



Dr. M. BHARANI, ASSOCIATE PROFESSOR, TEXTILE TECHNOLOGY

Name : Dr. M. Bharani

Designation : Associate Professor

Department : Textile Technology

Joining Date : 02.07.2021

Qualification : B.Tech., M.Tech., Ph.D.,

Nature of Association : Regular
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**PROFESSIONAL SUMMARY**

I am a doctorate with 20 years of engineering and leadership experience. I am skilled in designing a curriculum that meets the criteria of the 21st Century classroom. Proficiency with both the spoken and written word has provided leadership and advancement opportunities within the educational setting. Possesses the vision needed to instruct and mentor students in a highly competitive world and is skilled at utilizing current educational hardware (tablets, laptops, Smartboards, digital cameras) and software (Blackboard, Canvas, Adobe Creative Suite) both in and out of the school setting. Twenty years of experience as a teacher, mentor, and Department chairperson responsible for the innovation and development of new programs and initiatives. The research work includes Yarn Characterization, Fabric Characterization, Garment Characterization, High-Performance Characterization, Developing Technical Garments, etc.,. And have 42 Research publications including 26 International Journals, 9 National Journals, 7 International, 5 national level conferences, Edited 2 Proceedings, 2 Books, 01 International Patent (Australian Patent) and also a Reviewer of various international conferences and journals also delivered various special lectures in conferences & workshops.

EMPLOYMENT HISTORY

**Nov. 2016 – Present KOMBOLCHA ETHIOPIA, SOUTH WOLLO ETHIOPIA
ASSOCIATE PROFESSOR, KOMBOLCHA INSTITUTE OF TECHNOLOGY, WOLLO
UNIVERSITY**

- Prepare and deliver lectures to postgraduate students on subjects such as yarn manufacturing, fabric manufacturing, pattern engineering, fashion art and design, fabric manufacturing, fabric structure and design, theory of spinning, advanced yarn manufacturing, industrial engineering, quality evaluation of yarn fabrics, and

garments, garment manufacturing, fashion designing, Pattern Engineering, Garment Constructions. etc.

- Evaluate and grade students' class work, assignments, and papers. And Prepare course materials such as syllabi, homework assignments, and handouts.
- Compile, administer, and grade examinations, or assign this work to others. And Maintain regularly scheduled office hours to advise and assist students.
- Collaborate with colleagues to address teaching and research issues.
- Supervise undergraduate or graduate teaching, internship, and research work.
- Participate in student recruitment, registration, and placement activities. And Participate in campus and community events.
- Write grant proposals to procure external research funding.
- Research in a particular field of knowledge and publish findings in professional journals, books, or electronic media.
- Keep abreast of developments in the field by reading current literature, talking with colleagues, and participating in professional conferences.
- Review books and journal articles for potential publication.
- Teach community courses and speak to local groups and organizations.
- Monitor students' performance to make suggestions for improvement and ensure that they satisfy course standards, training requirements, and objectives.
- Observe students determine qualifications, limitations, abilities, interests, and other individual characteristics. And Prepare students for further development by encouraging them to explore learning opportunities and persevere with challenging tasks.
- Plan and conduct activities for a balanced instruction program, demonstration, and work time that provides students with opportunities to observe, question, and investigate.

Jun. 2005 – Oct. 2016 SATHYAMANGALAM, ERODE DISTRICT, TAMIL NADU

ASSISTANT PROFESSOR (SELECTION GRADE), BANNARI AMMAN INSTITUTE OF TECHNOLOGY, SATHYAMANGALAM

- Prepare and deliver lectures to undergraduate or graduate students on topics such as yarn manufacturing, fabric manufacturing, pattern engineering, fashion art and design, fabric manufacturing, fabric structure and design, theory of spinning, advanced yarn manufacturing, industrial engineering, and garment manufacturing, fashion designing, Pattern Engineering, Garment Constructions. etc.
- Prepare course materials such as syllabi, homework assignments, and handouts.
- Initiate, facilitate, and moderate classroom discussions.
- Evaluate and grade students' class work, assignments, and papers.
- Plan, evaluate, and revise curricula, course content, and course materials and methods of instruction.
- Research in a particular field of knowledge and publish findings in professional journals, books, or electronic media.
- Perform administrative duties such as serving as department head.
- Collaborate with teachers to develop and maintain curriculum standards, develop mission statements, and set performance goals and objectives.
- Observe teaching methods and examine learning materials to evaluate and standardize curricula and teaching techniques and determine areas where improvement is needed.
- Plan and lead professional development activities for teachers, administrators, and support staff.
- Determine allocations of funds for staff, supplies, materials, and equipment, and authorize purchases.
- Participate in special education-related activities such as attending meetings and providing support to special educators throughout the district.
- Develop partnerships with businesses, communities, and other organizations to help meet identified educational needs and provide school-to-work programs.
- Write articles, manuals, and other publications, and assist in distributing promotional literature about facilities and programs.

