

PROGRAM OF THE 46th TEXTILE RESEARCH SYMPOSIUM AT Mt.FUJI

TEIJIN ACADEMY FUJI
SUSONO CITY, SHIZUOKA PREFECTURE, JAPAN

September 3, 4 and 5, 2018

3th September (Monday)	
11:00~12:00	<i>Registration</i>
12:00~13:00	<i>Lunch</i>
13:00~13:10	<i>Opening</i>
13:10~14:40	<i>Session 1 : Production Technology of Fiber, Yarn and Textiles</i>
14:40~14:55	<i>Coffee break</i>
14:55~16:55	<i>Session 2 : Robotics and Textiles</i>
18:00~19:30	<i>Dinner</i>
19:30~	<i>Welcome Party</i>
4th September (Tuesday)	
8:30~	<i>Registration</i>
9:00~10:30	<i>Session 3 : Design and Quality of Textiles</i>
10:30~10:45	<i>Coffee break</i>
10:45~12:15	<i>Session 4 : Advanced Fiber and Yarn Technology</i>
12:15~13:30	<i>Lunch</i>
13:30~14:30	<i>Session 5 : Composite and Industrial Textiles</i>
14:30~14:45	<i>Coffee break</i>
14:45~16:15	<i>Session 6 : Textiles Science and Engineering</i>
16:15~17:15	<i>Poster presentation</i>
18:00~19:30	<i>Dinner</i>
19:30~	<i>Beer Party</i>
5th September (Wednesday)	
8:30~	<i>Registration</i>
9:00~9:30	<i>Session 7 : Environment and Sustainability</i>
9:30~10:30	<i>Session 8 : Fabric Handle and Sense Evaluation</i>
10:30~11:30	<i>Session 9 : Composite and Industrial Textiles</i>
11:30~11:35	<i>Closing Address</i>
11:35~13:00	<i>Lunch</i>
13:00~17:00	<i>Excursion</i>

3th September (Monday)11:00~12:00 **Registration**12:00~13:00 **Lunch**13:00~13:10 **Opening****13:10~14:40 *Session 1 : Production Technology of Fiber, Yarn and Textiles*****1. Production of non-circular cross-section fibers**Yiwen Chen, Wataru Takarada, Takeshi Kikutani
Tokyo Institute of Technology, Japan**2. Simulation of the sliver linear density behavior in a drawing process**You Huh, Jung Ho Lim, Jong Sung Kim
Kyung Hee University, Korea**3. Water wicking of knit fabric in comparison of ring yarn with of vortex**Tatsumori Matsumoto
Murata Machiney Ltd., Japan**- Coffee Break 15 min -****14:55~16:55 *Session 2 : Robotics and Textiles*****4. Deep reinforcement learning of robotic cloth manipulation**Takamitsu Matsubara
Nara Institute of Science and Technology, Japan**5. Forcibly spinning of bombyx mori silkworm silk ended in a complete failure :Spinning system of domestic silkworm**Yutaka Kawahara
Gunma University, Japan**6. New design of knitted gloves to stimulate hand motor rehabilitation**Raphael Santos, Yuta Yamaguchi, Sachiko Sukigara
Kyoto Institute of Technology, Japan**7. Viscoelastic flow simulation of polymer melts in the cylinder group region for the discussion of carbon fiber bundle impregnation process**Shuichi Tanoue, Hideyuki Uematsu
University of Fukui, Japan18:00~19:30 **Dinner**19:30~ **Beer Party**

4th September (Tuesday)

8:30~ **Registration**

9:00~10:30 **Session 3 : Design and Quality of Textiles**

8. **Suppression of hair photodamage by using bio-reductants**
Hidekazu Yasunaga, Aya Shomura, Martina Viková, Michal Vik
Kyoto Institute of Technology, Japan
9. **The creation of buoyant fabrics by inlay knitting structure**
Nga-wun Li, Chu-po Ho, Kit-lun Yick, Jin-yun Zhou
The Hong Kong Polytechnic University, H.K.
10. **Unit-cell modeling of woven fabrics for digital design of textile**
Atsushi Sakuma, Hikaru Miyaki
Kyoto Institute of Technology, Japan

