### **Profile Page**



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Qualification : Ph.D. Textile Technology (A C Tech, Anna University)

M.Tech. Textile Engineering (IIT, Delhi)

B.Tech. Textile Technology (BIET, Davangere)

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### **Research Interests:**

Yarn Engineering, Technical Textiles, Eco-friendly Textile Processing

### **Journal Publications:**

| Year | Journal                          | Publication  |  |  |  |  |
|------|----------------------------------|--|--|--|--|--|
| 2021 | Journal of Natural Fibers Volume | S Kubera Sampath Kumar, C Prakash, P Ramesh, N Sukumar, J Balaji, N  |  |  |  |  |
|      | 18, Issue 12, Pages 2270-2283.   | K Palaniswamy, "Study of Wound Dressing Material Coated with Natural |  |  |  |  |
|      |                                  | Extracts of Calotropis Gigantean, Eucalyptus Globulus and Buds of    |  |  |  |  |
|      |                                  | Syzygium Aromaticum Solution Enhanced with rhEGF (REGEN-DTM          |  |  |  |  |
|      |                                  | 60)"   |  |  |  |  |
| 2021 | Journal of Natural Fibers Volume | S Kubera Sampath Kumar, C Prakash, P Ramesh, N Sukumar, N K          |  |  |  |  |
|      | 18, Issue 12, Pages 2302-2314.   | Palaniswamy, "Study of Wound Dressing Material Coated With Natural   |  |  |  |  |
|      |                                  | Extracts of Leaf Solution Enhanced With Recombinant Human            |  |  |  |  |
|      |                                  | Epidermal Growth Factor (REGEN-DTM 150)"                             |  |  |  |  |
| 2019 | Fibers and Polymers              | Kiday Fiseha, Dipayan Das, and Palaniswamy N. K., "Effect of Blend   |  |  |  |  |
|      |                                  | Ratio of Deep-Grooved Polyester/Cotton Fibers on Mechanical and      |  |  |  |  |
|      |                                  | Comfort Properties of Woven Fabrics"                                 |  |  |  |  |
| 2019 | International Journal of Recent  | Shabrin Farhana.G, N.K.Palaniswamy, "Development of Diaper using     |  |  |  |  |
|      | Technology and Engineering       | Regenerated Carboxylated Cotton Fiber"                               |  |  |  |  |
|      | (IJRTE), Volume-8, Issue-2S11,   |  |  |  |  |  |
|      | p2949-2952                       |  |  |  |  |  |
| 2017 | Applied Mechanics & Materials,   | Umachitra G., Palaniswamy N. K., Shanmugasundaram O. L. and          |  |  |  |  |
|      | Vol. 867, p41-47.                | Sampath P. S., "Effect of Mechanical Properties on Various Surface   |  |  |  |  |
|      |                                  | Treatment Processes of Banana/Cotton Woven Fabric Vinyl Ester        |  |  |  |  |
|      |                                  | Composite  |  |  |  |  |