Aug. 2001 – Oct. 2003 Erode, TAMIL NADU

ASSISTANT PROFESSOR, BHARATHIDASAN COLLEGE OF ARTS AND SCIENCE, ERODE

- Prepare and deliver lectures to undergraduate or graduate students on yarn manufacturing, fabric manufacturing, fabric structure and design, knitting technology, nonwoven fabric manufacturing, quality evaluation of yarn fabrics and garments, garment manufacturing, fashion designing, Pattern Engineering, Garment Constructions. etc.
- Evaluate and grade students' class work, assignments, and papers.
- Prepare course materials such as syllabi, homework assignments, and handouts.
- Maintain student attendance records, grades, and other required records.
- Plan, evaluate, and revise curricula, course content, and course materials and methods of instruction.
- Select and obtain materials and supplies such as textbooks.
- Serve on academic or administrative committees that deal with institutional policies, departmental matters, and educational issues.
- Act as advisers to student organizations.
- Keep abreast of developments in the field by reading current literature, talking with colleagues, and participating in professional conferences.
- Serve on academic or administrative committees that deal with institutional policies, departmental matters, educational issues., and operations management.

May. 2000 – Apr. 2001 SATHYAMANGALAM, ERODE, TAMIL NADU

JUNIOR PRODUCTION OFFICER, K.P.R. Mills Pvt Ltd, Sathyamangalam

- Direct and coordinate employees engaged in the production or processing of goods, such as inspectors, machine setters, and fabricators.
- Confer with other supervisors to coordinate operations and activities within or between departments.
- Plan and establish work schedules, assignments, and production sequences to meet production goals.
- Keep records of employees' attendance and hours worked.

- Maintain operations data, such as time, production, and cost records, and prepare management reports of production results.
- Recommend or implement measures to motivate employees and improve production methods, equipment performance, product quality, or efficiency.

EDUCATION

Exam Passed	Board/ University	Subjects	Year
Ph.D.	Anna University	Textile Technology	2015
M.Tech.	Bannari Amman Institute of Technology, Sathyamangalam / Anna University	Textile Technology	2005
M.S. (IT)	Distance Education/ Bharathidasan University	Information Technology	2002
B.Tech.	Bannari Amman Institute of Technology, Sathyamangalam/ Bharathiyar University	Textile Technology	2000
P.G.D.M.I.T	Institute for Management Studies, New Delhi	Management Information Technology	2002
DEM	National Institute of Export Management, Chennai	Export Management	2001

FUNDED R&D PROJECTS / CONFERENCES

S.No.	Name of the R&D Project / Conference / Student Project	Sponsoring Agent	Amount	Status
1.	Design And Development Of Thermoregulating Garments	Wollo University, Ethiopia R&D Department	193848 ETB	Ongoing
2.	Design And Development Of Computer-Aided Fibre Friction Tester (2017-18)	Wollo University, Ethiopia R&D Department	85500 ETB	Completed and Patented
3.	Engineering And High-Performance Protective Textiles - Co-Investigator - (2005-2008)	DRDO, New Delhi	Rs. 14.42 Lakhs	Completed
4.	Innovations In Apparel Manufacture, Quality, And Management(IAQM) - (2013-14)	AICTE, New Delhi	Rs. 1.50. Lakhs	Completed
5.	Development Of Self-Cleaning Garments Using Nano Particles - Under S.P.S. - (2011-12)	TNSCST, Chennai	Rs. 0.06 Lakhs	Completed
6.	Thermal Control Of Automotive Interiors Using Pcms - Under S.P.S. - (2011-12)	TNSCST, Chennai	Rs. 0.06 Lakhs	Completed
7.	Development Of Thermo Regulating Garment - Under S.P.S. - (2010-11)	TNSCST, Chennai	Rs. 0.06 Lakhs	Completed
8.	Development Of Mosquito Repellent Garments - Under S.P.S. - (2013-14)	TNSCST, Chennai	Rs. 0.075 Lakhs	Completed

CONTRIBUTION TO SOCIETY

- Entrepreneur Development Programme on "Skill Development in Textile & Garment Design Technologies," 24 – 28 July 2006.

- Developed Solar Energized garments, Textile Keyboards, and Solar operated Sewing Machine
- Conducted Training Programme for Rural people on Entrepreneurial Aspects
- Organized various seminars, Conferences, Workshops, and short-term Courses.
- Freelance advice (How to Utilize each garment machine for varying designs and Minimize fabric waste during cutting) given for Kidane Garments, Kombolcha, Ethiopia
- I have Carried out Technical Analysis on embroidery machine service at the Department of Garment Engineering, Kombolcha Polytechnic College (T.V.T. College), Kombolcha, Ethiopia.
- Conducted a Training Programme on "Garment Construction" for Selected Local Ethiopian Community, through University Industrial Linkage for about 2 Months From 17 April to 22 May 2018 at Kombolcha Institute of Technology, Wollo University, Ethiopia, and facilitated the Job Opportunity for the Trained candidates at Kombolcha City, Ethiopia. Contributed to University Expatriate Assistance Grant for Needy Students.
- Sponsored Textile engineering subjects related to 11 Original and 27 Photocopied Books for the benefit of the student community during September 2017
- Sponsored Textile engineering subjects related to 3 Original and 25 Photocopied Books for the benefit of the student community during September 2018.
- Created Google group for the Easy communication with Department Faculty

