

## **DEPARTMENT OF TEXTILE TECHNOLOGY**

Vol-4, Issue:2 July-December 2023



# NEWSLETTER

# TEXTILE TECHNOLOGY



# INSTITUTION Vision

The vision of the college is to become a Technical University of International Standards through continuous improvement.

## Mission

Kumaraguru College of Technology is committed to providing Quality Education and Training in Engineering and Technology to prepare students for life and work equipping them to contribute to the technological, economic and social development of India. The college pursues excellence in providing training to develop a sense of professional responsibility, social and cultural awareness and set the students on the path of leadership.

## DEPARTMENT Vision

To be a Centre of Excellence in Textile Technology and Management with basic and applied research for the fulfillment of social needs.

### Mission

Develop industry-relevant curriculum, innovative teaching and project-based learning methods that enable students to be efficient professionals.

Motivate faculty to update their knowledge and skills through continuous learning.

Provide holistic student development by creating opportunities for lifelong learning and developing entrepreneurship skills.

Undertake inter-disciplinary research and development/ Internship/ Consultancy in the field of Textile Technology to support the industry and society.

# FROM THE DEAN'S DESK



#### **A.PAVENDHAN-ASSOCIATE DEAN-TEXTILE CLUSTER**

Regarded as one of the oldest industries in the world, Textiles, occupy a unique and dominant position in terms of agricultural and industrial arena of the world even in current context. Closer to three decades of Textile Education, our Institute and our department in particular have been producing graduate and post graduate students of high quality. Many of our Alumni are serving the industry in various capacities from running successful textile business to exciting start-ups and serving as textile professionals. We shall strive to have better interactions with our Alumni, going forward, for the mutual benefits of our students and industry. Happy to note that our department in the past six months have taken up many activities and is reflecting in the content and quality of this newsletter. We are also excited to mention here that we have identified many new research areas and activities which shall fall in place, one by one, in the coming months. We invite our students to join hands with faculty in sharpening their research skills. We also invite Textile Industry and Alumni to be part of this exercise. Please do not hesitate to be in touch with us. I take this opportunity to congratulate the Editorial team of the newsletter who have done a commendable job in terms of producing quality content and pleasing design. I am happy to be part of this prestigious institute and the department and looking forward to being part of many activities and achievements.

# FROM THE HOD'S DESK



#### Dr.V.Ramesh Babu, Head & Professor

Department of Textile Technology was started in the year 1995 with the objective of imparting comprehensive knowledge in all the faces of Textile Manufacture to students through UG & PG programmes. Professionally well-qualified, highly experienced faculty members and a well-equipped laboratory with modern facilities provide ample opportunity to the students to pursue their education with excellence. Students are provided with good industrial exposure taking full advantage of the college located in the Textile City, Coimbatore. The accreditation status has been awarded to the B. Tech Textile Technology undergraduate programme by the National Board of Accreditation, AICTE, New Delhi.

On behalf of the staff and students, it is my pleasure to release the issue of TEXTILE NEWSLETTER, Volume. 4, Issue.2, bi-yearly publication of the Department of Textile Technology that showcases the faculty activities, student activities, research activities, alumni activities, and programs organized in the Department from June-December 2023. Its mission is to become a voice of the textile department, addressing faculty, industry persons and alumni, and other stakeholders of Textile Technology. Finally, I would like to express my appreciation to the faculty and students who contributed to getting ready this Newsletter. I hope you will enjoy reading these newsletters and know the department achievements, Vision and Mission, Programme Educational Objectives and Program Specific Outcomes, etc

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#### WORKSHOPS/FDP ATTENDED

S.No	Name of the Faculty	Workshop / Seminar / Guest Lecture / Training	Topic/Title of the program	Total number of days
1	Dr.V.Ramesh Babu	Seminar	Rieter : Institutes' Intelligence Program 2023	3
2	R.Saminathan	Seminar	National Intellectual Property Awareness Mission (NIPAM)	1
3	P.Thangeswaran	Seminar	Rieter : Institutes' Intelligence Program 2023	3
4	P.Chandrasekaran	Industrial Training	Industrial Training-Textile Chemical Processing Industry	21
5	M.Saravanan	Training	Training program on Protective Textiles	7
6	Dr.P.Sivakumar	Training	Training program on Protective Textiles	7
7	Sukanya Devi R	Training	Training program on Protective Textiles	7
8	Dr.S.Ariharasudhan	Conference	11th Asian Textile Conference	2
9	S.Sundaresan	Conference	11th Asian Textile Conference	2
10	Dr.V.Ramesh Babu	Conference	11th Asian Textile Conference	2
11	Dr.V.Ramesh Babu	Conference	International Conference on scope and opportunities in Medical Textiles,	1

#### WORKSHOPS/FDP ATTENDED

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S.No	Name of the Faculty	Workshop / Seminar / Guest Lecture / Training	Topic/Title of the program	Total number of days
12	Dr.V.Ramesh Babu	Ехро	Techtextil India 2023,JWCC,Mumbai	3
13	Dr.S.Ariharasudhan	Ехро	Techtextil India 2023,JWCC,Mumbai	3
14	Dr.S.Ariharasudhan	Conference	International Conference on scope and opportunities in Medical Textiles	1
15	Dr.S.Ariharasudhan	Conference	11TH ASIAN TEXTILE CONFERENCE (ATEXCON)	2
16	Dr. Saminathan R	Conference	11TH ASIAN TEXTILE CONFERENCE (ATEXCON)	2
17	M.Saravanan	Conference	11TH ASIAN TEXTILE CONFERENCE (ATEXCON)	2
18	Dr.V.Ramesh Babu	Conference	11TH ASIAN TEXTILE CONFERENCE (ATEXCON)	2
19	R.Sukanya Devi	Conference	11TH ASIAN TEXTILE CONFERENCE (ATEXCON)	2
20	DR.P.SIVAKUMAR	AICTE SUPPORTED UHV- 1 FDP	UNIVERSAL HUMAN VALUES-1	3
21	Dr.S.Ariharasudhan	Guest Lecture	Shades of Medical Nonwoven	1

