NITRA PROFILE

Northern India Textile Research Association

Sector-23, Raj Nagar, Ghaziabad- 201 002 (U.P.)

BACKGROUND

Foundation

- Established in 1974 jointly by the Textile Industry and Government of India for conducting research and providing support services to Indian textile & apparel industry.
- Renders services to decentralized powerloom sector through 8 service centres situated at Meerut, Kanpur, Tanda, Gorakhpur, Varanasi (UP), Panipat (HR), Ludhiana (PB) and Bhilwara (RAJ).

Mission

- To conduct and promote technical research for textile, apparel and allied sectors
- To provide needful technical consultancy, accurate quality evaluation of products and comprehensive HRD support including manpower training
- To strengthen Indian textile and apparel industry to meet global challenges
- To achieve global excellence in customer service

Registration and Recognition

- Registered under the Societies Registration Act, 1860 (XXI of 1860)
- Approved U/S 35 (1)(ii) of the Income Tax Act, 1961 as scientific research organization
- Recognized by Council of Scientific & Industrial Research (CSIR), Bureau of Energy Efficiency (BEE) and Petroleum Conservation Research Association (PCRA)
- Designated as "Centre of Excellence for Protective Textiles and Automotive Textiles" by Ministry of Textiles, Govt. of India
- Scientists/ faculty members of NITRA are recognized by leading textile institutes and universities for their post-graduate and Ph.D. programs
- Member of Textile Institute, Manchester, UK
- Member of Indian Technical Textile Association
- Member of Bureau of Indian Standards

- Received CII Industrial Innovation Award 2023 (one of the top five innovative institutes). Also received same award in 2022.

Clientele

- Over 1200 textile mills, garment manufacturing & export units, testing labs, central and state govt. organizations, trade associations, academic institutions and non-textile units
- International clients from Indonesia, Bangladesh, Nepal, Thailand, Sudan, Kenya, Ethiopia and Philippines

SERVICES OFFERED

- Applied Research & Development
- Technical Consultancy
- Manpower Training & Allied HRD Services
- Quality Evaluation (Testing)
- Third Party Inspection
- Techno-economic viability studies of Textile Mills for Banks and Financial Institutions
- Assistance to industry through Centre of Excellence (CoE) – Protective and Automotive Textiles
- Standards / Specifications Development
- Technical Publications

ACCRIDITION AND CERTIFICATION

- Certified by ISO 9001:2015 Quality Management System
- Labs are accredited against ISO/IEC 17025 (NABL)
- Third Party Inspection Activities accredited against ISO/IEC 17020:2012 (NABCB)
- Energy auditors are certified and accredited by Bureau of Energy Efficiency (BEE)
- NITRA labs are empanelled as Govt. Labs by Bureau of Indian Standards (BIS)
- Labs have been registered by Indian Air Force, Ministry of Defence, Govt. of India

APPLIED RESEARCH & DEVELOPMEN

Major Products/Processes Developed

- Molten metal splash resistant workwear for Steel Industry workers
- Jute/ Polypropylene composite headliner & parcel tray for automobiles
- Re-generated Cellulosic Fibre from Indian was developed indigenously
- Value added products from pine needle fibres
- New approaches to reduce water consumption in textile wet processing
- Flame retardant CHEF uniform for Indian Navy
- Technology to Process Raw Banana Fibre
- Reusable sanitary pads and diapers
- Coat combat disruptive
- Improved version of Body protector for riots control
- Flash resistance hood for Indian Navy
- Air cleaner home textiles
- Multi layered flame and thermal resistance fabric for fire fighter clothing
- Protective work wear for cement porter
- Self-stitched garments
- Seamless jute carry bags
- Military and paramilitary uniforms from NYCO
- Products from corn husks
- Speciality embroidery yarn for application in stretchable fabrics like knitted fabrics
- Fabric for stab resistant vest ▪ Knitted fabric for comfort
- Cut resistant gloves from composite metallic yarn ▪ UV resistant fabric