CONFERENCES/SEMINARS/WORKSHOPS ORGANIZED

1. I have Organized a One Day seminar on the Latest's Developments in Garment Machineries 20 February 2018.
2. Every Academic year Organizing workshops on Garment Production Machinery Equipment.
3. Organized jointly with The Institution of Engineers (India) Tamil Nadu State Centre, under the aegis of the Textile Engineering Division, I.E. (I) "All India Seminar on Latest Developments in Technical Textiles and Marketing of Technical Textiles and Apparels" during June 2016
4. Coordinated to Organize Two Week AICTE Sponsored Staff Development Program (SDP) on Technical Textiles and Garments" during 2015.

5. Organized 3-day workshop on Fashion Portfolio was conducted during December 2013
6. Organized workshop on International Scenario on Fashion Designing on 22.08.2013
7. National level FASHDASH'13 - two-day National Level Students' Design Contest cum Fashion Workshop held at our Institute premises on 14-15th February 2013
8. Organized Workshop on Garment Production Machinery and Equipment on July and August 2013
9. Organized Two-Day AICTE Sponsored National Conference on "Innovations in Apparel Manufacture, quality, and Management (IAQM) during 22-23 October 2013.
10. National level FASHDASH'12 - two-day National Level Students' Design Contest cum Fashion Workshop held at our Institute premises on 23-24 February 2012
11. International Convention on Innovations in Engineering & Technology for Sustainable Development, Bannari Amman Institute of Technology, Sathyamangalam, & derby university, 3rd-5th September 2012
12. Organized three day International Conference on ATNT 2005, held at BIT, Sathy on 7-8 December 2009 jointly with Texas Tech University, Lubbock, U.S.A. (Jt. Secretary)
13. National level FASHDASH'09 - two-day National Level Students' Design Contest cum Fashion Workshop held at our Institute premises
14. Organized a National Conference on "Innovations in Yarn Manufacture, Quality, and Management" (IYQM 2007) during October 10-11, 2007.
15. I organized a 5-day Workshop on "Assyst Bullmer CAD Software" for IV Year B.Tech. Fashion Technology students during 25-30 June 2007.
16. Organized One-week training program on "TUKA TECH design" was conducted during 13.12.2007 to 22.12.2007
17. I Organized a 4-day Garment CAD Training program from 29.01.2007 to 01.02.2007.
18. Organized 3-Day Workshop on Textile CAD during 1 -3 March 2007.
19. Organized a 2-day training program on "Reach Cutter Plotter and Reach Fashion Studio" during 24-25 May 2006.
20. Organized ten days Workshop on TUKA CAD from 20.12.2006 to 30.12.2006
21. Organized a National Conference on "Innovations in Yarn Manufacture, Quality and Management" (IYQM 2005) during September 22-23, 2005.

International and National Publications: 47**International Journal: 22**

1. Bharani Murugesan 2013'Analysis on Sewing Performance of Ring, Rotor, Airjet, and DREF-3 Friction Spun Yarn Fabrics', Journal of Scientific And Industrial Research, vol.73, no.8, pp.521-424. (Impact factor: 0.505)
2. Bharani, M& Mahendra Gowda, R.V. 2013, 'Tensile Behavior of Ring, Rotor, Air-jet, and DREF-3 Friction spun yarns at different gauge lengths', Journal of Textile and Apparel, Technology and Management, vol.8, no.2, Summer. (Refereed).
3. Bharani, M& Mahendra Gowda, R.V. 2012, 'Characterization of Flammability and Low stress, Mechanical Properties (Compression and Shear) of Basofil fibers and its blends,' Chemical Science Review and Letters, Vol. 1 no.1,pp. 35-44.
4. Bharani, M, Mahendra Gowda, RV, Rajashree, S & Sarumathy, KK 2012, 'Characterization of Sewability Parameters of Plain Structured Fabric with Structurally Modified Trevira CS Yarn for Defence Application,' Chemical Science Review and Letters, Vol. 1, no. 1, pp. 53-61.
5. Bharani, M& Mahendra Gowda, R.V. 2012, 'A study on tensile behavior of Ring, Rotor, Airjet, and DREF -3 Friction Yarns at Different Gauge Lengths', International Journal of Scientific and Research Publications, vol. 2, no.9.
6. Bharani, M& Mahendra Gowda, R.V. 2012, 'A study on Effect of Strain Rate on Tensile Behaviour of Inherent Flame Retardant Trevira CS Airjet Spun Yarn,' Journal of Textile Science & Engineering, Vol. 2, no.5, <http://dx.doi.org/10.4172/2165-8064.1000118>, (Open Access Article).
7. Bharani M., Influence of Specimen Length And Extension Rate on Tensile Behaviour of Spun Yarns, International Journal of Recent Scientific Research Research Vol. 7, Issue, 3, pp. 9612-9619, March 2016. ISSN: 0976-3031
8. Bharani M, Pavithra MKS, R.V. Mahendra Gowda, Development of Antimicrobial Finished Flame-Retardant Textiles Materials, International Journal of Advanced Engineering Technology, Vol. VII, Issue I, Jan.-March, 2016, 142-148.
9. Bharani M, Analysis and Characterisation of Mosquito Repellent Textiles, Journal of Textile Science & Engineering, Vol.7, no.5, DOI: 10.4172/2165-8064.1000317