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S.No	Name of the Faculty	Workshop / Seminar / Guest Lecture / Training	Topic/Title of the program	Total number of days
22	M.Saravanan	CII conference	CII conference on Technical Textiles	1
23	R.Sukanya Devi	CII conference	Cll conference on Technical Textiles	1
24	P.Chandrasekaran	NPTEL COURSE	TECHNICAL TEXTILES	84
25	P.Chandrasekaran	NPTEL COURSE	TEXTILE FINISHING	84
26	R. Saminathan	NPTEL COURSE	TEXTILE FINISHING	84
27	R. Saminathan	NPTEL COURSE	Science of Clothing Comfort	84
28	M.Saravanan	NPTEL COURSE	TECHNICAL TEXTILES	84
29	M.Saravanan	NPTEL COURSE	Textile Quality Analysis	84
30	M.Saravanan	NPTEL COURSE	Introduction to IP	84
31	M.Saravanan	CII conference	CII conference on Technical Textiles	1
32	R.Sukanya Devi	CII conference	CII conference on Technical Textiles	1
33	S.Natarajan	Seminar	TECHNOLOGY SHOWCASE INDIA - Textile machinery 2023	1
34	Dr.V.Ramesh Babu	Workshop	7 th International Conference on Technical Textiles and Nonwovens@ IIT Delhi	1
35	P.Chandrasekaran	Seminar	TECHNOLOGY SHOWCASE INDIA - Textile machinery 2023	1

#### WORKSHOPS/FDP ATTENDED

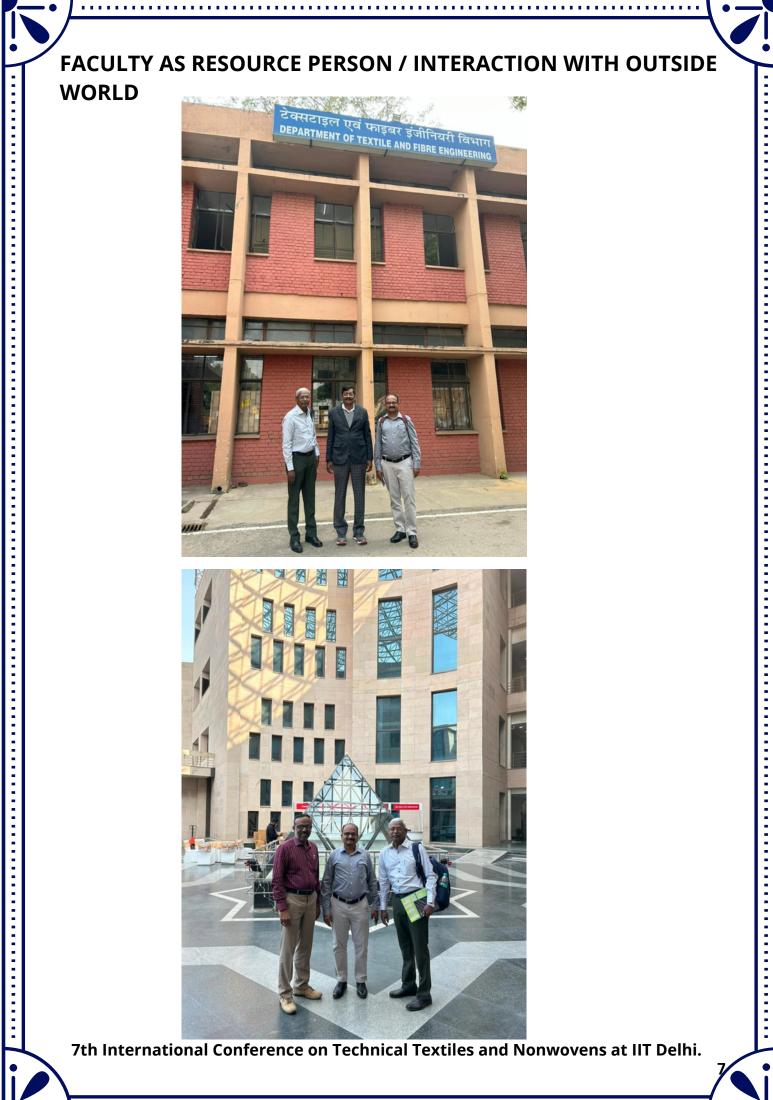
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S.No	Name of the Faculty	Workshop / Seminar / Guest Lecture / Training	Topic/Title of the program	Total number of days
36	S.Sundaresan	Refresher	National Intellectual Property Awarness Mission	1
37	S.Ariharasudhan	FDP	Computational thinking and Problem solving	5
38	S.Natarajan	FDP	Computational thinking and Problem solving	5
39	P.Chandrasekaran	FDP	Innovative Approaches in Fashion System	5
40	P.Chandrasekaran	FDP	Patent for Beginners	60
41	S.Natarajan	FDP	Patent for Beginners	60
42	Dr.V.Ramesh Babu	FDP	Value Chain Management in Natural Fibres	5
43	R. Saminathan	FDP	TEXTILE FINISHING	84
44	R. Saminathan	FDP	Science of Clothing Comfort	84
45	P.Chandrasekaran	FDP	TECHNICAL TEXTILES	84
46	P.Chandrasekaran	FDP	TEXTILE FINISHING	84
47	M.Saravanan	FDP	TECHNICAL TEXTILES	84

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S.No	Faculty Name	Type of Activity	Title of the Activity	Activity organised by	Date
1	Dr.V.Ramesh Babu	Five Day Professional Development Programme on Innovative Approaches in Fashion System	"Systematic Techniques of Training Sewing Operators"	Amity University Chhattisgarh Amity School of Fashion Technology	18.07.2023
2	Dr.V.Ramesh Babu	FDP on Export Oriented Quality Parameters in Textile Industrie	Delivered Lecture on Apparel Quality Assurance in Garment Exports	The Faculty Development Training Centre, Government College of Technology, Coimbatore, in association with Department of Textile Technology, Nachimuthu Polytechnic College, Pollachi – 642 003.	07.08.2023
3	S.Sundaresan	FDP on Export Oriented Quality Parameters in Textile Industries	Delivered Lecture on : Fabric Defects and Control	The Faculty Development Training Centre, Government College of Technology, Coimbatore, in association with Department of Textile Technology, Nachimuthu Polytechnic College, Pollachi – 642 003.	08.08.2023
4	Dr.V.Ramesh Babu	Examiner	Anna University Practical Exam	Rajas College of Engineering and Technology	24.11.2023
5	Dr.S.Ariharasudha n	FDP	Design Thinking for Fabric Development	Bon Secours College for Women, Thanjavur	12.12.2023
6	S.Sundaresan	Guest lecture	Strategic imperitive: Crafting a feasibility report for entreoreneural success	KSRCT	29.12.2023