| 2017 | Journal of Reinforced Plastics and                           | Mohamed Zakriya, Ramakrishnan G., Gobi N., Palaniswamy N.K. and                                       |
|------|--|---|
|      | Composites, Vol.36, No.3,                                    | Srinivasan J., "Jute-reinforced non-woven composites as a thermal                                     |
|      | p206-213.  | insulator and sound absorber–A review"  |
| 2017 | International Research Journal of                            | P Ramesh, C Prakash, N Sukumar, N K Palaniswamy, S Sengottuvelu,                                      |
|      | Pharmacy, Vol. 8, Issue 5, p95-100                           |   |
|      |  | HEALING ACTIVITY OF NATURAL FIBRE BASED WOUND   |
|      |  | DRESSING COATED WITH NATURAL EXTRACTS OF  |
|      |  | CALOTROPIS GIGANTEAN, EUCALYPTUS GLOBULES AND   |
|      |  | BUDS OF SYZYGIUM AROMATICUM ENHANCED WITH   |
|      |  | EPIDERMAL GROWTH FACTOR"  |
| 2017 | Int. Res. J. Pharm., 2017, 8 (3),                            | Ramesh P, Prakash C, Palaniswamy N K, Sukumar N and Sengottuvelu                                      |
|      | p50-55.  | S, "DEVELOPMENT AND CHARACTERIZATION OF BAMBOO  |
|      |  | BASED WOUND DRESSING COATED WITH NATURAL  |
|      |  | EXTRACTS OF CURCUMIN, ALOE VERA AND CHITOSAN  |
|      |  | ENHANCED WITH RECOMBINANT HUMAN EPIDERMAL   |
|      |  | GROWTH FACTOR AND IN VIVO EVALUATION FOR WISTAR   |
|      |  | ALBINO WOUNDED RATS"  |
| 2014 | Science International, Vol. 26,                              | Edwin Sunder, Palaniswamy N.K. and Nalankilli G., "Protective finishes                                |
|      | No.2   | on cotton textiles using chitosan"  |
| 2014 | Micro & Nano Letters, Vol.10,                                | Nattanmi Raman Dhineshbabu, Palanisamy Manivasakan, Periasamy   |
|      | No.9, p717-720.  | Prabu, Nallathambi Gobi, Palaniswamy N.K. and Venkatachalam   |
|      |  | Rajendran, "Development of functional hybrid cotton fabrics by coating                                |
|      |  | with SiO2 and ZrO2/SiO2 composites"   |
| 2014 | Indian Journal of Fibre & Textile                            | Edwin Sunder A., Nalankilli G. and Palaniswamy N.K.,"Multifunctional                                  |
|      | Research, Vol.39(4), p 418-424                               | finishes on cotton textiles using combination of chitosan and   |
|      |  | polycarboxylic acids"   |
| 2011 | The Journal of the Textile Institute,                        | , · · · · · · · · · · · · · · · · · · ·   |
|      | Vol.102, No.3, p189-202.                                     | Jayaraman, "Air permeability of multilayer woven fabric systems"                                      |
| 2007 | Indian Journal of Fibre & Textile                            | Palaniswamy N.K., Shabeer Mohamed A. and William Robert P.,   |
| 2005 | Research, Vol.32, No.2, p169-172.                            | "Balanced two-ply cotton rotor yarn"  |
| 2006 | Autex Research Journal, Vol.6,                               | Palaniswamy N. K. and Peer Mohamed A.,"Effect of single yarn twist                                    |
|      | No.2, p59-71   | and ply to single yarn twist ratio on abrasion resistance of two-ply cotton                           |
| 2005 | Y 1' Y 1 CE'1 0 TE ('1                                       | yarns"  |
| 2005 | Indian Journal of Fibre & Textile                            | Palaniswamy N. K. and Peer Mohamed A.,"Balanced two-ply cotton  |
| 2005 | Research, Vol.30(1),p32-36 Indian Journal of Fibre & Textile | yarn" Palaniswamy N. K. and Peer Mohamed A.,"Effect of single yarn twist,                             |
| 2005 |  |   |
|      | Research, Vol.30(3), p258-262                                | ply-to-singles twist ratio and tightness factor on spirality of single jersey cotton knitted fabrics" |
| 2005 | Journal of Applied polymer                                   | Palaniswamy N. K. and Peer Mohamed A.,"Effect of single yarn twist                                    |
| 2003 | Science, Vol.98, p2245-2252                                  | and ply to single yarn twist ratio on strength and elongation of ply yarns"                           |
| 2005 | Journal of industrial textiles,                              | Sakthivel J.C., Mukhopadhyay S. and Palaniswamy N.K., "Some studies                                   |
| 2003 | Vol.35 (1), p63-76   | on Mudar fibers"  |
| 2005 | AUTEX Research Journal, Vol.                                 | Palaniswamy N.K. and Peer Mohamed A., "Yarn Twisting"   |
| 2003 | 5(2), p87-90   | and twisting twist and twisting   |
|      | [5(2), p87-90  |   |

## **Conference Publications:**

| Year Conference | Publication |
|-----------------|-------------|
|-----------------|-------------|

