# Microbiology Lab at NITRA

is now NABL accredited (ISO/IEC 17025:2017)

# **Antimicrobial Testing Facilities**

(AATCC 100/AATCC 147/AATCC 174/AATCC 90/ISO 20743/ISO 20645/AATCC 30/ASTM D 4576/BS EN14119/JIS L 1902/IS 16548/ISO 22612)

# **Antifungal Testing Facilities**

(AATCC 30- Part-1, AATCC 30- Part-2, AATCC 30- Part-3, ASTM G 21, MIL-STD-810 F Method 508.5.1)



#### **Northern India Textile Research Association**

(Linked to Ministry of Textiles, Govt. of India)

Sector-23, Raj Nagar, Ghaziabad-201 002 (U.P.)
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# NITRA NEWS ...with industry always



#### Issue: July - Sept. 2023

Insight

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### **Editorial Structure**

Editor in - chief:

Dr. Arindam Basu

**Executive Editor:** 

R.K. Gaur

Partha Basu



#### FROM DIRECTOR GENERAL'S DESK

Dear Patrons,

This quarter has witnessed many activities in NITRA. The period featured the 47<sup>th</sup> Annual General Meeting for the year 2023-24 and the 18<sup>th</sup> Convocation Ceremony for NITRA's short-term job-oriented training programs.

The members of the Council of Administration, NITRA met in the 47<sup>th</sup> AGM held on 23<sup>rd</sup> Sept.'23 at NITRA, Ghaziabad to form NITRA's Council of Administration for the year 2023-24. They have unanimously consented to continue with the existing leadership team for the year 2023-24. As a result of that, Sh. Raj Kumar Jain, MD, Zonac Knitting Machines (P) Ltd. will be continuing his charge as Chairman, NITRA. Sh. Vidit Jain, Joint. MD, Pasupati Spg. & Wvg. Mills Ltd. and Sh. Sandeep Hora, C.E.O of Aeronav Industrial Safety Appliances will also be continuing as Dy. Chairman and Vice Chairman of NITRA respectively.

NITRA's 18<sup>th</sup> Convocation Ceremony took place on the same day in presence of Dr. Roopak Vasishtha, CEO & DG, Apparel Made-ups & Home Furnishing Sector Skill Council, who was the Guest of Honour. Also present were hon'ble council members of NITRA and eminent industrialists. About 130 students were awarded certificates and medals in the convocation. Besides the convocation, on the same day, The Artificial Intelligence & Machine Learning lab, that constitutes an essential part of the B.Tech. Program in Computer Science and Engineering (CSE) with a specialization in AIML, was inaugurated by the hon'ble Chairman, Dy. Chairman and Vice Chairman of NITRA.

During this period, NITRA organized two awareness programs, one on Intellectual Property Rights (IPR) and another on NAAC Accreditation. NAAC program covered various aspects of NAAC accreditation such as outcome based learning, what is accreditation, benefits of accreditation, difference between NAAC and NBA and seven steps of NAAC accreditation. Besides the above, DG NITRA chaired a session on "Standards of Protective Textiles and Workwear" on 25<sup>th</sup> July, 2023 in 6<sup>th</sup> National Conclave on Standards & Regulations for Technical Textiles, organized by MoT, BIS and FICCI at FICCI House, New Delhi.

To conclude, I wish you all enjoy reading NITRA News Bulletin and send valuable feedback.

Regards,

Dr. Arindam Basu Director General

#### **Northern India Textile Research Association**

(Linked to Ministry of Textiles, Government of India) Sector – 23, Raj Nagar, Ghaziabad – 201 002 (India)

#### **R&D SPECTRUM**

Presently, NITRA is working on nine Government sponsored projects.

