

## **Profile Page**



Name : Dr A Chatterjee  
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### **Research Interests :**

Fibre reinforced Composite, Nanocomposite, Conductive Textiles, Fluid flow in fibrous assembly

### **Other Profile Links :**

#### **Google Scholar Link :**

Dr. A. Chatterjee [Click Here](#)

### **Journal Publications :**

Year	Journal	Publication
June 2021	Indian Journal of Fibre & Textile Research Vol. 46, pp. 149-157	Vinit Kumar Jain & Arobindo Chatterjee: Influence of fibre type and dipping cycle on graphene adsorption and electrical conductivity of fibres
2023	J. Inst. Eng. India Ser. E	Effect of Yarn Linear Density on Static and Dynamic Mechanical Properties of Jute Yarn Reinforced Epoxy Composites; Manu Aggarwal & Arobindo Chatterjee
2022	Journal of Natural Fibres	Vinit Kumar Jain and Arobindo Chatterjee; Graphene Functionalized Cotton Nonwoven for Thermotherapy
2022	Journal of Vinyl and Additive Technology, 2022;1-7	Arobindo Chatterjee, Harwinder Singh and Khushboo Chaudhary; Nonwoven viscose fabric-polyvinyl alcohol based flexible composite
2022	Indian Journal of Fibre & Textile Research Vol 47, September 2022, pp. 309-317	Manu Aggarwal & A Chatterjee, Alkali pre-treatment of jute yarns for reinforcement in epoxy composites
2021	AATCC Journal of Research, Volume 8, Number 5, September/October 2021, pp. 18-29(12).	Chatterjee, Arobindo; Jain, Vinit Kumar; Isothermal, Kinetic, and Thermodynamic Studies of Graphene Oxide Adsorption on Silk
2021	Indian Journal of Fibre & Textile Research Vol. 46, September 2021, pp. 275-286	Harwinder Singh & Arobindo Chatterjee; Effect of filler loading and orientation on alkali-treated cornhusk film reinforced epoxy laminate composites
2021	Journal of Industrial Textiles	Vinit Kumar Jain and Arobindo Chatterjee; Graphene coated cotton nonwoven for electroconductive and UV protection applications

2020	Cellulose; Volume 27 Number 5, Page 2555-2567	Harwinder Singh & Arobindo Chatterjee. Potential of alkali treated cornhusk film as reinforcement for epoxy laminate composites
2020	Composites Communications	Arobindo Chatterjee , Sachin Kumar , Harwinder Singh; Tensile strength and thermal behavior of jute fibre reinforced polypropylene laminate composite
2020	J. Inst. Eng. India Ser. E.	Arpita Kothari, S. K. Sinha & Arobindo Chatterjee; Effects of Structural Modification and Some Parameters on Inverse Relaxation Behaviour of Polyvinyl Alcohol-Blended Polyester Yarn
2020	Cellulose Chem. Technol; 54 (7-8), 757-764	NASHRAH H. KIDWAI, HARWINDER SINGH and AROBINDO CHATTERJEE, All cellulose composite from cotton fabric and cellulose solution
2019	Journal of The Institution of Engineers (India): Series D. Page 1-7	A Chatterjee, H Singh; Development and Characterization of Peanut Shell Flour–Polypropylene Composite
2017	The Journal of The Textile Institute	Arobindo Chatterjee, M. Nivas Kumar & Subhankar Maity, Influence of graphene oxide concentration and dipping cycles on electrical conductivity of coated cotton textiles
2017	The Journal of The Textile Institute, 108:12, 2057-2066	Harabansh Singh, Arunangshu Mukhopadhyay & Arobindo Chatterjee, Reliability analysis of seam joints in square plain parachute canopy fabric
2017	POLYMER COMPOSITES	Maity, Arobindo Chatterjee, Polypyrrole Functionalized Polyester Needle-punched Nonwoven Fabrics for Electro-Magnetic Interference Shielding
2017	Surface & Coatings Technology, Volume 324, Pages 569-57	Arobindo Chatterjee, Subhankar Maity, A comparative study of reaction kinetics of in-situ chemical polymerization of polypyrrole onto various textile fibres
2017	Cellulose Chem. Technol., 51 (7-8), 601-608	HIMANSU SHEKHAR MOHAPATRA, PRIYANKA DUBEY, AROBINDO CHATTERJEE, PRAMOD KUMAR and SOURABH GHOSH, DEVELOPMENT OF A FIBROUS ASSEMBLY FROM ORANGE PEEL EXTRACT: CHARACTERIZATION AND ANTIBACTERIAL ACTIVITY
2016	Review of Scientific Instruments 87, 105114 (2016)	Pratibha Singh, Arobindo Chatterjee, and Subrata Ghosh, Vertical wicking tester for monitoring water transportation behavior in fibrous assembly
2016	Journal of Industrial Textiles	Harabansh Singh, A Mukhopadhyay and A Chatterjee, Influence of bias angle of stitching on tensile characteristics of lapped seam parachute canopy fabric – Part I: Mathematical modelling for determining test specimen size
2016	Journal of Industrial Textiles	A Mukhopadhyay, A Chatterjee and Harabansh Singh, Influence of bias angle of stitching on tensile characteristics of lapped seam parachute canopy fabric – Part II: Study on optimized test specimen dimension
2015	International Journal of Pharmacology, Phytochemistry and Ethnomedicine Vol. 1, pp 27-36	Himansu Shekhar Mohapatra1, Arobindo Chatterjee and Pramod Kumar, Characterization of Fibrous assembly from Lime Peel Extract,
2014	Journal of Textiles, Volume 2014, Article ID 379731	Arobindo Chatterjee and Pratibha Singh, Studies on Wicking Behaviour of Polyester Fabric
2014	The Journal of The Textile Institute	Subhankar Maity, Arobindo Chatterjee, Bhupinder Singh and Atinder Pal Singh, Polypyrrole based electro-conductive textiles for heat generation
2014	Journal of Applied Polymer Science	Urvashi Malhotra, Subhankar Maity, Arobindo Chatterjee “Polypyrrole-Silk Electro-Conductive Composite Fabric by In Situ Chemical Polymerization