10. Sakthivel Santhanam, Bharani M, SelamuTemesgen, Desalegn Atalie, and GashawAshagre, Recycling of cotton and polyester fibers to produce nonwoven fabric for functional sound absorption material, Journal of natural fibers, ISSN 1544-0478(print) 1544-046 X (online), DOI: 10.1080 / 15440478.2017.1418472.
11. Bharani Murugesan, (2018) Analysis on Production Efficiency of Lean Implemented Sewing Line: A Case Study. Journal of Textile Science and Engineering, Vol 8(6): 386. DOI: 10.4172/2165-8064.1000386.
12. SelamuTemesgen, Bharani Murugesan, and Rotich K. Gideon, Performance Evaluation of Cotton Yarn Sized With Natural Starches Produced From Native Corn, Cassava and Potato Starches, Journal of Textile Science and Engineering, J Textile Sci Eng, Vol 9(1): 389, DOI: 10.4172/2165-8064.1000389
13. K. Sakthisudhan, Bharani Murugesan, V. Saravanan, P.N.S. Sailaja, Textile E.F. shaped antenna based on reinforced epoxy for breast cancer detection by composite materials, Materials Today: Proceedings, 2020, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2020.10.465>.
14. S. SankarGanesh, P. Sreelatha, V. Bhanu Rekha, Aswani Kumar Puttumraju, Bharani Murugesan, K. Sakthisudhan, Textile antennas for breast carcinoma diagnosis application, Materials Today: Proceedings, 2021, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2020.12.221>.
15. T.M. Amirthalakshmi, D. Subitha, A. Johnson Santhosh, BalachandraPattanaik, Bharani Murugesan, K. Sakthisudhan, Breast carcinoma analysis by broadband antennas with composite test-beds, Materials Today: Proceedings, 2021, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2020.12.250>.
16. K. Sakthisudhan, Bharani Murugesan, V. Elanangai, C. Karthik, V.N. Sireesha, Dual-band transceiver of 1x2 grid pattern printed on woven fabric cancer detection by composites, Materials Today: Proceedings, 2021, ISSN 2214-7853, <https://doi.org/10.1016/j.matpr.2020.11.807>.
17. Bharani Murugesan,* , Assaye Dessie, Bezaneh Eshetu, Analysis On Colour Strength And Fastness Behaviour Of Senna Alata Dye Extract Treated Cotton Fabrics, Solid State Technology Volume: 63 Issue: 6 Publication Year: 2020, Archives Available @ www.solidstatetechnology.us
18. Kannan KilavanPackiam, Bharani Murugesan, Pavithra Mettupalayam, Kaliyannan Sundaramoorthy, Harshini Srinivasan & Keerthika