### **GUEST LECTURES**

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S. No.	Topic of Guest Lecture	Name and Designation of the Expert	Name of the Industry / Institute	Date
1	Clothing Comfort for Babies	Balaji M, General Manager - Sourcing	Poppeye Knitwear, Tiruppur	18.08.2023
2	Management Concepts in a Spinning Mill	Muguntharajan P., Factory Manager	Sri Varadaraja Textiles, Coimbatore	23.08.2023
3	Smart Textiles and its applications	Dr. P. Jagajanantha, Senior Scientist	ICAR-Mumbai	18.08.2023
4	Fancy yarn, slub yarn and its Applications	Mr.Jagan Mohan Balaji,Vice President	Lakshmi Caipo Industries	11.08.2023
5	Product Development And Diversification Of Silk And Silk Blended Melange Yarn/Fabrics	Dr Srinivasa, Scientist 'D'	Central Silk Board, Bengaluru	15.09.2023
6	International Guest Lecture	Dr Rangam Rajkhowa, Associate Professor	Deakin University, Australia	05.10.2023

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#### **GUEST LECTURES**

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S. No.	Topic of Guest Lecture	Name and Designation of the Expert	Name of the Industry / Institute	Date
7	International Guest Lecture	Dr Siddique, Dean FTE	BUFT, Dhaka, Bangladesh	10.10.2023
8	International Guest Lecture	Dr P Goswami, Associate Dean	University of Huddersfield, UK	13.10.2023
9	Industrial Engineering practices in Textile Industry"	Mr. Chandru Periyasamy,	Executive Industrial Engineer, Jay Jay Mills Pvt. Ltd., Tiruppur	06.10.2023
10	Application of Viscose and its blend with clothing	Mr. HARISHCHAND R General Manager in Birla Cellulose,	Aditya Birla Group, Erode	15.12.2023
11	Seminar on Career Options after Undergraduation	Mr. S. Siddharth, Manager (Operations), T.I.M.E., Coimbatore Mr. N. Shiva Guru, Chief-B&M, KC Overseas Education, CBE	T.I.M.E., Coimbatore & KC Overseas Education, Coimbatore	13.12.2023
12	Machineries and their Advancements in spinning	Mr. R. Naveen Kumar Manager – Area Operations M/s Voltas Pvt. Ltd., (Textile Machinery Division), Coimbatore	M/s Voltas Pvt. Ltd., (Textile Machinery Division), Coimbatore	14.12.2023

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#### PROGRAMMES ORGANISED

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		Type of program	Title of the	Du	ration	Details of
	S.No.	organised	program	From	to	resource person
-	1	Training	Eco friendly silk dyeing technology for Sirumugai weavers	17.06.2023	17.06.2023	Self
	2	Exhibition	Handloom day exhibition	08-07-2023	08-07-2023	NA
	3	Teachers Day Event	Teachers Triumph Fest	05-08-2023	05-08-2023	NA
	4	Engineer's Day	Weave Tank	20.09.2023	20.09.2023	NA
	5	TAI seminar	Sustainability in spinning mills	05.10.2023	05.10.2023	A.Kanthimathi nathan, TAl- SIU, Coimbatore
	6	Refresher programme	Refresher programme for 2022-26 batch	17.10.2023	17.10.2023	NA
	7	Training Programme	Training Programme on "Quality and process control for textile manufacturing process and soft skills	09.10.2023	21.09.2023	Mr.R.Murugaa nandan, Trainer – SGS Academy, Bangalore,

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#### PROGRAMMES ORGANISED

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	Type of program	Title of the	Dur	ation	Details of
S.No.	organised	program	From	to	resource person
8	Competition	Mind Olympics	Within KCT	11-04-2023	NA
9	Workshop	Startup spark	Within KCT	16.11.2023	16.11.2023
10	Refresher	Trip to Baralikadu-KCT Textile Dept Faculty Refresher Program	КСТ	12-09-2023	12-09-2023
11	Seminar	Powering business growth through fabric digitization and 3d material creation	International	22/12/2023	22/12/2023
12	Seminar	Seminar on recycled cotton fibres	Within KCT	26/12/2023	26/12/2023

#### **RESEARCH ACTIVITIES**

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S.No	Title of project	Name of the Pl / Employee code / Department	Name of the Co- Pl / Employee Code / Department	Name of the funding agency	Total grant sanctione d in Lakhs
1	Enabling Education Institute for Technical Textile	Dr.V.Ramesh Babu	Dr.S.Ariharasudhan/ Mrs.R.Sukanya/Dr.M .Saravanan	MoT,GOI	2.5 Crores
2	Nanotechnology for sustainable Growth and Development	Dr.A.Sasikala K00215 ECE, Dr.H.Arul K01219 SFS and Prof.R.Sukanya Devi, Textile	Nil	IEEE	\$5,000

#### SCHOLARS COMPLETED PH. D UNDER TEXTILE RESEARCH CENTRE

S. No	Name of the Faculty	Ph.D Completion Date	Name and details of the Guide
1	Mrs.Tharakeswari	18/08/2023	Dr.D.Saravanan
2	Mr.Vijyasekar	21/08/2023	Dr.D.Saravanan
3	T.S.Geethanjali	9/15/2023	Dr.V.Ramesh babu
4	M.Maanvizhi	10/27/2023	Dr.V.Ramesh babu