- Energy efficient textile spindle oil (servo-super EE10) – in association with Indian Oil Corporation Ltd.
- Anti static finish oil for processing synthetic fibres
- X-ray opaque fabric
- Anti-microbial fabric
- Special functional fabric for bedding and sports wear








APPLIED RESEARCH & DEVELOPMENT

Major Instruments Developed

- An apparatus to determine dust resistance characteristics of sheeting Material
- An apparatus to determine Air pollutant gas adsorption capability of fabric
- Stab and impact resistance tester
- Synthetic Blood Penetration Tester
- Electronic drape meter
- Compressed air monitoring system for textile industry
- Fabric smoothness tester (patented)
- Light & Heat Cutting Tester (patented)
- An attachment for waste reduction in rapier loom (application for patent filed)
- Modified power loom to produce seamless jute bags/sacks (patented)
- Soil release efficiency tester
- Dimensional stability to dry heat tester
- Elastane yarn count tester (patented)
- Draftometer (patented)
- Fabric hand tester
- Friction tester (application for patent filed)

- Water vapour permeability tester
- Toxicity tester
- Equipment for color fastness to daylight (As per IS 686)
- Fire resistant test apparatus (As per UIC code 562 – 2 Appendix 5 and 12)
- Smoke visibility test apparatus (As per UIC code 562 – 2 Appendix 15)
- Flammability tester (As per IS 11871 Method A)
- Flammability tester (As per BS 5438)

COMMERCIALIZATION OF NITRA DEVELOPMENTS

Technology Transfer

- Molten Metal splash resistance fabric to M/s. JCT Limited, Phagwara
- Roof liner and Parcel Tray to M/s. RFM Automotives Pvt. Ltd., Gurgaon
- Next generation ecofriendly antimicrobial technology "Citron" to Polygiene Group at Styrmansgatan, Sweden
- Reusable sanitary pads and diapers to Kaytent Industries
- Flash resistance hood for Indian Navy to M/s Aero Garment
- Improved version of Body protector for riots control to M/s. G.M.Trading and Applied Systems
- Coat combat disruptive to Kusumgar Corporates Pvt. Ltd. and Radnik Exports
- Multi Layered Flame & Thermal Resistance Fabric for Fire Fighter Clothing 1. Arvind Ltd. and 2. Aeronav Industrial Safety Appliances.
- Stab and impact resistant material for anti riots body protector to M/s. Applied Systems
- NITRA's Fabric Smoothness Tester to Multiflo Instruments Pvt. Ltd., Navi Mumbai
- Work wear for Cement Porters to M/s. Arvind Ltd., Ahmedabad
- Seamless low cost jute carry bags to M/s. G. D. Industries, Kolkata
- NITRA Electronic Drape Meter to Dinu Technology, Coimbatore
- Fabric Defect Analysis to M/s. Textile Sector Skill Council, New Delhi




PATENTS GRANTED AND FILED

Patents Granted

1. Method of manufacturing thermal barrier or liner using roving woven material - Patent No. 502720 dt. 24.01.2024
2. An apparatus to determine dust resistance characteristics of sheeting Material Patent No. 459098, dated 15.10.23
3. A short manufacturing process for semi-finished and/or finished products using a loom, Patent no. 357432 dt. 1.2.2021
4. A process for fiber extraction from Pine Needles (Perul) (Patent no. 355691 dt. 12.1.21
5. An apparatus to determine heat and light cutting ability of curtains, Patent 350763 dt. 3.11.2020
6. An apparatus to determine smoothness of a sheeting material, Patent no. 380915, dated 07.07.2015
7. An instrument to measure linear density of continuous elastane threads and strands - Patent No. 244569 (Application No. 218/DEL/2004, 16.02.2004) on 10.12.2010
8. A compact indigo dyeing device for dyeing a thread flock – Indian Patent No. 222432 (23/DEL/2001) on 08.08.2008
9. A Draftometer – Patent No. 221976 granted (Application No. 1189 / DEL/2002, dt. 26.11.2002) on 12.07.08
10. A process for the treatment of yarn/fabric (textile materials) having UV radiation/ protection and flame resistant properties – Patent No. 216779 (Application No. 110/DEL/2002, 13.02.2002) on 19.03.2008,
11. A process for the treatment of textile industries effluent to obtain clear effluent (Application no. 708/DEL/2000) on 8th Feb. 2006 (IPN awaited)
12. A hank dryer – Indian Patent no. 197 543 (87/DEL/2003) on 29th December, 2006.