- Dhanasekaran (2021): Extraction, Purification and Characterization of Nanocrystalline Cellulose from Eichhorniacrassipes (Mart.) Solms: A Common Aquatic Weed Water Hyacinth, Journal of Natural Fibers, DOI:10.1080/15440478.2021.1946886.
19. K. Yoganandam, Vigneshwaran Shanmugam, A. Vasudevan, D. Vinodh, N. Nagaprasad, Balasubramaniam Stalin, Alagar Karthick, ChandrabhanuMalla, Murugesan Bharani, "Investigation of Dynamic, Mechanical, and Thermal Properties of Calotropis Procera Particle-Reinforced P.L.A.Biocomposites," Advances in Materials Science and Engineering, vol. 2021, ArticleID 2491489, 7 pages, 2021. <https://doi.org/10.1155/2021/2491489>
 20. R. Dharmaraj, Alagar Karthick, G. K. Arunvivek, S. Gopikumar, V. Mohanavel, M. Ravichandran, Murugesan Bharani, "Novel Approach to Handling Microfiber-Rich Dye Effluent for Sustainable Water Conservation," Advances in Civil Engineering, vol. 2021, ArticleID 1323472, 10 pages, 2021. <https://doi.org/10.1155/2021/1323472>
 21. U. Muthuraman, R. Shankar, Vinay Kumar Nassa, Alagar Karthick, ChandrabhanuMalla, Amit Kumar, P. Manoj Kumar, Robbi Rahim, Murugesan Bharani, "Energy and Economic Analysis of Curved, Straight, and Spiral Flow Flat-Plate Solar Water Collector," International Journal of Photoenergy, vol. 2021, Article ID 5547274, 11 pages, 2021. <https://doi.org/10.1155/2021/5547274>
 22. VijayananthKavimani, Balasubramaniam Stalin, PudhupalayamMuthukutti Gopal, Manickam Ravichandran, Alagar Karthick, Murugesan Bharani, "Application of r-GO-MMT Hybrid Nanofillers for Improving Strength and Flame Retardancy of Epoxy/Glass Fibre Composites," Advances in Polymer Technology, vol. 2021, Article ID 6627743, 9 pages, 2021. <https://doi.org/10.1155/2021/6627743>
 23. M.VetrivelSezhian, K.Giridharan, D.PeterPushpanathan, G.Chakravarthi,B.Stalin ,Alagar Karthick , P.Manoj Kumar, and Murugesan Bharani, "Microstructural and Mechanical Behaviors of Friction StirWelded Dissimilar AA6082-AA7075 Joints" Advances in Materials Science and Engineering Volume 2021, Article ID 4113895, 13 pages,<https://doi.org/10.1155/2021/4113895>.
 24. B. Stalin , M. Ravichandran , Alagar Karthick , M. Meignanamoorthy, G. T. Sudha,4 S. Karunakaran, and Murugesan Bharani "Investigations on Microstructure, Mechanical, Thermal, and Tribological Behavior of Cu-MWCNT Composites Processed by Powder Metallurgy", Journal of Nanomaterials Volume 2021, Article ID 3913601, 15 pages

<https://doi.org/10.1155/2021/3913601>.

25. N. Saravanan , V. Yamunadevi, V. Mohanavel , V. Kumar Chinnaiyan, Murugesan Bharani , P. Ganeshan , K. Raja,7 and Alagar Karthick, Effects of the Interfacial Bonding Behavior on the Mechanical Properties of E-Glass Fiber/Nanographite Reinforced Hybrid Composites, *Advances in Polymer Technology* Volume 2021, Article ID 6651896, 9 pages <https://doi.org/10.1155/2021/6651896>.
26. V. Kavimani , P. M. Gopal , B. Stalin , Alagar Karthick , S. Arivukkarasan, and Murugesan Bharani, Effect of Graphene Oxide-Boron Nitride-Based Dual Fillers on Mechanical Behavior of Epoxy/Glass Fiber Composites, *Journal of Nanomaterials* Volume 2021, Article ID 5047641, 10 pages <https://doi.org/10.1155/2021/5047641>

National Journal: 9

1. Bharani, M, Shiyamaladevi, P.S.S.& Mahendra Gowda, R.V. 2012, 'Characterization of Seam Strength and Seam Slippage on Cotton Fabric with woven structure and finish,' *Textile Trends*, vol.9, pp.35-43.
2. Bharani, M, Shiyamaladevi, P.S.S.& Mahendra Gowda, R.V. 2012, 'Characterization of Seam Strength and Seam Slippage on Cotton Fabric with woven structure and finish,' *Research Journal of Engineering Sciences*, vol. 1, no.2, pp.41-50.
3. Bharani, M & Mahendra Gowda, R.V. 2012, 'Characterization of Seam Strength and Seam Slippage on P.C. Blend Fabric with woven structure and finish,' *Research Journal of Recent Sciences*, vol.1, no.12,pp. 7-14.
4. Bharani, M, Abaya S, Nithya S, Manikandan, M & NixshaMafer, D, 2012'Characterization of Self Cleaning Behavior of Inherent Flame Retardant Materials', www.technicaltextile.net (Open Access Article).
5. Bharani M., Mohanraj S. Fabric Evaluation process to ensure the quality of the garment, *The Textile Magazine* volume 40, Issue No.5, 72-84 March 2008
6. Bharani M., Mohanraj S. and Mahendra Gowda R.V., Role of a sewing needle in sewing performance –A critical Review, *IJEST* Vol. 2 No. 1, Jan- Jun 2008 pp 65-74.
7. Bharani M., Timble N.B. Melt Blown Nonwoven an Overview, *Asian Textile Journal*, Vol 14; Numb 6, page(s) 48-54 June 2005
8. Bharani M., Sivakumar M., Process and treatments involved in fabric finishing for value addition, *Textile Magazine*, Vol 46, pp 66-69, June 2005
9. Bharani M., Sivakumar K., All About Metal Fibre Technology, *Textile Magazine* pp 30-32, May 2005

