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 2. Designation : Scientist –D
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 6. Educational Qualification



Sl.No.	Name of the college /University	Degree exam passed	Year of Passing	Subject taken with specialization	Class/Dvn
1	SKSITI Bangalore, Bangalore University	B.Tech (Textiles)	Jan-87	Textile technology	First Class
2	SKSITI Bangalore, Bangalore University	M.Tech (Textiles)	Mar-91	Textile technology	First Class
3	Visveswaraya Technological University	Ph.D	Feb-13	Textile technology	NA

7. Experience

Sl.No.	Name of the employer	Designation of the post held	Nature of Duties performed	Period of service	Date of leaving with reasons.
1	CTR & TI ,Central Silk Board, Ranchi	SRA	Research & training on Tasar silk on reeling, spinning, weaving, dyeing & finishing ,solving the field related problems	13/03/1990 to Sept. 1991	Transfer
2	DCTSC,CSTRI, Central Silk Board, Jagadapur, Chhattisgarh	SRA	Research & training on Mulberry silk on reeling, spinning, weaving, dyeing & finishing, solving the field related problems, extension work	Sept 1991 to May 1998	Transfer
3	Central Silk Technological Research Institute , Central Silk Board , Bangalore	SRA	Research & training on Mulberry, Tasar, Muga & Eri silk on reeling, spinning, weaving, dyeing & finishing ,solving the field related problems	May 1998 to 12 March 2000	Promotion

4	Central Silk Technological Research Institute , Central Silk Board , Bangalore	SRO	Research & training on Mulberry, Tasar, Muga & Eri silk on reeling, spinning, weaving, dyeing & finishing ,solving the field related problems	13 March 2000 to 29 August 2006	Promotion
5	Central Silk Technological Research Institute , Central Silk Board , Bangalore	Scientist C	Research & training on Mulberry ,Tasar, Muga & Eri silk on reeling, spinning, weaving, dyeing & finishing ,solving the field related problems	30 August 2006 to 05.03.2009	Promotion
6	Central Sericultural Research & Training Institute , Central Silk Board , Mysore	Scientist C	Research, training and Test reeling of mulberry silk solving the field related problems	06.02.2009 to 27.02.2014	Transfer
5	Central Sericultural Research & Training Institute , Central Silk Board , Mysore	Scientist D	Research, training and Test reeling of mulberry silk solving the field related problems	28.02.2014 to 30.04.2017	Promotion
7	Central Silk Technological Research Institute , Central Silk Board , Bangalore	Scientist D	Research & training on Mulberry, Tasar ,Muga & Eri silk on reeling, spinning, weaving, dyeing & finishing ,solving the field related problems	01.05.2017 to till date	Working

8. Projects(s) submitted/ being perused / carried out by Investigator

#	Project code and Title	Funding Agency	Duration
1	CYR-7019: Development of Tasar reeling package to produce superior quality Tasar silk.	CSB	Apr., 2003- Sep., 2008
2	CYR-7023: Development Fancy yarn.	CSB	Apr., 2006 – Sep., 2008
3	CYR-7024: Production of Non-Mulberry mill spun yarn, fabric and its Characterization.	CSB	Apr., 2006 – Sep., 2008
4	SIM-0038: Studies to determine the process parameter for the new multi x Bivoltine hybrids.	CSB	Mar., 2010 – Apr.,2013
5	SEM-0007: Test verification of newly developed silk worm breeds and their hybrids.	CSB	Oct., 2007 – Mar., 2012
6	SIM-0009: Evaluation of three way cross hybrids for commercial exploitation.	CSB	Aug., 2010 – Sep., 2014
7	AIT-3445: Development of robust bivoltine hybrid of silk worm <i>Bombyx mori</i> L. tolerant to high temp environment of the tropic through DNA marker Assisted selection	CSB	Nov., 2010 to Oct., 2015

