



The Institute of Textile Science

Incorporated, Canada 1956

**2026 Symposium and 69th AGM
March 3 & 4, 2026**

Locations:

- **Montreal**
Université de Montréal, École de Santé Publique: room 3019 (3rd floor)
7101, avenue du Parc, Montreal, QC, Canada
Please note that parking is limited: use of the subway is suggested
- **Edmonton**
Cascade Room, Students' Union Building, University of Alberta, Edmonton, AB, Canada
- **Raleigh**
Room 2431, 1020 Main Campus Dr, Wilson College of Textiles, North Carolina State University, Raleigh, NC 27606, USA
- **Remote**
Zoom details sent to remote attendees a few days before the event

Program

Tuesday March 3, 2026

| <u>MT</u> | <u>EST</u> | |
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| 7:45 | 9:45 | Greetings Land Acknowledgements & Welcome words |
| 8 - 8:30 | 10 - 10:30 | <u>Opening Talk</u> Regulatory Changes for the Textile Industry. <i>Rajath Kumar</i> , Vice President - Global Softlines, Intertek, USA. |
| 8:30 to 9:30 | 10:30 to 11:30 | <u>Comfort & Protection</u> |
| 8:30 - 9 | 10:30 - 11 | Pressure Effects on Thermal Resistance in Nonwoven Sleeping Bag Textiles. <i>Dr. Stéphane Hallé</i> , Professor, École de technologie supérieure, QC. |
| 9- 9:30 | 11- 11:30 | Beyond PFAS: Sustainable Nanofiber Membranes for Protective Textile Applications. <i>Dr. Zahra Abdali</i> , Chief Technology Officer, PlasmaGear, QC. |
| 9:30 to 10:15 | 11:30 to 12:15 | <u>3-min poster presentations</u> |
| 10:15 - 11 | 12:15 - 1 | Lunch break in Montreal and Raleigh / Poster session in Edmonton |
| 11-12 | 1 to 2 | <u>Inclusive & Accessible Fashion</u> |
| 11 - 11:30 | 1 - 1:30 | Collaboration, Creativity, and Care in Fashion Education. <i>Caron Phinney</i> , Assistant Professor, Alida Finnie & Amelia June Ferguson, Toronto Metropolitan University, ON. |
| 11:30 - 12 | 1:30 - 2 | FashionAble: Innovation in Accessible, Adaptive, & Universal Fashion Design. <i>Chloë Angus</i> , Fashion Designer & Creative Director, Chloë Angus Design, BC. |
| 12 to 12:15 | 2 to 2:15 | <u>3-min poster presentations</u> |
| 12:15 - 1 | 2:15 - 3 | Lunch break in Edmonton / Poster session in Montreal and Raleigh |
| 1 - 2 | 3 - 4 | <u>Students' Research Corner</u> |
| 1 - 1:15 | 3 - 3:15 | Reducing microplastic fiber shedding from hand-washed polyester. <i>Amanuel Goliad</i> , Samuel Au, Kevin Golovin, University of Toronto, ON. |
| 1:15 - 1:30 | 3:15 - 3:30 | Proof-of-Concept of an End-of-Life Sensor for Liquid-Repellency Monitoring of Medical Gown Fabrics. <i>Elaine Phu</i> , Erika Kaviannasab, Lelia Lawson, Dan King, Patricia Dolez, University of Alberta, AB / Davey Textile Solutions, AB. |
| 1:30 - 1:45 | 3:30 - 3:45 | Setup Development and Comparative Analysis of the Infrared Performance of Fabrics. <i>Rupali</i> , Adrian Lai, Robert Gathercole, Patricia Dolez, University of Alberta, AB / lululemon, BC. |
| 1:45 - 2 | 3:45 - 4 | Use of Parametric Design to Support Garment Customization for Individuals with Atypical Body Size/Shape. <i>Justin Raines</i> , Isabel Prochner, Yuanqing Tian, Patricia Dolez, Virginia Polytechnique and State University, VA / North Carolina State University, NC / University of Alberta, AB. |
| 2 to 3:30 | 4 to 5:30 | <u>69th Annual General Meeting</u> |
| 6 pm | 6 pm | Reception |