Patents Filed

1. An Automotive component and process for manufacturing thereof from waste jute blends for automotive application, patent application No. 202311082687 dated 5.12.2023
2. Method of manufacturing jute based fabric for protection against Molten Metal Splash, patent application No. 202311082688 dated 5.12.2023
3. Blockchain based authentication system for IOT networks, patent application No. 202341066014 dated 2.10.2023
4. IOT based smart milk pan, patent application no. 202311067403 dated 7.10.2023
5. Prediction of academic monitoring system in higher educational institute incorporating ai, patent application no. 202311057775 dated 28.8.2023
6. Cloud-based predictive maintenance system for electric vehicle batteries using deep learning, patent application no. 202341059803 dated 6.9.2023
7. A collaborative filtering based system for opinion extraction and sentiment analysis, patent application no. 202311045904 dated 7.7.2023
8. A process for preparation of regenerated bamboo fibre from indigenous bamboo, Patent Application No. 20211029728 Dt. 24.05.2022
9. An apparatus to determine Air Pollutant Gas Adsorption Capability of Fabric, Patent Application No. 202111062044 dt. 31.12.2021

10. A process for preparing water repellant milkweed floss/fibre for preserving thermo-regulatory property thereof, Patent Application No. 202111055410 dt. 30.11.2021
11. Method of preparing flexible impact and stab resistance material, Patent Application No. 201911030134 dt. 25.07.2019
12. A compressed air monitoring system to optimize energy consumption in a textile mill, Patent Application No. 201911016310 dt. 24.04.2019
13. A stretchable composite embroidery thread, Patent Application No. 201911016309 dt. 24.04.2019
14. A water saving hank dyeing machine for dyeing textile yarns, Patent Application No. 201911015524 dt. 18.04.2019
15. Extraction of fibres from Kanghi or Atibala plant (Abutilon Indicum) using retting process, Patent Application No. 201811047418 dt. 14.12.2018
16. Extraction of textile fibers from corn husk - Patent application no. 201711039937 dt. 09.11.2017
17. An attachment for shuttleless rapier looms for reducing selvedge waste - Provisional patent application no. 1856/Del/2011 dt. 30.6.11.
18. A device for measuring frictional characteristics – Patent application no. 1188/DEL/ 2002, 26.11.2002.

CONSULTANCY SERVICES

Technical Consultancy

- Plant set up for natural fibre extraction
- Manpower rationalization/ Workload assessment
- Machine & Labour productivity
- Production system audit/ Yarn realization audit
- Framing of technical specification
- Preparation of DPR for textile units
- Quality audit, Cost audit & Maintenance audit
- Analysis of defects in yarn, fabric & garment
- Energy audit/energy audit mandatory under PAT and Power quality audit
- PAT (Performa, Achieve & Trade) advisory
- Carbon footprint reduction / GHG reporting
- Life cycle assessment
- Boiler audit/ Water audit
- Compressed air optimization
- Designing and acting up of common/ Individual Effluent Treatment Plant (ETP/ CETP)
- Safety audit (electrical safety audit, occupational Health & safety audit etc.)
- Adequacy reports of ETP/CETP/ ETP assessment

