

**Dr. Chandrasekhara S.M.** B Tech. (Tex. Tech.), M. Tech. (Tex, Tech.), Ph.D. (Tex.Tech.)  
**Assistant Professor**  
**Dept. of Tex. Tech,**  
**Bapuji Institute Engineering and Technology,**  
**DAVANGERE -577004**  
**Mob:** +919844422882  
**Email:** [smcdvg@gmail.com](mailto:smcdvg@gmail.com)

### **RESEARCH INTEREST**

Bamboo fiber technology, silk technology Weaving technology,

### **TEACHING EXPERIENCE: 22 years and 5 years in research**

- Presently working as Assistant Professor from August 2010 in Textile Technology Dept., BIET, Davangere to till date.
- Worked as Senior Lecturer June 2006 to July 2010 in Textile Technology Dept., B.I.E.T, Davangere
- Worked as Lecturer June 1998 to May 2006 in Textile Technology Dept., B.I.E.T, Davangere

### **INDUSTRIAL EXPERIENCE**

- Worked as a professional trainee in Davangere cotton mills.Davangere. From May1995- July.1995.

### **EDUCATION**

**Ph.D.** in Textile Technology from Visvesvaraya Technological University, Belagavi during the year 2018-19.

**M.Tech.** in Textile Technology from Kuvempu University during the year 1998

**B.Tech.** in Textile Technology. Technology from Kuvempu University during the year 1994.

## **PROFESSIONAL MEMBERSHIP:**

- Member of Indian Society for Technical Education (ISTE) Member for Institute of Engineers (IE)

## **PUBLICATIONS**

**BOOKS:** Written a short term course on Recent Developments in Weft knitting Technology under Continuing Education Programme sponsored by AICTE –Delhi.

## **In International/National Journals:**

1. *Chandrasekhara.S.M.* Characterization of Bamboo, cotton and polyester fibers structure and properties International J. of Engineering and scientific research, May, 2018 (pp 81-92)
2. *Chandrasekhara.S.M. Babu K.M.* (pp ) - Studies on geometrical, performance and comfort properties of Bamboo and bamboo blended fabrics. International J. of Management, IT and Eng. July, 2018
3. *Chandrasekhara.S.M. Babu K.M Appasaheb D* Antimicrobial activity of sidarhom bifolia(SRF) fibres for medical applications. (Asian Textiles Journal May 2016 25-55)

## **In International and National Conferences:**

1. *Chandrasekhara.S.M. Babu K.M.* Studies on structure, hand, unique properties and processing of Bamboo fibers.8-10 April 2016, Ministry of Agriculture & Farmers Welfare, Indore MP.
2. Unique properties of bamboo fibers for application in textiles and health care products. (23-25 Feb 2016 IWST Bangalore.
3. Comparison of geometrical physical and comfort properties of pure bamboo and cotton fabrics. (19-20 August 2011, Organized by Institute of Engineers, Karnataka center Bangalore.
4. Development of Textile products from bamboo fibers. (14 July 2016. Bamboo resource development for addressing livelihood concerns of communities.)

## **Short- term course, workshops, conferences attended and conducted**

1. Silver jubilee International Textile conference on 16-18 Feb.2007held at DKTE Ichalakaranji Maharashtra.
2. Short term training programme on computer aided Textile Designing from 31-05-2001at PSG Coimbatore.
3. NCUTE programme on chemical preparatory process inTextiles held at IIT on 13-14th March 2000
- 4 Infosys campus connect programme on ‘soft skills Workshop’ held at Infosys Mysore from 28-30 Jan.2009
- 5 Workshop on ‘vermicomposting’ held at BIET on 23 & 24Dec.2003.
6. NCUTE programme on Weaving –I shuttle looms held at BIET, Dept. of Textiles on 8-9th sept.2000.
7. NCUTE –Weaving- BIET Davangere-2000 8.NCUTE- Garment wet processing BIET 2004
8. STTP (Teaching & Learning) From 15-07-2019 to 19-07-2019 at BIET Davangere
9. Wonder weaves systems (work shop). BIET-2008
10. Training by Wonder weaves systems at BIET-2002
11. Training by TUKATECH, INC at BIET-2003
12. Work Shop on Research Methodology at BIET-2015
13. Work Shop on Research –ADD- ONS at BIET-2014
- 14.

### **Organized**

1. Worked as Co-Coordinator for National Seminar on Recent developments in wet processing of Silk organized by BIET at IE Building Bengaluru
2. Worked as Convener and Member of Organization committee for Annual National level Technical Students Symposium organized by Dept. of Textile Tech. BIET from 2002-2019.

### **Sponsored Research Projects**

#### **Ongoing Projects**

Sl. No.	Title	Agency	Period	Grants (Rs. Lakh)
1.	Setting up of Centre of Excellency and Skill Up- gradation in Textiles(Working as one of the coordinators)	Dept. of Hand Loom and Textiles. Govt. of Karnataka.	2017-2019 (03 Years)	50.00

#### **Completed Projects**

Sl. No.	Title	Agency	Period	Grant (Rs. Lakh)
1.	.Differentiation of Khadi and other textiles KVIC, Mumbai)	AICTE- TAP-TECH project	2003-2004 (02 Years)	4.6
2.	GI registration for Guledgudd Khana fabric – Textile Committee,Mumbai	AICTE- RPS project	2008-2009 (02 Years)	8.0
3.	Development of secondary motions for pit loom at Kancheepuram	AICTE- RPS project	2004-2005 (02Years)	7.0

### **RESPONSIBILITIES**

- Working as Convener of Textile forum
- Worked as Editor for Institute Techno wave magazine.
- Nodal officer for Covid-19 cell of Davanagere.
- Coordinator for Criteria -6&7 (NBA) of Department
- Worked as project member for various funded projects of Department
- Worked as BOE member of VTU, Kuvempu, universities
- Taken active part in preparation of Syllabus of Textile Technology both (UG and PG) Course
- Worked as NSS coordinator of the Institute.

