




# Bharathiar University

State University | "A<sup>++</sup>" Grade by NAAC | 26<sup>th</sup> Rank in MoE-NIRF  
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<b>Dr M SUMITHRA</b> Assistant Professor Department of Textiles and Apparel Design Bharathiar University COIMBATORE, 641015 Tamil Nadu <b>E-mail:</b> sumitad@buc.edu.in <b>Phone:</b> 8870233330 <b>Office Number:</b> 04222428255	
<b>Research Area</b> <ul style="list-style-type: none"><li>• Herbal Finishes, Natural Fibers, Eco Textiles</li><li>• Visual Merchandising, Technical Textiles, Home Textiles</li><li>• Natural dyeing, Special Finishes</li></ul>	<b>Courses Teaching</b> <ul style="list-style-type: none"><li>• Fundamentals of Textile science and Apparel Designing</li><li>• Home Textiles</li><li>• Visual Merchandising</li><li>• Surface Enrichment and Accessory Making</li></ul>
<b>Research Experience:</b> 16	<b>Teaching Experience:</b> 24
<b>Research Credentials</b> (as on December 2024 – Source: Google scholar) H-index: 143                      Citations: 7                      i10-index: 4	
<b>Publications</b> Books/Chapters: 4                      National Journals: 18                      International Journals: 55	
<b>Education</b> <b>Ph. D.</b> Subject : Textiles & Apparel Design Institution : Avinashilingam University Affiliated University : Avinashilingam University Year of Award : August 2014 <b>M. Phil.</b> Subject : Textiles & Apparel Design Institution : Bharathiar University Affiliated University : Bharathiar University Year of Award : December 2007 <b>M. Sc.</b> Subject : Textiles & Apparel Design Institution : Avinashilingam University Affiliated University : Avinashilingam University Year of Award : May 2000	
<b>Projects</b>	<b>Research Guidance</b> <b>Completed</b> Ph.D. - 1 <b>On Going</b> Ph.D. - 1



## Publications

### National Journals - 18

#### 18. Natural dyeing using Bauhinia purpurea flower on selected fabrics

Indian Journal of Advances in Science Engineering and Technology (December 2024)  
Souganthika.M Dr.Sumithra Murugesan

#### 17. Effect of medical herb extracts treated on cotton denim fabric

Mintage Journal Of Paramedical And Medical Sciences (December 2024)  
Dr.M.Sumithra

#### 16. Herbal anti odor finishes for selected denim blends

Fiber2fashion.Com (December 2024)  
Dr.M.Sumithra

#### 15. A Study On Consumer Awareness Of Sweat Underarm Pads

Man-made textiles in India (September 2024)  
M. Sumithra

#### 14. Development of productive clothing using medicinal herbs for skin cancer

Man-made textiles in India JULY 2024 (July 2024)  
Dr.M.Sumithra

#### 13. Determination of optimum utilization from food waste of eggshell converted to ash-finishing and investigating with textile ecofriendly fabrics

Man-made textiles in India (December 2023)  
M.Malini Devi , M.Sumithra

#### 12. Analysis on herbal textiles using medicinal herb extracts and standard testing methods for herbal finished textiles.

Man-made textiles in indiasci (December 2023)  
V. S. Karpagavalli<sup>1</sup> , M. Sumithra<sup>2</sup>

#### 11. Utilization of temple waste flower dyed with cotton fabric.

Man-made textiles in india (September 2023)  
M. Sumithra and Devadharshini

#### 10. Development Of Biodegradable eco-friendly herbal coated sanitary napkin-SCI

Man-MadeTextiles In IndiaJanuary 2023 (January 2023)  
M.Sumithra

#### 9. A study on dyeing dahlia pinnata and rosa flowers on cotton yam for crocheting-SCI

Man- Made Textiles In IndiaNovember 2022 (November 2022)  
M.Sumithra and M.Agnes Monisha

#### 8. Identification of new natural fibre from chamaecostus cuspidatus

Tekstilna Industrija2021 (January 2021)  
Dr.M.Sumithra

#### 7. Comparative study on tithonia diversifolia dyed and Fragrance Finished with Rosa Damascene on Cotton And Bamboo Fabric-SCI

Man-Made Textiles In IndiaFebruary 2020 (February 2020)  
Dr.M.Sumithra

#### 6. Decoction of new natural fiber from etlingera elatior-SCI

Man-Made Textiles In IndiaNovember 2019 (November 2019)  
Dr.M.Sumithra

#### 5. Ftir and sem analysis made on nano encapsulated cotton denim fabric

Shanlax International Journal Of Arts, Science And Humanities (December 2016)  
Dr.M.Sumithra



