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NITRA NEWS

..... **WITH INDUSTRY ALWAYS**



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FROM DIRECTOR GENERAL'S DESK



Dear Patrons,

This first quarter of 2026, has been full with activities at NITRA. During this period, one of the major events that took place at NITRA is a high-level review meeting on New-Age Fibres. Ms. Neelam Shami Rao, IAS, Secretary, MoT, GoI Chaired the meeting. The meeting was also graced by Ms. Padmini Singla, IAS, Jt. Secretary, Ministry of Textiles, Mr. Shashi Bhushan Singh, Secretary, National Jute Board, and Dr. Sarveshwar N. Bhure, Jt. Textile Commissioner along with many industry stalwarts.

Friends, in its commitment to sustainable and zero-waste innovation, NITRA has also developed value-added products utilizing every part of the Milkweed plant. A major invention is the development of eco-friendly vegan leather derived from the leftover stem and outer shell of the pod. During this period, NITRA presented the developed vegan leather sample to Hon'ble Union Textiles Minister Giriraj Singh. The minister appreciated NITRA's innovative and sustainable efforts in advancing textile research.

NITRA made a glorious presence at the 63rd JTC at Ahmedabad wherein I led a team of NITRA scientists that presented five scholarly papers covering a diverse range of New-Age fibers, Sustainable processes in dyeing & printing, Protective textiles and Conventional Textiles. In the same occasion, Smt. Vrunda Manohar Desai, Textile Commissioner, Government of India, stepped into NITRA stall and shown keen interest in NITRA's innovations and technological advancements.

In addition to above, I represented NITRA in a series of visits during this period. Major among those is the 74th Foundation Day celebration of ICAR–Central Research Institute for Jute and Allied Fibres (CRIJAF), Barrackpore, as the Chief Guest, and a Panel Discussion at the 8th International Conference on Technical Textiles and Nonwovens on "Bridging Performance and Sustainability: The Future of Technical Textiles and Nonwovens" at IIT Delhi.

NITRA, during this period, signed three Memorandum of Understanding. The first one with M/s Oswal Woollen Mills Ltd., Ludhiana, marking a significant step towards sustainable and self-reliant textile innovation in India. The second with Hind Yarn Private Limited, Kolkata for product development at the Flex Spinning Plant at NITRA, and one more with NASSCOM–SSC, India's leading association and apex body for its \$283 billion technology industry, established in 1988 and representing more than 3,000 member companies. This strategic partnership aims to sharpen future-ready professionals passing out from our academic wing NITRA Technical Campus and strengthen India's digital talent ecosystem.

I hope you all enjoy reading this edition of NITRA News.

Dr. M. S. Parmar
Director General, NITRA

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R&D Spectrum

Presently, NITRA is working on 06 Government sponsored projects:

❖ ON-GOING PROJECTS:

Sponsoring Agency: DST, Govt. of India

- Socio-economic development of SC/ST by providing training, technology and market to convert local resources to industrial products
- To develop protective workwear for sewage and sanitary workers

Sponsoring Agency: Ministry of Textiles, Govt. of India

- Design and development of various products from Milkweed (*Calotropis gigantea*) floss/fibre

Sponsoring Agency: NTTM, Ministry of Textiles, Govt. of India

- Development of specialised Firefighting suit
- Development of flame-retardant Nylon 66 yarn/fibre indigenously
- Cellulose-based indigenous high Clo value and low-density surface modified natural fibre for developing thermal layers of extreme cold climate clothing
- Development of indigenous State-of-the-art Instruments for protective textiles

❖ PROPOSED PROJECTS:

Proposed under: Ministry of Textiles, Govt. of India

under NTTM Scheme,

- Development of Flame Retardant micro glass beads-based Retro-reflective material
- Development of 3D high-performance knitted sports textiles with thermo-physiological comfort and impact protective properties for commercial application
- Development of 3D Orthogonal Woven Composite for Airborne Radome Structures
- Development of Indigenous State-of-the-Art Thermal Protective Performance (TPP)

under Tex-RAMPS' Scheme,

- Application of new-age hydrophobic oleophilic Milkweed fibres for oil and grease removal from industrial wastewater
- Osmotic power generation from high- TDS textile effluent streams.
- Research-Driven innovation in Milkweed floss for Textile Manufacturing

Proposed under: Council of Science & Technology, U.P.

