

2008 Korea-Japan Joint Conference on Wellness@Living Environment Program

November 30 (Sunday)

09:00-09:30 Registration

Opening Ceremony

Moderator: **Dae-Taek Lee** (Kookmin University, Korea)

09:30-10:00

Welcome Address I	Kyun-Hyong Cho	(President, Korean Society of Living Environment System)
Welcome Address II	Yutaka Tochiara	(President, Japanese Society of Human-Environment System)
Congratulatory Address I	Choong-Suk Koh	(President, Cheju National University, Korea)
Congratulatory Address II	Jang-Yeol Sohn	(President, Architectural Institute of Korea)

Keynote Speech I

10:00-10:40 Ethics and Laws of Living Environment in Japan, Today

Yotaro Kobayashi (Emeritus Professor, Tokyo Institute of Technology, Japan)

10:40-11:00 Photograph, Coffee Break

Concurrent Session I

11:00-12:00 Session I-A

Chairpersons: **Satoru Takada** (Kobe University, Japan)

Chul-Gu Lee (Semyung University, Korea)

1. Individual difference in transient thermophysiological responses to change in air temperature: A study based on subject experiments for sedentary case

Satoru Takada, Hiroaki Kobayashi, Takuya Sakiyama (Kobe University, Japan)

2. Impact of demand controlled ventilation on multi-purposed facilities under the current Korean ventilation standard

Jae-Weon Jeong, Sang-Tae No (Sejong University, Korea)

3. Effect of solar radiation on thermal comfort

Ryota Suzuki, Yasuhiro Shimazaki, Atsumasa Yoshida, Yusuke Mototake, Shinichi Kinoshita (Osaka Prefecture University, Japan)

4. Effect factors of the somatotype for designing the functional clothing –focusing on the Korean farmers

Yoon-Jeong Baek, Kyung-Suk Lee, Kyung-Ran Kim, Hyo-Cher Kim, Kyoung-Sook Hwang
(National Institute of Agricultural Science, Korea)

5. Evaluation of heat and moisture conditions for human thermal load

Yasuhiro Shimazaki, Atsumasa Yoshida, Yusuke Mototake, Ryota Suzuki, Shinichi Kinoshita (Osaka Prefecture University, Japan)

11:00-12:00 Session I-B

Chairpersons: **Kyung-Hi Hong** (Chungnam National University, Korea)

Takako Fukazawa (Fukuoka Women's University, Japan)

6. Thermo assessment of wearing functional outdoor garments

Jeong-Rim Jeong, Hee-Eun Kim (Kyungpook National University, Korea)

7. Differences in convective and radiative heat transfer coefficients between adult and infant

Takako Fukazawa, Sachiyo Ikeda, Ayu Yamaguchi, Ingvar Holmér, Kalev Kuklane, Yutaka Tochiara (Fukuoka Women's University, Japan)

8. Variation of indoor air pollutant concentration during the day in child-care centers

Min-Seon Jang, Jae-Sung Na, Ji-Hye Lim, Jang-Yeul Sohn, Byung-Wook Ahn (Hanyang University, Korea)

9. Measurement method of thermal plume in space between skin and clothing

Tomonori Sakoi, Shengwei Zhu, Kazuyo Tsuzuki, Shinsuke Kato, Ryoza Ooka, Teruko Tamura (Shinshu University, Japan)

10. The relationship of work environment and impaired presenteeism of nurses in Korea and Japan

Young-Mi Lee, Moon-Hee Jung, Mikako Arakida, Rika Oawa, Sumie Suzuki (Hanyang University, Korea)

12:00-13:30 Lunch

Keynote Speech II

13:30-14:10 Localism in my Modern Architecture

Choon-Soo Ryu

(Architect, President of Beyond Space Group, Korea)

14:10-14:30 Coffee Break

Concurrent Session II

14:30–15:30 Session II -A

Chairpersons: **Shintaro Yokoyama** (Hokkaido University, Japan)
Sung-Jin Yoon (Korea University, Korea)