#### 4. Mosquito Repellent Finish on Dyed Bamboo Fabric using Thyme Oil

Man-Made Textiles In India (September 2014)  
Dr.M.Sumithra

#### 3. Micro-encapsulation and nano-encapsulation of denim fabrics with herbal extracts.

Indian Journal Of Fiber And Textile Research Journal (December 2012)  
Dr.M.Sumithra

#### 2. Nano encapsulation finishes on denim fabric

Man-Made Textiles In India, (April 2012)  
Dr.M.Sumithra

#### 1. Investigation of multifunctional properties for the herbal finished denim variants

Man-Made Textiles in India (December 2011)  
Dr.M.Sumithra

### International Journals - 55

#### 55. Extraction and characterization of natural cellulose fibers from Elettaria Cardamomum

Tekstilna Industrija 2021 (December 2024)  
Dr.M.Sumithra

#### 54. Effect of microencapsulation of denim fabrics with herbal extract on the handle and care properties

Daffodil International University, Journal of Science and Technology, (December 2024)  
Dr.M.Sumithra

#### 53. Effect of functional finish on bandages for hospital application

International Journal Of Biomedical Research (December 2024)  
Dr.M.Sumithra

#### 52. Mosquito repellency finishes in blended denim fabrics

International Journal Of Pharmacy & Life Sciences (December 2024)  
Dr.M.Sumithra

#### 51. Antibacterial efficacy analysis of Ricinus communis, Senna auriculata and Euphorbia hirta extract treated on the four variant of denim fabric against Escherichia coli and Staphylococcus aureus

Textile Science And Engineering (December 2024)  
Dr.M.Sumithra

#### 50. Application of Denim Fabrics in Fashion Accessories and Home Textiles

IJRES International Journal of Recent Engineering Science (April 2024)  
M. Sumithra

#### 49. Importance of antimicrobial finishes in sportech: An overview 2024

International Virtual Conference "Apparel and Nutra-Ergonomic Considerations in Enhancing Sports Performance" (February 2024)  
M. Sumithra

#### 48. A study on organic fibres for sustainable and eco-friendly textiles

International journal of textile and fashion technology (IJTFT) (December 2023)  
V. S. Karpagavalli<sup>1</sup>, M. Sumithra

#### 47. Reactive eco-friendly dyeing of natural fabrics using a novel herbal composite containing extracts of Hemigraphis colorata and Bacopa monnieri-SCIE

Journal of industrial textiles, jan-dec 2023 (December 2023)  
V.S Karpagavalli<sup>1</sup> Dr.M.Sumithra<sup>2</sup>

#### 46. Analysis of Textural characterization of coconut shell Bio-Pac (Biomass powder-Activated Carbon Structures through field emission scanning electron microscopy (FESEM) Techniques

IJARSEM, International Journal of All Research Education & Scientific Methods. ISSN: 2455-6211, New Delhi, India 2023 (July 2023)  
M.Malini Devi<sup>1</sup> and Dr.M.Sumithra<sup>2</sup>

#### 45. A STUDY ON PLANT FIBERS FOR SUSTAINABLE AND ECOFRIENDLY TEXTILES.

IARJSET ISSN (O) 2393-8021, ISSN (P) 2394-1588 International Advanced Research Journal in Science, Engineering and Technology ISO 3297:2007 (June 2023)  
Karpagavalli<sup>1</sup>, M. Sumithra<sup>2</sup>



**44. Assessing resistance in food wastes through the activated carbon powder with absorbent analysis with eco friendly materials**

International Advanced Research Journal in Science, Engineering and Technology June 2023 (June 2023)  
V. S. Karpagavalli<sup>1</sup> , M. Sumithra<sup>2</sup>

**43. Analysis on indian handloom weaving process**

International journal of scientific research and engineering development June 2023 (June 2023)  
V.S Karpagavalli<sup>1</sup> , M.Sumithra<sup>2</sup>

**42. Application Of Antimicrobial herbal extract on bamboo non- woven fabric for treating Basal Cell Carinoma**

**Scars**

International journal of scientific research and engineering development may –June 2023 (June 2023)  
R. Angala Eswari, Dr.M.Sumithra ,