- Development of standardised protocols and sustainable Textile Engineering strategies to minimise microfiber release
- Utilisation of High TDS RO reject saline water in the Indian Cotton dyeing Industry to reduce ZLD/MEE operating cost and fresh salt consumption.
- Valorisation of Milkweed agricultural biomass into vegetable- tanned vegan leather and cellulose- rich pulp and long Fibres

Director General's Engagements



DG meets Hon'ble Cabinet Minister of U.P. Shri Rakesh Sachan

Dr. M.S. Parmar met Hon'ble Cabinet Minister of Uttar Pradesh Shri Rakesh Sachan (MSME, Khadi & Village Industries, Sericulture, Handloom & Textile) at Lucknow and apprised him of the latest activities and key initiatives undertaken by NITRA. The Hon'ble Minister graciously appreciated the works done by NITRA.



Dr. M.S. Parmar, DG, NITRA, graced 74th Foundation Day celebration of ICAR (CRIJAF)

Dr. M.S. Parmar, Director General, NITRA, graced the 74th Foundation Day celebration of ICAR–Central Research Institute for Jute and Allied Fibres (CRIJAF), Barrackpore, as the Chief Guest on 09 February 2026. Dr. Parmar expressed his sincere gratitude to Dr. Gouranga Kar and the entire CRIJAF team for the kind invitation and warm hospitality extended to him during the visit..

Director General's Engagements



Director General at ICTN 2026

Dr M. S. Parmar participated in Panel Discussion “The Market Tug-of-War: Innovation vs. Marketing” at the 8th International Conference on Technical Textiles and Nonwovens (ICTN 2026) on "Bridging Performance and Sustainability: The Future of Technical Textiles and Nonwovens" held on 6-8th February 2026 at IIT Delhi.



DG NITRA presents a vegan leather sample to Hon'ble Union Textiles Minister Shri. Giriraj Singh

NITRA has been pioneering research on milkweed floss for over two decades, expanding its cultivation and applications from cold-weather clothing to advanced medical textiles. Emphasizing sustainability and zero-waste practices, NITRA has developed value-added products from all parts of the plant, including eco-friendly vegan leather made from residual biomass. This innovation was showcased to Union Textiles Minister Giriraj Singh in March 2026, who appreciated NITRA's efforts in sustainable textile development.

Research Paper Presented



DR. NIDHI SISODIA PRESENTED PAPER

NITRA's Senior scientific officer Dr. Nidhi Sisodia presented paper on Processing and Value Addition of Plant and Animal Fibres in the Context of Industry and Agriculture 5.0, held on January 3–4, 2026, at ICAR–NINFET, Kolkata as part of the 6th National Conference on Innovations in Natural Fibres at Kolkata.



NITRA SCIENTIST PRESENTS RESEARCH AT ICTN- IIT-DELHI

Dr. M.S. Parmar, Dr. Nidhi Sisodia, Dr. Preeti Kaur Sachdeva, and Ms. Annu Kumari, presented the research papers on “Milkweed Cycle Assessment Approach” and “Developing Sustainable Textiles from Parali Fibres at the 8th International Conference on Technical Textiles and Nonwovens, organized at Indian Institute of Technology Delhi from 6–8 February 2026



NITRA SCIENTISTS PRESENT FIVE SCHOLARLY PAPERS AT 63RD JTC

Scientists from NITRA presented five scholarly papers covering a diverse range of New-Age fibers, Sustainable processes in dyeing & printing, Protective textiles and Conventional Textiles. The delegations were led by Director General NITRA Dr. M.S. Parmar and NITRA scientists Dr. Shweta Saxena, Mr. Pankaj Kumar, Dr. Sundaramoorthy, and Ms. Annu Kumari.

Consultancy Corner

• INSPECTION / CONSULTANCY SERVICES

NITRA offered various consultancy services to the industries in the area of Study of manpower rationalisation in spinning unit, Electrical Safety audit, Setting Up 1200 KLD ZLD Model, Up-Gradation of 800 KLD ETP plant, Process Audit, Pollution Prevention and Effective Waste Management in the Units of Panipat Cluster, Technical & Financial appraisal of CFC. NITRA also conducted third-party inspection of textile manufacturing units for Coat Combat, Jersey woollen, Terry Towel, T-shirts, Anti-riot Helmet, Thermal Underpants, Vest Thermal, Uniform Cloth, ground sheet, sleeping bag, cap comforter, Blanket, Mattress Glacier, Cloth disp. P/C, Shirting Angola, etc. NITRA has conducted more than 20 No. consultancy assignments and 28 No. of third-party inspections during the period Jan 2026 to March 2026.