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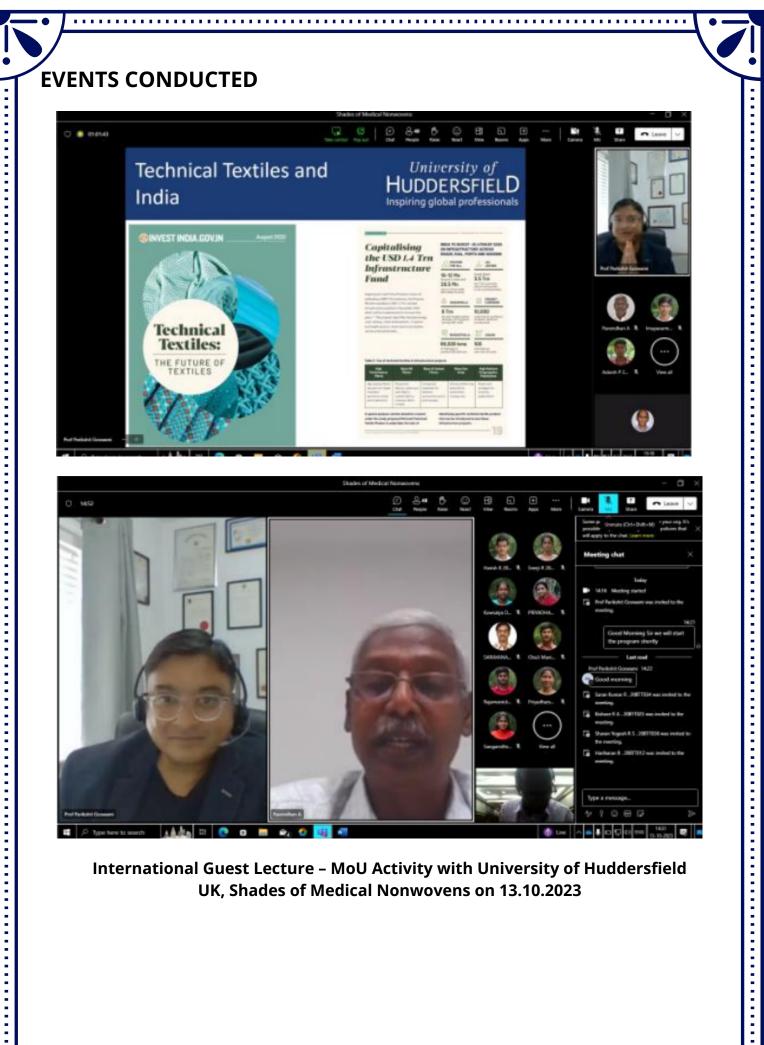




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SGS Academy, India: Training Programme on "Quality and process control for textile manufacturing process and soft skills" 09.10.2023



International Guest Lecture - MoU Activity with University of Huddersfield UK, Shades of Medical Nonwovens on 13.10.2023

#### **EVENTS CONDUCTED**



TAI SIU seminar on "sustainability in spinning mill" on 05.10.2023

#### **EVENTS CONDUCTED**



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National Handloom Day Expo (Silk sarees, cotton sarees, cotton silk sarees and cotton towels were sold in huge number among the audience) on 07.02.23 17



Refresher Program for enlightening the students on the various courses and the working of the department 17.10 2023

#### **EVENTS CONDUCTED**



Mind Olympics: quiz event helps students to learn about their knowledge on textile on 04.11.2023

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S. No.	Date	Title of the collaborative activity	Name of the collaborating agency with contact details	Name of the participant	Nature of the activity
1	07.06.23	Second Doctoral Committee meeting for the Research Scholar Mr. Thangeswaran. P	Dr.S.Balasivannadha Prabhu.Professor,Dept of Mechanical,CEG Camous,Anna Univetsity,Cheenai.Dr.A rockiarajan,Professor,D ept of Applied Mecahnics,IIT,Madras,C hennai	Mr.P.Thangesw aran	Research
2	17.06.23	Training for Sirumugai Dyers	Sirumugaipudur Sir Ramalinga Sowdambigai cooperative weavers society, Sirumugai & DST, Gol	R.Sukanya Devi	Training
3	16.08.23	DC meeting	1.Dr.M.Senthil Kumar, Professor, Dept of Textile Technology, PSG College of Technology 2.Dr. R.Prabha Asst Professor(SG) Department of Textiles and Clothing Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore- 641043	Dr.V.Ramesh Babu,Mrs.Neeth i.G.S	Research
4	06.10.23	Local Prgram Advisory Commitee Meetig	DST - SEED Women Scheme	R.Sukanya Devi	Project Review
5	06.10.23	Faculty exchange- International	BUFT Bangladesh	R Saminathan	Visit and lecture
6	13.10.23	International Guest Lecture - Shades of medical nonwovens	University of Huddersfield UK	R Saminathan	Lecture

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S. No.	Date	Title of the collaborative activity	Name of the collaborating agency with contact details	Name of the participant
7	18.11.23	Department Advisory Board	<ol> <li>Dr. Mohanapriya</li> <li>Venkataraman, Assistant professor, Faculty of Textile</li> <li>Engineering, Technical</li> <li>University of Liberec (TUL),</li> <li>Czech Republic.</li> <li>Mr. G. Kathirvel Pandiyan,</li> <li>46/27b, Arul Illam,</li> <li>Peelamedu, Coimbatore.</li> <li>Dr. M. Ramamoorthy,</li> <li>Manager – Technical sales</li> <li>and Business development</li> <li>and R&amp;D HP Pelzer</li> <li>Automotive Pvt. Ltd.</li> <li>Kharabwadi, Chakan, Pune -</li> <li>410501, India.</li> </ol>	1. Dr. Mohanapriya V 2. Mr. G. Kathirvel 3. Dr. M. Ramamoorthy,
8	21.11.23	BoS	KSR College of Technology, Dept. of Textile Technology	Dr.V.Ramesh Babu
9	22.11.23	BoS	AC Tech, Anna Univ, NIT Jalandhar, PSG Tech, IIT Mumbai, OCF Avadi, Chennai	Dr Murugesan, Dr NK Palaniswamy, Dr M Senthilkumar, Dr A Subash babu, Mr S Vaidheeswaran, Mr AJ Kannan, Ms r Swathy
10	09.11.23	Collaborative Research	Dr.K.Amutha, Bharathiar University, Coimbatore	R.Sukanya Devi

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Industry interaction between Department of Textile Technology and Saurer Textile Solutions Private Limited was conducted. The involvement of Mr. Arjunsinh Solanki, Head HR & Admin at Saurer Textile Solutions Private Limited, Vadodara, and Mr. Sankar, HR Coimbatore ------





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Prof. Dr Eng. Abu Bakr Siddique, Dean of FTE & FAS, BGMEA University of Fashion & Technology (BUFT), Dhaka, Bangladesh, was on KCT Campus in Coimbatore as part of the faculty exchange program under the MoU signed between the Department of Textile Technology, KCT and BUFT. He visited us from 06.10.2023 to 14.10.2023 with the aim of establishing a long-term relationship between the two institutions.

#### **INDUSTRY LINKAGE**

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S. No.	Date	Name of the partnering institution/ industry /research lab with contact details	Nature of linkage
1	25.07.2023	Dr.N.K.Palanisamy, Associate Professor, NIT/Dr.Neelakandhan,Professor, Anna University,Dept. of Textile Technology, Dr.V.Ramesh Babu,Associate Professor,Dept. of Textile Technology, KCT	Research
2	06.10.2023	M/s Coloursburg, Perundurai	Project Review
3	06.10.2023	The South India Textile Research Association, CBE	Project Review
4	20.11.2023	Grasim and KCT	resourece center
5	28.11.2023	Best Corporation Private Ltd	Placement/Internship
6	19.12.2023	Mr. Arjunsinh Solanki, Head HR & Admin at Saurer Textile Solutions Private Limited, Vadodara, and Mr. Sankar, HR Coimbatore,	Placements/Internships/



Dept. of Textile Technology, signed an MoU with Grasim Industries Ltd. on November 20, 2023.