**41. A Study on Medicinal Properties of Ayurvedic Herbs and its Usage in Textile Industry**

International Journal of Science and Research May 2023 (May 2023)  
V. S. Karpagavalli<sup>1</sup> , M. Sumithra<sup>2</sup>

**40. Exploring Fibre and Fabrics Used for Home Textile Products**

International Journal of Research Publication and Reviews. May 2023 (May 2023)  
R. Angala Eswari and Dr. M. Sumithra<sup>2</sup>

**39. Safety Evaluation Of Biodegerable Sanitary Napkin**

International Journal of Advances in Engineering Management (IJAEM) March 2023 (March 2023)  
M.Sumithra

**38. A Comparative Study on Mosquito Repellency in Knitted Fabric using Herbal Extracts and Oils**

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) February-2023 (February 2023)  
Sachin Kumar. A1, Dr. M. Sumithra<sup>1</sup>, Aishwarya. R3, Jothipriya. R

**37. Article on organic yarn preparation weaving organic fabric and enzymatic desizing process (Indexed in web of science) V**

BioGecko-A journal for new Zealand herpetology January-February-2023 (February 2023)  
V.S.Karpagavalli, Dr.M.Sumithra

**36. Evaluation of 100% Eco-Friendly Herbal Coated Sanitary Napkin**

International Research Journal of Innovations in Engineering and Technology (IRJIET) February 2023 (February 2023)  
M.Sumithra

**35. Market survey on feminine hygiene products for sanitary napkin**

International Research Journal of Innovation in Engineering and Technology (IRJIET) February 2023 (February 2023)  
Murugesan Sumithra

**34. Selection of Herbs For Disposable Sanitary Napkin**

International Journal of Innovative Research In Science /Engineering /Technology (IJIRSET) February 2023 (February 2023)  
M.Sumithra

**33. Development of biodegerable eco friendly herbal coated sanitary napkin**

Journal of fashion technology and textile engineering (January 2023)  
M.Sumithra

**32. Design inspiration naturalism on apparels**

International Journal of Scientific Research in Engineering and Management (IJSREM) February 2022 (February 2022)  
V.S. Karpagavalli and Dr.M.Sumithra

**31. Design inspiration rhopalocera application on apparels in current trends**

IRJMETS40200010842 February 2022 (February 2022)  
V.S. Karpagavalli and Dr.M.Sumithra

**30. Self Regulating Smart Textiles.**

Research Journal of Textile and Leather (RJTL) August 2021 (August 2021)  
Sadheeshkumar, Dr.M.Sumithra



## 29. Acoraceae Plants Extract on Fabric Finishes

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) August 2021 (August 2021)  
Sadheesh kumar.A, Dr.m.sumithra and Aishwarya .R

## 28. Herbal Finished Garment For Skin Allergies Patients

ISAR - International Journal of Research in Engineering Technology August 2021 (August 2021)  
Sadheesh kumar.A ,Dr.M.sumithra, A.Lavanya Ashiwarya.R

## 27. Comparison of Various Properties Between Nanoencapsulated Cotton Denimfabricand The Untreated

### Cotton Denim Fabric V

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) August 2021 (August 2021)  
V.S Karpagavalli and Dr.M.Sumithra

## 26. Preparation Of Coconut Shell And Pista Shell Charcoal And Finishing Natural Cotton And Bamboo Fabric

### Materials-An Eco-Friendly Approach

International journal of research and analytical reviews(IJAR)August 2021 (August 2021)  
MS.M.Malini Devi and Dr.M.Sumithra

## 25. Electronic Sensor Application In Textiles And Apparels

World journal of pharmaceutical research, August 2021 (August 2021)  
Sadheesh kumar.A, Dr.m.sumithra

## 24. Innovation Approach –Preparation Of Lemon Wood Charcoal Finishing With Natural Materials

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) August 2021 (August 2021)  
MS.M.Malini Devi and Dr.M.Sumithra

## 23. Eco-friendly antimicrobial finishes of cotton denim fabric using herbal extracts

International Journal of Scientific Research and Engineering DevelopmentAugust 2021 (August 2021)  
V.S Karpagavalli and Dr.M.Sumithra

## 22. The enquiry Of Antibacterial Finishes On Modal Blended Knitted Fabric

International Journal of Scientific Research in Engineering and Management (IJSREM) July 2021 (July 2021)  
Dr.M.Sumithra

## 21. Textile finishes for a healthy environment

International Journal of Scientific Research Engineering and Management ( IJSREM),July 2021 (July 2021)  
Sadheesh kumar.A , Dr.M.Sumithra

