### Curriculum Vitae of Professor. Debasish Das, University of Calcutta



1. Full name: Debasish Das

**2. Designation**: Professor and Head of the Department, Department of Jute and Fibre Technology, University of Calcutta, Kolkata

**3. Specialization:** Textile Chemistry, Textile Technology, Technical Textiles, , Coated Textile etc.

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### 6. Academic Qualification:

College/University	Abbreviation of the Degree
University of Calcutta, Department of	Ph.D(Tech).
Polymer Science and Technology.	
University of Calcutta, Department of jute	B.Tech in Fibre Technology.
and Fibre Technology.	
University of Calcutta, Vidyasagar college.	B.Sc (Hons) in Chemistry.

### 7. Positions Held/holding

### a)Present:

Professor in Department of Jute and Fibre Technology, University of Calcutta

#### b)Past:

- ii) Associate Professor in Department of Jute and Fibre Technology, University of Calcutta.
- iii) Associate Professor in National Institute of Fashion Technology, Ministry of Textiles, Govt. of India with Lien from University of Calcutta.
- iv)Reader in Department of Jute and Fibre Technology, University of Calcutta.

**8. International Fellowship**: Received UNDP fellowship and obtained training on "Advanced Processing of Textile" from University of Leeds, UK.

### **9**. **Award** :

a) **International**: Received "Discover Natural fibre Initiative innovation award 2019" (DNFI-2019) from "Discover Natural Fibre Initiative,", Germany. "Discover Natural Fibre Initiative" is an organization created with the initiative of United Nations General Assembly (www.dnfi.org).

**b)National Award** :Received Dr. "Triguna Charan Sen" memorial award" from the Institution of Engineers (India) in the year 1995-96

### 10. Research Guidance:

Number of Researchers awarded

i)M.Tech - 6

ii)Ph.D- 5

Number of researchers pursuing Ph.D – 6

### 11. A) Ongoing Research Projects:

0.1		University		Mobilized(Rs. Lakhs)
01	Coating/finishin g of textile based on jute and other natural fibers for technical applications	"Department of Apparel, Textile and Merchandising", Eastern Michigan University, USA	Office of the Textile Commissioner, Ministry of Textiles, Govt. of India under R & D scheme	25
02	Development of bag made from jute fabric and aluminium foil laminate for packaging tea	Nil	Ministry of Textile, Govt. of India under R & D scheme	26.08

03	Technology	Nil	West Bengal	10.15
	upgradation for		Khadi and	
	dyeing and		village	
	printing of		industries Board	
	muslin and silk			
	of WBKVIB,			
	Part II			

# . B) Completed Research projects :

Year	Sponsored	Collaborating	<b>Sponsoring Agency</b>	Funds
	Projects carried	Institute		Mobilised
	out			
2013-2015	Development of	"Department of	Ministry of Textiles,	Rs.39.14
	Technical Textiles	Apparel, Textile and	Government of India	lakhs
	Based on Coated	Merchandising",	under "Technological	
	Jute Fabric for	Eastern Michigan	Mission on Technical	
	different	University, USA	Textile (TMTT) scheme.	
	applications"			
2001-02 to	Development of	Department of	All India Council of	Rs.20. Lakhs
2004-05	Jute based	Textile Technology,	Technical	113.20. 20.113
200.02	Technical Textiles	Indian Institute of	Education(AICTE) under	
		Technology, New	Nationally Coordinated	
		Delhi, India	Project Scheme	
		,		
2006-07 to	Development of	IIT,Kharagpur	All India Council of	Rs.15 lakhs
2009-2010	Jute Based Coated		Technical Education	
	Textiles		(AICTE)under Nationally	
			Coordinated Project	
			Scheme	
2007-08	Studies on residual	Bangladesh Jute	"Common Fund For	US\$17,000/-
	silica/silicate In	Research Institute	Commodities",	
	raw jute and scope	,Dhaka	Netherland	
	for			
	elimination/reducti			
	on			
Completed (	Consultancy Project :	1	1	<u> </u>

2015-2017	Technology	Nil	West Bengal Khadi and	13.26
	upgradation on		Village Industries Board,	
	Dyeing and		Govt. of West Bengal	
	Finishing of Muslin			
	Yarns and Fabrics,			
	Part I			

# 12. Contribution in national Body :

A)Honorary Member of Board of Academic Affairs(BOAA) of Indian Institute of Handloom Technology, Ministry of Textiles,Govt of India

