

**PROGRAM OF
THE 48th TEXTILE RESEARCH SYMPOSIUM 2021**

December 8th and 9th, 2021, online, Japan

Day 1 (JST) : December. 8 (Wed.)	
13:50~14:00	Opening
14:00~15:00	Session 1: Nano Fibers
15:00~15:30	Session 2: Composite Material
15:30~16:00	Break
16:00~17:00	Session 3:Fiber Science and Engineering
17:00~18:00	Plenary Lecture: Prof. George Havenith, Loughborough University, U.K.
18:00~18:30	Break
18:30~19:30	Session 4:Smart Textile and IoT
19:30~20:30	Session 5:Nonwoven and Industrial Textile
20:30~	Closing
Day 2 (JST) : December. 9 (Thu.)	
10:20~10:30	Opening
10:30~11:00	Memorial Session 1: Dr. Arun Pal Aneja, East Carolina University, USA
11:00~12:00	Session 6:Apparel Science and Protective clothing
12:00~13:30	break
13:30~14:30	Session 7:Textile Testing and Comfort on Textiles products
14:30~15:30	Session 8:Simulation and Virtual Textile
15:30~16:00	Break
16:00~17:30	Session 9:Environment and Sustainability
17:30~18:00	Memorial Session 2: Prof. Jiří Militký, Technical University of Liberec, Czech Republic
18:00~18:30	Break
18:30~19:30	Session 10:Science and Technology of Textile Machinery
19:30~20:00	Session 11:Dyeing and Finishing
20:30~	Closing

Day 1 (JST) : December. 8 (Wed.)

13:50~14:00 Opening

14:00~15:00 Session 1: Nano Fibers

Chairman: Yasuhito Mukai (Nagoya University), Yoshihiro Yamashita (Fukui University)

14:00~14:30 1. Functional nanofibrous materials

Bin Ding

Donghua University, China

14:30~15:00 2. Nanofiber innovations, product development and their commercialization challenges

Zeeshan Khatri

Mehran University, Pakistan

15:00~15:30 Session 2: Composite Material

Chairman: Akio Ohtani (Kyoto Institute of Technology)

15:00~15:30 3. Multiscale Textile Modeling for Composite Manufacturing

Louis Laberge Lebel

Polytechnique Montréal, Canada

15:30~16:00 break

16:00~17:00 Session 3: Fiber Science and Engineering

Chairman: Takeshi Kikutani (Tokyo Institute of Technology), Hiroki Murase (Kyoritsu Women's University)

16:00~16:30 4. Key Structural Factor for High-toughness Property in Silks Revealed by Time-resolved Synchrotron X-ray Scattering Analysis

Taiyo Yoshioka

National Agriculture and Food Research Organization, Japan

16:30~17:00 5. The influence of processing conditions on the behavior during and performance after stretching of poly (ethylene furoate)

Hendrikus A. Visser

Avantium Renewable Polymers, Netherlands

17:00~18:00 Plenary Lecture

Chairman: Shuichi Tanoue (Fukui University)

Physiological Responses of the human body and their interaction with perception and thermal comfort of clothing

George Havenith

Loughborough University, U.K.

18:00~18:30 break

18:30~19:30 Session 4:Smart Textile and IoT

Chairman: Naoki Saiwaki (Nara Women's University), Noriaki Kuwahara (Kyoto Institute of Technology)

18:30~19:00 6. Healthcare digital transformation using smart wearables

Ken Kiyono

Osaka University, Japan

19:00~19:30 7. E-textile materials and devices development for Smart Fashion

Mijung Lee

Kookmin University, Korea

19:30~20:30 Session 5:Nonwoven and Industrial Textile

Chairman: Kim KyoungHou (Shinshu University)

19:30~20:00 8. Characterisation of Fabric Tactile Properties of Nonwoven Topsheets

Ningtao Mao

University of Leeds, U.K.

20:00~20:30 9. Multifunctional behavior of 3D textile materials

Rajesh Kumar Mishra

Czech University of Life Sciences Prague, Czech Republic

20:30 Closing

Day 2 (JST) : December. 9 (Thu.)