#### **Government Sponsored Projects - On-going:**

| workers (Sponsored by NJB, GoI)   |
|---|
| Development of Jute composite for automotive acoustic insulation and other uses (Sponsored by NJB, GoI) |
| Socio-economic development of SC/ST by providing training, technology and market to convert             |
| local resources to industrial products (Sponsored by DST, GoI)  |
| Development of Specialized Firefighting Suit (Sponsored by NTTM, GoI)                                   |
| Development of flame retardant Nylon 66 yarn/fibre indigenously (Sponsored by NTTM, GoI)                |
| Development of Crop Cover, mulch, soil protection fabrics and other products using Sunnhemp             |
| and Banana Fibre (Sponsored by NTTM, GoI)   |
| Development of 3D High Performance Knitted Sports Textiles with Thermo-Physiological                    |
| Comfort and Impact Protective Properties (Sponsored by NTTM, GoI)                                       |
| Cellulose based indigenous high Clo value and low density surface modified natural fibre for            |
| developing thermal layers of extreme cold weather clothing (Sponsored by NTTM, GoI)                     |
| Development of Ceramic and UHMWPE Textile based Hybrid Polymer Composite Armor                          |
| jointly with MNIT, Jaipur (Sponsored by NTTM, GoI)  |

#### RESEARCH PAPER PUBLISHED

| S.<br>No. | Title   | Author(s)   | Publication/Place     | Date             |
|-----------|---|---|-----------------------|------------------|
| 1         | Optimization of weave structure and filament fineness on the basic comfort properties of the fabric | Sugandha<br>Sahni, Rita<br>Kant and M. S.<br>Parmar | Asian Textile Journal | Aug-Sept<br>2023 |

#### **CONSULTANCY CORNER**

- Inspection: T Shirt (2 units), Terry Towel (3 units), Blanket (1 unit), Twill Weave Wool, Fabric Cloth Serge Dress (1 unit), Light Weight Sleeping Bag (Improved) (2 units), Waist Belt Nylon with Buckle and Rings (1 unit), Handloom Cotton Bed Durries (1 unit), Rucksack 30 Ltrs. (1 unit), Pouch for Ammunition & Grenades (1 unit) & Cloth Gabardine (1 unit)
- \* Fabric Defect analysis (2 units)
- \* Manpower Assessment (2 units)
- Energy Audit (7 units)
- Setting up of 1200 KLD ZLD plant in Bhilwara (1 unit)
- Pollution prevention and effective waste management of Panipat Textile Cluster (1 unit)

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| 2. | SG Infosystems                 | CSE | Ganesh Kumar   |
|----|--------------------------------|-----|--|
| 3. | ANR Software Pvt. Ltd.         | CSE | Nishita Rani   |
| 4. | InnoBit Systems Pvt. Ltd.      | CSE | Jatin, Jyoti Kumari, Shubham Dixit, Siddhant Singh, Utkarsh Teotia, Yogesh Kumar |
| 5. | Vivo Mobile India Pvt.<br>Ltd. | CSE | Sanjana Chaturvedi   |
| 6. | DigiTech Syatems Pvt. Ltd.     | CSE | Twinkle  |

#### **Recent Technology Transfer by NITRA**

- ☐ 'Technology to process raw banana fibre' is transferred to Gencrest Bio Products Private limited, Mumbai.
- ☐ 'Flash resistance hood for Indian Navy'- Technology transferred to M/s Aero Garment.
- ☐ 'Improved version of body protector for riots control'- Technology transferred to M/s. G. M. Trading and Applied Systems.
- ☐ 'Coat combat disruptive'- Technology transferred to Kusumgar Corporates Pvt. Ltd. and Radnik Exports.
- ☐ 'Reusable sanitary pads and diapers'- Technology transferred to Kaytent Industries.

