



2nd INTERNATIONAL SYMPOSIUM 2024

IGNITING INNOVATION FOR SUSTAINABLE TEXTILES

NOVEMBER 19–21, 2024

VENUE: ZOOM PLATFORM



**UNU
FLORES**

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STRAUSS

Program

The whole program is split into three themes namely “Resources and Their Nexuses in Textile Industry”, “Special Sustainable Tools for Sustainability Assessment in Textile Industry”, and “Water and Waste Management in Textile Industry” aligned with the name of the courses offered by CSTI that explores the latest innovation, challenges, and solutions in these segments to create a sustainable textile industry. Moreover, there will be two panel discussions on textile sustainability with the prominent experts. As creativity, technology, and know-how are necessary, these three sessions will play a role in achieving a sustainable future of the textile industry along with SDGs through the interdisciplinary engagement of world-class personnel.

Theme 1: Resource Nexus in Textile Industry

Related SDG Goals



Theme 2: Sustainability Assessment

Related SDG Goals



Theme 3: Water and Waste Management

Related SDG Goals



Day 1: 19th November, 2024

Session 1: Inauguration of the Symposium & Keynote Lecture

Zoom Link: [Inauguration of the Ceremony](#)

Moderator: Noor-E-Farzana Annesha, Iffat Ara Anannya

Recitation of Quran: 2.00–2.05 PM

Activity	Resource Person	Time
Inauguration Speech	Prof. Dr. Lal Mohan Baral, Project Coordinator, CSTI, DTE, AUST	2.05–2.15 PM
Overview of CSTI Project	Dr. Mohammad Tajul Islam, Chair Holder, CSTI, DTE, AUST	2.15–2.25 PM
Overview of AUST & Department	Engr. Emdadul Haque, Project Administrator (CSTI) & Head, DTE, AUST	2.25–2.35 PM
Keynote and Q&A	Prof. Edeltraud Guenther, Director, UNU–FLORES, Germany Title: Sustainability transformation in the textile industry: A resource nexus perspective	2:35–3:15 PM
Speech of Special Guest 1	A representative from Engelbert Strauss/ Johannes Froester, PM, International Service, GIZ	3.15–3.30 PM
Speech of Special Guest 2	Prof. Dr. Mustafizur Rahman, Ex-Treasurer, and Founding Head, DTE, AUST	3:30- 3.45 PM
Speech of Special Guest 3	Representative from GIZ	3:45–4:00 PM
Chief guest	Prof. Dr. M. Shamsher Ali, Member, Board of Trustees, AUST Ex-VC of Open University and Southeast University	4:00- 4:15 PM
Speech of Chair of the Program	Prof. Dr. Md. Ashraful Hoque, Vice-Chancellor, AUST	4:15- 4: 30 PM

Day 2: 20th November, 2024

Session 1: Technical Paper Presentation based on Theme 1 & 2

Zoom Link: [International Textile Symposium Day 1](#)

Moderator: Noor-E-Farzana Annesha

Session Chair: Prof. Dr. Lal Mohan Baral

Presentation Title	Presenter	Time
Renewable Energy Integration in Bangladesh's Textile Industry: Analyzing Opportunities Amidst Challenges	Mst. Nadiya Noor, American International University Bangladesh (AIUB)	9.00 – 9.15 AM
Hydrogen Cells in Bangladesh's Textile Sector: A Comprehensive Examination of Opportunities and Challenges	Sunipun Seemanta, American International University Bangladesh (AIUB)	9.15–9.30 AM
Enhanced Safety and Monitoring for Special Needs Children Through Smart Textiles with Integrated GPS and Camera Systems.	Md. Rafiqul Islam, Bangladesh University of Textiles, Bangladesh	9.30–9.45 AM
Valorizing of Post-Consumer PET Bottles into Functional Fabrics: Preparation and Characterizations	Md. Tanvir Hossain, Dhaka University of Engineering and Technology	9.45–10.00 AM
Physicochemical Properties and Applications of Alginate in Smart Materials and Cosmetic Textiles	Md. Tanvir Hossain , Dhaka University of Engineering and Technology	10.00– 10.15AM
Integration of Hydro Power in Bangladesh's Textile Industry: Challenges and Opportunities for Sustainability	Tanisha Fairouz, American International University Bangladesh (AIUB)	10.15-10.30 A.M
Progress in conductive materials for smart textiles	Md. Mostafizur Rahman, Dhaka University of Engineering and Technology	10.30-10.45 A.M
Correlation of Air Gaps and Dynamic Postures in Human Body-Clothing System: A Numerical Approach	Rashed Al Mizan, Assistant Professor, DTE, AUST	10.45-11.00 A.M

