

The 17th Japan-Korea Joint Symposium on Ergonomics 2015

Japan Ergonomics Society & Ergonomics Society of Korea

June 13-14

Shibaura Institute of Technology, Tokyo, Japan

General Chair

Kazuo AOKI & Seong Rok CHANG

Conference Chair

Ryoji YOSHITAKE

Steering Committee

Kentaro KOTANI & Byungchan MIN

Program Committee

Keisuke SUZUKI

Time table for sessions at Room C (#301)

Day	Time	Session No	Session Title
June 13	9:30-10:40	1C1	Living body Instrumentation
	10:50-11:40	1C2	Mental-state Estimation
	14:10-15:20	1C3	QOL
	15:40-16:50	1C4	Life Support
	17:10-18:00	1C5	Operator Behavior
June 14	9:30-11:00	2C1	Support for Seniors
	11:10-12:00	2C2	Car Ergonomics (1)
	13:00-14:10	2C3	HMI
	14:20-15:10	2C4	Car Ergonomics (2)
	15:20-16:30	2C5	Driving Assistance

----- Program of Japan-Korea Joint Symposium 2015 (as of May 19, 2015) -----

9:30-10:40

Opening: Kentaro Kotani (Kansai University)

1C1 Living-body Instrumentation

Chairperson: Youngsuk LEE (Chonnam National University)

1C1-1

Growth curves of Korean girls from 13 to 18 years

Youngsuk LEE

University of Chonnam National

1C1-2

Analysis and usability testing of the 3D scanning method for anthropometric measurement of the elderly

Sunghee AHN, Jinhee PARK, YunJa NAM, Myunghwan YUN

Seoul National University

1C1-3

The effect of carrying a military backpack on a transverse slope and sand surface on lower limb kinetics

Byungju YOO, Sungdo KIM, Andrew MERRTWEATHER, Donald BLOSWICK

University of Utah, Ministry of National Defense

1C1-4

Electronic patient referral system with data exchange and fingerprint patient Identification

Tipporn LAOHAKANGVALVIT, Michiko OHKURA, Tiranee ACHALAKUL, Somchanok TIVATANSAKUL

Shibaura Institute of Technology, King Mongkut's University of Technology Thonburi

10:50-11:40

1C2 Mental-state Estimation

Chairperson: Myunghwan YUN (Seoul National University)

1C2-1

Cluster analysis on self-reported emotional experience of smart TV viewing

Ilsun RHIU, Yelim RHIE, Geewon SHIN, Myunghwan YUN

Seoul National University

1C2-2 Withdrawal

1C2-3

Study on the transition of psychosomatic state under the external stimuli with regard to the Individual characteristics

Shinichi TACHIWANA, Keisuke SUZUKI

Kagawa University

14:10-15:20

1C3 QOL

Chairperson: Kentaro KOTANI (Kansai University)

1C3-1

A quantitative affection assessment of earphones using a spreading activation theory

Jaekyu PARK, Yujun CHO, Sungjoon PARK, Eui S. JUNG

Korea University, Namseoul University

1C3-2

A literature survey on UX design properties and principles of smart device design for the disabled: From the perspective of value/quality of human life

Joochan PARK, Sung H. HAN, Mingyu LEE, Hyeji JANG

POSTECH

1C3-3 Withdrawal

1C3-4

A framework for affective quality of ear-related product design

Kyungrak CHOI, Kimin BAN, Jaeho Choe, Eui S. JUNG

Korea University, Daejin University

1C3-5

Identifying human property measurements for user-centered design based on user scenarios

Heekyung MOON, Sung H. HAN, Bora KANG, Dongyeong JUNG

POSTECH

15:40-16:50

1C4 Life Support

Chairperson: Woochang CHA (Kumoh National Institute of Technology)

1C4-1

Usability evaluation of electric adjustable bed during back support elevation using motion analysis method

Jonghyun KIM, Seungyeop LIM, Byeonghee WON

KITECH

1C4-2

Evaluation of rehabilitation robot through contextual interview based on usage scenario

Jonghyun KIM, Woosang SIM, Kyungseok JANG, Hyosun KWEON, Kihun CHO, Youngki KIM, Byeonghee WON

KITECH, National Rehabilitation Center, Senior Communication Co.

1C4-3

A study on the dehumidifier in consideration of the Korean living environment

Wonseok YANG

Shibaura Institute of Technology

1C4-4 Withdrawal

17:10-18:00

1C5 Operator Behavior

Chairperson: Hirotaka AOKI (Tokyo Institute of Technology)

1C5-1

Measurement of characteristic change using MyotonPRO in low back muscles during a long-term driving; pilot study

Donghyun KIM, Youngjin JUNG, Yeeun SONG, Donghyun HWANG, Changyong Ko, Hansung KIM

University of Yonsei, Korea Orthopedics & Rehabilitation Engineering Center

1C5-2 Withdrawal

1C5-3

Measuring progressions in the play technologies of French Horn by the professional musician lessons

Ichiro TOKUHIRO, Aya MORISHITA, Isoharu NISHIGUCHI, Kiyohiko YAMAYA

Kanagawa Institute of Technology, Showa University of Music, Sonaresearch Co., Ltd.