Feasibility Study

- Textile mills
- Garment factories

System Certification

- ISO 9001: 2015 (Quality Management System)
- ISO/IEC17025: 2017 (NABL) and ISO/IEC17020: 2012 (NABCB)

Infrastructure Set Up

- Textile and Apparel clusters/parks
- Training institutes
- Testing laboratories
- Effluent treatment and water recovery plant

Valuation

Machinery, plant, land and building

Inspection

- 3rd party inspection for textile and apparel products

Product/ Process Design & Development

MANPOWER TRAINING AND ALLIED HRD SERVICES

Customized Training Program (on shop/off shop)

- Productivity and quality improvement
- Testing and quality control
- Process control in spinning, weaving, knitting, chemical processing and apparel manufacturing
- Machine maintenance management
- Cost reduction
- Environment management and pollution control & Utilities management
- Latest trends/innovations in textiles
- Development of shopfloor managers (supervisors), Training of Trainers (TOT)/ Assessors (TOA)
- Energy audit/ Electrical safety/ Energy conservation in electrical & thermal utilities
- ETP/ CETP- Operation, maintenance & trouble shooting
- ISO 9001, ISO/IEC 17025 (NABL) & ISO/IEC 17020 (NABCB)

Job Oriented Professional Program

- Fashion Marketing and Merchandizing (FMM)
- Apparel Production and Industrial Engineering (APIE)
- Apparel Design & Quality Control (ADQC)

Distance Learning Program

- Textile Technology & Management (TTM-DLP)
- Apparel Manufacturing & Merchandising (AMM-DLP)
- Quality Evaluation of Textiles & Garments (QETG-DLP)

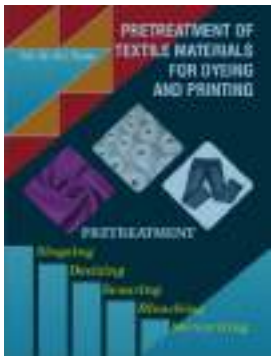
B. Tech Program

- Academic wing NITRA Technical Campus (NTC) set up in 2012, Govt. Aided Self Financed Institute Code – 802
- Institute affiliated to AKTU (formerly UPTU) and approved by AICTE
- Three B. Tech programs on:
  - Textile Technology (TT),
  - Computer Science & Engineering (CSE) and
  - Computer Science & Engineering (Artificial intelligence & Machine learning i.e. AI & ML)

Seminar, Workshop and Conference

- Seminars, Workshops and Conferences organized periodically on issues pertaining to textile and apparel industry
- Joint Technological Conference (JTC) is organized annually in association with other TRAs to share research findings with the industry

TECHNICAL PUBLICATION SERVICS

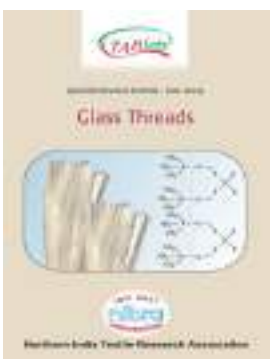


- Library cum Information Centre
- Enriched with more than 10000 books and 35 national and international journals
- Information sharing services through NITRA News Bulletin
- Published about 150 books/technical literature
- Published 400 research papers in national, international, referred journals and trade magazines
- Published norms for spinning, weaving & chemical processing jointly with other TRAs

Some of the Major Books Published

- Latest Developments in Textile Machines – "Review of ITMA 2023
- **वस्त्रों की रंगाई-छपाई एवं फिनिशिंग**
- Textile & Apparel Booklets (TABlets) – a series of 15 booklets
- Garment Processing Series (GaPS) – a series of 13 booklets
- Sewing Machine Series (SMS) – a series of 4 booklets
- A Guide to Manufacture Garments using Delicate Fabrics
- Pre-treatment of Textile Materials for Dyeing & Printing
- Failure Mode and Effect Analysis (FMEA) – An Essential Tool for Textile and Apparel to Survive and Grow
- Sewing Threads
- **वीविंग हैण्ड बुक भाग १ – पावर लूम वीविंग**