### CONSULTANCY

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S.No. Name of the facility used Comprussion moulding, UTM & Impact Strength Tester		Consulting / Sponsoring agency with contact details	Revenue generated (Amount in Rs.)	
		K.Murugesan, AP, Mechatronics Engineering, KCT	1,416.00	
2	Universal Testing machine	Arya S Unni, M.Tech Biotechnology, KCT.	354	
3	Universal Testing machine	Sukanyadevi.R, AP-II, Department of Textile Technology, KCT	590	
4	Needle Punching	Swakar Meditech, Coimbatore.	2,360.00	
5	Needle Punching	Global Textile Alliance India private Limited,Coimbatore.	1,652.00	
6	Needle Punching     Ms.Dakshata.S, B.Tech Textile Technology, BIT,       Sathyamangalam.		708	
7	Needle Punching	dle Punching Ms.Sheebamercy.D, Department of Textile and Apparel Design, Bharathiar university, Coimbatore.		
8	Needle Punching	J.Pearly, Department of Textile and Apparel Design, Bharathiar university, Coimbatore.	11,800.00	
9	Needle Punching	Ms.Cherin Perci.K, Textile Department, Anna University, Chennai-25.	1652	
10	Needle Punching	Anima Mandal, Textile and Apparal Designing,Assam Agricultural University,Jorhoct.	1593	
11	Needle Punching	Anima Mandal, Textile and Apparel Designing, Assam Agricultural University, Jorhoct.	2596	
12	Needle Punching	Pearly.J, Textile and Apparel Designing, Bharathiar University, Coimbatore.	5900	
13	Needle Punching	Dr. Nidhi Sisodia, Senior Scientific Officer Northern India Textile Research Association, Raj Nagar, Ghaziabad – 201 002.	6,372.00	
14	Needle Punching	Needle Punching Anima Mandal, PhD Scoler, Textile and Apparel Designing, Assam Agricultural University, Jorhant.		
15	Tensile Strength Testing	Dr.V.kavimani AP, Karpagam Acadamic Higher Education, Coimbatore.	3,776.00	
16	Tensile Strength Testing	Kore Sai Lakshmi, B.E.Aeronautical Engg, Hindusthan College of Engg & Technology, Coimbatore.	1,416.00	
17	Tensile Strength Testing	Sudhagar.SAP, Kalaignarkarunanidhi Institute of Technology,Coimbatore.	1,416.00	

#### PAPERS PUBLISHED BY FACULTY

### Non Scopus

SI. No.	Faculty Name	Month	Year of publication	Title of paper	Publisher Details
1	Ariharasudhan S	Nov	2023	Akilan S, Ariharasudhan, Kishore R A and Roopesh U S. "A Review on Development of Composites from Bagasse."Internation Journal Of Advance Research And Innovative Ideas In Education 9, no. 6 (2023) : 456- 462.	International Journal of Advance Research and Innovative Ideas in Education
2	Ariharasudhan S	Nov	2023	Anushkumar A , Ariharasudhan S, Hariharan R and Pranesh s. "A Review on super oleophobic surface on Textile material." Internation Journal Of Advance Research And Innovative Ideas In Education 9, no. 6 (2023) : 355-359.	International Journal of Advance Research and Innovative Ideas in Education
3	P.Chandrasekara n	Nov	2023	P.Chandrasekaran,Kirubananthan,Vinit h kanna,Vijayaragavan, " OPTIMIZING AUTOMOTIVE PERFORMANCE: EVALUATING GLASS FIBER COMPOSITE WITH VARIED PLY ANGLES". International Journal of Advance Research and Innovative Ideas in Education vol.9,no.6(2023): 444-450.	International Journal of Advance Research and Innovative Ideas in Education
4	P.Chandrasekara n	Nov	2023	P.Chandrasekaran,prithvi, sadvika, Dayananth, "STUDY ON THE RUSTLING SOUND OF VARIOUS FABRICS AND THEIR PROPERTIES ". International Journal of Advance Research and Innovative Ideas in Education vol.9,no.6 (2023): 451-455.	International Journal of Advance Research and Innovative Ideas in Education
5	S.Sundaresan	Nov-23	2023	ERI SILK SPUN YARN & FABRIC- A Review S.Sundaresan1, S.Ariharasudhan2 ,T.Sanajeev3, J.Dhayananth4, M.Abishek5	International Journal of Advance Research and Innovative Ideas in Education
6	S.Sundaresan	Novem ber	2023	GREEN COMPOSITES- A Review S.Sundaresan1 , S.Ariharasudhan2 , Sarumathi.V3 V, Shamrithi B4, Rishwanth S5	International Journal of Advance Research and Innovative Ideas in Education
7	S.Sundaresan	Novem ber	2023	Micro dust Measurement using a dust evaluator instrument in spinning mill, Spinning Textiles, Volume 17, Issue 5, SEPT-OCT-202	Spinning Textiles

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#### PAPERS PUBLISHED BY FACULTY

#### Non Scopus

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SI. No.	Faculty Name	Month	Year of publicati on	Title of paper	Publisher Details
8	R. Saminathan	Novem ber	2023	Advancements in textile through microencapsulation	International Journal of Advance Research and Innovative Ideas in Education
9	R. Saminathan	Novem ber	2023	Comparative analysis of non-cotton cellulose fiber extracted from banana variety	International Research Journal of Modernization in Engineering, Technology and Science
10	M.Saravanan	Novem ber	2023	DESIGN AND DEVELOPMENT OF AIR FILTER TO REDUCE EMISSION IN DIESEL ENGINE, International Journal Of Advance Research And Innovative Ideas In Education 9, no. 6 (2023) : 404-410.	International Journal of Advance Research and Innovative Ideas in Education
11	M.Saravanan	Novem ber	2023	Development of Water Absorption Tester for Material Characterization, International Journal Of Advance Research And Innovative Ideas In Education 9, no. 6 (2023) : 382-391.	International Journal of Advance Research and Innovative Ideas in Education
12	P.Thangeswaran	Novem ber	2023	Design and development of composites based on basalt / aramid fibres for aerospace application	International Journal of Advance Research and Innovative Ideas in Education
13	P.Thangeswaran	Novem ber	2023	Design and development of composites based on basalt / ceramic fibers for high temperature application	International Journal of Advance Research and Innovative Ideas in Education
14	R.Sukanya Devi	Novem ber	2023	Thermal Insulation Wear. International Journal of Advance Research And Innovative Ideas In Education, 9(6), 603-614.	International Journal of Advance Research and Innovative Ideas in Education