## 20. Technological Advancement in Textile and Fashion – Wearable E- Textiles

Research Journal of Textile and Leather July 2021 (July 2021)  
Aishwarya.R, Dr.M.Sumithra, sadheesh kumar.A

## 19. Natural Herbals Extracts And Application Of Bamboo, Cotton &Rayon Fabrics Using Apparels

International Journal Of Multidisciplinary Educational Research July 2021 (July 2021)  
Sadheesh kumar.A, Dr.m.sumithra

## 18. A study on consumer awareness of sanitary napkin UGC

International Journal Of Multidisciplinary Educational Research2021 (January 2021)  
Dr.M.Sumithra

## 17. Dyeing of cotton fabric using herbs

Journal of Textile Science and Engineering2018 (December 2018)  
Dr.M.Sumithra

## 16. Development of medical textile product using chitosan incorporated herbal extract (Aristolochia bracteolate)

International Journal Of Pharmacy And Life SciencesMarch 2018 (March 2018)  
Dr.M.Sumithra

## 15. Eco- friendly herb extracts treated on cotton fabric using antibacterial activity

International Journal Of Scientific Research In EngineeringJanuary 2017 (January 2017)  
Dr.M.Sumithra



## 14. Functional modification on adhesive bandage using natural herbs

Functional modification on adhesive bandage using natural herbs Journal Of Textile Science & Engineering 2016 (December 2016) Sumithra

## 13. A Study On The Effect Of Cotton Fabric Finished With "Aegle Marmelos" Herb

Inn Original International Journal Of Sciences (October 2016)  
Dr.M.Sumithra

## 12. Effect of insect repellent property using microencapsulation technique

World Journal Of Pharmaceutical Research (March 2016)  
Dr.M.Sumithra

## 11. Evaluation of blended knitted fabric dyed with natural pigments

Journal Of Basic And Applied Research International (November 2015)  
Dr.M.Sumithra

## 10. Nano encapsulated finishes for physical and comfort properties for durable 100% cotton denim fabrics

International Journal Of Arts And Humanities, Spring Journals (April 2015)  
Dr.M.Sumithra

## 9. Antifungal activity of herbal finish on 100 % cotton denim fabric

Journal Of Fashion Technology & Textile Engineering (April 2015)  
Dr.M.Sumithra

## 8. Antiodor evaluation of microencapsulation and nanoencapsulation finished fabric

International Journal Of Pharmacy And Life Sciences (March 2015)  
Dr.M.Sumithra

## 7. Herbal coating of denim fabric to enhance the wickability

International Journal Of Biomedical Research, (February 2014)  
Dr.M.Sumithra

## 6. A novel method of dyeing nylon 6, 6 with cold brand reactive dyes and assessment of its fastness properties

Textile Science And Engineering (February 2014)  
Dr.M.Sumithra

## 5. Antimicrobial finishing of denim fabric with herbal extracts

American Journal Of Medical And Biological Research, (August 2013)  
Dr.M.Sumithra

## 4. Herbal Antimicrobial finishes for selected Denim Blends

Fiber2fashion.com (December 2012)  
Dr.M.Sumithra

## 3. Geometrical properties of multifunctional herbal finishes

Fiber2fashion.Com (December 2012)  
Dr.M.Sumithra

## 2. Antimicrobial finishing of Denim fabric using metabolic and aqueous extract of selected medicinal herbs

Antimicrobial finishing of Denim fabric using metabolic and aqueous extract of selected medicinal herbs Fiber2fashion.com (December 2012)  
Dr.M.Sumithra

## 1. Fashion draping cowl

Fiber2fashion.com (May 2012)  
Dr.M.Sumithra

## Books/Chapters - 4

### 4. Apparel Quality Standards

Laser Park Publishing House D.No.5, SF No. 115/1, M.G. Colony, Vadavalli, Coimbatore, Tamil Nadu, India 2023 (December 2023)  
Dr.M.Sumithra



### **3. Advanced garment construction guide**

Woodhead Publishing India In Textiles Pvt Ltd, 2020, ISBN: 978-81-936446-4-5. (February 2020)  
M.Sumithra

### **2. Visual merchandising**

Laser park publishing house,2017 (December 2017)  
Dr.M.Sumithra

### **1. Innovation in textiles and fashion (ITF 2016).**

Laser park publishing house,2016 (December 2016)  
Dr.M.Sumithra