	PhD fellow, TUD, Germany	
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Session 2: Panel Discussion

Moderator: Dr. Mohammad Tajul Islam, Chair Holder, CSTI

Title	Resource Person	Time
Challenges and Opportunities of Sustainability Certifications in Apparel Industries	Presenter: Ms. Rabeya Sultana , Sustainability Manager, Hohenstein Institute Bangladesh	11.00–11.20 AM
	Panelists: Mr. Kamal Hossain , GM, GSCS, Bnagladesh Mr. Rafiqul Islam , Manager, SGS, Bangladesh Mr. Auyan Biswas , Manager, Control Union Certifications B.V. Nur E Alam Anik , Country Manager, GCL Assesment Service Ltd.	11.20–11.40 AM

Session 3: Invited Talk

Session chair: Professor Dr. Md. Saifur Rahman, Professor, Daffodil International University, Bangladesh

Title of the Talk	Invited Speakers	Time
Eco Costs / Value Ratio (EVR)	Dr. Natasha van der Velden , Independent Researcher, The Netherlands	12.00–12.15 PM
Social Sustainability in the Textile Supply Chains	Dr. Enrico Fontana , Cranfield University, UK	12.15–12.30 PM

Lunch & Prayer Break: 12.30–1.30 PM

Session 4: Keynote Speech

Session chair: Professor Dr. Ayub Nabi Khan, Pro-VC, BGMEA University of Fashion and Technology, Bangladesh

Keynote title	Resource Person	Time
Sustainable Textiles and Waste Management in RMG Industries	Dr. Mubarak Ahmad Khan , Scientific Advisor, Bangladesh Jute Mills Corporation	1.30–2.00 PM 2.00–2.10PM(Q&A)

Session 5: Session on Resource Nexus approach by UNU-FLORES

Special Session		Time
Session Title	Presenter	
A Resource Nexus approach in the textile sector	Representative from UNU-FLORES	2.30–3.00 PM

Session 6: Poster Presentation

Session Chair: Prof. Dr. Ummul Khair Fatema

Judges: Dr. Ummul Khair Fatema, Prof. BuTex, Rashed Al Mizan, TUD, Germany, Md. Ruhul Amin, Asso. Prof. AUST, Dr. Arun Kanti Guha, Prof. SEU

Poster Presentation		Time
Poster Title	Presenter	
Exploration & Innovation of Potato-based Natural Flame-Retardant Textiles	Nure Arfi, AUST	3.00–3.10 PM
Study of Adsorption & Equilibrium Isotherm of Reactive Dye Removal from Aqueous Solution Using Eggshell Biomass Adsorbent	Yousuf Mahmud, AUST	3.10–3.20 PM
Study on the Effect of Natural Rubber as Binder on Pigment Printing in Combination with Synthetic Binder	Sayef Ahmed, AUST	3.20–3.30 PM
QR Code Printing on Apparel as an Alternative to Product Labels	Humayra Salam Arshi, AUST	3.30–3.40 PM
Towards Sustainable Consumption and Production: A Focus on Bangladesh's Leather Tanning Industry	Mongsathowai Marma, AUST	3.40–3.50 PM

Session 7: Application of Photovoltaic in Agriculture

Session Chair: Dr. Mohammad Sarwar Morshed, Prof, AUST

Special Session		Time
Session Title	Presenter	
Feasibility and Economic Viability of Horticulture	Dr. Max Trommsdorff, Head of Group Agrivoltaics; Fraunhofer Institute for Solar Energy Systems ISE	4:00 pm- 6.00 pm

Day 3: 21st November, 2024

Session 1: Technical Paper Presentation based on Theme 3

Zoom Link: [International Textile Symposium Day 2](#)

Moderator: Iffat Ara Anannya

Session Chair: [Dr. Mohammad Abbas Uddin Shiyak, Asst. Prof. BuTex](#)