B)Member of National Jute Board, Ministry of Textiles, Govt of India

## 12. Selected list of Publications:

### a) Journals:

Serial	Publisher	Title, Journal Volume and Author
No 01	Springer	Sustainable dyeing of silk with natural Dyes using natural sources of water, A. Mridha, A. Mukhopadhyay, B. Sarkar, S. Roy Maulik,, D. Das, <i>Journal of Institution of Engineers(E)</i> , <b>102(1)</b> , 2021, 61-74
02	NISCAIR	Development of non-formaldehyde wrinkle resistant finish for cotton using carboxylic acids, P. Arya, S. Ghosh, D. Das, <i>Indian J. Fibre &amp; Textile Research</i> , <b>45</b> ,2020,475-481
03	Taylor and Francis	Development of biodegradable conductive cotton yarns by in-situ polymerization of pyrrole, Mallika Datta, Atin Chaudhuri, Mainak Mitra, Devarun Nath & Debasish Das, <i>The Journal of Textile Institute</i> , <b>110</b> (1), 2019,10-15
04	Taylor and Francis	Development of moisture vapour permeable waterproof cotton fabric by coating with blend of natural rubber latex and polyvinyl alcohol, D. Das, A. Chaudhuri, M. Mitra & S. Ghosh <i>The Journal of Textile Institute</i> , <b>108</b> (8), 2017, 1285-1290
05	Elsevier	Macro-structured carbon clusters for developing waterproof breathable conductive cotton fabric, K.Sirkar, D.Das, T. Chaki and S Chattopadhyay, <i>Carbon</i> , <b>116</b> ,(2017)1-14,
06	wileyonlinelibrary.com	Retention and sustained release of fragrance by cyclodextrins functionalisesd cotton fabric modified using maleic anhydride, S. Bandopadhyay and D. Das <i>Flavour and Fragrance Journal</i> ,

		<b>32(3)</b> ,2017,207-211
07	SAGE	Dyeing of EDTA-Modified
		Cotton With Reactive Dyes
		Debasish Das, Sumantra Bakshi,
		and Pinaki Bhattacharya, Clothing and Textile Research
		Journal, <b>34(3)</b> ,2016, 196-201
08	SAGE	Simulataneous Dyeing and Finishing of Silk with Natural
		Colour and Itaconic Acid, D.Das, D, B. Datta and P Bhattacharya
		,Clothing and Textile Research Journal,32(2), 2014, 93-106.
09	Taylor and francis	Finishing of Jute by polyacrylic rubber, Rajiv Munsi, Debasish
		Das and Atin chaudhuri, <i>J.Text.Inst</i> , <b>105</b> (1),2014,76-73
10	Taylor and francis	Dyeing of sericin modified cotton with reactive dye, D.Das
		,S.Bakshi and P Bhattacharya, <i>J.Text.Inst.</i> , <b>102</b> (3),2014,34-67
11	Taylor and Francis	Finishing of silk with EDTA., D.Das, A.Mukherjee
		D.Chakraborty and P.Bhattacharya., J. Text. Inst., 102(10),2012,
		141-148
12	Taylor and Francis	Concurrent dyeing and Finishing of cotton with natural dye
		and citric acid under thermal
		treatment., J. Text. Inst., <b>102(6)</b> , 2011, 491-499
13	Taylor and francis-	Modification of cotton fabric with acrylamide for improving
		dyeability with Natural Dyes, , S.Ray Maulik D.Das and
		S.Bhattacharya., <i>J. Text. Inst.</i> , <b>102(2)</b> , 2011, 131-139.
14	Wiley Interscience Ltd.	Finishing of silk with acrylic. acid, D.Das, S.Mukherjee and
		P.bhattacharya, Journal of Applied Polymer Science,
		<b>121(2),</b> 2011, 770–776
15	Taylor and Francis	Finishing of cotton by polyacrylic rubber in presence of
		NaH <sub>2</sub> PO <sub>4</sub> as catalyst under thermal treatment., D.Das and R
		Munsi ., <i>Journal of Natural Fibre</i> , <b>5</b> , <b>(4</b> ,) 2008, pp 383 – 395.
16	Elsevier	Modification of Cotton with acrylic acid in the presence of
		$K_2S_2O_8$ and $NaH_2PO_4$ as catalysts under thermal treatment', P.
		Ghosh and D. Das, <i>European. Polym. J</i> , <b>36</b> , 2000, 2505-2512
17	Elsevier	Modification of jute with low molecular weight glycols and a
		polyol under thermal treatment, P. Ghosh and D. Das,
		European. Polym. J, 36, (2000).pp. 2147-2153