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# PAPERS PUBLISHED BY FACULTY Scopus

SI. No.	Faculty Name	Month of publicati on	Year of publicati on	Title of paper	
1	M.Saravanan	JUNE	2023	Effect of alkaline hydrolysis on low-stress mechanical properties of polyester/cotton blended weft knitted fabrics/ IJFTR/48/2/167-173	0.825
2	Dr.S.Natrajan Dr.V.Rameshbabu Dr.S. Ariharasudhan	Aug	2023	"Antimicrobial properties of Acanthus ilicifolius and determination of phytochemical composition", Biomass Conversion and Biorefinery, https://doi.org/10.1007/s13399-023- 04723-7	4.05
3	Dr.S.Natrajan Dr.V.Rameshbabu Dr.S. Ariharasudhan	Aug	2023	"Investigating the Effect of Knot Configuration and Suture Diameter on the Knot Performance of Silk Sutures" Tekstilec, https://doi.org/10.14502/tekstilec.66.2023028	0.7
4	P.Chandrasekaran	Aug	2023	Advancements in Basalt Composite Bumpers and performance evaluation through finite element analysis	
5	Dr.V.Ramesh Babu	Septembe r	2023	Thermal properties of different kinds of polyester knitted fabrics. Indian Journal of Fibre & Textile Research (IJFTR), 48(3), 295-301.DOI: https://doi.org/10.56042/ijftr.v48i3.6052	0.825
6	Ariharasudhan S	November	2023	INVESTIGATION OF THE IMPACT OF PLASMA TREATMENT ON MOISTURE CONTROL CHARACTERISTICS IN KNITTED FABRICS BLENDED WITH COTTON AND POLYESTER	0.163
7	M.Saravanan	December	2023	Casein and Banana Peel-Loaded Bacterial- Resistant Surgical Textiles/ Tekstilec/ 66/ 4/ 252- 262/ 10.14502/tekstilec.66.2023020	0.7

#### PAPERS REVIEWED BY FACULTY

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SI. No	Faculty Name	Title of paper	Name of Journal	
1 S.Sundaresan		Improved YOLOv5-based image detection of cotton impurities	Textile Research Journal.	
2	S.Sundaresan	Compression textiles intervene in sports performance - Sports compression clothing	Journal of Industrial Textiles	
3	ARIHARASUDHAN S	Effect of Z-binding depths on the ballistic performance of 3D woven through-the- thickness angle-interlock fabrics in a multiply system	Journal of Industrial Textiles	
4	M SARAVANAN	Yarn Level FEM Simulation for Bending over Sheaves of Braided Ropes" for the Journal of Industrial Textiles	Journal of Industrial Textiles	
5	R. Saminathan Digital printing image generation based on style transfer		Textile Research Journal.	
6	S.Sundaresan Compression textiles intervene in sp performance - Sports compression c		Journal of Industrial Textiles	
7	S.Ariharasudhan	Photonic Crystal Textiles for Heat Insulation	Journal of Applied Physics	
8	R.Saminathan	Digital printing image generation method based on style transfer	Textile Research Journ	
9	Dr.V.Ramesh Babu	Exothermic and Endothermic Effects of Fibers on a Sweating Thermal Manikin under Windy and Non-Windy Conditions	Textile Research Journ	
10	Dr.V.Ramesh Babu	Development of Kapok/Polyester Nonwovens for Building Insulation Application.	Journal of Textile Association	
11	M.Saravanan Yarn Level FEM Simulation for Bending over Sheaves of Braided Ropes		Journal of Industrial Textiles	
12	S.Sundaresan	Compression textiles intervene in sports performance - Sports compression clothing: A review	Journal of Industrial Textiles	
13	Ariharasudhan S	Photonic Crystal Textiles for Heat Insulation	Journal of Applied Physics	

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### PAPERS REVIEWED BY FACULTY

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SI. No	Faculty Name	Title of paper	Name of Journal
14	Saminathan R	A New Sight of Ozone Usage in Textile: Improving Flame Retardant Properties	Journal of the Textile Institute
15	S.Sundaresan	Comparative Study on the Physical Properties of Biobased PA56 Fibers and the Wearability of Their Fabrics"	Textile Research Journal
16	S.Sundaresan	Compression textiles intervene in sports performance - Sports compression clothing:	Journal of Industrial Textiles
17	S.SUNDARESAN	Improved YOLOv5-based image detection of cotton impurities	Textile Research Journal
18	S.SUNDARESAN	A method to regulate yarn balloon for reducing yarn tension and improving yarn qualities	Textile Research Journal
19	Dr.R.Saminatha n	Improving the flame retardancy of polyester fabrics by ozonation	Journal of the Textile Institute
20	Ariharasudhan S	Enhancement of Silk Fabric Knife-Stabbing Resistance for Soft Body Armor	Journal of Industrial Textiles
21	Ariharasudhan S	Test and analysis on flexural performances of prefabricated sandwich insulation wall panels with TRE after hot rain cycles	Journal of Industrial Textiles
22	Dr.V.Ramesh Babu	Humidity-dependency of the relaxation behavior of fabric crease recovery angle	Textile Research Journal
23	R. Saminathan	Study on the electromagnetic properties of MXene-modified cotton fabric	Textile Research Journal
24	M.Saravanan	ANALYSIS OF MULTI-FILAMENT HIGH- PERFORMANCE YARNS' DYNAMIC FAILURE FOR IMPACT RESISTANCE ENHANCEMENT	Journal of Industrial Textiles
25	ARIHARASUDHA N S	Enhancement of Silk Fabric Knife-Stabbing Resistance for Soft Body Armor	Journal of Industrial Textiles
26	Dr. Ramesh Babu V	Influence of Ring Spinning Parameters on the Properties of Hollow Polyester Yarns	Journal of The Textile Association

### INDUSTRIAL TOURS ARRANGED FOR STUDENTS

S.No	Name and address of the industry	Date of visit (from)
1	Shiva Texyarn, Karamadai, Coimbatore	21.09.2023
2	M/s.Ero Dyeing, Erode	07.10.2023
3	KG Denim Ltd, Karamadai	28.12.2023



