Name : Dr. S Aruna

Staff ID :--

**Designation**: Associate Professor and Head

**Department**: Costume Design and Fashion

**Experience**: 11 years

Qualification: Ph.D

**Specialization: Textile Processing** 

Mail ID : aruna.cdf@rathinam.in



## **ACADEMICS**

| Degree  | Branch  | Institution / University   | Year of<br>Completion |
|---------|---|--|-----------------------|
| Ph.D.   | Textiles and Clothing   | Avinashilingam Institute for Home<br>Science and Higher Education for<br>Women, Coimbatore | 2017                  |
| M.Phil. | Textiles and Clothing   | Avinashilingam University for Women,<br>Coimbatore   | 2012                  |
| MBA     | Marketing   | Bharathiar University, Coimbatore  | 2010                  |
| M.Sc.   | Costume Design & PSG College of Arts and Science, Coimbatore. |  | 2010                  |
| B.Sc.   | Apparel Designing and Fashion Art                             | Avinashilingam University for Women,<br>Coimbatore   | 2008                  |

# RESEARCH AND PUBLICATIONS

## **GRANTS**

| Title   | Agency   | Amount           | Year | Status  |
|---|----------|------------------|------|---------|
| CREATEX - Co-creation for<br>Textile Higher Education<br>Capacity Building in Ethiopia and<br>Kenya | Erasmus+ | INR<br>53,50,000 | 2024 | Ongoing |

# **GUIDANCE**

| Program | No. of Scholars |          |
|---------|-----------------|----------|
| Trogram | Completed       | Pursuing |
| Ph. D.  | 1               | -        |

#### **Journal Publications**

- 1. Banale, A.K, Fante, K.A, Aruna, S, & Sathiesh Kumar, S (2025). Design and Materials of Flexible Wearable Microstrip Patch Antenna: A Systematic Review. Discover Applied Sciences, Vol.7, 477.
- 2. Aruna, Nachiappan Sukumar & Vasugi Raaja (2020), Microencapsulation of Herbal Extracts for Antimicrobial Finishing, Journal of Textile Engineering and Fashion Technology, Vol. 2 No. 3, pp. 15 22.
- 3. Sukumar Nachiappan, Gnanavel P, Dharmalingam S and Aruna Sampath (2020), "Development of chemical protective clothing using multilayer fabric for hazardous chemicals handling" Journal of Natural Fibers, 1-13. http://dx.doi.org/10.1080/15440478.2020.1764450. (Impact Factor 1.252).
- 4. S. Sathiesh Kumar, S. Vairam, N. Neelakandeswari, S. Aruna (2018). New heterojunction solar cells using copper oxide ingrained MWCNT: fabrication and performance analysis. Solar Energy, 166, 195-202.
- 5. S. Sathiesh Kumar, S. Vairam, N. Neelakandeswari, S. Aruna (2018). Effect of metal oxide charge transfer layers on the photovoltaic performance of carbon nanotube heterojunction solar cells. Materials Letters, 220, 249-252.
- 6. S.Aruna, N. Vasugi Raaja, S. Sathiesh Kumar (2016), Fabrication of Antimicrobial Textiles Using Hydrothermally Synthesized Copper Oxide Nanoparticles, International Journal of Innovative Research in Science, Engineering and Technology, Vol. 5, Issue 2: 2112-2119.
- 7. S.Aruna, N. Vasugi Raaja, S. Sathiesh Kumar (2016), Functionalisation of Polycotton Fabric with Hydrothermally Synthesized ZnO Nanoparticles, International Journal of Engineering Sciences & Research Technology, 5(4):318-324.
- 8. S.Aruna and N.Vasugi Raaja (2015), Antimicrobial Finishing of Cotton Fabric Using Herbs, Research Highlights, Vol.25, No.3:188-194.

### **Proceedings**

- 1. S.Aruna & N.Vasugi Raaja (2017), Evaluation of Antimicrobial Activity of Iron Oxide Treated Fabrics for Health Care Textiles, Conference Proceedings of Scientific Perspectives in Home Science, 623-629, ISBN:978-93-84234-06-5.
- 2. S.Aruna and N.Vasugi Raaja, "Synthesis Characterization and Application of Nano TiO2 for Antimicrobial Finish of Polyester/Cotton Blended Fabric" Proceedings of the National conference on "Eco-Textiles and Green Consumerism" (ETGC-2017) at Avinashilingam institute for Home Science and Higher Education for Women, Coimbatore during 24th February, 2017.
- 3. S.Aruna and N.Vasugi Raaja, "Fabrication of Antimicrobial Textiles using Iron Oxide Nanoparticles Synthesized by Hydrothermal Method" Proceedings of the National