18	NiSCAIR	Dyeing of wool and silk with Bixa Orellana, D.Das, S.Ray Moulik and S.C.Bhattacharya, <i>Indian.J.Fibre.Text.Res</i> , <b>32</b> , 366 (2007) pp 366-371
19	Taylor and Francis	Finishing of Cotton with Methacrylic Acid (MAA) in presence of NaH <sub>2</sub> PO <sub>4</sub> and K <sub>2</sub> S <sub>2</sub> O <sub>8</sub> as Catalysts under Thermal treatment, Debasish Das, Rajiv. Munshi, <i>J. Text. Institute</i> , <b>97</b> , (2006) pp519- 526
20	Man Made Fibre Society	Modification of the properties of silk by chemical treatment, P. Chowdhuri and D. Das, <i>Man made Textile in India</i> , February, 2006.,pp.62-69.
21	Wiley Interscience	Coating of jute with natural rubber, D.Das, R.B.Chavan, M. Datta and S. K. Datta, <i>J. Appl. Polym. Sc.</i> <b>98</b> , (2005) pp. 484-490
22	Tea Board of India	Colouration of Wool and Silk with Tea, D. Das, S. Ray Moulik, <i>International J. Tea Sc.</i> <b>4</b> , (2005) pp17-21
23	International Journal of Polymer Material	Modification of cotton with low molecular weight glycols and a polyol under thermal treatment, P. Ghosh and D. Das, <i>J. Polym. Material</i> , <i>19</i> , (2002).pp.111-115
24	Elsevier	Modification of jute with low molecular weight glycols and a polyol under thermal treatment, P. Ghosh and D. Das, <i>European. Polym. J</i> , <i>36</i> , (2000). <i>pp</i> . 2147-2153
25	Elsevier-	Modification of Cotton with acrylic acid in the presence of $K_2S_2O_8$ and $NaH_2PO_4$ as catalysts under thermal treatment', P. Ghosh and D. Das, <i>European. Polym. J</i> , <b>36</b> , (2000), pp. 2505-2512
26	Wiley Interscience	Modification of jute with acrylic acid (AA) in the presence of K <sub>2</sub> S <sub>2</sub> O <sub>8</sub> and Na <sub>3</sub> PO <sub>4</sub> as catalysts under thermal treatment', P. Ghosh and D. Das, <i>J. Appl. Polym. Sc.</i> , <b>68</b> , (1998).pp.63-69
27	NISCAIR	Reactive dyeing behaviour of ramie fabrics pretreated with different swelling agent and their rub fastness property, D. Das, A. K. Samanta and P. C. Dasgupta, <i>Indian J. Fibre. Text. Res.</i> , <b>22</b> , (1997).pp. 53-57

28	Institution of	Modification of rotor spun jute/cotton blended yarn properties
	Engineers(India)	by causticization, A. K. Samanta, D. Das and S. K. Sett , J.
		Insst. Engg(I), <b>Tx 96</b> , (1995)pp.12-18
29	Internaltional Journal of	Modification of jute with citric acid', P. Ghosh, D. Das and A.
	Polymer Material	K. Samanta, J. Polym. Material, 12, (1995),pp.297-302
30	NISCAIR	'Effect of selective pretreatment and different resin post treatment on jute/viscose upholstery fabric', P. Ghosh, D. Das and A.K. Samanta, <i>Indian. J. Fibre. Text. Res.</i> , <b>19</b> , (1994),pp. 277-282
31	Institution of Engineers(India)	Studies on quantitative colour measurements of Direct dyed jute fabric in relation to computerized colour matching, A. K. Samanta and D. Das, <i>J. Inst. Engg. (I)</i> , <b>TX 73</b> , (1992).pp. 53-58
32	-do-	Some studies on quality performance of jute/cotton Furnishing Fabric, A.K.Samanta, P.Chakraborti and D.Das, <i>J. Inst. Engg.</i> ( <i>I</i> ), <b>TX71</b> , (1990),pp. 45-50

# b) Selected Conference /Seminar Volumes:

Sl	Title of the paper	Name of the Conference	Date and Place
No.			
01.	Breathable waterproof coating of cotton with blend of natural rubber latex containing ammonium acetate.	"International Conference on Natural Fibres-Smart Sustainable Solutions"	1 <sup>st</sup> - 3 <sup>rd</sup> July 2019 in Porto- Portugal organized by University of Minho, Portugal.
02.	Breathable waterproof coating of cotton with blend of natural rubber and ploychrloroprene containing ammonium acetate.	"International Conference on Technical Textiles and Nonwovens (ICTN)-2018"	6-8 <sup>th</sup> December 2018 in New Delhi organized by IIT, Delhi
03.	Concurrent dyeing and finishing of cotton based garment with natural colour and itaconic acid	"International conference on cutting edge technology- redefining textiles National Institute of Technology,	On 8-10 April,2016 at NIT,Jalandhar.