International Conferences- 7

1. Bharani, M, Gowthami, D, Subanandhini, V, Durga Priyanka, G & Sriramulu, V 2011,'Characterization of flammability and Low-Stress Mechanical Properties (compression and shear) of Basofil and its Blends,' in the International Conference on Asian Textile Conference, held at **South Korea, Seoul, Daegu**, pp.109.
2. Bharani, M, Mohanraj, S & Sriramulu, V 2011, 'Study on Seam Performance of Woven Fabrics', in the International Conference on Asian Textile Conference, held at **South Korea, Seoul, Daegu**, pp.100.
3. Bharani, M & Mahendra Gowda, R.V. 2011, 'Investigation on Tensile and Flammability Behaviour of BasofilFibres and its Blends,' in the International Conference on Advances in Textiles, Machinery, Nonwovens, and Technical Textiles held at Kumaraguru College of Technology, Coimbatore and Texas Tech University, U.S.A., pp. 33.
4. Bharani, M, Jino, JK &Sahithya, B 2009, "Characterization of Flammability & Low-Stress Mechanical Properties (compression and shear) of Trevira CS and Its Blends," in the International Conference on Advances in Textiles, Machinery, Nonwovens, and Technical Textiles held at Bannari Amman Institute of Technology, Sathyamangalam, and Texas Tech University, U.S.A., pp.29.
5. Bharani, M, Ramya Priya, R, Karthiga, D &Shanmugapriya, S 2009, "A Critical Investigation of Sewing Performance of Plain, Twill, Satin Fabrics Based on Seam Slippage, and Seam Strength" in the International Conference on Advances in Textiles, Machinery, Nonwovens, and Technical Textiles held at Bannari Amman Institute of Technology, Sathyamangalam and Texas Tech University, U.S.A., pp.14-15.
6. Bharani M "Characterisation of Antimicrobial Finished Flame retardant Textile Materials" in the "5th International Conference on the Advancement of Science and Technology" organized by Bahirdar Institute of Technology, Bahirdar University 19-20 May 2017.
7. MahletAyele, Bharani M., Bhanu Rekha., "Analysis of air permeability and absorption behavior of diaper insert produced from hemp and viscose rayon fiber blend" International Conference on Integration of Advanced Technologies for Industry 4.0 (ICIATI-2020) organized by K.C.G. College of Technology, Chennai, India during June 12-13, 2020

National Conference/Seminars/SDP – 5

1. Bharani M, 2015 "Self Cleaning Textile Materials" in the AICTE Sponsored Staff Development Program (SDP) on Technical Textiles and Garments" during 18-30 May 2015.
2. Bharani, M & Mahendra Gowda, R.V. 2013, 'Analysis of seam Strength and Seam Slippage on Cotton Fabric with woven structures,' in the National Conference on Innovations in Apparel Manufacture, quality and Management held at Bannari Amman Institute of Technology, Sathyamangalam during 22-23 October 2013, pp 101-113
3. Bharani M, 2012 "3D Body Scanning" in the AICTE Sponsored Staff Development Program (SDP) on "Modern Garment Technology" Organized by Department of Textile & Fashion Technology, Bannari Amman Institute of Technology, Sathyamangalam during. 21 May – 02 June 2012.
4. Bharani M "Antimicrobial Finished Flame Retardant Materials" in the "All India Seminar on Latest Developments in Technical Textiles and Marketing of Technical Textiles and Apparels" organized by Department of Fashion Technology, Bannari Amman Institute of Technology, Sathyamangalam jointly with The Institution of Engineers (India) Tamil Nadu State Centre, under the aegis of the Textile Engineering Division, I.E. (I) during 22 June 2016 to 23 June 2016.
5. Bharani M "Engineering and Characterization of Sewing Performance of Fabric Produced from Trevira CS Spun Yarns" in the "The 1st National Research Conference on Science, Technology, and Innovation for Sustainable Development (STISD-2017)" organized by Kombolcha Institute of Technology, Wollo University, during 1-2 July 2017.

Editor of Proceedings and Books - 4

1. Proceedings of the AICTE Sponsored F.D.P. program on "Technical Textiles and Garments," Organized by Department of Fashion Technology, Bannari Amman Institute of Technology, Sathyamangalam during 18-30 May 2015, Publisher BIT, Sathyamangalam. (ISBN: 978-81-920460-7-5).
2. Proceedings of the AICTE Sponsored National Conference "Innovations in Apparel Manufacture Quality and Management (IAQM 2013)", Organized by Department of Textile & Fashion Technology, Bannari Amman Institute of Technology, Sathyamangalam during 22-23 October 2013, Excel India Publishers, New Delhi. (ISBN: 978-93-83842-02-5).

3. Edited a Book Entitled "A collective study on Technical Textiles" with ISBN 978-93-86176-88-2, 2017
4. Edited a Book Entitled "Technology of Terry Weaving" with ISBN 978-93-86638-18-2, 2017

RESEARCH PROJECTS

ENGINEERING OF FLAME-RETARDANT TEXTILES

Trevira CS inherently Flame-Retardant fibers were successfully processed on popular spinning systems, like Ring, Rotor, and Air-jet spinning systems to produce 20 Ne & 30 Ne yarns. Trevira CS fibers were also blended with Acrylic (T/A: 50/50 & 80/20), Cotton (T/C: 80/20 & 50/50), Modal (T/M: 80/20), and to produce blended yarns for exploring the feasibility of economic production of Flame-Retardant apparel.

