In 2019, the Japan Research Association for Textile End-Uses will celebrate its 60th anniversary. To commemorate this special occasion, we will hold the Comfort and Smart Textile International Symposium on September 6th and 7th with the cooperation of related academic societies and associations.

The fourth industrial revolution is upon us, as keywords like AI, robots, IoT, and the cloud herald the rapid advancement of digitalization. The textile industry is also actively developing smart textiles worldwide due to dramatic advances in ICT (information and communication technology). This is expected to lead to developments across many fields, including healthcare and sports, with innovations in nursing and rehabilitation. Amidst these revolutionary changes, we have called on those who are active in fields related to smart textiles and designed this symposium as an occasion for broad, global exchange with the aim of clarifying the challenges that lie ahead in the next decade, as well as furthering developments in the field.

We are deeply grateful for your cooperation and understanding the 60th anniversary of this society, and we are looking forward to your active participation for the Comfort and Smart Textile International Symposium.

Symposium program
Host: The Japan Research Association for Textile End-Uses

Website of symposium: https://cscenter.co.jp/issttcc2019/

Language: English  (Simultaneous interpretation, Only for Day 1)

Registration:
The detail information for registration is in the website: https://cscenter.co.jp/issttcc2019/registration.php
Early registration: On or before 19 July 2019
Late registration: From 20 July 2019

Registration fee:

<table>
<thead>
<tr>
<th>Category</th>
<th>Fee</th>
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<tbody>
<tr>
<td>General (early registration)*</td>
<td>50,000 JP Yen</td>
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<tr>
<td>General (late registration)*</td>
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<td>Students (early registration)*</td>
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<tr>
<td>Students (late registration)*</td>
<td>25,000 JP Yen</td>
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<tr>
<td>Banquet**</td>
<td>8,000 JP Yen</td>
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</tbody>
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* The registration fee does not include hotel accommodation, banquet and any personal activities.

** Banquet is held at Annex to Nara Kasugano International Forum from 18:30 of 6th September (Fri).

Call for poster presentation:
The detail information for registration is in the official website: https://cscenter.co.jp/issttcc2019/abstsubm.php
Deadline for abstract submission: 31 May 2019
Notification of abstract acceptance: The middle of June 2019

Call for company exhibition:
Booth size: Display table of 1800W/600D/700H, Back panel of 1800W/1200H (thumbtacks can be used)
Please apply by e-mail with the following required information: Required information: Company name, Title of Exhibition (e.g., product name), Contact person (affiliation), Contact (address, phone number and email address)
Contact for the company exhibition:
The Japanese Research Association for Textile End-Uses
E-mail: shohikagaku@nifty.com

Contact information:
Symposium Secretariat · CS Center Co., Ltd.
Phone: +81 75 241 9620   Fax: +81 75 241 9692   E-mail: issttcc2019@cscenter.co.jp
Program details
6 September (Day 1)

8:45 - Registration
10:00-10:30 Opening remarks
   Masaru Ohya, President of the Japan Research Association for Textile End-Uses
   Teruo Hori, Chairman of the Smart Textile Research Group
10:30-12:00 Poster presentation and Company exhibition
12:00-12:50 Lunch

**Special invited lecture**
12:50-14:00 “Human Robots and Smart Textiles”
   Hiroshi Ishiguro
   Osaka University (Professor Emeritus), ATR Director of Special Laboratory, ATR Fellow

**Lecture about the forefront of smart textile**
14:00-14:50 “Soft Robotics and Smart Textile”
   Kelly Dobson, Technical Project Leader, Google in USA

14:50-15:00 Break

15:00-15:50 “Industry 4.0 and Smart Textile for Society 5.0”
   Thomas Gries,
   Director of the Technical Textile Laboratory at Aachen Institute of Technology in Germany

15:50-16:40 “Smart Textile in Automobile Assembly”
   Fabian Schroeter and Christian Boekels
   BMW Group in Germany

16:40-17:30 “Deployment of Smart Textile Applications to Medicine”
   Marc Frouin
   Coo of BioSereniti

17:40-18:00 Entertainment (under planning): Japanese Traditional Music Performance (Gagaku)

18:30-20:00 Banquet at Annex to Nara Kasugano International Forum
7 September (Day 2)

Japan-Euro Joint Workshop
8:30- Registration
9:30-9:40 Opening remarks
Hideshi Ueda, Japan Chemical Fibers Association
9:40-10:10 “The development of physiologically-controlled comfortable clothes for all seasons”
Kiyoshi Itao, WIN Representatives / University of Tokyo
Makoto Komazawa, WIN Frontier Director / Shibaura Institute of Technology
10:10-11:10 UP-TEX, European cluster, France
11:10-11:40 TECTERA 1, European cluster, France
11:40-12:30 Lunch
12:30-14:00 Poster session and Company exhibition
14:00-14:30 TECTERA 2, European cluster, France
14:30-15:00 “hitoe® - A Garment type wearable device”
Hirokazu Sugihara, Naoki Asai, Toray Industries, Inc.
“Flexible Conductive Material “COCOMI®” for Biological Information Measuring Clothing”
Euichul Kwon, TOYOBO CO., LTD.
15:00-15:30 “The future outlook on wearable development of Teijin Frontier”
Ryosuke Ehina, TEIJIN FRONTIER CO., LTD.
“The availability for wearable products of stretchable cable, ROBODEN”
Shuhei Ogawa, Asahi Kasei Corporation
15:30-15:50 Break
15:50-16:20 “e-skin -Next Generation Smart Apparel-”
Ichiro Amimori, Xenoma, Co-Founder & CEO
16:20-16:50 “International Standardization for Wearable Electronics”
Satoshi Maeda, IEC/TC124 Japan
16:50-17:00 Closing remarks

Comfort Workshop
9:30-9:40 Opening remarks
9:40-10:20 “Aging and sweating function”
Yoshimitsu Inoue, Osaka International University
10:20-11:20 “Physiological responses of the human body and their interaction with perception and thermal comfort of clothing”
George Havenith, Loughborough University, UK
11:20-12:00 “Brain networks connecting body and mind”
Yasunori Kotani, Tokyo Institute of Technology
12:00-12:30 Lunch
12:30-14:00 Poster session and Company exhibition
14:00-14:30 “Thermal effects of graphene and its application to clothing”
Joo-Young Lee, Seoul National University, Korea
14:30-15:00 “Regulation and adaptation of human sweating”
Tatsuro Amano, Niigata University
15:00-16:00 “Thermal Regulatory Clothing for Personal Thermal Management”
Jintu Fan, Hong Kong Polytechnic University, China
16:00-16:10 Break
16:10-16:40 “Electro conductive polymer coated nanofiber textile electrodes for biomedical signal recordings”
Shingo Tsukada, NTT
16:40-16:55 Panel discussion
16:55-17:00 Closing remarks
The above information is in the website of Nara Kasugano International Forum:
http://www.i-ra-ka.jp/en/