Books won AICTE Award under Technical Book Category



- **वस्त्रों की रंगाई-छपाई एवं फिनिशिंग**
- **सिले सिलाये वस्त्रो पर रासायनिक अभिक्रियाएं**

QUALITY EVALUATION (TESTING) SERVICES

Quality Evaluation

- Seven NABL accredited (ISO/ IEC 17025: 2017) Labs:
- Physical Quality Evaluation Lab,
- Chemical Quality Evaluation Lab,
- Polymer & Technical Textile Lab,
- Heat & Flame Testing Lab,
- Micro Biology Lab,
- Eco Lab
- Environment Lab

Facilities available for quality evaluation of fibres, yarns, fabrics, garments, technical textiles, leather, plastic, Personal Protective Clothing, Upholsteries, and Transport Textiles: Textile used in automobile, railways, airplane, shipping industries and Floor Coverings, PPEs/Coveralls and surgical masks, chemicals, auxiliaries, dyes, water and effluents.

- 10,000+ samples are tested every year

CENTRE OF EXCELLENCE FOR PROTECTIVE AND AUTOMOTIVE TEXTILES

NITRA has been designated as Centre of Excellence (CoE) for Protective Textiles and Automotive Textiles by the Ministry of Textile, Govt. of India.

The prime objectives of CoE-Protech are :

- Promoting protech segment of technical textiles and providing infrastructural support and facilities at one place for its manufacturers
- Testing and evaluation of products in identified segments of technical textiles
- Resource centre with IT infrastructure
- Indigenous development of prototypes
- Training core personnel and personnel from the technical textile industry
- Knowledge sharing with stakeholders and end users
- Incubation centres where it will provide necessary facilities to entrepreneurs for testing new ideas and technologies
- Setting up of standards and specifications at par with global benchmark

CENTRE OF EXCELLENCE FOR PROTECTIVE AND AUTOMOTIVE TEXTILES

Focus Incubation Centre:

NITRA has set up Focus Incubation Centre for weaving, knitting garmenting purpose. Section wise brief details of machines are:

For Weaving:

The FIC comprises of latest warping/weaving machines capable of producing high quality fabric.

Name of Machine	Make and Model
▪ Sectional Warping	Rabatex Year 2001
▪ Shuttle less Loom	Vamatex Rapier Loom P-1001 Year 2001
▪ Shuttle less Loom	Picanol Rapier loom Optimax-1-8-P220 Year 2018

For Kniting:

The FIC comprises of latest circular knitting machines capable of producing high quality knitted fabric.

Name of Machine	Make and Model
▪ Circular Knitting Machine	Terrot (Made in Germany) Model 8296-2 Year 2013
▪ Circular Knitting Machine (Open width fabric take down)	Pilotelli (Made in Italy) Model M0938417 Year 2017

For Garmenting & Embroidery:

The FIC comprises of latest cutting, fusing, sewing and embroidery machinery of reputed machine manufacturers for producing workwear and heavy garments.

The facility is available to textile and apparel industry to undertake commercial production activities on a chargeable basis.

DEVELOPMENT OF SPECIFICATIONS & STANDARDS

NITRA plays a very important role in standardizing the textile materials used by the Govt. employees including military/paramilitary forces and other organizations.