11. Investigation and control of air pollutants in tunnel under construction
Shintaro Yokoyama, Takafumi Maeda, Masashi Kuramae, Shinsuke Wada (Hokkaido University, Japan)
12. Effects of room acoustics on speech intelligibility for children in classrooms
Won-Young Yang, John. S. Bradley (Samsung Engineering and Construction, Korea)
13. The relation between place and action evaluation and indoor environmental conditions
Younsuk Ko, Satoru Kuno, Masayuki Harada, Kazumi Nakayama, Ryo Iimura (Nagoya University, Japan)
14. The effects of Props Pilates stability exercise for people in engaged agriculture
Hye-Jin Kim, Nam-Sang Nam, In-Ae Choi (Hanyang University, Korea)
15. Theoretical study on perspiration from mass transport phenomena
Masashi Kuramae, Shintaro Yokoyama, Takafumi Maeda (Hokkaido University, Japan)

14:30–15:30 Session II -B

Chairpersons: **Mee-Hye Kim** (Shinsung College, Korea)
Kazuho Tsuzuki (AIST, Japan)

16. Occupied environment temperature (OET) and thermal sensations in daily life through the year
Kazuho Tsuzuki, Tomonori Sakoi, Ikue Mori, Tota Mizuno (National Institute of Advanced Industrial Science and Technology, Japan)
17. The factors affecting blood lead levels in Childhood
Chung-Min Cho (Sungshin Women's University, Korea)
18. Trends and issues of experience-based education of thermal environment:
Ineko Tanaka, Shin Taniguchi (Yokohama National University, Japan)
19. How do people move in urban environments?-Human activity pattern and urban planning-
Dae-Taek Lee (Kookmin University, Korea)
20. Practice of competition for high school students as energy environmental education from the view point of housing design and living style
Nami Muramatsu, Tetsumi Horikoshi, Ineko Tanaka (Nagoya Institute of Technology, Japan)

15:30–16:00 Coffee Break

Poster Session 90cm (width)*120cm (length)

16:00 –17:30 Session A

Chairperson: **Hitoshi Wakabayashi** (Kyushu University, Japan)

21. Thermoregulatory responses and femoral muscle activity during knee extension exercise in cold water
Hitoshi Wakabayashi, Hideto Kuroki, Titis Wijayanto, Joo-Young Lee, Yutaka Tochiwara (Kyushu University, Japan)
22. Study on thermal comfortable temperature for the elderly
Naomi Sassa, Hiroko Kubo, Norio Isoda (Mukogawa Women's University, Japan)
23. Effects of short wavelength control in polychromatic light sources on nocturnal melatonin secretion
Tomoaki Kozaki, Shota Koga, Naohiro Toda, Horoki Noguchi, Akira Yasukouchi (Kyushu University, Japan)
24. Evaporative cooling effect of RC roof covered with new water-retentive porous ceramics
Manabu Kanaya, Junko Takada, Yuki Yamamoto, Tetsumi Horikoshi (INAX Corporation, Japan)
25. The measurement methods of temperature with thermo recording system
Hironobu Kajii, Morie Miyazawa Takakazu Matsuo (Kinki University, Japan)
26. Development of a movable soft manikin of the lower part of the human body
Teruko Tamura, Kayo Saito, Tomoko Koshihara (Bunka Women's University, Japan)
27. Heat island index for coastal urban area
Hiroshi Miyazaki (Kansai University, Japan)
28. Study on a cooling system using water mist sprayers: system control considering outdoor Environment
Gyuyoung Yoon, Hideki Yamada, Masaya Okumiya (Nagoya University, Japan)
29. Human body is not holistically but locally responsive to thermal radiation emitted from a 50°C-heated wall
Joo-Young Lee, Hitoshi Wakabayashi, Hideto Kuroki, Titis Wijayanto, Yutaka Tochiwara, Norio Yamaguchi (Kyushu University, Japan)
30. Artificial neural networks for use in the cooling load prediction of a large exhibition center
In-Seok Ko, Hyung-Jun Jeon, Han-Sol Kwon, Jung-Ho Huh (University of Seoul, Korea)
31. A strategy for reducing stack effect in super high-rise building
Seung-Hyuck Choi, Jin-Chul Park (Chung-Ang University, Korea)