DEVELOPMENT OF MOSQUITO-REPELLENT TEXTILES

The present project work represents an attempt to develop mosquito-repellent garments. Cotton and Trevira knitted fabrics were treated with natural fragrance, namely Eucalyptus Oil and synthetic mosquito-repellent such as DEPA.

TENSILE BEHAVIOUR OF RING, ROTOR, AIR-JET, AND DREF-3 FRICTION YARNS

Project work was investigated the strain-strain responses and failure modes of the structurally different Ringspun, Rotor spun, Air-jet spun, and DREF-3 Friction spun yarns at high line rates and different gauge lengths so that more appropriate yarn engineering and utilization techniques were demonstrated

DESIGN AND DEVELOPMENT OF COMPUTER-AIDED FIBRE FRICTION TESTER

This project was planned to fabricate a novel and specific device for measuring Friction in textile fiber assemblies and other related surfaces. The research focused on designing and fabricating fiber friction testers to institute a standard test procedure. And Designed a novel system for measuring fiber-to-fiber Friction in more commonly used textile fibers, like cotton, viscose, polyester, acrylic, and other fibers; and examined the influence of Normal load and Test speed on fiber friction; measuring fabric friction and relating it to its handle, and thus along.

LECTURERS DELIVERED

1. She acted as a Resource Person in the Faculty Development Program (F.D.P.) on "Technical Textiles and Garments" Sponsored by AICTE, New Delhi, conducted by Dept. of Fashion Technology, conducted by BIT during 18 May – 30 May 2015.
2. Acted as a Resource Person in the "Entrepreneurship Development Program (EDP)" on "Apparel Technology" sponsored by DST-NIMAT conducted by Dept. of Fashion Technology, BIT during 03 – 31 December 2012 and 18 February – 18 March 2013.
3. She acted as a Resource Person in the Staff Development Program (SDP) on "Modern Garment Technology" Sponsored by AICTE, New Delhi, conducted by Dept. of Fashion Technology, conducted by BIT during 21 May – 02 June 2012.
4. She acted as a Resource Person in the National Seminar on "Plasma Processing of Textile Materials" Sponsored by AICTE, New Delhi, conducted by the Dept. of Fashion Technology, conducted by BIT during 22-23 April 2010.
5. She acted as a Resource Person in the Staff Development Program (SDP) on "Structure and Properties of Textile Fibers," Sponsored by AICTE, New Delhi, Dept. of Fashion Technology, conducted by BIT during 06-18 July 2009.
6. I acted as External Examiner for various Institutions in India during my Due course of experience.

COMMUNITY SERVICES AND DEPARTMENTACTIVITIES

- Developed Solar Energized garments, Textile Keyboards, and Solar operated Sewing Machine
- Conducted Training Programme for Rural people on Entrepreneurial Aspects
- Organized various seminars, Conferences, Workshops, and short-term Courses.
- I organized 2 Months training program through U.I.L., KIOT, Kombolcha "Training on Garment Construction" for selected locals at Kombolcha from 17 March 2018 to 20 May 2018 at the KIOT garment laboratory.
- Freelance advice (How to Minimize fabric waste during cutting) given for Kidane Garments, Kombolcha

- Gave technical suggestion for an embroidery machine service at the Department of Garment Engineering, Kombolcha Polytechnic College (T.V.T. College), Kombolcha
- Gave Training for Industrial Labours At Your Garments, Tirupur
- Donated 1200 ETB as an Expatriate Assistant Grant During the academic year of 2017-18 for the Benefit of Needy Students.
- Sponsored 11 nos. Of Original textile Engineering books to the Department on 19.09.2017
- She has sponsored 27 nos. of reproduced copies of Textile Engineering books to the Department on 27.09.2017.
- Sponsored three original and 25 reproduced copies of Textile Engineering books to the Department on 09.10.2018.
- Installation of Various Testing Equipment Namely Stelometer, Single yarn strength Tester, Perspirometer, etc.
- Prepared School Development Document for becoming "School of Textile, Leather and Fashion Technology" at KIOT, Wollo University.
- She developed Google groups in the Department of Textile Engineering for Easy and Better communication.
- Arranged Guest Lecture from JUKI Singapore about Latest Technology on Garment Machineries

HOLISTIC MODULES

Prepared following Holistic Module for Textile and Fashion Designing Department, and it was submitted to the Department on 28.02.2018. Both soft and hard copies.