9. Publications: 46

1. Books: 3
2. Research papers: 37
3. Popular Articles: 6

10. List of important publications whose contents can be used in the proposed area of work:

A. International Journals:

1. Kariyappa, K.P.Shivakumar, P.M.Damodara Rao, Subrata Roy and T.H.Somashekar, Studies on processing of Muga waste in mill spinning to produce quality spun silk yarn and its characterization 2011-*Sericologia* ,51(2) 265-283.
2. Kariyappa, P.M.Damodara Rao and T.H.Somashekar, Physical & comfort properties of Mulberry, white Eri & Red eri spun yarn woven fabrics 2011-*Sericologia* ,51(3) 415-431.
3. Kariyappa, Y.C.Radhalakshmi, K.P.Shivakumar and T.H.Somashekar (2013), Comparative performance of mulberry and tasar silk waste processing in mill spinning, *Sericologia*, 53(2) : 125-133.
4. A.Nasema Begum, Kariyappa,N.Malreddy,Y.C.Rahalakshmi,K.P.Shivakumar and B.B.Bindroo (2013) Studies on cocoon filament size deviation in three way cross bivoltine hybrids of the silk worm *Bombyx mori*.L , *International Journal of Research in Biological sciences* 3(4):171-174.
5. Kariyappa, Y.C.Radhalakshmi, and K.P.Shivakumar (2014), Evaluation of low stress Mechanical properties of Eri/wool Blended fabrics , *Sericologia* , 54(1) : 59-65.
6. N.Chandrakanth,S.M.Moorthy,Kariyappa ,K.M.Ponnuvel and V.Sivaprasad (2015) Reeling performance of F2 and backcross populations under high temperature condition ,*Journal of entomology and Zoology studies*;3(6):219-222.
7. Dayananda,V.Sivaprasad, S.B.Kulkarni, C.Parameswara and Kariyappa (2016) Identification of improved crossbreeds of silkworm *Bombyxmori*L. Suitable for south India *International Journal of Plant, Animal and Environmental Sciences*; 6(1):109-113.

B. National Journals

1. Kariyappa and T.H.Somashekar. An innovative method for Tasar cocoon cooking Development of new method of Tasar cocoon cooking. *Indian Silk* ,March 2003, Page 25-27
2. Kariyappa, M.Umesh and T.H.Somashekar. CSTR Motorised cum pedal operated spinning machine, *Indian Silk* , May 2003, Page 37-40.
3. Kariyappa, B.V.Vasumati, G.N.Ramaswamy, T.Srikanth, Subrata Roy and T.H.Somashekar. Development of fancy Spun silk yarn. *Indian silk* ,March 2005, Page15-16.
4. Kariyappa, M.Umesh, G.N.Ramaswamy, Subrata Roy and T.H.Somashekar.Development of CSTR Reeling cum twisting machine for Tasar and Muga, *Indian silk* , May 2005, Page14 &16.
5. Kariyappa, M.Umesh and T.H.Somashekar, Development of fleece, Denim fabric and sarees from Eri spun silk yarn, *Indian Silk*, July 2005, Page 25-26.
6. Kariyappa, Subrata Roy and T.H.Somashekar. Eri Silk Noil Spinning and Its Characterization *Indian Silk*, Sept.2005,page 15-18
7. Kariyappa, S.A.Hipparagi, Subrata Roy and T.H.Somashekar. Degumming of Eri cocoons for mill Spinning, *Indian Silk*, March 2006 page 17-20.
8. Kariyappa, T.H.Somashekar, Subrata Roy and Nanjunda Sastry.Studies on blending of Eri silk with Wool fibre in spinning and it's Characterisation. *Man made textiles in India*, May 2006 page no 176-185.