#### NITRA Developments Already Commercialized Through Technology Transfer

- ☐ Technology of "Synthetic blood penetration tester" to Asian Test Equipments, Ghaziabad
- ☐ Technology of "Development of improved stab and impact resistant material for antiriots body protector" to Applied Systems Mumbai
- ☐ Technology of "Work wear for Cement Porters" to M/s. Arvind Ltd., Ahmedabad
- ☐ Technology of developing "Multi Layered Flame & Thermal Resistance Fabric for Fire Fighter Clothing" to Arvind Ltd. and Aeronav Industrial Safety Appliances.
- ☐ Technology of "NITRA Electronic Drape meter" to Dinu Technologies, Coimbatore
- ☐ Technology of "NITRA's Fabric Smoothness Tester" to Multiflo Instruments Pvt. Ltd., Navi Mumbai.
- ☐ Technology to produce "Seamless low cost jute carry bags" to G. D. Industries, Kolkata
- ☐ Study material for "Fabric Defect Analysis" to Textile Sector Skill Council, New Delhi



#### 18th Convocation Ceremony at NITRA

NITRA's 18th Convocation Ceremony was held on Saturday, 23rd Sept.'23 at NITRA, Ghaziabad. Dr. Roopak Vasishtha, CEO & DG, Apparel Made-ups & Home Furnishing SSC was the Guest of Honour. The dais was shared by eminent industrialists and NITRA Council office bearers Sh. Raj Kumar Jain, Chairman, Sh. Vidit Jain, Deputy Chairman, and Sh. Sandeep Hora, Vice Chairman. Also present were Dr. Arindam Basu, Director General NITRA, Dr. M.S.Parmar, Director NITRA and other invitees from the industry. About 130 students were awarded certificates and medals in the convocation. While speaking, DG NITRA apprised about the many industry oriented regular and DLP programs that NITRA offers on garment manufacturing, designing, merchandising, and quality assurance. So far NITRA has completed 83 batches of full time and 68 batches of DLP and has trained and placed over 3,300 students in various renowned garment/textiles exports companies.

The Guest of Honour stated that India's growth in textile industry will continue in the coming years and to cope with this, Indian industry needs skilled manpower at all levels. He opined that many of the students passing out of engineering colleges in India are not employable but NITRA programs will help changing this scenario. Chairman NITRA mentioned about the key factors that are fuelling the growth of this industry in India whilst the Dy. Chairman and Vice Chairman NITRA expressed happiness over the distance learning programs. They also appreciated the fact that many leading textile and garment export houses, testing labs and buying agencies regularly recruits NITRA students.





#### NEW AI&ML Laboratory Inaugurated at NITRA Technical Campus

The Artificial Intelligence & Machine Learning lab, that constitutes an essential part of the B.Tech. Program in Computer Science and Engineering (CSE) with a specialization in AIML, was inaugurated on 23rd September 2023. The inauguration ceremony was graced by Shri Raj Kumar Jain, Chairman, Sh. Vidit Jain, Dy. Chairman and Sh. Sandeep Hora, Vice Chairman in presence of Dr. Arindam Basu, DG, NITRA and other dignitaries.





Placement Activities (B. Tech) at NITRA Technical Campus

| S.<br>No. | Recruiting Company     | Branch | Student's Name |
|-----------|------------------------|--------|----------------|
| 1.        | Vardhman Spinning Ltd. | TT     | Shivam Maharaj |

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#### **TESTING ZONE**

During the period, total 1580 samples were tested in all the labs as par following table:

| S. No. | Lab Name                         | No. of samples tested |  |
|--------|----------------------------------|-----------------------|--|
| 1      | Physical Quality Evaluation Lab  | 715                   |  |
| 2      | Chemical Quality Evaluation Lab  | 650                   |  |
| 3      | Heat & Flame/Microbiology Lab    | 650                   |  |
| 4      | Polymer & Technical Textiles Lab | 155                   |  |
| 5      | Eco Lab                          | 60                    |  |
| 6      | Environment Lab                  |                       |  |

No. of Fabric Defect Analysis under taken during the period: 2

#### **GLIMPSES**

## NITRA signs MOU with M/s. Sahifab Private Ltd.

MOU was signed with M/s. Sahifab Private Limited, a start-up company, engaged in production of natural fibre yarn & fabrics, on July 12, 2023 enabling them to utilize Flax Spinning Facility at NITRA.