- Coffee Break 15 min -

10:45~12:15 **Session 4 : Advanced Fiber and Yarn Technology**

11. **A new spinning method and its yarn qualities**
Jong S. Kim, Jung H. Lim, You Huh
Kyunghee University, Korea
12. **Fabrication of microporous active membranes by electrospaying**
Mohanapriya Venkataraman, Rajesh Mishra, Xiaoman Xiong, Jiri Militky, Veerakumar Arumugam
Technical University of Liberec, Czech Republic
13. **Effects of process condition to galvanic traits of battery yarn**
Jungho Lim, Jong Sung Kim, You Huh
Kyung Hee University, Korea

12:15~13:30 **Lunch**

13:30~14:30 **Session 5 : Composite and Industrial Textiles**

14. **High performance fibrous sandwich composites**
Rajesh Mishra, Kasthuri Rajagopala Venkatesh, Jiri Militky, Dana Kremenakova
Technical University of Liberec, Czech Republic
15. **Bending properties of CFRP with braided structure**
Toshiyasu Kinari, Nanang Endriatno, Takuru Suehiro
Kanazawa University, Japan

- Coffee Break 15 min -

14:45~16:15 ***Session 6 : Textiles Science and Engineering***

16. **Research and development of cervical cell harvesting fixtures from the experiment of the adsorption amount**

Hitomi Morino, Kozo Hirata
Kobe Women's University, Japan

17. **Sound absorption behaviour of perpendicular-laid nonwovens**

Tao Yang, Xiaoman Xiong, Rajesh Mishra, Jan Novák, Jiri Militky
Technical University of Liberec, Czech Republic

18. **New definition of relative surface area of nanomaterials**

Jiri Militky, Dana Kremenakova, Rajesh Mishra
Technical University of Liberec, Czech Republic

16:15~17:15 **Poster presentation**

- P1. **Relationship between surging and yarn tension in false twisting machine**

Kouichi Hayashida, Naoto Kaneda
National Institute of Technology Fukui College, Japan

- P2. **Relationship between the number of discs and the twist form in disc friction false twisting machines**

Naoto Kaneda, Ryosuke Sasa
National Institute of Technology Fukui College, Japan

- P3. **Identification of elastic characteristics of yarn woven in various textile**

Shohei Fujita, Atsushi Sakuma
Kyoto Institute of Technology, Japan

- P4. **Improvement in particle retention capacity of ultraporous nanofiber nonwoven fabric by plasma-induced surface modification**

Yasuhito Mukai, Yoshihiro Takayama
Nagoya University, Japan

- P5. **EVOH/PU composite nanofiber**

Yoshihiro Yamashita, Hajime Miyake
Osaka Seikei College, Japan

- P6. **Textile identification using robotic fingers**

Felix Von Drigalski, Ding Ming, Jun Takamatsu, Tsukasa Ogasawara
Nara Institute of Science and Technology, Japan

- P7. **Compression resilience and impact resistant properties of fibre reinforced sandwich composites**

Kasthuri R Venkatesh, Rajesh Mishra, Jana Novotna
Technical University of Liberec, Czech Republic

- P8. **Experimental study on convective heat transfer through fibrous insulators**

Xiaoman Xiong, Mohanapriya Venkataraman, Tao Yang, Rajesh Mishra
Technical University of Liberec, Czech Republic

- P9. **Study on the properties of meltblown nonwovens of poly (lactic acid)/polyamide11 blends**