Wednesday March 4, 2026

| <u>MT</u> | <u>EST</u> | |
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| 8 to 9 | 10 to 11 | <u>Sustainability</u> |
| 8 - 8:30 | 10 - 10:30 | Made-in-Canada lyocell fibre from hemp and recycled fabrics. <i>Dr. Patricia Dolez, Professor, University of Alberta, AB.</i> |
| 8:30 - 9 | 10:30 - 11 | Making progress towards 2030 goals at manufacturing facilities. <i>Jimmy Summers, Chief Sustainability Officer, Elevate Textiles, USA.</i> |
| 9 to 10 | 11 to 12 | <u>Students' Research Corner</u> |
| 9 - 9:15 | 11 - 11:15 | Optical Sensor Integrated Textile Platform for Wearable Cardiovascular Function Monitoring. <i>Tharushi Peiris, Arash Shahidi, Demosthenes Koutsogeorgis, Carlos Oliviera, Theo Hughes-Riley, Nottingham Trent University, UK.</i> |
| 9:15 - 9:30 | 11:15 - 11:30 | Textile-Compatible Connectors and Flexible Interconnects for Next-Generation Wearable Electronics. <i>Ayesha Siddika, Amanda C. Mills, North Carolina State University, USA.</i> |
| 9:30 - 9:45 | 11:30 - 11:45 | Smart Wearables for Muscular Chronic Pain Mitigation. <i>Anastasia Skorobogatiy, Alexander Skorobogatiy, Kathirvel Nallapan, John Abbott College, QC / Polytechnique Montreal, QC.</i> |
| 9:45 - 10 | 11:45 - 12 | Evaluating Textile-Based Respiratory Sensors for Non-Invasive Monitoring: A Comparative Study Against Clinical Methods. <i>Sania Aftab, Delaram Sadatamin, Md. Saiful Hoque, Joshua Jerry Chirayath, Salvador Felipe Estrada Ramos, Paulo Antonio Naspud Rojas, Maryam Davoudpou, Azadeh Yadollahi, University of Toronto, ON / University Health Network, ON / Humber Polytechnic, ON.</i> |
| 10 to 11 | 12 to 1 | Lunch break in Montreal and Raleigh / Poster session in Edmonton |
| 11- 12 | 1- 2 | <u>Textile manufacturing</u> |
| 11 - 11:30 | 1 - 1:30 | Improve recycled yarns by a control loop for rotor spinning. <i>Pierre Lanfer, Research Assistant, Staple Fibre Technologies, Institut für Textiltechnik of RWTH Aachen University, Germany.</i> |
| 11:30 -12 | 1:30 - 2 | Weaving the future: sustainable fiber innovation does not need to be an oxymoron. <i>Dr. Svetlana V Boriskina, Director, META Research Lab, Massachusetts Institute of Technology, USA.</i> |
| 12 to 1 | 2 to 3 | Lunch break in Edmonton / Poster session in Montreal and Raleigh |
| 1-2 | 3 - 4 | <u>E-Textiles</u> |
| 1 - 1:30 | 3 - 3:30 | Textile-based soft robotics. <i>Dr. Xiaomeng Fang, Assistant Professor, North Carolina State University, USA.</i> |
| 1:30 -2 | 3:30 - 4 | Accelerating Advanced Textile Product Development & Manufacturing Readiness: AFFOA's Role in Scaling E-Textile Systems. <i>Dr. Guan Wang, Technology Manager, AFFOA, USA.</i> |
| 2-3 | 4 - 5 | <u>Students' Research Corner</u> |
| 2 - 2:15 | 4 - 4:15 | Balancing Delignification and Cellulose Integrity in Hemp-Derived Pulps for Regenerated Textile Fibres. <i>Lelia Lawson, Bernardo A. Souto, Wade Chute, Patricia I. Dolez, University of Alberta, AB / Zylotex, AB / Plantae Technologies, AB.</i> |
| 2:15 - 2:30 | 4:15 - 4:30 | Toward sustainable air filtration: development of electrospun eco-responsible filtration media. <i>Adnan Masri, Loïc Wingert, Ludwig Vinches, Université de</i> |

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| 2:30 – 2:45 | 4:30 – 4:45 | Experimental Evaluation of Combustion-Derived Contaminant Deposition on Flame-Resistant Fabrics Used in Wildland Firefighting. <u>MD. Momtaz Islam</u> , <u>Habeeb H. Al-Mashala</u> , <u>Elijah G. Schnitzler</u> , <u>Adriana Petrova</u> , <u>Robert J. Agnew</u> , <u>Preston Larson</u> , <u>Lynn M. Boorady</u> , <u>Sumit Mandal</u> , <u>Oklahoma State University, USA</u> . |
| 2:45 – 3 | 4:45 – 5 | Manufacturing Flame-Resistant Lyocell Fibre from Flame-Resistant Cotton Waste Fabrics through Optimized Pulping Process. <u>K M Abdun Noor</u> , <u>Lelia Lawson</u> , <u>Bernardo Araujo Souto</u> , <u>Md Abu Sayed</u> , <u>Dagem Z. Haddi</u> , <u>Frehiwot T. Hailu</u> , <u>Abdelhamid S. Himat</u> , <u>Pramod M. Gurave</u> , <u>Khalid Ahmed</u> , <u>Jane Batcheller</u> , <u>David C. Bressler</u> , <u>Patricia I. Dolez</u> , <u>University of Alberta, AB</u> . |
| 3 pm | 5 pm | Closing remarks from Sogol Asghari , President, Institute of Textile Science. |
| 3:30-4:30 pm | | <u>Tour at University of Alberta - Protective Clothing and Equipment Research Facility (PCERF)</u> |

POSTER PRESENTATIONS

In Raleigh

Improving Charge Stability in PLA Meltblown Electret Filters. Negar (Nora) Karimian Ardestani, Raoul Farer, Behnam Pourdeyhimi, North Carolina State University, USA.