Presentation Title	Presenter	Time
Characterization of Benzoyl peroxide treated and polymer-coated sustainable jute fabric for the use of Geo-Technical purposes	Ms. Nasrin Akter, Assistant Professor, DTE, AUST	9.00 – 9.15 AM
Identifying and Overcoming Critical Barriers to Circular Economy Transition in the Textile Industry	Md. Abidur Rahman Asif, Hameem Group	9.15–9.30 AM
Fabric Waste Reinforced Bio-Composite: A Sustainable Flame Retardant using Banana Peel	Abdullah Al Fariz, Northern University of Bangladesh	9.30–9.45 AM
Sustainable Bleaching of Juton Fabric	Md. Monowar Hossen, BUTEX	9.45–10.00 AM
Predicting the Stitch Density of Finished Fabrics Using Weft Blended Grey Knit Fabrics	K. M. Elias, Jahangirnagar University, and DBL	10.00–10.15 AM

otton Knit Fabric Coloration with Tamarind using Bio mordants as a Greener Alternative to Metallic Mordanting	Sadia Afrin, Port City International University,	10.15– 10.30 AM
Building a Sustainable Supply Chain: The Role of Sustainable Supplier Selection in Bangladesh's Apparel Industry	Md. Mahfujul Haq, AUST	10.30– 10.45 AM
A Statistical Expedition on the Characteristics of Textile Wastewater Assessing the Aftermath on Environment and Urban Civilization	Md. Jubairul Alam, American International University Bangladesh	10.45– 11.00 AM

Session 2: Panel Discussion

Moderator: Dr. Mohammad Tajul Islam, DTE, AUST

Title	Resource Person	Time
Sustainability Expectations of Global Fashion Brands: How to Meet Them	Presenter: Mr. Moyeen Chowdhury , Country Manager, PUMA	11.00–11.20 AM
	Panelists: Mr. Moyeen Chowdhury , Country Manager, PUMA Biplob Barua , GM, Strategic HR, Urmi Group Mr. A.B.M Faqrul Alam , Head of Sustainability Department, Urmi Group Mr. Syful Alam Mallick , Sustainability Expert. Mr. Zakir Hossen , DGM, Sustainability, Noman Group Mr. Mashook Chowdhury , Senior Manager, Sustainability, DBL Group	11.20–11.40 AM

Session 3: Invited Talks

Session chair: Dr. Nitai Chandra Sutradhar, Prof. Green University and Ex-VC, BUTEX

Title of the Talk	Invited Speakers	Time
Sustainability transformation in the textile industry: A policy briefing for environmental resource practices	Mr. Komol Gomes , UNU–FLORES, Germany	12.00 P.M- 12:15 P.M
Cost Benefit Analysis Green Chemistry	Mr. Shamsul Arefin , GIZ Bangladesh	12.15–12.30 PM

Lunch & Prayer Break: 12.30–1.30 PM

Session 4: Keynote Lecture

Session Chair: Prof. Dr. Mustafizur Rahman, Ex-Treasurer and Founding Head, DTE, AUST

Keynote title	Presenter	Time
Sustainability is the Future of the Textile Business	Dr. Michael Rauch , Professor, Hof University, Germany	1.30–2.00 PM 2.00–2.10PM(Q&A)

Session 5: Presentation on Engelbert Strauss

Keynote title	Presenter	Time
Presentation on Englebert Strauss	Representative from Englebert Strauss	2.10–2.30 PM 2.30–2.40PM(Q&A)

Session 6: Closing of the Symposium

Moderator: Noor-E-Farzana Annesha, Iffat Ara Anannya

Activity	Resource Person	Time
Opening Speech	Dr. Mohammad Tajul Islam, Chairholder, CSTI, AUST	3.00- 3.10 PM
Speech of Special Guest 1	Prof. Dr. Engr. Ayub Nabi Khan Pro-Vice-Chancellor, BUFT	3.10- 3.20 PM
Speech of Special Guest 2	Prof. Dr. Mohammed Mahbubur Rahman, Pro-Vice-Chancellor, AUST	3.20- 3.30 PM
Announcement of Best Poster Presentation Award	By Moderator	3.30- 3.40 PM
Speech of Chief Guest	Dr. S.M. Khalilur Rahman, Member, Board of Trustees, AUST and Ex-Member Director, Bangladesh Agricultural Research Council	3.40–4.00 PM
Closing Remarks	Prof. Dr. Lal Mohan Baral Project Coordinator, CSTI, AUST	4.00–4.10 PM
Vote of Thanks/ Session chair	Head, Department of Textile Engineering, AUST	4.10–4.20 PM