




# Bharathiar University

State University | "A<sup>++</sup>" Grade by NAAC | 46<sup>th</sup> Rank in MoE-NIRF  
Maruthamalai Road, Coimbatore, Tamil Nadu - 641 046.

<b>Dr K AMUTHA</b> Assistant Professor Department of Textiles and Apparel Design Bharathiar University Coimbatore, 641046 Tamil Nadu <b>E-mail:</b> amuthatad@buc.edu.in <b>Phone:</b> 9159440734 <b>Office Number:</b> 4222428634	
<b>Research Area</b> <ul style="list-style-type: none"><li>• Natural dyes</li><li>• Natural fibres</li><li>• Sustainable textiles</li><li>• Nonwovens</li></ul>	<b>Courses Teaching</b> <ul style="list-style-type: none"><li>• Apparel Production Technology</li><li>• Clothing Care and Maintenance</li><li>• Textile Testing</li><li>• Sustainable Fashion</li></ul>
<b>Research Experience:</b> 10	<b>Teaching Experience:</b> 14
<b>Research Credentials</b> (as on May 2026 – Source: Google scholar) H-index: 11                      Citations: 601                      i10-index: 12	
<b>Patents :</b> Granted: 1	
<b>Publications</b> International Journals: 9                      National Journals: 6	
<b>Career</b> <b>At Bharathiar University</b> <b>1. Designation : Assistant Professor</b> Period : October 2014 - Till Date	
<b>Education</b> <b>Ph. D.</b> Subject : Textiles & Apparel Design Institution : Bharathiar University Affiliated University : Bharathiar University Year of Award : June 2019 <b>M. Sc.</b> Subject : Textiles & Apparel Design Institution : Punjab Technical University Affiliated University : Punjab Technical University Year of Award : September 2012	
<b>Projects</b> <b>National Level</b> Ongoing - 1    completed - 1	<b>Research Guidance</b> <b>Completed</b> Ph.D. - 1 <b>On Going</b> Ph.D. - 2



## Visits

1. 10th Nonwoven Tech Asia (Mumbai) ( 2024-08-24 - 2024-08-22 )
2. Invited Lecture ( 2025-03-12 - 2025-03-17 )

## Programs organized

1. Apparel Testing and Regulations for International Market ( 2015-03-26 - 2015-03-27 )
2. Eco-Textiles: A Step towards Sustainability (NCETS 2015) ( 2015-10-09 - 2015-10-09 )
3. TEXNOVATION 2016 ( 2016-02-19 - 2016-02-19 )
4. Textile Testing and Quality Control ( 2017-02-27 - 2017-02-28 )
5. Demonstration (visit) ( 2017-03-01 - 2017-03-02 )
6. Environmental Impacts of Textiles ( 2020-11-10 - 2020-11-19 )
7. Handloom Awareness Exhibition ( 2023-08-07 - 2023-08-07 )
8. Crocheting Techniques ( 2025-07-25 - 2025-07-26 )
9. Macramé Techniques ( 2025-08-07 - 2025-08-08 )

## Publications

### National Journals - 6

#### 6. Design and Development of Sustainable Soft Toys: A Transformation towards Bio and Circular Economies

International Journal of Innovative Research in Technology, 12(11), 5165- 5171 (April 2026)

Amutha K

#### 5. Natural dyeing of banana fibre for fashion accessories

Asian Dyer, 22(4), 41-43 (August 2025)

K Amutha

#### 4. Colouration of Textiles with natural dyes from Cassava (Manihot esculenta) leaves

Asian Dyer, 20(2), 39-43 (March 2023)

Amutha K, Grace Annapoorani S

#### 3. Natural dye from Spathodea campanulata fruit for textile applications

Asian Dyer, 18(5): 58-61 (November 2021)

K Amutha, K. Ramya

#### 2. Natural dye extraction from agro waste and its application on textiles

Asian Dyer, 16(1), 35-39 (August 2019)

2. K Amutha, S Grace Annapoorani

#### 1. Development of film using biopolymer and herbal extract for biomedical application

Man-made Textiles in India, 46(4), 119-121 (May 2018)

K Amutha

### International Journals - 9

#### 9. Characterization of adhesive bonded nonwovens made from blends of agro?waste, cotton, and viscose fibers

Cellulose, 32, 8487-8505 (September 2025)

Ramya K, Amutha K, Sukanya Devi R

#### 8. Cellulosic bark fibers as sustainable and renewable reinforcement in biocomposites: a comprehensive review

Cellulose, 32, 6337-6361 (May 2025)

Ramasamy, S., Karuppuchamy, A., Rangappa, S.M. et al.



## 7. Characterization of Ligno-cellulosic fibers from Wild turmeric (*Curcuma aromatica*) petiole for potential textile applications

Cellulose, 31,10593–10605 (October 2024)  
Ramya Kanagaraj & Amutha Karuppuchamy

## 6. Novel banana core stem fiber from agricultural biomass for lightweight textile applications

Industrial Crops and Products, 209, 117985, 1-11 (March 2024)  
A Karuppuchamy, K Ramya, R Siva

## 5. Ecofriendly Dyeing of Textiles with Natural Dyes Extracted from Commercial Food Processing Waste

### Materials

Journal of Natural Fibers, 19(15): 10394-10411 (May 2023)  
Amutha K\*, Grace Annapoorani S, P Sakthivel, Sudhapriya N

## 4. Comprehensive characterization of novel Robusta (AAA) banana bracts fibers reinforced polylactic acid based biocomposites for lightweight applications

Polymer Composites 43(11): 8569-8580 (November 2022)  
Ramasamy, S., Karuppuchamy, A., Jayaraj, J. J., Suyambulingam, I., Siengchin, S., & Fischer, S

## 3. Characterization of Natural Fibers Extracted from Banana Inflorescence Bracts. Journal of Natural Fibers

Journal of Natural Fibers 19 (3): 872-881 (May 2020)  
K. Amutha\*, A. Sudha & D. Saravanan

## 2. Dyeing of textiles with natural dyes extracted from Terminalia arjuna and Thespesia populnea fruits

Industrial Crops and Products, 148 (March 2020)  
Amutha K\*, Grace Annapoorani S, Sudhapriya N

## 1. Sustainable Antimicrobial Finishing of Fabrics using Natural Bioactive Agents-A Review

International Journal of Life Science and Pharma Research, 8(4), L10-L20 (October 2018)  
A Reshma, V Brindha Priyadarisini, K Amutha

## Patents

### Granted - 1

1. DYEING OF TEXTILES USING DYES DERIVED FROM AGRO-WASTE 04-2023 429599 AMUTHA K

## Projects

### Completed - 1

1. Design and Development of Eco-friendly Soft Toys. Others 500000 (February 2020 - March 2022)

### Ongoing - 1

1. Designing of Radiation Protective Clothing Others 1938000 (January 2021 - November 2025)