- Working as YRCW coordinator of the institute.
- Working as warden of Amrutha ladies hostel.

### **Project Guided:**

**For B.E.: 22 batches**

**For M.Tech. : 6 students**

### **SUBJECTS TAUGHT**

#### **For B.Tech.**

Weaving preparatory, chemical processing of textiles. Silk technology, Garment Technology, Textile Testing, Textile fibers.

#### **For M.Tech.**

Development in fabric formation, strategic management, advance silk technology.

### **Ph.D. Thesis; Studies on production, properties and techno-economics of 100% bamboo and bamboo blended fabrics.**

Ecofriendly, sustainable, organic, green are the different terminologies presently used today to tap the increasing demand among the consumers to buy the products which cause less harm to the environment. Ecofriendly apparels are made from natural fibres that were grown without pesticides and finished with non-polluting substances and are also called 'green clothes'.

Various ecofriendly fabrics that has been developed over the period of time and research is still being carried out to make these fabrics applicable in all spheres of clothing and apparels. The market share for ecofriendly apparels even though is small but in future definitely big potentially for these products because of the increased awareness among the consumers. There has been renewed interest in utilizing plant fibres viz: hemp, ramie and bamboo for clothing, Research in these areas are focused much to produce ecofriendly products. Ecofriendly fabrics are biodegradable and not harmful to the environment.

Ecofriendly fabrics lead to reduced carbon foot print and do not cause carcinogenic effect.

Bamboo is the popular name for a tribe of grasses, bambuseae, which are tree like woody stems. Bamboo is a group of perennial grass and includes the largest member of grass family. Historically bamboo with its various applications has been an integral part of people's livelihood and life style of millions of people in tropical and subtropical regions. Now day's consumers are demanding the textile products, which provide comfort, environment friendly, biodegradable, healthier and ecofriendly. In textile and chemical industries usage of cellulose as raw material for various applications for the production of regenerated fibres is common. Bamboo viscose is a new fibre belongs to bast fiber category obtained from bamboo pulp; possess some useful unique properties such as, antimicrobial, antibacterial, UV protection, and

deodorizing, good hygroscopicity and soft feel nature. Bamboo fiber possesses good strength, better UV protection property and high flexibility.

The present research work is carried out to produce fabrics from bamboo, cotton and polyester fibres and to study various properties of bamboo and its blended fabrics. The unique anti-microbial property of bamboo and its application in medical application is evaluated. Three different fibres viz; bamboo, cotton and polyester fibres were used for the production of bamboo/cotton (65; 35), bamboo polyester (65:35), 100% bamboo, 100% cotton, 100%polyester fabrics.

The techno economic studies of bamboo, cotton and polyester fabrics were made and from the results it was observed that bamboo fabrics show excellent technical and economical advantages compared to cotton and polyester fabrics in terms of durability, comfort, cost, eco-friendliness and unique antimicrobial property made bamboo fabrics to be used in apparel and health care textiles. .

**M.Tech. project: Studies on spirality of weft knitted fabrics.**

**B.Tech. project: LPP Technique on blending of cotton.**

**Residential Address: Dr.Chandrasekhara.S.M.  
Nasuku, 1059/18  
7 th cross Siddaveerappa Layout  
Davanagere-577004.**

Ecofriendly, sustainable, organic, green are the different terminologies presently used today to tap the increasing demand among the consumers to buy the products which cause less harm to the environment. Ecofriendly apparels are made from natural fibres that were grown without pesticides and finished with non-polluting substances and are also called 'green clothes'. Various ecofriendly fabrics that has been developed over the period of time and research is still being carried out to make these fabrics applicable in all spheres of clothing and apparels. The market share for ecofriendly apparels even though is small but in future definitely big potentially for these products because of the increased awareness among the consumers. There has been renewed interest in utilizing plant fibres viz: hemp, ramie and bamboo for clothing, Research in these areas are focused much to produce ecofriendly products. Ecofriendly fabrics are biodegradable and not harmful to the environment. Ecofriendly fabrics lead to reduced carbon foot print and do not cause carcinogenic effect.

Bamboo is the popular name for a tribe of grasses, bambuseae, which are tree like woody stems. Bamboo is a group of perennial grass and includes the largest member of grass family. Historically bamboo with its various applications has been an integral part of people's livelihood and life style of millions of people in tropical and subtropical regions. Now day's consumers are demanding the textile products, which provide comfort, environment friendly, biodegradable, healthier and ecofriendly. In textile and chemical industries usage of cellulose as raw material for various applications for the production of regenerated fibres is common. Bamboo viscose is a new fibre belongs to bast fiber category obtained from bamboo pulp; possess some useful unique properties such as, antimicrobial, antibacterial, UV protection, and deodorizing, good hygroscopicity and soft feel nature. Bamboo fiber possesses good strength, better UV protection property and high flexibility.

The present research work is carried out to produce fabrics from bamboo, cotton and polyester fibres and to study various properties of bamboo and its blended fabrics. The unique antimicrobial property of bamboo and its application in medical application is evaluated. Three different fibres viz; bamboo, cotton and polyester fibres were used for the production of bamboo/cotton (65; 35), bamboo polyester (65:35), 100% bamboo, 100% cotton, 100%polyester fabrics.

The techno economic studies of bamboo, cotton and polyester fabrics were made and from the results it was observed that bamboo fabrics show excellent technical and economical advantages compared to cotton and polyester fabrics in terms of durability, comfort, cost, eco-friendliness and unique antimicrobial property made bamboo fabrics to be used in apparel and health care textiles.