Graphene-based electrospun sensor for low stain sensing applications. Md. Abdullah Al Mamun, Leandro Maio, Anura Fernando, Prasad Potluri, University of Manchester, UK.

In Montreal

Automated Morphological Characterization of Recycled Cotton Textiles for Loose-Fill Insulation Production via Optical Microscopy and Computer Vision. José Carlos Ferreira Junior, Leyla Lardja, Nicole R. Demarquette, Lucas A. Hof, École de Technologie Supérieure, QC / Vestechpro, QC.

Smart Textile for Non-Invasive Core Body Temperature Estimation During Exercise. Md. Saiful Hoque, Mathys Mulot Hauriez, Antonio Bandur, Azadeh Yadollahi, University of Toronto, ON / University Health Network, ON.

A Systematic Review of Sensing Modalities and Integration Challenges in Textile-Based Sweat Lactate Monitoring. Mathys Mulot- -Hauriez, Saiful Hoque, Azadeh Yadollahi, University of Toronto, ON / University Health Network, ON.

Revaluing Waste Wool: Exploring Sustainability Through Felting and Thinking-Through-Making. Wen Shen, Toronto Metropolitan University, ON.

Electronic Textile Platforms for Cardiorespiratory Monitoring: Integration Strategies, Signal Performance, and Clinical Validation. Delaram Sadatamin, Md. Saiful Hoque, Ivana Culjak I, Sania Aftab, Pedram Karimi, Azadeh Yadollahi, University of Toronto.

Comfort-Oriented Wearable ECG Garment: Textile Electrode Performance for Heart Rate Accuracy and Waveform Fidelity. Delaram Sadatamin, Atousa Assadi, Ivana Culjak, Sania Aftab, Md. Saiful Hoque, Baptiste Garnier, Pedram Karimi, Saba Sadatamin, Azadeh Yadollahi, University of Toronto.

In Edmonton

Insights into the Persistence of Fluorine-Containing Finishes on Fire Protective Fabrics. Rajitha Botheju, Md. Saiful Hoque, Patricia I. Dolez, University of Alberta, AB.

From Hemp Bast to Lyocell Fibre: Optimization of Dissolving Pulp Preparation. Md. Abu Sayed, Lelia Lawson, Bernardo A. Souto, K. M. Abdun Noor, Dagem Z. Haddis, Frehiwot T. Hailu, Pramod M. Gurave, Abdelhamid S. Himat, Jane Batcheller, David C. Bressler, Patricia I. Dolez, University of Alberta, AB.

Photocatalytic Activity of UV-Assisted CuBi₂O₄ Nanorods. Asif Jahan Anu, Md Shafayatul Islam, S M Khalid Hossain, Ahmed Sharif, University of Alberta, AB / Bangladesh University of Engineering and Technology, BD.

Exploring the fabrication of graphene-Based reusable electrodes for neurostimulation applications using solvent replacement. Maria Sawiak, Kirankumar Kuruvinashetti, Vivian Mushahwar, Patricia I. Dolez, University of Alberta, AB.

Challenges and Opportunities of Fire Protective Clothing Fit, Function, and Safety Among Female Firefighters. Jemma Forgie, Patricia Dolez, University of Alberta, AB.

Manufacturing Cellulose Pulp for Lyocell Fibre from Flame Resistant Cotton/Nylon Waste Fabric. Khalid Abdi Ahmed, K M Abdun Noor, Frehiwot T. Hailu, Abdelhamid S. Himat, Pramod M. Gurave, Bernardo Araujo Souto, Md Abu Sayed, Lelia Lawson, Patricia I. Dolez, University of Alberta, AB.

Test method of the resistance of joule heating textiles to fatigue bending. Hamdi Ben Khelifa, Patricia I. Dolez, University of Alberta, AB.

Smart Garment Prototype for Muscle Expansion Monitoring During Resistance Training. Melwin Chacko Moncy, Elena Kosareva, Mahdi Tavakoli, Patricia I. Dolez, University of Alberta, AB.

Mapping the electrospinning parameter space for bead-free PAN/N-halamine composite nanofibres. Pramod M. Gurave, Nafiseh Hedayati, Patricia I Dolez, University of Alberta, AB.

Exploring Daily Life Challenges in Individuals with Musculoskeletal Weakness: Informing Adaptive Clothing Design. Elena Kosareva, Millie Yates, Madison Thompson, Isabel Prochner, Patricia I. Dolez, University of Alberta, AB / Toronto Metropolitan University, ON / Virginia Polytechnique and State University, VA.

Extraction of Bio-based Glycerol from Catfish for Salt-free Reactive Dyeing of Cotton and Dyed Fabric Performance Evaluation. A K M Nayab Ul Hossain, Amit Kumar Ghosh, Salma Katun Sela, Md Sabbir Hossain, Mohammad Mashud, Ashikur Rahman Antor, Shekh Md. Mamun Kabir, Md Rashedul Islam, Patricia I. Dolez, University of Alberta, AB / Khulna University of Engineering & Technology, BD / Jashore University of Science and Technology, BD / Bangladesh University of Textiles, BD.