NITRA was entrusted with key project development assignments by the Government of Uttar Pradesh and its associated bodies. The Uttar Pradesh Khadi and Village Industries Board (UPKVIB), Lucknow, assigned NITRA to prepare a Detailed Project Report (DPR) for establishing a modern Khadi Blanket Production Centre at Khajani, Gorakhpur. NITRA successfully developed and submitted a comprehensive DPR covering all aspects of infrastructure, technology, and production planning. The report was duly accepted by the Board, reflecting its technical soundness and practical viability.

In another significant initiative, the Directorate of Handloom and Textiles, Government of Uttar Pradesh, engaged NITRA to prepare a Pre-Feasibility-cum-Detailed Project Report for the proposed Sant Kabir Textile and Apparel Park at Ramana, Varanasi, spread over 75 acres. NITRA delivered a well-structured and detailed report, which was highly appreciated and accepted by the Directorate, highlighting the institute's expertise in textile sector planning and development.

The Directorate of Handloom and Textiles, Government of Uttar Pradesh has further entrusted NITRA to prepare pre-feasibility cum detailed project reports of 4 textile and apparel parks located at Amroha, Nagina, Bahedi and Maghar under Sant Kabir Textile and Apparel Park Scheme of UP Govt. The preparation of pre-feasibility cum detailed project reports of all four parks is in process

NITRA rendered consultancy services to M/s Green Pack on reducing the pilling propensity of the fabrics. The consultancy report provides root cause of the pilling problem and suggests various control measures to reduce pilling propensity of their fabrics.

HRD Focus

· Programs Organised

S. No.	Program	Venue	Department	No. of trainees
1	Fundamental Course on Protech	Swami Vivekanand Subharti University, Meerut	<i>HRD & Publication</i>	60
2	Fundamental Course on Protech	Vidya University, Meerut	<i>HRD & Publication</i>	43
3	Fundamental Course on Protech	Satyam fashion Institute, Noida	<i>HRD & Publication</i>	17
4	Fundamental Course on Protech	NITRA	<i>HRD & Publication</i>	52
5	Awareness & Skill Development for Khadi Products Representative under UPKVIB	NITRA	<i>MPD- Spinning</i>	14
6	Awareness of Khadi Products & Skill Development for Khadi Executives under UPKVIB	NITRA	<i>MPD- Spinning</i>	15

· Programs Attended

S. No.	Program	Name of participant	Venue/ Date	Department	Status
1	Chintan Shivir 2026 on India's Wool Sector	Sanjeev Shukla	CSWRI, Avikanagar, 16th Jan	MPD- Spg	Speaker
2	Technical Textiles in Build-Tech & Geo-Tech	Dr. Neha Kapil	Online	PQE & PTTD	Participant
3	Inspection Bodies, and its Benefits to Industry & Government Bodies	Dr. Neha Kapil	Online	PQE & PTTD	Participant
4	Seminar on Design, Standardization, and Promotion of Khadi Branding	Pankaj Kumar	U.P. Khadi and Village Industries Board, 28.3.26	Chemical Processing & Env.	Delegate

Testing Zone

Newly Established Testing Facilities

- Fire Manikin Test Setup for evaluation of protective clothing performance
- Comprehensive Food Testing Laboratory
 - Analysis of spices, herbs, and condiments
 - Microbiological examination of alcoholic and non-alcoholic beverages
- Footwear and Leather Testing Facility
 - Raw material testing
 - Sole adhesion testing
 - Abrasion resistance tests
 - Flexing resistance evaluation
 - Water vapor permeability assessment
- Bullet Proof Helmet Evaluation Unit
 - Design assessment
 - Evaluation of helmet accessories

Advanced Specialized Laboratory Instruments

- Radiant heat tester
- Molten metal splash tester
- Automatic flammability tester
- Automatic limiting oxygen index tester
- Retro-reflectance tester
- Contact heat tester
- Electrical resistivity tester
- Fire resistance testers
- Gas fume chamber
- Toxicity tester
- Smoke visibility tester

Sport Textile tests:

- Cut resistance test
- Impact test
- Compression test
- Flexing (belly type)

TESTING SERVICES:

During Jan 2026 to March 2026, NITRA has tested total 2686 samples in its seven NABL accredited laboratories (Physical quality evaluation lab 297, Chemical quality evaluation, Heat & flame 1419, Microbiology labs 136, Eco lab & Env. lab 90 and Polymer & technical textile 480)

Dignitaries Visit



Chairman & Managing Director, Cotton Corporation of India (CCI) Visits NITRA

We were honoured to welcome Mr. Lalit Kumar Gupta, Chairman & Managing Director, Cotton Corporation of India (CCI), to NITRA on 9th January 2026. His visit marked a significant moment, fostering meaningful discussions on the cultivation of milkweed crop and its application in textile sector, and innovation-driven development. Such engagements continue to inspire our mission of advancing research.