- conference on "Eco-Textiles and Green Consumerism" (ETGC-2016) at Avinashilingam institute for Home Science and Higher Education for Women, Coimbatore during 9th 10th March, 2016.
- 4. S.Aruna and N.Vasugi Raaja, "Preparation, Characterization and Application of TiO2 Nanoparticles on Polyester/Cotton for Imparting Multifunctional Properties" in three days National Conference on Bio-Nanotechnology "BIONANO 14" at Sri Ramakrishna Engineering College, Coimbatore on 21st 23rd August 2014.
- 5. N.Vasugi Raaja and S.Aruna, "A Study on Eco Friendly Herbal Antimicrobial Finished Cotton Fabric using Microencapsulation Technique" proceedings of the Seventh Indo-US Collaborative International Conference on "Advances in Textile, Machinery, Nonwoven and Technical Textiles" (ATNT 2011) at Kumaraguru College of Technology, Coimbatore on 15th -17th December 2011.
- 6. S.Aruna and N.Vasugi Raaja, "Adventure towards Herbal Textiles" at Vivekanandha College for Women, Tiruchengode on 15th September 2011.
- 7. N.Vasugi Raaja and S.Aruna, "An Eco- Friendly Herbal Antimicrobial Finishing on Cotton Fabric using Microencapsulation Technique" proceedings of the International Conference on "Textiles A Decade Ahead" at North India Section of The Textile Institute and Indian Institute of Technology, New Delhi on 9th -10th September 2011.
- 8. S.Aruna and N.Vasugi Raaja, "Innovative Plasma Technology for Biomedical Application with Treatment of Neem Oil Vapour" proceedings of the 13th International conference on "Emerging Interfaces of Physical Sciences and Technology" (CONIAPS XIII) at University of Petroleum and Energy Studies, Dehradun on 14th 16th June, 2011.
- 9. S.Aruna "Production of Herbal based Microcapsules for Medical Textiles" proceedings of the National Conference on Innovations in Textile Processes & Products at PSG College of Technology, Coimbatore on 29th April 2011.
- 10. M.Kanimozhi and S.Aruna, "Role of Nonwoven in Automobile Textiles as Acoustics" in proceedings of National Level Technical Symposium on "Fashionista 11" at PSG College of Technology, Coimbatore on 5th March 2011.
- 11. S.Aruna and N.Vasugi Raaja, "Microencapsulated herbals for antimicrobial finishing of bamboo fabric" proceedings of the International Conference on "Global Women Entrepreneurship with Fashionable Handicrafts" Fashion snoops-2011 at Vivekanandha College for Women, Tiruchengode on 9th -10th February 2011.
- 12. S. Aruna, "Microencapsulated herbals for antimicrobial finishing of bamboo fabric" in proceedings of "Young Talent Search-2010" at Textiles Committee Auditorium organized by Society of Dyers and Colourists (SDC), Mumbai on 19th November 2010.

#### **PRESENTATIONS**

|            | State Level | National | International |
|------------|-------------|----------|---------------|
| Conference | 2           | 1        | 3             |
| Seminar    | 3           | 1        | 2             |

# **PARTICIPATION**

|            | State Level | National | International |
|------------|-------------|----------|---------------|
| Conference | 1           | 2        | 2             |
| Seminar    | 1           | 3        | 2             |
| Workshop   | 2           | 1        | 1             |
| FDP/PDP 1  | 1           | 2        | 1             |

# **Events Organized** (Seminar/Conference/Workshop)

- 1. "International seminar on material characterisation" at Kombolcha Institute of Technology, Ethiopia on 2<sup>nd</sup> March, 2021.
- 2. "International seminar on auxetic fibrous materials" at Jimma Institute of Technology, Ethiopia on 19th March, 2022.

## Invited Speaker / Session Chair- Conference / Seminar / Workshop

- 1. Resource person for an international conference on "Change makers & Innovators in Sustainable Fashion industry" organised by Kongunadu arts & Science College, Coimbatore, 25<sup>th</sup> March, 2021.
- 2. Resource person for one day workshop on "Batik and Tie-Dye" organised by The TIPS Global Institute on 9<sup>th</sup> December 2017.
- 3. Resource person for two-day workshop on "Terracotta Jewellery Making" organised by Avinashilingam University for Women on 5<sup>th</sup> & 6<sup>th</sup> February 2015
- 4. Resource person for two-day workshop on "Terracotta Jewellery Making" organised by Kongunadu College of Arts and Science on 23<sup>rd</sup> January, 2015.

## Members in BoS/ Editorials/ Professional Bodies

- BoS member for B.Voc Garment Designing, PSGR Krishnammal College for Women, Coimbatore
- 2. BoS member for B.Sc Fashion and Costume Designing, Holy Cross College, Trichy