyzed at Zonal Office, Bilaspur and tasar silk yarn quality characteristics were assessed at CSTRI, Bangalore. A detailed report was prepared and submitted to the Member Secretary, CSB and the Director, CSTRI, Bangalore.
2. Reeling performance assessment for the New Charka Reeling and Vertical Reeling & Spinning Machine regarding the project entitled “Development of new reeling machine for tropical tasar cocoons (CYR- 4699) during 7th to 10th January, 2013 at Central Tasar Research & Training Institute, CSB, Ranchi. The report has been submitted to the competent authority.
3. Technology trials for the Modified Wet Reeling Machine and the New Charka Reeling Machine at Mahadevpur, Karimnagar District, Andhra Pradesh during 13th to 17th May, 2013.
4. A field trial was conducted at Tantipara, Suri, Birbhum, West Bengal during 20th to 31st January, 2015 regarding performance assessment of different reeling machines developed by Central Silk Board, Sericulture Department of different States, NGOs and

individual reeler i.e., Motorized Reeling cum Twisting Machine (MRTM), Wet Reeling Machine, Vertical Reeling cum Spinning Machine, Motorized Tasar Reeling Charkha (MTRC) etc. It was revealed that for warp yarns, Motorized Reeling cum Twisting Machine (MRTM) and Wet Reeling Machine are very much suitable whereas for weft, Motorized Tasar Reeling Charkha (MTRC) and Buniyaad Reeling Machine can be utilized. The maximum production was found about 300 g for Motorized Tasar Reeling Charkha and minimum 150 g in case of Motorized Reeling cum Twisting Machine for 8 hours operation with 60 denier fineness.

5. Trial was conducted at Tasar Yarn Production Centre, PRADAN, Kuruwa Village, Sariyahat, Dumka, Jharkhand during 10th to 19th May, 2018 using new developed Atal Reeling Machine jointly by Tasar Research Foundation, Deoghar, Jharkhand and Central tasar Research & Training institute, Central Silk Board, Ranchi manufactured by M/s Aryan Engineering, Kanakpura, Ramanagaram, Karnataka. The machine consists of two ends where take up speed can be altered between 35 to 120 m/min by speed control tuner. But considering quality of tasar cocoons, reeling speed can be maintained between 35 to 50 m/min. The reeling trials were conducted at 50 m/min take up speed. It was found that about 250 g of 60 denier fineness untwisted yarn can be produced using this machine.

Annexure – VII

A. Training programme conducted:

1. A Three-Day supervisory development programme for M/s. ATL Textiles Limited, Tirupur, during July 1998. The topics covered were process control and modern development in spinning.
2. Programme on “Yarn quality from high tech spinning machinery”, September 1998, Topics covered were performance of high-tech spinning machinery, obtainable yarn quality & quality control measures, quality requirements for high-speed weaving & knitting, quality monitoring-off line & online and maintenance of high-tech machinery.
3. ISO 9000 for M/s. Bhoruka Textiles, A three-day in-house training programme on “Implementation of ISO 9000 quality system in a textile mill was conducted for M/s. Bhoruka Textiles, Hubli, Karnataka during September 1998. The topics covered include concepts, systems requirement, maintenance of records and obligations required for ISO 9000 as well as implementation in textile mills.
4. Three days programme on “Fibre to fabric”, for non-textile executives during April, 1999. Besides focusing on spinning, weaving and chemical processing, the course content covered topics on raw materials, fibre and yarn relationship, present textile scenario and modern developments. More time was devoted to the practical sessions which included visit to the pilot mill and also spinning, weaving and processing units.
5. “Programme on Total Quality Management & Total Productive Maintenance”. A Two days programme on TQM and TPM was organised during June 2000. The highlight of the programme was the emphasis given to practical application of TQM and TPM in textile mills.
6. “Programme on Speciality Yarns and Technical Fabrics”. The program was held during August 2000. The course highlighted the types of unconventional yarns used in different applications like core, mélange, fancy, worsted, composite etc. as also technical fabrics used in various applications like medical, agricultural, constructional, automotive etc. The programme also provided general guidelines on the diversified possibilities available to textile mills.
7. Programme on “Specialty Yarns and Technical Textiles”. The program was held during September 2001. This orientation course highlighted the types of unconventional yarns used in different applications like core, mélange, fancy, worsted, composite etc. and also the various technical fabrics used in medical, agricultural, construction and automotive purpose.
8. “Programme on Speciality Fibres and Technical Fabrics”. The program was held during September 2002. This orientation course highlighted recent development in speciality fibres like trilobal, hollow, low pill and flame retardant and high-performance fibres like carbon, Kevlar, Nomex, Spectra etc. their special features, the spinning systems to be employed for yarn manufacture and yarn quality requirements to produce fabrics from these yarns for various end uses. The course also covered on smart fabrics.