## Conference Publications :

Year	Conference	Publication
2021	3rd international conference on Material Science & Nanotechnology, 16-17 August 2021, held at Lisbon, Portugal.	Harwinder Singh & Arobindo Chatterjee,' Utilization of Agrowaste as Reinforcement for Epoxy Laminate Composite
2021	2nd international conference on Sustainable growth in Textiles,19-21 August 2021, held at UPTTI Kanpur.	Harwinder Singh & Arobindo Chatterjee,' Cornhusk reinforced green composite '
2021	65th DAE Solid State Physics Symposium (December 15 - 19, 2021), Organized by Bhabha Atomic Research Centre, Mumbai	Harwinder Singh & Arobindo Chatterjee, "Characterization of Interface of Corn-Husk Film Reinforced Composites"
2021	Sustainability in Technical Textiles (ICSTT 2021)	Manu Aggarwal and Arobindo Chatterjee; Influence of linear density on the alkali treatment of Jute yarn used as a reinforcement material for composites.
2019	2nd National Conference on Advances in Chemical & Environmental Engineerin- ACEE 2019	Harwinder Singh & Dr. Arobindo Chatterjee, 'Dynamic Mechanical properties of Peanut Shell Flour Polypropylene Composite'
2019	1st International conference on Material science and engineering (ICMSE)	Sachin Kumar & Arobindo Chatterjee, "Characterisation of Jute fibre reinforced PP composite"
2019	1st International conference on Material science and engineering (ICMSE)	Arobindo Chatterjee, Khushboo Chaudhary and Manu Aggarwal, "Thermal and Mechanical Properties of Poly Vinyl Alcohol Film Using a Nonwoven Viscose Fabric
2018	19th ISME Conference on Advances in Mechanical Engineering	Harwinder Singh & Dr. Arobindo Chatterjee, Potential of Peanut Shell Flour as filler for Polypropylene Composite
2016	International Conference on Redefining Textiles Cutting Edge Technology of the Future (RTCT 2016)	Subhankar Maity and Arobindo Chatterjee, Adsorption of Polypyrrole onto Textile Surface at Liquid Solid Interface by In-Situ Polymerization
2015	International Conference on Advanced Materials for Power Engineering	Arobindo Chatterjee and Subhankar Maity, Non-metallic/polymeric electro-conductive textiles for novel applications, International
2014	International Conference on Technical Textiles and Nonwovens	Singh K V P, Chatterjee A, Das A and Fanguero R, 2014, IMPROVING FRICTION YARN QUALITIES FOR ITS USE IN FOUNDATION GARMENTS
2014	Proc. of 5th International Conference on 3D Body Scanning Technologies, Lugano, Switzerland	K.V.P. Singh, A. Chatterjee, A. Das and Raul Fanguero "Anthropometric Study by Diagonising and Antagonizing the Feel Factor of 'Ideal Fabric' with 'Reference Fabric' for Frugal Engineering of Foundation Garments"
2014	International Conference on Emerging Trends in Traditional & Technical Textiles	S. Maity and A Chatterjee, Preparation and characterization of electro-conductive textiles
2014	International Conference on Emerging Trends in Traditional & Technical Textiles	Arobindo Chatterjee, Himansu Shekhar Mohapatra and Pramod Kumar, Development of Antioxidant Film from Orange Peels Extract
2013	AUTEX 2013 Conference	A. Chatterjee, Pratibha Singh "Studies on wicking behaviour of Polyester Fabric"
2010	AUTEX 2010 Conference	A. Chatterjee, MODIFICATION OF AS-SPUN PP BY VGCF FOR MAKING HIGH MODULUS FIBRE
2008	86th World Textile Conference (Textile Institute)	A. Chatterjee, Influence of process parameters on the properties of VGCF/PP composite filament

## Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
Book Chapter	Lignocellulosic biowaste for composite applications	Woodhead Publishing. The Textile Institute Book Series	Harwinder Singh and Arobindo Chatterjee, Lignocellulosic biowaste for composite applications; Chapter 19, Functional and Technical Textiles, The Textile Institute Book Series, Edited by Subhankar Maity, Kunal Singha & Pintu Pandit.	978-0-323-91593-9	2023
Conference Proceedings	Zea Mays Husk Reinforced Epoxy Composites	Springer	Singh H. and Chatterjee A.	978-981-15-9995-8	2021
Book Chapter	Advanced electromagnetic interference shielding textiles and clothing	Woodhead Publishing	Arobindo Chatterjee and Subhankar Maity; Advances in Functional and Protective Textiles, DOI: <a href="https://doi.org/10.1016/B978-0-12-820257-9.00018-7">https://doi.org/10.1016/B978-0-12-820257-9.00018-7</a> ; edited by SHAHID-UL-ISLAM & BHUPENDRA SINGH BUTOLA.		2020
Book Chapter	Filament formation and recent developments in Fibres to Smart Textiles: Advances in Manufacturing, Technologies, and Applications; edited by Asis Patnaik, Sweta Patnaik	CRC Press	Arobindo Chatterjee	ISBN 9781138332515	2019
Book Chapter	Continuous Filament and Texturized Synthetic Yarns	CRC Press	Arobindo Chatterjee	9781315156163	2018
Book Chapter	Electroconductive Textiles	Scrivener Publishing LLC	Arobindo Chatterjee and Subhankar Maity	ISBN:9781119488101	2018

Book Chapter	Reinforcements and Composites with Special Properties	Springer Science+Business Media Singapore	Arobindo Chatterjee, Subhankar Maity, Sohel Rana and Raul Fanguero		2016
Book Chapter	Process control in the manufacturing of synthetic textile fibres	Woodhead Publishing Series in Textiles	B. L. Deopura, A. Chatterjee, N. V. Padaki		2013

### Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Principal Investigator	Sponsored	Optimisation of the production process of PP/carbon nanofibre composite filament	MHRD	14.01.04	18.08.10	22 lacs	Completed	

### Events Organized :

Category	Type	Title	Venue	From	To	Designation
Workshop	International	GIAN	NIT Jalandhar	14.01.19	18.01.19	Coordinator
Conference	International	International Conference on FUTURISTIC TRENDS IN TEXTILES	NIT Jalandhar, India.	10.12.2007	12.12.2007	Secretary

### PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Harwinder Singh	Development, Characterisation & Evaluation of Corn husk film Reinforced Epoxy Laminate Composites.	Completed	2022	
Vinit Jain	Graphene based conductive Textile	Thesis submitted	2022	
Urvashi Malhotra	Graphene based textile	ongoing	2021	
Mr. Harbans Singh	Seam characterisation of parachute canopy fabric as a function of seam angle	Completed	2018	Dr. A. Mukhopadhyay
Himansu Shekhar Mohapatra	Development and Characterization of Fibrous Assembly and Film From Citrus Peel Extract	Completed	2017	Dr. S. Ghosh and Dr. P. Kumar
PRATIBHA SINGH	MOISTURE MANAGEMENT BEHAVIOR OF WOVEN TOWEL MADE OF DREF III FRICTION SPUN YARN	Completed	2017	Dr. S. Ghosh
Subhankar Maity	Influence of Textile Substrate Parameters on the Performance of Polypyrrole based Electro-conductive Textiles	Completed	2016	
Kanwar Varinder Pal Singh	Modification of Friction Spun Yarn Suitable for Apparel End Use	Completed	2009	Prof. A. Das

Sujit Kumar Sinha	An Investigation on the Influence of Sheath on Friction Spun Yarn Properties and Spinning Limit	Completed	2007	Prof. R. Chattopadhyay
Manu Aggarwal	Natural fibre reinforced composite	On going		