9:30-11:00

2C1 Support for Seniors

Chairperson: Sanghyun KIM (Waseda University)

2C1-1 Withdrawal

2C1-2

A study of development of senior-friendly products through usability test

Myungkug MOON, Joonkeun LEE, Kihyang KIM

Korean Health Industry Development Institute

2C1-3

Real-life accident factors for elderly patients with dementia

Mihyun CHOI, Hyungsik KIM, Hyunjun KIM, Jungchul LEE, Sooncheol CHUNG, Jihye BAEK, Byungchan MIN, Sungjun PARK

Konkuk University, Hanbat National University

2C1-4

Effect of music therapy on activation and calming of cerebral function

Tomohiro MORIYA, Katsutoshi TADOKORO, Keisuke SUZUKI

Kagawa University

2C1-5

Screening method of dementia using odor

Hiroshi KOBAYASHI, Keisuke SUZUKI, Masayuki KARAKI

Kagawa University, Tanaka ETC Clinic

11:10-12:00

2C2 Car Ergonomics (1)

Chairperson: Keisuke SUZUKI (Kagawa University)

2C2-1

Comparisons of driver distraction from in-vehicle device use: rotary controllers and touch screens

Sanghyng KWON, Sunghwan PARK, Joonghee LEE, Myunghwan YUN

Seoul National University

2C2-2

Modelling of the auditory satisfaction function for the automobile door opening quality

Wonjoon KIM, Taebeum RYU, Yushin LEE, Donggun PARK, Myunghwan YUN

Seoul National University, Hanbat National University

2C2-3

An empirical analysis on the design variables affecting user satisfaction for the operation of automotive switch

Daewon CHOI, Kimin BAN, Jinsung JUNG, Eui S. JUNG

Korea University

13:00-14:10

2C3 HMI

Chairperson: Joonwoo SON (Gyeongbuk Institute of Science and Technology)

2C3-1

Effects on body sway viewing tilted 3D images using binocular disparity

Sanghyun KIM, Fumiya OHTA, Takashi KAWAI, Katsumi WATANABE, Reiko SETO,
Yushi FUJITA

Waseda University, Technova Inc.

2C3-2 Withdrawal

2C3-3

The movement time and optimal control-display ratio of foot-controlled Isotonic Mouse

Kyungtae LEE, Yeonghun LEE

Sehan University, Hyundai Samho Heavy Industries Co.

2C3-4

Usability evaluation of flicking gesture area for effective page shifting of a smart phone

Sangeun LEE, Kimin BAN, Jiwon Jung, Eui S. JUNG

Korea University

14:20-15:10

2C4 Car Ergonomics (2)

Chairperson: Byungchan MIN (Hanbat National University)

2C4-1

Effects of sleep deprivation and the odor of 100% lavender oil and 100% peppermint oil on unexpected situation while driving

Seunghyun KWAK, Sanghyeok SEO, Hyungsik KIM, Sooncheol CHUNG, Byungchan MIN

Hanbat National University

Konkuk University

2C4-2

Validation of a driving simulator for driver distraction research on a two-lane highway

Joonwoo SON, Myoungouk PARK

DGIST

2C4-3 Withdrawal

2C4-4

Comparison of Driving Performance on the Unimanual and Bimanual Steering during Simulated Driving between Post-Stroke Patients and Healthy Adults

Hanseong CHOE, Kwansub LEE, Hwakyung SHIN

The Catholic University of Daegu

15:20-16:30

2C5 Driving Assistance

Chairperson: Keisuke SUZUKI (Kagawa University)

2C5-1

Effect of advanced driver assistance systems on driving style and fuel economy

Joonwoo SON, Myoungouk PARK, Bawul KIM

DGIST

2C5-2

Study on advanced head-light distribution pattern to enhance driver's visibility

Katsuya GOHDA, Keisuke SUZUKI, Shun'ichi DOI, Toshihiko TSUKADA, Keiichi SHIMAOKA, Kazunori HIGUCHI

Kagawa University, TOYOTA CENTRAL R&D LABS., INC.

2C5-3

Development of accident mitigation system based on driver characteristics

Masaya Miyazaki, Keisuke SUZUKI

Kagawa University

2C5-4

Change of Driving Behaviors with Stopping Alert at Intersection for Individual Elderly Drivers

Seunghye HONG, Takafumi ASAO, Keisuke SUZUKI, Byungchan MIN, Shun'ichi DOI

The University of Kagawa, Kansai University, Hanbat National University