9. A lecture was delivered on “Mechanical processing of cotton and man-made fibres in spinning” during the senior executives training programme organised by M/s. Lakshmi Machine Works Limited, Coimbatore during December, 2002.
10. “Awareness Programme on ISO 9001:2000”. M/s. Anglo French Textiles, Pondicherry availed SITRA’s services for three days programme on ISO 9001: 2000 amendments. 25 Supervisor and Assistant Managers attended the programme which dealt with 2000 series of standards for ISO 9000, audit procedure involved, implementation methods etc. The programme dealt practical exercise for preparation of quality manuals and records and on evaluation of the extent of system adherence and corrective measures thereof during January, 2003.
11. “Supervisory Development Programme for Technical Personnel”. At the request of M/s. Gem Spinners, Chennai, SITRA conducted an in-house supervisory development programme during July 2003. The programme covered technical topics like waste control, quality management in spinning, process control in spinning and maintenance management.
12. “Programme on yarn quality requirements for high-speed looms and quality preservation in post spinning and weaving preparatory”. The programme was held during May, 2004. Topics that are covered in the programme are yarn quality requirements for rapier looms, air jet looms, projectile looms and high speed shuttle looms, quality requirements for producing denser fabrics with higher thread count, yarn quality deterioration in post spinning and weaving preparatory operations and measures of control the same, relative importance of different yarn properties for fabrics of different end uses like apparels, protective fabrics, upholstery, curtains etc and assessment of weak spots in spun yarn and their correlation with weaving performance.
13. M/s. Voltas Ltd., (A division of Tata Group) requested SITRA to conduct similar programme as mentioned in Sl. No. 12. During May 2004, same programme was conducted and 50 participants from all over India branch offices have attended the same.
14. Programme on “Quality management in spinning mills”. The programme was held during June, 2004. The topics that are elaborated at this workshop are hairiness of spun yarns – influencing factors, factors affecting yarn elongation and measures to improve the same, fibre properties – process variables – yarn quality mapping to produce superior quality yarns, optimizing yarn quality with AFIS data, interpretations of test data from modern testing instruments, 5-S work practices for improved performance and productivity and 6-sigma problem solving tools for productivity enhancement.
15. M/s. Anglo French Textiles, Pondicherry requested SITRA to conduct a similar training programme as mentioned in Sl. No. 14. Accordingly, the same was conducted during July, 2004. About 30 participants consist of Managers, Asst. Managers and Supervisors have participated in this programme.
16. Nachimuthu Polytechnic, Pollachi, Coimbatore requested SITRA to conduct a class at the I.S.T.E. Short Term Training Programme. The paper entitled "Application of artificial neural network for predicting ring yarn properties and process variables" was presented at the workshop during October 2004.