32. Evaluation plan for the concentration of volatile organic compounds in new housing by using enthalpy and specific volume
Jin-Kyun Oh, Hyun Cho, Woo-Jin Cho, Seung-Woo Lee, Seung-Ki Pang, Jang-Yeul Sohn, Hye-Sook Im (Hanyang University, Korea)
33. Experiment of the sound attenuation by fire alarm signals in sleeping area
Min-Joo Lee, Myung-Jun Kim (University of Seoul, Korea)
34. Different walking patterns of free walkers at inner city park walking trails with variant trail characteristics
Jee-Eun Son, Ji-Hyuk Kim, Dae-Taek Lee (Kookmin University, Korea)
35. Effect of forward or backward inclined walking training on isokinetic muscle strength and electromyographic activity
Hyun-Jeong Cho, Hae-Chan Park, Kyung-Hee Kang, Min-Soo Kang, Sung-Jin Yoon (Korea University, Korea)
36. Comparison of physical fitness, blood lipid profiles, and insulin resistance following to BMI in elementary school boys
Ja-Young Byon, Chang-bae Hong, Na-young Ahn, Sang-hyun Kim, Woo-kwang Cheon, Ki-jin Kim (Keimyung University, Korea)
37. Effects of adiponectin T45G genotype on changes in adiponectin, obesity, and metabolic risk factors to 12 weeks walking exercise training
Eue-Soo Ann, Dae-Young Kim, Soo-Hyun Park, Tae-Kyong Han, Hyun-Sik Kang (Sungkyunkwan University, Korea)
38. The effect of tail-suspension on the BMD of the fore- and hind-limb
Changsun Kim, Dongho Park, Shoji Igawa (Gyeongju University, Korea)
39. The possible relationship between suicide and 5-HTT gene genotypes
Dongho Park, Changsun Kim, Doyun Kim (Inha University, Korea)
40. Comparison of consumed carbon dioxide and energy in raised-floor Ondol with a ventilation system and wet hydronic Ondol system
Jae-Gyu Shin, Jong-Soo Seong, Yu-Min Kim, Jang-Yeul Sohn (Hanyang University, Korea)
41. Assessment of VOCs concentration reducing effect of bake-out method in new apartments in Korea
Seung-Woo Lee, Seung-Ki Pang, Woo-Jin Cho, Hyun Cho, Jin-Kyun Oh, Chul-Goo Lee, Heung-Don Ham, Young-Tae Chae, Kwang-Ho Lee, Jang-Yeul Sohn (Hanyang University, Korea)
42. Analyzing recirculation rate of exhaust air of ventilation system through case study in Korea
Deok-Yeon Park, Doo-Sung Choi, Jin-Seok Do, Kyun-Hyong Cho (Suwon University, Korea)
43. A study on the life cycle assessment of represent cooling heat source system in the case building in Korea
Sung-Hwan Moon, Doo-Sung Choi, Myeong-Jin Ko, Kyun-Hyong Cho (Suwon University, Korea)
44. A study on the effects of long-term antioxidant intake upon LDH in blood serum CK and activities during physical exercise
Sang-Nam Nam, Jeong-Hun An, Sang-Hyun An, Chan-kyoung Jung (Hanyang University, Korea)
45. An evaluation of ventilation effectiveness and air temperature by the different types of air supply system through simulation and verification experiment
Woo-Jin Cho, Seung-Ki Pang, Jin-Kyun Oh, Hyun Cho, Seung-Woo Lee, Jang-Yeul Sohn (Hanyang University, Korea)
46. Development of a skin thermometer and application to occupant behavior for the operating of air-conditioner
Gook-Sup Song, Moon Nyeo Jang, In-Joong Shin (Bucheon University, Korea)
47. Role of neurotransmitter with sweating induced by peripheral sudomotor axon reflex in human skin
Jeong-Beom Lee, Young-Ki Min, Hun-Mo Yang (Soonchunhyang University, Korea)
48. Development of comfort sleep air conditioner
Ju-Youn Lee, Jin-Kyu Han (LG Electronics Inc., Seoul, Korea)