Jian Han, Feichao Zhu, Bin Yu, Juanjuan Su
Zhejiang Sci-Tech University, China

- P10. **Estimation of hair damage by fluorescence from berberine**
Hiroki Ogihara, Martina Viková, Michal Vik, Hidekazu Yasunaga
Kyoto Institute of Technology, Japan
- P11. **Objective hand evaluation of car interior materials**
Takafumi Hata, Mari Inoue
Kobe University, Japan
- P12. **Durability of Hand in Cotton Terry Fabrics**
Hiroko Yokura, Sachiko Sukigara
Shiga University, Japan
- P13. **An analysis of woven fabric grain for men functional business dress shirt design using stress body area analysis method**
Vannesa Chu, Chu-po Ho, Joe Au, Jin Lam
The Hong Kong Polytechnic University, H.K.
- P14. **Basic Research on Deformation Behavior of Loop in Plain Knitted Fabric under Biaxial Tensile**
Yumi Fujiki, Lina Wakako*
National Institute of Technology, Ishikawa College, Japan
*: Kanazawa University, Japan
- P15. **A design of "Wear promotes exercise effect" with the purpose of improving comfort**
Yoshitaka Niimi, Toshiya Jitsuishi, Hiroyuki Kanai,
Kiyohiro Shibata*,
Antonín Havelka**
Shinshu University, Japan
*: AOKI Inc., Japan
**: Technical University of Liberec, Czech Republic
- P16. **Softness design of head protection gear by nonlinear deformation of porous material**
Yoshiki Umaba, Atsushi Sakuma
Kyoto Institute of Technology, Japan
- P17. **Effects of Braiding Structure on Artificial Hair Lustre**
Elizabeth Kalist Akaro, Sachiko Sukigara
Kyoto Institute of Technology, Japan
- P18. **New geometrical model of four directional 3D braided preforms**
Zunjarrao Kamble, B.K. Behera
Indian Institute of Technology Delhi, India

18:00~19:30 **Dinner**

19:30~ **Beer Party**

5th September (Wednesday)8:30~ **Registration**9:00~9:30 ***Session 7 : Environment and Sustainability*****19. Towards circular economy in textiles - a world with zero waste**Arun Pal Aneja
East Carolina University, USA9:30~10:30 ***Session 8 : Fabric Handle and Sense Evaluation*****20. Relation between fingertip forces and tactile perception of cashmere fabrics**Davaajav Narantogtokh, Sachiko Sukigara
Kyoto Institute of Technology, Japan**21. Hand evaluation of silk thin dress fabrics and washing durability**Mari Inoue
Kobe University, Japan10:30~11:30 ***Session 9 : Composite and Industrial Textiles*****22. Experimentally determined advanced mechanical properties of 3D spacer fabrics**Veerakumar Arumugam, Rajesh Mishra, Dana Kremenakova, Jiri Militky
Technical University of Liberec, Czech Republic**23. Mechanics of advanced 3D woven structural composites**B.K. Behera, Ghanshyam Neje, Manjunath R. N.
Indian Institute of Technology Delhi, India11:30~11:35 **Closing Address**11:35~13:00 **Lunch**13:00~17:00 **Excursion**13:00 Departure Teijin Academy Fuji
14:00~16:00 Tour Hakone Shrine
16:00 Departure Hakone Shrine
17:00 Arrival JR Mishima Station, Dissolution

Chair	Prof. Mari Inoue	(Kobe Univ.)
Memberss	Dr. Hiroyuki Kanai	(Shinshu Univ.)
	Prof. Tetsuya Sato	(Kyoto Inst. Tech.)
	Prof. Sachiko Sukigara	(Kyoto Inst. Tech.)
	Prof. Shuichi Tanoue	(Fukui Univ.)
	Prof. Hidekazu Yasunaga	(Kyoto Inst. Tech.)
	Dr. Yoshihiro Yamashita	(Osaka Seikei Coll.)
	Prof. Hiroko Yokura	(Shiga Univ.)
Adviser	Dr. Mitsuo Matsudaira	(Kato Tech Co.)