17. A lecture has been delivered on "Air-jet spinning technology – applications and limitations" during three days short term programme conducted by Bannari Amman Institute of Technology, Erode on "Advances in production and quality aspects of yarn" during March, 2005.
18. M/s. Super Spinning Mills, Hindupur, A.P. and Karur, Tamil Nadu requested SITRA to conduct Supervisory Training Programme at mill's premises regarding modern development on spinning, application of modern testing instrument, test data for process control in spinning, yarn quality requirement for high-speed weaving and knitting etc. Accordingly, the same was conducted during October 2005 and November 2005.
19. Central Silk Board, Guwahati was organized five days technological awareness programme for silk industries in north-east region in co-ordination with M/s. Mosksha Group, Guwahati. 17 participants from 20 assembly constituencies of eastern Nagaland were participated during June, 2007. The main aim of this programme was "Economic empowerment of women from eastern Nagaland districts".
20. Central Silk Board, Guwahati was organised fifteen days training programme for weaving of muga and eri silk using CSTRI Improved Handloom (with parallel beat-up mechanism) in co-ordination with Directorate of Sericulture, Government of Assam during December, 2009. 30 participants from different parts of Assam were participated. The main aim of this programme was to make familiarize about the CSTRI Improved Handloom (with parallel beat-up mechanism), work practices to be followed and maintenance of the same.
21. Two training programmes on "Muga cocoons reeling and eri cocoons spinning technology" were organized by Central Silk Board, Guwahati. The first one was conducted at Boko, Kamrup, Assam during September, 2009 for 15 days in which 25 participants were attended. The second one was conducted at Dhemaji, Assam during December, 2009 for 15 days in which 25 participants were attended.
22. One operator training on non- mulberry reeling and spinning under Integrated Skill Development Scheme (ISDS) programme was organized during September- October, 2012 at Bilaspur for 15 days in which 25 women candidates of Abhiyan, NGO, Bilaspur were participated sponsored by Central Silk Board, Bangalore.
23. An Integrated Skill Development Scheme (ISDS) Programme was conducted on silk degumming and spinning following Italian Technology for the operators of M/s Kasare Vanya Silk Mills, Urkura, Bhanpuri, Raipur, Chhattisgarh during August-September, 2013 (15 days) in which 25 participants were attended sponsored by Central Silk Board, Bangalore.
24. Two lectures have been delivered on "An overview of post cocoon scenario in mulberry and tasar sector" and "Introduction to silk reeling, spinning, twisting, weaving and dyeing" at the Resource Development Programme (RDP) organized by Basic Tasar Silkworm Seed Organization, CSB, Bilaspur during December, 2013.

25. One operator training on non- mulberry reeling and spinning under Integrated Skill Development Scheme (ISDS) programme was organized during January- February, 2014 for 15 days in which 25 women candidates of reeling and spinning unit, Abhiyan, NGO, Lingadihi Village, Bilaspur were participated sponsored by Central Silk Board, Bangalore.
26. Two operator training on non- mulberry reeling and spinning under Integrated Skill Development Scheme (ISDS) programmes were organized during June, 2014 for 15 days in which 25 women candidates from tasar reeling training and production center, Directorate of Sericulture, Government of M.P., Narsinghpur, M.P. were attended sponsored by Central Silk Board, Bangalore.

B. Training programme attended:

1. Attended/Participated different training programmes, symposium, conferences etc. organized by Rieter (Switzerland), Trützschler (Germany), Uster (Switzerland), Lophe (Switzerland), Dilo (Germany), Laxmi Machine Works (India), Reliance Industries Limited (India) etc. in Coimbatore, Tamilnadu during service period at SITRA.
2. Attended seminar on “Total Quality Management – Business Development towards World Class Standard” at Small Industries Testing and Research Centre, Coimbatore during December, 1999.
3. Attended seminar on “Statistical Techniques with Computer Applications” at PSG College of Arts & Science, Coimbatore during March, 2000.
4. “Testing of Imported Silk Yarns as well as Indigenous Silk Cocoons and Yarns” at Central Silk Technological Research Institute, Central Silk Board, Bangalore during February, 2010.
5. “Trainer Training Programme for Integrated Skill Development Scheme (ISDS) at Central Silk Technological Research Institute, Central Silk Board, Bangalore during February, 2012.
6. Attended training programme on “Science Administration and Research Management” during 1st to 12th July, 2019 sponsored by Department of Science and Technology (DST), Government of India, New Delhi at Administrative Staff College of India, Bella Vista, Hyderabad.
7. Attended training programme on “Communication and presentation skills” organized by Central Tasar Research & Training Institute, Ranchi during 10th to 11th September, 2018.
8. Attended training programme on “Statistics and its application in tasar sericulture” during 5th to 7th January, 2022 at Central Tasar Research & Training Institute, Ranchi organized by Indian Council of Agricultural Research (ICAR), New Delhi.