Some of the specifications developed by NITRA for CRPF (CoBRA), CRPF, Indian Navy, BSF, ITBP, CISF, SSB, NSG, Assam Rifles, NDRF, Railways Police Security Force, VIP Security, RAF are as follows:

Nylon Life Jacket with expandable polyethylene foam buckle and whistle plastic, Combat light weight blanket with good insulating, Hand Gloves Knitted, Sleeping bag, Jungle Floppy Hat, Tactical 3 points sling universal, Anti-mosquito Veil, Light weight ground sheet, Pouch for Ammunition and Grenades, Balaclava with convertible properties as cap comforter face mask and cold weather muffler, Durable Combat Rucksack, Coat Parka, Multipurpose light weight load bearing frame with carrier facilities and convertibility as stretcher (Made of Aluminum), Water Proof Multipurpose Rain Poncho with convertibility as bivouac, Waist belt nylon with buckle and ring, Beret cap, Trouser BD Serge, Specification of "Track suit", Cotton sports socks for Drivers of the Indian Navy, Cap FS Blue (Floppy Hat Type), Unarmed Combat Dress for Marine commandoes, Specification of "Flag", Dope dyed polyester viscose uniform cloth-Khaki, Dope dyed polyester viscose uniform cloth-Black (Colour specification), Colour specification of camouflage uniform, Cloth Disruptive Pattern, P/V dope dyed olive green and silver grey uniform, Specification for "Tactical Pistol Holster", Specification of Änklet Web", Specification of "Dungree cloth", Specification of "Disruptive Pattern Dangi cloth", Rain coat, Alpine Tent, Wader Suit etc.

INFRASTRUCTURE ROUND UP

Human Resource

NITRA has a rich and experienced pool of Research Scientists, Technical Experts and Management Professionals.

Workshops

Spinning

Blow room (LR), Carding (LR-C1/2), Draw Frame (LR-D02S), Roving Frame (LR-GS), Ring Frame (LR-DJ-5, MEI-MKII), Friction Spinning (DREF-3), Pears Schlafhorst Parallel Winding M/c (VERSA-A-VI), TFO (Trytex), Rotor Spg. (Trytex), Compact Spg.-LMW (LRJ 60/A), Miniature Carding M/c, (Trytex), Miniature Grill Box (Trytex), Miniature Speed Frame (Trytex), and Miniature Ring Frame (Trytex).

Melt spinning

NITRA has established melt spinning pilot plant for development of Nylon 66 fibre.

Melt Spinning Pilot Plant

Weaving

Handlooms, Powerlooms, Semi-Automatic Loom with Terry Motion, Automatic looms, Rapier Shuttle-less loom with electronic dobby, Single end sizing machine, Handloom Sample wraper loom, Computerized handloom, Leno loom, Double plush loom, Needle loom and Warping for needle loom

Computerized flat bed kniiting machine

Knitting

Circular knitting machines (single jersey, rib, interlock), Knittability tester, Flat knitting machine with jacquard, SHIMA SEIKI computerized flat bed knitting machine, Flat knitting machine with Intarsia, Terrot circular knitting machine

Chemical Processing

Soft flow dyeing machine, padding mangle with curing chamber, fibre/yarn package dyeing machine, steamer (autoclave), tumble dryer, drum washing machine, Hot melt coating machine, Continuous dyeing range (CDR), Digital printing, Winch dyeing machine, Beaker dyeing machine, Hank dyeing machine, Transfer printing machine, Flock printing machine.

NATURAL LONG FIBRE (HIMALAYAN REGION) – PILOT PLANT

(Under MoT, GoI sponsored project "Development of Value Added Products from different fibres produced in Himalayan Region")

Objective is to assist industry in development of yarns, fabrics and final products of Natural Long Fibre (Himalayan Region)

Hackling Machine

Wet Spinning Machine

INFRASTRUCTURE ROUND UP

Pre-Sewing

Manual Pattern making, Digitizing, Cutting machine, Fusing machine

Sewing & Embroidery

Computerized industrial sewing machines from JUKI, Brother and Pegasus, multi-head embroidery machine from DEFU.

Garment Finishing

Steam presses, Electronic heated steam press, Gravity feed irons, Vacuum ironing boards, Stain removing machine, Shirt folding table, Thread sucking machine, Washing machine (15 kg), Hydro extractor (15 kg), Tumble dryer (25 kg) all from Ramsons.