9. Kariyappa, T.H.Somashekar, Subrata Roy and G.N.Ramaswamy. Large scale mill spinning of Eri cocoons-A possibility, *Indian Silk*, August 2006, Page 19-23.
10. Kariyappa, G.N.Ramaswamy. T.H.Somashekar, Subrata Roy, C.Shasidhar and R.B.Pattanashetty. Studies on processing of Eri cocoons in mill spinning to produce quality Eri spun silk yarn and its characterisation, *Man made textiles in India*, Sept 2006 page no 339-349.
11. Kariyappa, Sangappa N.Shillin, Subrata Roy and T.H.Somashekar. Effect of mechanical Raising on properties of Eri spun silk fabric, *Journal of Textile association*, March-April 2007 pages no 277-281,
12. Kariyappa, G.N.Ramaswamy. Subrata Roy and Promod R.K, Prof.V.Shiva Prakash and D.Sheshachala Influence of different process on eri noil spinning and yarn characterisation, *Man made textiles in India*, July 2007 50 (7) page no 240-249.
13. Kariyappa, B.M.Mahadevaiah, Subrata Roy & G.N.Ramaswamy. Dr.T.Anathkrishnan and T.Srikanth. Studies on Influence of Eri/Wool fibre blending on abrasion resistance of Eri/wool blended fabric, *Man made textiles in India*, Oct 2007 page no 370-374.
14. Kariyappa, Sangappa N shiilin, G.N.Ramaswamy, Subrata Roy & T.H.Somashekar and P.M.Damodara Rao. Effect of mechanical raising on low stress, surface properties and Total hand value of white Eri spun silk fabric, *Man made textiles in India*, Dec 07 page no 441-449.
15. Kariyappa, P.M.Damodara Rao, G.N.Ramaswamy, Subrata Roy & T.H.Somashekar and Uday C, Javali. Comparative studies on physical properties of mulberry, Tasar, Muga and Eri silk fibre. *Man made textiles in India*, March 08 page no 85-89 & 93
16. Kakkanavar, A.V.Shivaprakash, Kariyappa, T.Halaswamy and Subrata Roy. Influence of Eri noil weft yarns on the furnishing fabric, *Man made textiles in India*, August 2008 page no 282-286.
17. Kariyappa, K.P.Shivakumar, P.M.Damodara Rao and Subrata Roy Evaluation of Physical & comfort properties of Eri & wool spun yarn woven fabrics, *Man made textiles in India*, November-2009 page no 393-396.
18. Kariyappa, K.P.Shivakumar, P.M.Damodara Rao, Subrata Roy and T.H.Somashekar 'Evaluation of low stress, surface properties and Total hand value of Red Eri spun silk fabric' *Man made textiles in India*, May 2010 page no 161-166.
19. Kariyappa, P.M.Damodara Rao and T.H.Somashekar, Physical & comfort properties of Mulberry, white Eri & Red eri spun yarn woven fabrics, *Man made textiles in India*, December-2010 page no 438-446.
20. Kariyappa and S.Nirmalkumar, large scale mill spinning of floss waste and its yarn characterization, *Indian silk*, July 2011 vol.2(50 old) no.3 page no 22-25.
21. Anjali A Kulkarni, Geetha Mahele and Kariyappa (2011), Physical properties of developed viscose rayon and eri silk union fabrics Karnataka *J.Agric.Sci.* 24(4) :506-509.
22. Kariyappa, P.M.Damodara Rao and T.H.Somashekar, Evaluation of low stress surface properties and total hand value of Mulberry, white eri and red eri spun silk fabric, *Indian Journal of Sericulture*, December 2011 Volume 50, Number 2 page no 180-187.
23. Kariyappa, P.M.Damodara Rao and T.H.Somashekar, Studies on shrinkage properties of spun silk yarn and its fabric, *Man made textiles in India*, February -2012 Vol XL no.2 page no 59-63.
24. Kariyappa, K.P.Shivakumar, P.M.Damodara Rao, Subrata Roy and T.H.Somashekar, Studies on processing of Tasar silk waste in mill spinning to produce quality spun silk yarn and its characterization Jan-Feb 2012-*Journal of the Textile Association* ,72(5) 288-294.
25. Y.C.Radhalakshmi, Kariyappa, K.P.Shivakumar, T.H.Somashekar and V.Subramaniam Influence of various methods of Degumming on mechanical properties of silk fabric, *Indian J.Seri.*, June 2012 Volume 51 Number 1 page no 72-80.
26. K.P.Shivakumar, Y.C.Radhalakshmi, Kariyappa, P.R.Mohan rao and S.N.Kumar, Comparative fibre Characteristic of improved cross breeds and Bivoltine hybrid of the silkworm *Bombyx Mori L*, with special reference to quality parameters, *Man made textiles in India*, September -2012 Vol XL no.9 page no 301-304.

27. Kariyappa, P.M.Damodara Rao and T.H.Somashekar, Studies on thermal properties of spun silk yarn and its fabric, *Man made textiles in India*, October -2012 Vol XL no.10 :349-352.
28. Y.C.Radhalakshmi, Reshma B.S., Kariyappa, K.P.Shivakumar and S.Nirmalkumar (2013) , Studies on impact of kinetics of cocoon cooking on reeling performance and quality of raw silk , *Indian J.Seri.* 52 (1) : 71-78.
29. Kariyappa, Y.C.Radhalakshmi, K.P.Shivakumar and B.B.Bindroo (2014) , Studies on shrinkage properties of Eri silk/Wool blended spun yarn and fabrics , *Indian J.Seri.* 53 (1) : 68-72.
30. Y.C.Radhalakshmi,Kariyappa and V.Sivaprasad (2014) Studies on interrelation among cocoon and reeling Characteristics, *Indian J.Seri;* 53 (2): 65-70.