➤ Dignitaries Visit



Delegates from C-DAC, Ministry of Electronics & Information Technology Visit NITRA

We were delighted to welcome a distinguished delegation from C-DAC (Centre for Development of Advanced Computing)—India’s premier R&D organization under the Min. of Electronics & IT, Government of India on 16th January 2026. The visit focused on collaboration in IT education and training, advanced technologies, skill development, and future-ready learning initiatives. We believe such collaboration in bridging the gap between research, innovation, and academic excellence.



Directors, Amity Institute of Microbial Technology and Amity Institute of Phytochemistry Phytomedicine visit NITRA

On March 25, 2026, Prof. (Dr.) Amit C. Kharkwal, Director- Amity Institute of Microbial Technology and Prof. (Dr.) Harsha Kharkwal, Director- Amity Institute of Phytochemistry & Phytomedicine, visited NITRA. Both the scientists had discussions with Director General, NITRA, to explore joint projects focused on milkweed floss/fibre (CLOCell™). The collaboration aims to harness cellulose-rich biomass for sustainable, biodegradable products and lightweight mouldable composites, bridging textile science with biotechnology and sustainability. The delegation witnessed NITRA’s systematic cultivation of milkweed and observed the complete processing chain—from plant to final product.

➤ Glimpses



Secretary Textiles Graces Review Meeting on New-Age Fibres at NITRA

A high-level review meeting on New Age Fibers (Hemp, Ramie, Flax, Sisal, Milkweed, Bamboo, Pineapple and Banana) fibers was successfully held at NITRA, Ghaziabad on 29th January 2026, under the chairpersonship of Ms. Neelam Shami Rao, IAS, Secretary, Ministry of Textiles, Government of India.

The meeting was graced by the esteemed presence of Ms. Padmini Singla, IAS, Joint Secretary, Ministry of Textiles, Mr. Shashi Bhushan Singh, Secretary, National Jute Board (NJB), Kolkata, and Dr. Sarveshwar N. Bhure, Joint Textile Commissioner.

On this occasion, Dr. M. S. Parmar, Director General, NITRA, facilitated Ms. Neelam Shami Rao, Ms. Padmini Singla, Mr. Shashi Bhushan Singh, and Dr. Sarveshwar N. Bhure, acknowledging their valuable guidance and support to the textile sector.

JTC Joint technological conference at ATIRA



63rd Joint Technological Conference (JTC) was jointly organised by ATIRA, BTRA, NITRA, and SITRA hosted by ATIRA, at Ahmedabad, on 16–17 February 2026



➤ Glimpses



Textile Commissioner Visits NITRA Pavilion at the 63rd JTC

Smt. Vrunda Manohar Desai, IRS Textile Commissioner, Government of India, stepped into NITRA stall during the 63rd JTC in Ahmedabad. Her keen interest in NITRA's innovations and technological advancements in the textile sector were deeply encouraging and created the linkage between industry, research, and policy-making bodies.



Product Display Center Inaugurated during NTC Academic Council Meet

The Academic Council & Board of Governors Meeting of NITRA Technical Campus was held on 21st February, 2026 in presence of NITRA's senior council members and distinguished members from academia and industry. The meeting reviewed academic initiatives, assessed ongoing programs, and collectively shaped up the institution's forward-looking academic roadmap. The progress made by the campus was highly appreciated by all members, reflecting NITRA's continued commitment to academic excellence & innovation,

In the sidelines of this meeting, a new Product Display Centre, along with a VIP lounge was inaugurated. The Product Display Center will serve as a dedicated platform to showcase innovative developments and technological advancements.

MoU and Technology Transfer



MoU with Oswal Woollen Mills Ltd., in application of CLOCell™ in Textiles

On 23 March 2026, NITRA signed a Memorandum of Understanding (MoU) with M/s Oswal Woollen Mills Ltd., Ludhiana, marking a significant step towards sustainable and self-reliant textile innovation in India. The MoU was formalized in the presence of Dr. M. S. Parmar, Director General, NITRA, and Mr. Ajay Ghorpade, Head – Quality Control & Management, M/s Oswal Woollen Mills Ltd. During the interaction, Dr. Parmar highlighted NITRA's pioneering work on milkweed floss/fibre, trademarked as CLOCell™, positioning it as a next-generation fibre supporting Atmanirbhar Bharat.