10:20~10:30 Opening

10:30~11:00 Memorial Session I

Chairman: Takeshi Kikutani (Tokyo Institute of Technology)

From Textile Terrific to Textile Terrible and Back

Arun Pal Aneja

East Carolina University, USA

11:00~12:00 Session 6:Apparel Science and Protective clothing

Chairman: Hiroki Maru (Japan Women's University), Hajime Tsuji (Kaken Test Center)

11:00~11:30 10. Smart Wearable Interface for Human Health and Safety

Huiju Park

Cornell University, USA

11:30~12:00 11. Improvement of Protective Clothing Design in Japanese Emergency Medical Services by Interdisciplinary Approach

Kaoru Wakatsuki

Shinshu University, Japan

12:00~13:30 break

13:30~14:30 Session 7:Textile Testing and Comfort on Textiles products

Chairman: Sachiko Sukigara(Kyoto Institute of Technology), Hiroyuki Kanai (Shinshu University)

13:30~14:00 1 2. Sweat Simulator for Simultaneous Real-time Measurement of Sweat accumulation, Dripping and Evaporation Rate

Jintu Fan

The Hong Kong Polytechnic University, Hong Kong

14:00~14:30 1 3. The heat and flow transfer through porous fibrous material

Hua Shen

Donghua university, China

14:30~15:30 Session 8:Simulation and Virtual Textile

Chairman: Hidefumi Wakamatsu (Osaka University), Yosuke Horiba (Shinshu University)

14:30~15:00 1 4. Overview of Virtual Textile and Clothing Simulation

Shigeru Inui

Shinshu University, Japan

15:00~15:30 1 5. Fluid dynamic simulation of face masks for evaluating droplet collection performance against COVID-19

Keiji Onishi

RIKEN Center for Computational Science, Japan

15:30~16:00 break

16:00~17:30 Session 9:Environment and Sustainability

Chairman: Shunji Takeuchi (Kyoto Institute of Technology), Teruo Kimura (Kyoto Institute of Technology),
Motoko Uchimaru(Colorloop Co., Ltd.)

16:00~16:30 1 6. Global Manufacturing Trend : Light weighting through 3D weaving and 3D printing towards sustainability

Bijoya Kumar Behera

Indian Institute of Technology Delhi, India

16:30~17:00 1 7. Make/Shift - design research methods for sustainability in Textiles

Michelle Baggerman

ArtEZUniversity of the Arts, Netherlands

17:00~17:30 1 8. Bio-inspired Textiles

Satyadev Rosunee

University of Mauritius, Republic of Mauritius

17:30~18:00 Memorial Session 2

Chairman: Sachiko Sukigara(Kyoto Institute of Technology)

Hand and Complex Quality of Fabrics, Kawabata Approach and Beyond

Jiří Militký

Technical University of Liberec, Czech Republic

18:00~18:30 break

18:30~19:30 Session 10:Science and Technology of Textile Machinery

Chairman: Annie Yu (Kyoto Institute of Technology), Zhu Chunhong (Shinshu University)

18:30~19:00 19. Active training bodysuit for patients with spinal deformity: how to apply passive force and active posture training in functional garment design?

Yip Joanne

The Hong Kong Polytechnic University, Hong Kong

19:00~19:30 20. Fibre Surface Molecular Engineering for Smart Textiles and Wearable Devices

Xuqing Liu

The University of Manchester, U.K.

19:30~20:00 Session 11:Dyeing and Finishing

Chairman: Satoko Okubayashi (Kyoto Institute of Technology), Hidekazu Yasunaga(Kyoto Institute of Technology)

19:30~20:00 21. Resource effective processes for functional and smart textiles

Vincent Nierstrasz

University of Borås, Swedish

20:00~20:30 22. Evaluation of Whiteness: An Important part of Color Quality Control

Michal Vik

Technical University of Liberec, Czech Republic

20:30 Closing