Bharathiar University

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

Dr K AMUTHA

Assistant Professor
Department of Textiles and Apparel Design

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Research Area

- Natural dyes
- Natural fibres
- Sustainable textiles
- Nonwovens

Courses Teaching

- Apparel Production Technology
- Clothing Care and Maintenance
- Textile Testing
- Sustainable Fashion

Research Experience: 10

Teaching Experience: 14

Research Credentials (as on October 2026 – Source: Google scholar)

H-index: 11 Citations: 643 i10-index: 13

Patents : Granted: 1

Publications

International Journals: 9 National Journals: 6

Career

At Bharathiar University

1. Designation : Assistant Professor

Period : October 2014 - Till Date

Education

Ph. D.

Subject : Textiles & Apparel Design
Institution : Bharathiar University
Affiliated University : Bharathiar University
Year of Award : June 2019

M. Sc.

Subject : Textiles & Apparel Design
Institution : Punjab Technical University
Affiliated University : Punjab Technical University
Year of Award : September 2012

Projects

National Level

Ongoing - completed - 1

Research Guidance

Completed

Ph.D. - 1

On Going

Ph.D. - 2

Dr K AMUTHA , Assistant Professor , Department of Textiles and Apparel Design

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.

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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)