MoU with National Association of Software and Service Companies (NASSCOM–SSC)

NITRA's academic wing NTC signed a MoU with the National Association of Software and Service Companies (NASSCOM–SSC), India's leading association and apex body for its \$283 billion technology industry, established in 1988 and representing more than 3,000 member companies.

The MoU was formally exchanged between Dr. Upmith Singh, COO, NASSCOM–SSC, Dr. M.S. Parmar, Director General, NITRA, and Dr. B.K. Sharma, Director, NITRA Technical Campus. They highlighted the importance of such collaborations between academia and industry in preparing students for rapidly evolving technology landscape. This strategic partnership aims to develop future-ready professionals and strengthen India's digital talent ecosystem.

MoU and Technology Transfer



NITRA Strengthens Industry Collaboration with Hind Yarn Pvt. Ltd., Kolkata

NITRA signed a MoU with Hind Yarn Private Limited, Kolkata for product development at the Flex Spinning Plant at NITRA. This collaboration marks an important step towards; Innovative yarn and product development and Hands-on learning and applied research opportunities. The MoU reflects a shared vision to advance textile technology through research and innovation.

Leisure & Recreation Time



On the day of happy holi, members of NITRA and its academic wing NITRA Technical Campus (NTC) family traded their spreadsheets for gulal and their meetings for sweets! At NITRA office, we believe that a team that works together and plays together, stays together. Celebrating the vibrant spirit of Holi with the people who make work feel like home

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Date
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Location
NITRA, Ghaziabad

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ABOUT THE CONFERENCE

ICETA-2026 aims to bring together academicians, researchers, industry experts, and innovators to exchange knowledge and insights on the latest advancements in emerging technologies such as AI, IoT, Robotics, Cybersecurity, Cloud Computing, and Data Analytics. It provides a multidisciplinary platform for discussing innovations, trends, and practical implementations across sectors like Textile, healthcare, agriculture, smart cities, and sustainability. ICETA-2026 encourages collaboration, research excellence, and the development of innovative, technology-driven solutions for a sustainable and digitally empowered future.

ABOUT THE INSTITUTE

NITRA Technical Campus (NTC), Ghaziabad, is the academic arm of the Northern India Textile Research Association (NITRA), established in 1974 by the Govt. of India and the textile industry. NTC offers quality engineering and technology programs with strong focus on innovation and industry relevance. With modern infrastructure, experienced faculty and research-driven practices, the campus promotes interdisciplinary learning, skill development, and real-world exposure to nurture competent professionals with strong ethical values and commitment to technological advancement.

CONFERENCE OBJECTIVES

- Promote advanced research in Emerging Technologies like AI, IoT, Textile, Robotics, and Data Analytics for practical solutions.
- Encourage interdisciplinary collaboration among academia, industry, and policymakers.
- Address real-world challenges in sectors such as healthcare, agriculture, and smart cities.
- Strengthen academia-industry partnerships for innovation, knowledge transfer, and industry-ready solutions.

CALL FOR PAPERS

Title of the Paper | Author(s) Details (Name, Affiliation, Email) | Abstract (200-300 words) | Keywords (4-6) | Introduction | Literature Review | Research Methodology | Results and Discussion | Conclusion | References

Manuscript must be original, free from plagiarism, properly cited, ethically conducted, with no simultaneous submission, and authors must adhere to all guidelines.

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Important Dates

ABSTRACT SUBMISSION DEADLINE 25 MAY 2026	FULL PAPER 30 MAY 2026	REGISTRATION DEADLINE 10 JUNE 2026
NOTIFICATION OF ACCEPTANCE 30 MAY 2026	CONFERENCE DATES 17th - 18th JULY 2026	

REGISTRATION FEE

FEES ₹ 1500

CALL FOR PAPERS

Original and unpublished research papers are invited from scholars, academicians, industry professionals and students.



NITRA'S LATEST PUBLICATION



MILKWEED FLOSS/FIBRE: India's Green Gold

A distinctive blend of scientific research and immersive visual storytelling. Discover the dual narrative of 20 years of R&D and socio-economic transformation Making Atmanirbhar Bharat's 5F vision a reality. **Witness the Journey!**

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