1. Fashion Designing
2. Yarn Manufacturing
3. Advanced Yarn Manufacturing

JOURNAL REVIEWER

1. Textile Research Journal
2. Journal of Industrial Textiles
3. Journal of Engineered Fibres and Fabrics
4. Textile Research Journal

PATENT GRANTED

Australian Patent Granted for the Research Instrument entitled "Design and Fabrication of Fibre Friction Tester" (Application Number: 2020102824)

- Dr. Bharani Murugesan - Principal Investigator
- Mr Aron Mulat - Co Principal Investigator
- Mr Selam Temesgen- Co Principal Investigator
- Dr Melaku Tamene M – Co Principal Investigator

PROGRAMS ATTENDED

1. Acted as a Resource Person in the Orientation Program on "A Guide Line for Research Proposal and Research Dissertation Thesis" conducted by the Department of Textile Engineering, conducted by KIOT on 22 March 2019
2. Attended training on "Garment Machinery and Equipment - including Maintenance Engineering" Trained by Juki India, Tirupur.
3. Attended one day workshop on "Design of Experiments & Minitab 17: Statistical software tools" by Cubic Computing P Ltd., Bangalore & BIT on 08 September 2015.
4. Attended two-week AICTE sponsored F.D.P. program on "Fashion Design and Technology" from 20 May to 02 June 2013 at Bannari Amman Institute of Technology, Sathyamangalam.
5. Attended Personal Effectiveness Program (P.E.P.), Conducted by Prasanna Trust, Coimbatore during 28 – 29 July 2012 at Bannari Amman Institute of Technology, Sathyamangalam.
6. Attended one day program on ABET Accreditation by Dr. K Surendran, Southeast Missouri State University, EV ABET on 21 July 2012 at Bannari Amman Institute of Technology, Sathyamangalam.
7. Attended a training program on "Computer-Aided Design to operate TUKA design, Tukagrade & TUKA mark by Tukatech, Inc, the U.S.A. from 14th to 20 June 2010.
8. Attended a workshop on "Research Methods and Tools for Engineering Faculty" conducted by Dept. of Mechanical Engineering, Bannari Amman Institute of Technology, Sathyamangalam, during 18-19 December 2009.

9. Attended F.D.P. on "Finite Element Analysis," conducted by Department of Mechanical Engineering, Bannari Amman Institute of Technology, Sathyamangalam during 19-20 November 2008.

AWARDS

Best Outgoing Student Award (MTech. -Textile Technology) –Bannari Amman Institute of Technology (Alagammal Charitable Trust), Sathyamangalam.

PARTICIPATION IN COLLEGE AND UNIVERSITY AFFAIRS

1. Curriculum Development for Fashion Designing – Modification and Revising.
2. Class Advisor for 2009 Batch Graduate Student.
3. Class Advisor for Post Graduate Students of Ist and II batch
4. Member - Undergraduate Thesis Evaluation Committee
5. Member - School Development Committee
6. Member- Laboratory Establishment Committee.
7. Proposal Evaluator - Research and Community service.
8. Member - Department Graduation Committee, Textile Engineering
9. Member - Promotion Evaluation committee
10. Documentation Committee In-Charge
11. College Ranking Process
12. N.B.A. Accreditation Approval Process
13. Governing Council Meeting Process
14. NAAC Accreditation process-related documents
15. AICTE Approval Process and Funded Scheme Approval Process
16. Anna University Affiliation Process
17. Various Inspection Process of AICTE, N.B.A., NAAC, and Anna University
18. Mentoring and Counselling Club Faculty Coordinator
19. Library, coordinating committee member
20. College Canteen Committee Member
21. QP verification /scrutiny (Internal & External)

ADVISOR –UNDERGRADUATE AND POSTGRADUATE PROJECTS

Undergraduate Projects

1. Solar Energised Garments
2. Design and Development of Thermo-regulating Garments

3. Solar Operated Sewing Machine.
4. Design and Development of Garments for Blinds
5. Sew-ability analysis of Different Structured Fabrics
6. Production Analysis of Lean Implemented sewing section.
7. Antimicrobial behavior of Bamboo and Neem Activated charcoal
8. Extraction and characterization of Natural Dyeing using Senna Alexandrina.
9. Design and Development of Wrap spinning machine
10. Characterization of Core-spun yarn produced from Ring spinning machine.
11. Design and Development of Yarn Appearance Board Winder
12. Characterization of Different Structured Woven Fabric for Stiffness, Drape, and Crease Recovery.

Postgraduate Projects

1. Development and Characterizations of nonwoven fabrics using banana, sisal, and coir fibers for oil absorbent applications in marine engineering.
2. Influence of Cylinder Doffer Setting and Fiber Transfer Rate on N.E.P. Formation of Carding Machine.
3. Preparation and Characterizations of Baby Diaper Insert From Viscose Rayon And Hemp Fibres.
4. Design and Development of Flame-retardant Textiles using Eggshell and borax and Boric Acid.
5. Development and Characterisation of Water hyacinth reinforced composites using Euphorbia Abyssinica Gum using composites

SKILLS

PRESENTATION SKILLS	: <i>Expert</i>
ORGANISATIONAL WORK	: <i>Expert</i>
VERBAL COMMUNICATION	: <i>Expert</i>
LEADERSHIP	: <i>Expert</i>
TEAM WORK	: <i>Expert</i>

Dr (Mrs) BHARANI MURUGESAN