| 2016 | International Conference on Redefining Textiles and | Ramesh P, Palaniswamy N. K. and Sukumar                |
|------|---|--|
|      | Cutting Edge Technology 2016                        | Nachiappan, "Preparation and Characterization of       |
|      |   | Natural Fibre Based Wound Dressing Enhanced With       |
|      |   | Egf for Wound Healing Applications",Organized by       |
|      |   | Dr. B R Ambedkar National Institute of Technology,     |
|      |   | Jalandhar on 8 – 10th April 2016                       |
| 2014 | International Conference on Technical Textiles and  | Ramesh P. and Palaniswamy N. K., "Functional           |
|      | Nonwovens 2014                                      | properties of chitosan/rhegf/bamboo charcoal           |
|      |   | composites: development, characterization and          |
|      |   | evaluation of their antibacterial efficacy", Organized |
|      |   | by Indian Institute of Technology, Delhi (IIT-D), on   |
|      |   | 6th – 8th Nov 2014                                     |
| 2014 | International Conference on Emerging Trends in      | Ramesh P. and Palaniswamy N.K., "Preparation and       |
|      | Traditional and Technical Textiles                  | characterization of bamboo fibre gel enhanced with     |
|      |   | egf for wound healing", Organized by Dr. B R           |
|      |   | Ambedkar National Institute of Technology (NIT ),      |
|      |   | Jalandhar on 11th -12th April 2014                     |
| 2005 | The Fibre Society Spring 2005                       | Sakthivel J.C., Karthikeyan N.D., Mukophadyay S.       |
|      |   | and Palaniswamy N. K., "Properties and spinnability    |
|      |   | of Mudar fibres", The Fibre Society Spring 2005        |
|      |   | conference held at Swiss Federal Institute for         |
|      |   | Materials Testing and Research (EMPA), St. Gallen,     |
|      |   | Switzerland on 25th and 27th May 2005                  |

# **Research Projects:**

| Role         | Project   | Title          | Funding | From | То   | Amount | Status    | Co-Investi |
|--------------|-----------|----------------|---------|------|------|--------|-----------|------------|
|              | Type      |                | Agency  |      |      |        |           | gator      |
| Co-          | R&D       | Maximising     | AICTE   | 2004 | 2005 | 950000 | Complete  | Dr. M.     |
| Principal    |           | the yarn       |         |      |      |        | d         | Madhusoot  |
| Investigator |           | quality by     |         |      |      |        |           | hanan      |
|              |           | structural     |         |      |      |        |           |            |
|              |           | modification   |         |      |      |        |           |            |
|              |           | during ply     |         |      |      |        |           |            |
|              |           | twisting       |         |      |      |        |           |            |
| Principal    | UGC Minor | Formaldehyd    | UGC     | 2017 | 2018 | 290000 | Surrender | Dr.        |
| Investigator | Project   | e-free Easy    |         |      |      |        | ed        | Balasubra  |
|              |           | Care           |         |      |      |        |           | manian     |
|              |           | Finishing of   |         |      |      |        |           |            |
|              |           | Cotton using   |         |      |      |        |           |            |
|              |           | Lipase         |         |      |      |        |           |            |
|              |           | mediated       |         |      |      |        |           |            |
|              |           | Esterification |         |      |      |        |           |            |
|              |           | of             |         |      |      |        |           |            |
|              |           | Polycarboxyli  |         |      |      |        |           |            |
|              |           | c Acids: an    |         |      |      |        |           |            |
|              |           | Eco-friendly   |         |      |      |        |           |            |
|              |           | Approach       |         |      |      |        |           |            |

## **Events Organized:**

| Category  | Type     | Title | Venue   | From     | To | Designation |
|-----------|----------|-------|---------|----------|----|-------------|
| Cuttegory | 1 - 3 PC | 1100  | V CIIUC | 1 1 0111 | 10 | Designation |

| Workshop   | National | 27th National           | K. S. Rangasamy     | 20-02-2014 | 21-02-2014 | Organizing  |
|------------|----------|-------------------------|---------------------|------------|------------|-------------|
|            |          | Convention of Textile   | College of          |            |            | Secretary   |
|            |          | Engineers & National    | Technology,         |            |            |             |
|            |          | Seminar on "Design      | Tiruchengode,       |            |            |             |
|            |          | and Manufacture of      | Tamil Nadu          |            |            |             |
|            |          | Technical Textile       |                     |            |            |             |
|            |          | Materials and Products" |                     |            |            |             |
| Workshop   | National | Instrumentation in      | A C College of      | 04-07-2003 | 05-07-2003 | Co-coordina |
|            |          | Textile Industry        | Technology, Anna    |            |            | tor         |
|            |          |                         | University, Chennai |            |            |             |
| Conference | National | Impact of Research and  | K S Rangasamy       | 23-12-2014 | 24-12-2014 | Convener    |
|            |          | Development in          | College of          |            |            |             |
|            |          | Biotechnology for       | Technology,         |            |            |             |
|            |          | sustainable Textile     | Tiruchengode        |            |            |             |
|            |          | Production              |                     |            |            |             |