C. Conference/Seminar proceedings:

1. T,H,Somashekar, Subrata Roy and Kariyappa, *Recent trend in Tasar post cocoon sector National workshop on recent advances in Tasar culture* ,held on 21 and 22 June 2005, page no 227 - 242
2. Kariyappa, T.H.Somashekar, Subrata Roy, "Studies on low-stress mechanical properties of Eri// wool blended fabric" *Regional seminar on Prospects & problems of sericulture as an economics enterprise in North West India* Held at Dehradun on 11 & 12 November 2006
3. Thimma reddy .G., Kariyappa and SubrataRoy "Studies on design and evaluation of Physical properties of Muga spun union fabrics produced on Handloom and Power loom" *National workshop on Seri Bio-Diversity* held on 7 and 8/03/09 at (CGHS), Hosur.
4. Kariyappa, G.Thimmareddy, Subrata Roy, G.N.Ramswamy & Kantharaj "Studies on influence of Eri silk wool blending on tensile properties & tear strength of Eri silk /wool blended fabric" *Team textiles* 16/april/2009.
5. Kariyappa, P.M.Damodara Rao,T.H.Somashekar and S.Nirmal kumar , comparison of Physical & thermal properties of Mulberry, white Eri & Red eri spun yarn woven fabrics , Golden jubilee conference -sericulture innovations:Before and Beyond 2011,CSR&TI, Mysore,388-397
6. Y.C.Radhalakshmi, S.A.Hippargi , Kariyappa, and K.P.Shivakumar Development of new and diversified products of silk to enhance the Indian silk in international market, Golden jubilee conference -sericulture innovations: Before and Beyond 2011,CSR&TI, Mysore, 529-531.

11 Highlights of outcome/Progress of the project(s) handled during the years, their outcome and utilization:

- ✓ Development of New model Motorised um pedal operated reeling cum twisting machines for Tasar & Muga reeling.
- ✓ Development of Tasar/Muga Motorised cum pedal operated Reeling cum twisting machine (6 spindles)
- ✓ Development of Tasar/Muga /Eri/Motorised cum pedal operated Spinning machine.
- ✓ Developments of Tasar/Muga /Eri Re-Reeling machine
- ✓ BISU Plant has been developed for separation of peleda from the pupae
- ✓ Development of low cost Flyer type spinning machines for spinning of Tasar/Muga /Eri waste.
- ✓ Development of cooking Recipe for Tasar cocoon for wet reeling this is the first time in history.
- ✓ Development of cooking Recipe for Muga cocoon to produce quality silk.
- ✓ Development of Degumming Recipe for Degumming of Eri cocoons for Hand spinning.
- ✓ Development of Degumming Recipe for Degumming of White Eri & Brick red Eri cocoons, Muga and Tasar waste for both Mill spinning and Hand spinning.
- ✓ Technology has been developed for spinning of Eri, Muga & Tasar spun silk yarn in spun silk mills and yarns have been characterized.

- ✓ Technology has been developed for spinning of Eri Noil yarn in Woolen, cotton and open end system of spinning and yarns have been characterized.
- ✓ Technology for spinning of Eri wool blend has been developed Eri/wool blended yarn and fabric has been characterized.
- ✓ For above blended fabric Mechanical, low stress properties, shrinkage thermal, Primary Handle and Total Handle value and dyeing properties have been characterized.
- ✓ Technology for spinning Eri cocoons (with pupae) has been developed.
- ✓ Most attractive Eri Blankets have been developed and mechanical, low stress, thermal and shrinkage properties have been characterized.
- ✓ Eri denim fabric has been developed from which, Jacket vest, pant and shirt have been developed same fabric has been given various finishing treatment has been given i.e. Enzymatic, Denim, tint, blue and yellow finish has been given.
- ✓ Various silk fancy yarns have developed (Feather, chennile, flag and slub yarns).
- ✓ Saris from Eri spun silk yarn developed.
- ✓ Development of equipment to maintain constant basin temperature.
- ✓ Development of two in one system of reeling machines for reeling of Tasar and Muga cocoons.
- ✓ Development of Reeling Package for reeling of L14XCSR2 cocoons.

11. Following machines have been patented.

1. 6 spindle Motorised cum pedal operated Reeling machine for Tasar & Muga.
2. 5 End Re-Reeling machine for Tasar & Muga.
3. Motorised cum pedal operated Flyer system of spinning machine (CSTRI Spinning model –II).
4. Two in one six spindle reeling cum twisting machine. March 2008
5. Tasar cocoon sorting machine April 2008