Industrial visit to M/s.Ero Dyeing, Erode

#### **INDUSTRY INTERACTION**



Department of Textile Technology, had an industry interaction with Best Corporation Private Limited, Tirupur, on November 28, 2023. We had a meaningful interaction with Mr. Adithya Shivan Rajkumar, Director, and Rtn.S. Seshathri Sathiamoorthy, President at Best Corporation Pvt. Ltd



Dept. of Textile Technology, in association with Aditya Birla Cellulose and Grasim Industries Ltd., launched The Liva Resource Centre on November 20, 2023. 32

#### **STUDENTS' INTERNSHIPS**

S.No	Date_from	Date_to	Roll number	Name of the student	Name and address of the industry
1	26.06.2023	25.07.2023	20BTT002	P.Akshai Kumar	NITRA, Ghaziabad
2	26.06.2023	25.07.2023	20BTT212	S.Pravesh	NITRA, Ghaziabad
3	16.06.2023	18.07.2023	20BTT207	M.Jothi Sankar	S.D.Polytech Pvt. Ltd., Uttarakhand
4	16.06.2023	18.07.2023	20BTT215	G.Thanaguru	S.D.Polytech Pvt. Ltd., Uttarakhand



Honorable minister Shree. Piyush Goyal visited the stall of Kumaraguru College of Technology, Department of Textile Technology at 11th Asian Textile Conference held at coimbatore, India



#### STUDENTS' PUBLICATIONS

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S. No	Roll number	Name of the student	Name of the event/ conference	State/ National/ international/
1	20BTT011, 20BTT024	Giriprasanth K.P, Nithishkumar.R, Naveen.R	Dr.V.Ramesh Babu	Exploring Magnetic Repulsion in Handlomm Weaving,International Research Journal of Modernization in Engineering Technology and Science,Volume:5/Issue:11/November,202 ,ISSN: 2582-5208,789-791
2	20BTT034, 20BTT040, 20BTT018	Saran Kumar R, Siddharth D, Kamalesh S	Dr.V.Ramesh Babu	KNITTED PIQUE FABRIC USING CONDUCTIVE YARN FOR ENHANCED FUNCTIONALITIES, International Research Journal of Modernization in Engineering Technology and Science, Volume:5/ Issue:11/ November,2023, ISSN: 2582- 5208,608-611
3	20BTT023, 20BTT030, 20BTT201	Kishore R A, Roopesh U S, Akilan S	S.Ariharasudhan	"A Review on Development of Composites from Bagasse." Internation Journal Of Advance Research And Innovative Ideas In Education 9, no. 6 (2023) : 456-462.
4	20BTT003, 20BTT012, 20BTT027	Anushkumar A , Hariharan R, Pranesh S	S.Ariharasudhan	"A Review on super oleophobic surface or Textile material." Internation Journal Of Advance Research And Innovative Ideas Ir Education 9, no. 6 (2023) : 355-359.
5	20BTT010,2 0BTT031, 20BTT213	Dayananth, Sadvika, Prithvi	P.Chandrasekara n	STUDY ON THE RUSTLING SOUND OF VARIOUS FABRICS AND THEIR PROPERTIES International Journal of Advance Research and Innovative Ideas in Education vol.9, no.6(2023): 451-455.
6	20BTT032,2 0BTT010, 20BTT001	T.Sanajeev., J.Dhayananth, , M.Abishek	S.Sundaresan	ERI SILK SPUN YARN & FABRIC- A Review, International Journal of Advance Research and Innovative Ideas in Education, Vol 9 Issue 5, 2023
7		Sarumathi.V V, Shamrithi B Rishwanth S	S.Sundaresan	GREEN COMPOSITES- A Review, International Journal of Advance Research and Innovative Ideas in Education,Vol 9 Issue 5, 2023
8	20BTT021,2 0BTT218,20 BTT220	Kirubananthan,Vijay aragavan, Vinith kanna	P.Chandrasekara n	OPTIMIZING AUTOMOTIVE PERFORMANCE: EVALUATING GLASS FIBE COMPOSITE WITH VARIED PLY ANGLES. International Journal of Advance Research and Innovative Ideas in Education vol.9, no.6(2023): 444-450.

S.No.	Roll number	Name of the student	Name of the event/ conference	State/ National/ international/
9	20BTT014, 20BTT015, 20BTT016	Joshika, Jeevan, Kalaimani	R. Saminathan	Advancements in textile through microencapsulation, International Journal o Advance Research and Innovative Ideas in Education vol.9,no.6(2023):
10	20BTT022, 20BTT024, 20BTT043	Kiahore KG, Nikesh Kumar, Vishnu Varsa	R. Saminathan	Comparative analysis of non-cotton cellulose fiber extracted from banana variety, International Research Journal of Modernization in Engineering Technology and Science, Volume:5, Issue:11/Novembe 2023
11	20BTT006, 20BTT017, 20BTT219	Benitta Nilofer J, Kalaivanan V, Vijaysharathy JM	S.Natarajan	Performance analysis of knitted fabrics with elastane Core slub yarns, International Research Journal of Modernization in Engineering Technology and Science, Vol:09 Issue:11/November-2023
12	20BTT013, 20BTT019, 20BTT209	HARIPRASATH P, KARUNYA A, NARASHIMA GOWTHAM R	S.Natarajan	Eco-friendly dyeing of cotton using natural dye from sweitenia mahagoni (bark)and examination of anti-microbial activity, International journal of Advanced research and innovative ideas in education, vol-9 Issue-6 2023
13	20BTT028, 20BTT202, 20BTT208	Priyanka, Dhinakar, Kowbis	M.Saravanan	DESIGN AND DEVELOPMENT OF AIR FILTER TO REDUCE EMISSION IN DIESEL ENGINE, Internation Journal Of Advance Research And Innovative Ideas In Education 9, no. 6 (2023)
14	20BTT037, 20BTT038, 20BTT041	Sharan Krithik, Sharan Yogesh, Sri Sudharsan	M.Saravanan	Development of Water Absorption Tester for Material Characterization, International Journal Of Advance Research And Innovative Ideas In Education 9, no. 6 (2023 : 382-391.
15	20BTT002, 20BTT004, 20BTT005	P.Akshai Kumar, Arun Srinivasan, Aryaman	R.Sukanya Devi	Thermal Insulation Wear. Internation Journal Of Advance Research And Innovativ Ideas In Education, 9(6), 603-614.
16	20BTT020, 20BTT042, 20BTT008	Kavya B, Dhamodharan A, Vanmathi V	P.Thangeswaran	Design and development of composites based on basalt / ceramic fibers for high temperature application
17	20BTT033, 20BTT039, 20BTT011	Santhosh kumar S, Obuli Kartick MV, sHRUTHI R	P.Thangeswaran	Design and development of composites based on basalt / aramid hybrid composite for aerospace application