GOVERNING BODY

Council of Administration, the governing body of NITRA, comprises of representatives from reputed units of Textile & Apparel Industry. It has also representation from Govt. of India, Trade Associations, Academia and Textile Research Associations.

Chairman is the head of the council and Director General is the overall head of the organization.

Members of Council of Administration

Shri Raj Kumar Jain
Chairman - Council of Admn.
MD, Zonac Knitting M/cs Pvt. Ltd.

Shri Dinesh Nolkha
MD, Nitin Spinners Ltd.

Shri Ramesh Kumar Jain
Chairman-cum-MD
Pasupati Spg & Wvg Mills Ltd.

Shri Nitin Nolakha
Jt. MD, Nitin Spinners

Shri Varun Ladha
MD, Sudiva Spinners Pvt. Ltd.

Shri B.M. Sharma
Jt. MD, RSWM Ltd.

Dr. S.N. Modani
MD & CEO, Sangam (India) Ltd.

Shri Sanjay Garg
President - NITMA
MD, Longowalia Yarns Ltd.

Shri Mukesh Kumar Tyagi
Vice President - NITMA
Director, BST Textile Mills Pvt.Ltd.

Shri Rajiv Garg
MD, Garg Acrylics Ltd.

Shri Rajeev Agarwal, CEO
Geo Sys India Infrastructures P. Ltd.

Representatives
NTC Ltd.

Prof. K.J. Sreeram
Director CSIR-CLRI

Shri M. Sankar
Chairman, TMMA (I)
President, Lakshmi Machine Works Ltd.

Shri Vidit Jain
Dy. Chairman - Council of Admn.
Jt. MD, Pasupati Spg.&Wvg.Mills Ltd.

Shri S.K. Kapoor
MD, Surya Processors Pvt. Ltd.

Dr. Arindam Basu
Director General, NITRA

Shri Pragnesh Shah
Director, ATIRA

Dr. Prakash Vasudevan
Director, SITRA

Dr. T.V. Sreekumar
Director, BTRA

Chairman/Addl. Secretary General
Apparel Export Promotion Council

Prof. Alagirusamy, Prof.& Head
Deptt. of Textile Technology
IIT, Delhi

Ms. Chandrima Chatterjee
Secretary General,CITI

Shri Ashish Bagrodia
Chairman & MD, Winsome Textile
Industries Ltd.

Shri Rajeev Mehani, Sr. VP
Vardhman Textiles Ltd..

Dr. Rajiv K. Srivastava, Professor
Deptt. of Textile Technology, IIT Delhi

Rabisankar Chattopadhyay
Professor
Deptt. of Textile Technology
IIT, Delhi

Dr. J.V. Rao
Former DG & Advisor - NITRA

Shri Sandeep Hora
Vice Chairman - Council of Admn.
Partner/CEO, Aeronav Industrial
Safety Appliances

Shri Sanjay Kumar Jain
M.D., T.T. Ltd.

Shri R.C. Kesar
Centre for Responsible Business

Shri Naveen Gupta, Partner
Star Safety Hub

Shri Dulal Chandra Acharyya, MD
G.D. International

Shri L.N. Jhunjhunwala
LNJ Bhilwara Group

Shri Sharad Jaipuria, Chairman & MD
Ginni International Ltd.

Shri Shishir Jaipuria, MD
Ginni Filaments Ltd.

Dr. Rikhab Chand Jain, Chairman
T.T. Ltd.

Representative, Federation of Hosiery
Manufacturers Association of India

Representative
The Cotton Corpn. of India Ltd.

ISO 9001
nitra
ORGANISATION

NORTHERN INDIA TEXTILE RESEARCH ASSOCIATION

(Linked to Ministry of Textiles, Government of India)

Sector-23, Raj Nagar, Ghaziabad – 201002 (India)

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