		Jalandhar	
04	Breathable Waterproof Coating for Jute with Compound based on Natural Rubber Latex	International Conference on "Jute and Allied Fibres :Changing Global Scenario" of National Institute of Research on Jute and Allied Fibre Technology, ICAR,Kolkata and Indian Natural Fiber Society.	Bhasa Bhavan, National Library, Kolkata on 1-3 August,2014
05.	Development of moisture vapour permeable waterproof coating for cotton	Emerging Trends in Traditional and Technical Textiles	11 <sup>th</sup> -12 <sup>th</sup> April,2014 at National Institute of Technology, Jalandhar, Punjab, India.
06.	Development of breathable waterproof coating for jute fabric	International Conference on Natural Fibres	1-3 August,2014,The Indian natural fibre Society, Indian council for Agricultural Research, Kolkata, India.
07.	"Methacrylic acid Finish of cotton based Garment"	Fibre Society's Spring 2012 conference (ISBN:978805591902-5)	23 <sup>th</sup> -25 <sup>th</sup> May, 2012,by Fibre Society, St Gallen, Switzerland.
08.	Concurrent dyeing and finishing of cotton with natural dye and citric acid	International Conference on "TEXTILE: A DECADE AHEAD". Organised by National Institute of Textile research Association and Indian Institute of Technology, New Delhi, India	9 <sup>th</sup> -10 <sup>th</sup> September'2011, New Delhi.
09.	"Dyeing of Sericin modified Cotton with Reactive Dye in absence of Salt"	Fibre Society's spring 2010 Conference (ISBN:978605591902-3	12 <sup>th</sup> to 14 <sup>th</sup> May'2010., Bursa, Turkey.
10.	Finishing of cotton by polyacrylic rubber in presence of NaH <sub>2</sub> PO <sub>4</sub> as catalyst under thermal treatment	International conference on rubber and rubber-like materials	8 <sup>th</sup> -10 <sup>th</sup> January,2008, Rubber Technology Centre, Indian Institute of Technology,Kharagpur,In dia

**10.Patent :** Filed patent titled" Rubber Coated cotton-jute fibre based textile" Patent application no 201831031949,dt. 27.8.2019.

#### 10. Contribution in Handloom Sector:

- ii)Acted as Consultant in "Sfurti" project of Ministry of Micro,Small and Medium Enterprises implemented by National Institute of Fashion Technology,Kolkata. And successfully introduced power driven modern process line at Murshidabad District of West Bengal for Muslin and silk products.
- iii) Implemented program on Eco-friendly preparatory process ,dyeing and finishing in "Swarnajayanti Gram Sarojgar Yojana(SGSY) scheme as faculty of National Institute of Fashion Technology , Kolkata covering about 2500 artisans.
- iv)Used to deliver lecture and hands on practice session as an expert for transformation of traditional practices in handloom dyeing across the West Bengal Handloom Cluster session at Weavers service Centre, Kolkata.
- v) Chaired session in seminars conducted by Ministry of Micro and Small scale Industries and textile for Textile at Milan Mela, Kolkata.

#### 11. Others

- c) **Organized International Conference** on "Textile and Clothing" as **Convener** utilizing UGC fund involving about 7 Countries from USA, Europe and ASIA on 3-5<sup>th</sup> january'2017 at University of Calcutta under the name "TCPFT-2017".
- **d**) Contributed as Member of Scientific Committee for International Conference "ICTX-2020" on "Innovative Approaches for the Development of Sustainable Textile Products and Processes" from February 9th & 10th, 2020 in the Lalit Great Eastern, Kolkata, India in association with Textile Engineering Division, Institute of Engineers (India).

#### e) Selected Review Publications:

01	Asian Textile Journal.,	Natural dye and its applications, D.Das and R.Shah, Asian Textile Journal., 20(5), (2011) pp.54-58	
02	Asian Textile	Easycare finishing of cotton based garments.D.Das	2010
	Journal		

		and B.Agrawal,	
		Asian Textile Journal, 19(1), (2010) p. 55-59	
03	Indian Science	Functional Polymer for Fashion Apparel, D.Das and	
	Cruiser	B.Kaur, <i>Ind,Sc.Cruiser</i> , <b>23</b> May,(2009) pp.40-45	
04	Colourage	"Chemical processing of diversified jute products",part	1997
		I A,K,Samanta and D.Das Colourage,XLIV 1997pp41-	
		47	
05	Colourage	Chemical processing of diversified jute products",part	1997
		II A,K,Samanta and D.Das Colourage,XLV 1997pp 79-	
		85	
06	Colourage	Review of Basic and Modified basic dyes foracrylic	1992
		fibre,colourage,September,1992,pp21-29	

# 12. Membership of Societies:

a)Textile Association of India: Patron Member

b)Indian Natural Fibre Society : Life member

c) Institute of Science Education and Culture: Life member