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3XHR+J2J, Saravanampatti, Coimbatore, T 641006, India Lat 11.079556° Long 76.98929° 18/08/23 11:28 AM GMT +05:30

#### Guest Lecture on "Smart Textiles and its applications" 18.09.23



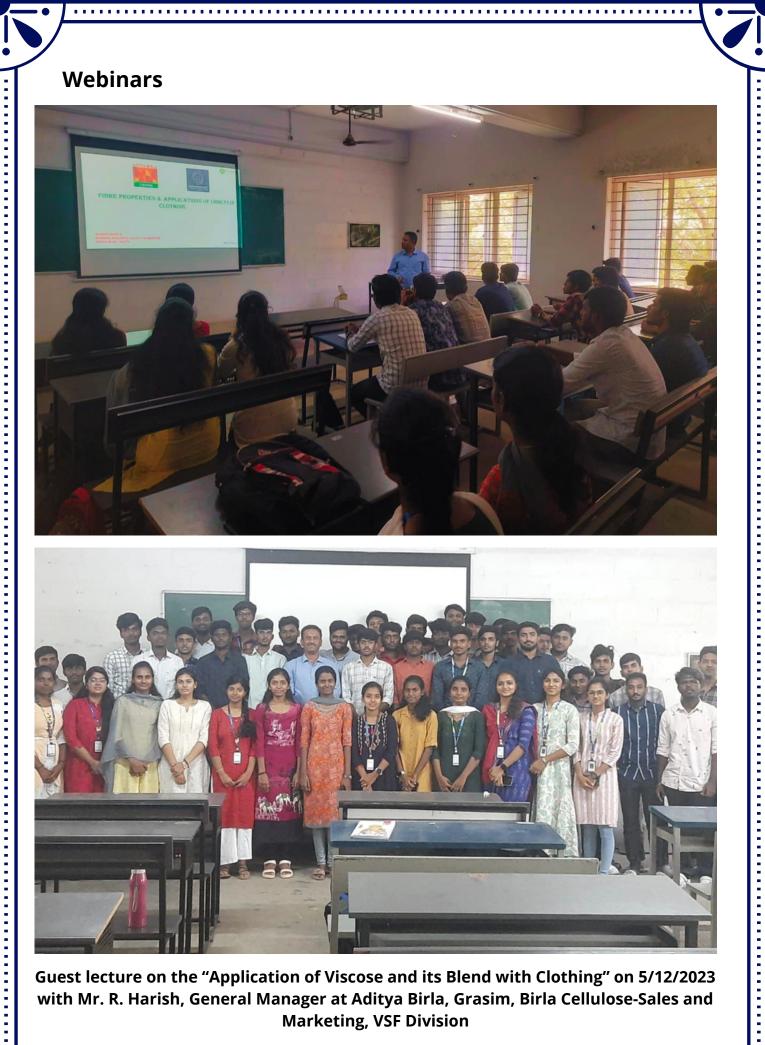
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Guest Lecture on "Application of Viscose and its blend with clothing" 15.12.2023

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Guest lecture on the "Application of Viscose and its Blend with Clothing" on 5/12/2023 with Mr. R. Harish, General Manager at Aditya Birla, Grasim, Birla Cellulose-Sales and **Marketing, VSF Division** 

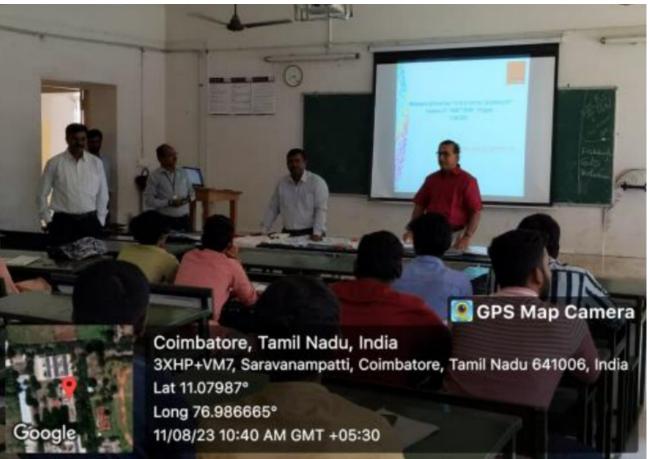
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### Webinars

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Guest Lecture on "Fancy yarn, slub yarn and its Applications" 11.08.2023

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# Silk: Versatile Source of Biomaterials

Rangam Rajkhowa

40

Institute for Frontier Materials Deakin University Australia

International Quality Assurance Cell Kumaraguru College of Technology 5 October 2023



International Guest Lecture - Silk: Versatile source of biomaterials 05.10.2023





Powering business growth with fabric digitization and 3D material creation on 22.12.2023

## **Textile Technology Association**

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Department of Textile Technology Association Investiture Ceremony held on 26.12.2023.The chief guest Mr.E.Ramanathan, CEO of Pioneer Instruments and Innovations 42



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Alumni Reunion 2013 Textile Batch Reunion



#### **B.TECH ( TEXTILE TECHNOLOGY)**

#### **PROGRAMME EDUCATIONAL OBJECTIVES ( PEO'S)**

PEO:1 Hold leadership responsibilities in Textile and related segments such as product development, production, technical services, quality assurance, and marketing.

PEO:2 Become a successful entrepreneur in Textile and related fields and contribute to societal, technological, and industry development.

PEO:3 Partake professional qualifications/ certifications in Textile Technologyrelated areas by pursuing specialised studies in engineering and business.

#### **PROGRAMME SPECIFIC OUTCOMES ( PEO'S)**

Engineering Graduates will be able to:

PSO1: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialisation for Process Optimisation, Cost and Value analysis, Productivity improvement, Solutions to quality issues, and Product development in textile and related fields.

PSO2: Demonstrate learned techniques, experiments, modern engineering tools, and software to estimate the optimum utilisation resources such as raw materials, machinery, manpower and to predict the properties of fibre, yarn, fabric, and garments as per the end uses

#### Editors

Prof. A.Pavendhan-Associate Dean Textile Cluster Dr.V.Ramesh Babu, Professor & Head, Textile Technology Dr.S.Natarajan, Assistant Professor, Textile Technology

#### Publisher

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