Faculties (Textile & Fashion Technology) of Kumaraguru College of Technology, Coimbatore attended Training Program on "Protective Textiles" at NITRAfrom July 19-25, 2023







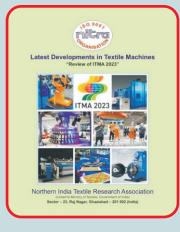
Dr. Arindam Basu, DG NITRA chairs a session on "Standards of Protective Textiles and Workwear" on 25<sup>th</sup> July, 2023 in 6<sup>th</sup> National Conclave on Standards & Regulations for Technical Textiles, organized by MoT, BIS and FICCI at FICCI House, New Delhi

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Under NTTM Scheme, six B. Tech (3<sup>rd</sup> year Textile Technology) Students two each from NIT, Jalandhar; KCT, Coimbatore; and ACT, Chennai; the Renowned Institutes get Internship Training at NITRA from June 25 to July 26, 2023







## NITRA releases a booklet LATEST DEVELOPMENTS IN TEXTILE MACHINES "Review of ITMA 2023"

It consists of latest developments in Spinning & Non-woven systems, Weaving, Knitting & Garment Manufacturing, Quality Control Instruments and Sustainability & Circularity in Textile Wet Processing. The aim is to disseminate Textile & Clothing manufacturing machinery & equipment knowledge to the industry who do not have opportunity to visit ITMA 2023 at Milan, Italy.

NITRA Scientist Dr. Prakash Arun Khude conferred with a Ph.D Degree from IIT Delhi

Dr. Prakash Arun Khude, Senior Scientific Officer, NITRA, was honoured with a doctoral degree in Textile Engineering by Prof. T. R. Sreekrishnan, Deputy Director (Operations), IIT Delhi during the 54th Annual Convocation of the Indian Institute of Technology, Delhi held on August 12, 2023.





# Program on IPR at NITRA Technical Campus

Program on Intellectual Property Rights (IPR) was organized on 1st Sept. 2023 for the faculty members of NITRA Technical Campus. Ms. Neha Goyal, MD, Unipatrde Consultants LLP and Patent Attorney conducted the program. During the program, every step of filing a patent, its various reference points, relevant

IPR acts and safeguarding creators and other producers of their intellectual commodity, goods and services were explained at length.

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## Program on NAAC Accreditation at NITRATechnical Campus

Program on NAAC Accreditation was organized for the faculty members of NITRA Technical Campus on 1st Sept. 2023. Dr. Ramendra Singh, Dean, Accreditation, RKGIT, Ghaziabad conducted the program & covered various aspects of NAAC accreditation, Outcome

Based Learning, topics like what is accreditation, benefits of accreditation, difference between NAAC and NBA, processes and seven steps of NAAC accreditation.

#### Program on "Rieter Spinning System - Recent developments in Spinning"

Program on latest developments in textiles, NITRA Technical Campus arranged industry-institute program in which Rieter India presented about their new developments in spinning machines on 25<sup>th</sup> September 2023. Around 30 participants attended the program.

#### NITRA signs MOU with Indus Integrated Information Management Limited

NITRA and Indus Group have agreed to partner based on their mutual strengths and propose the Consortium as Knowledge Partner and Project Management Consultants for the purpose of addressing the requirements of the industry on July 31, 2023.

NITRA celebrates 77<sup>th</sup> Independence Day on 15<sup>th</sup> August, 2023





#### NITRA's 47th Annual General Meeting

The 47th Annual General Meeting (AGM) was held on 23<sup>rd</sup> Sept.'23 at NITRA Campus, Ghaziabad. The members met to form NITRA's Council of Administration for the year 2023-24. They have unanimously consented to continue with the existing leadership team for the year 2023-24. As a result of that, Sh. Raj Kumar Jain, MD, Zonac Knitting Machines (P) Ltd. will be continuing his charge as Chairman, NITRA. Sh. Vidit Jain, Joint. MD, Pasupati Spg. & Wvg. Mills Ltd. and Sh. Sandeep Hora, C.E.O of Aeronav Industrial Safety Appliances will also be continuing as Dy. Chairman and Vice Chairman of NITRA respectively. The Chairman and his team thanked everybody while taking over the charge for the second consecutive time.







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