16:00–17:30 Session B Chairperson: **Chung-Yoon Chun** (Yonsei University, Korea)

49. Evaluation of continuation Mental Work-Load (MWL) with psycho-physiological measurement
Tota Mizuno, Shusaku Nomura, Akio Nozawa, Hirotoashi Asano, Hideto Ide, Kazuyo Tsuzuki (National Institute of Advanced Industrial Science and Technology, Japan)
50. Effects of relative humidity on sensory odor evaluation part 1: cooking odor experiment
Michiyo Azuma, Hiroki Ikeda, Norio Isoda (Kio University, Japan)
51. Transitional process of impression to the change of color temperature in a residential interior-lighting
Naoya Hara, Makiko Uda (Kansai University, Japan)
52. Survey of bathing behavior and bathroom thermal environment on the daily life
Hiroko Kubo, Norio Isoda, Yagi Yasuko (Nara Women's University, Japan)
53. Indoor air quality and recommended level in Japan
 Masatoshi Tanaka (Fukushima College, Japan)
54. Analysis of key variable in quiet standing induced by young children
Takeshi Sato, Akiko Takahashi, Macky Kato, Takayuki Watanabe, Hiroshi Yasuoka, Shoji Igawa, Kimitaka

- Nakazawa (Jissen Women's University, Japan)
55. Development of device to evaluate the ventilation of diaper
Yayoi Satsumoto, Masaaki Takeuchi, Chiemi Habu, Akiko Yoshizaki, Yuri Imamura, Mitsuhiro Wada, Kenichi Akaki, Kiyoshi Miyazawa (Yokohama National University, Japan)
 56. Restriction of movement when wearing fire fighting clothing
Su-young Son, Seong-suk Kim, Yutaka Tochihara (Kyushu University, Japan)
 57. The development of bio-signal system using smart textile
Tae-Gyou Kim, Young-Min Park, Sang-Woo Jin (Korea Sewing Technology Institute, Korea)
 58. Consumers' willingness to pay for reducing environmental load of residential building
Min-Sun Park, Aya Hagishima,, Chung-Yoon Chun (Yonsei University, Korea)
 59. Analysis of polybrominated diphenyl ethers in textiles treated by Brominated Flame Retardants (BFRs)
Jeoung-Hwa Shin, Kyu-Keon Lee, Yun-Gyong Ahn, Yun-Cheol Na (Korea Basic Science Institute, Korea)
 60. Physiological aspects of silver knit fabrics
Do-Yeon Kwon, Mi-Jeong Kang, Young-Ah Kwon (Sabin Co., Korea)
 61. Comfort properties of electrically heated socks
Young-Ah Kwon, Ji-Eun Lee, Jin-Hee Kong, Mi-Jeong Kang (Silla University, Korea)
 62. Effect of thermal comfort in PP, PET, and PP/PET
Hyo-Suk Park, Soo- Kyung Hwang, Han-Sup Lee (Inha University, Korea)
 63. Research on the wearing condition of functional outdoor garment
Ah-Lam Lee, Jeong-Rim Jeong, Hee-Eun Kim (Kyungpook National University, Korea)
 64. Musculo skeletal pain of Nurses
Nam-Jung Kim (Hanyang University, Korea)
 65. Age-specific urodynamic analysis of women
Kyeong-Ok Heo, Mung-Soo Choo, Moon-Hee Jung (Hanyang University, Korea)
 66. Types of employment and health status among female employees in Korea
Jimee Kim (Hanyang University, Korea)
 67. FHS and fall-related factors in the community-dwelling elderly from MDS-HC
In-Young Yoo (Jeonju University, Korea)
 68. The realities of drinking in the parts of the rural regions
Myung-Hwa Han, Young-Ok Han (Mokpo Science College, Korea)
 69. Job-related environmental predictors on work impairment of clinical nurses
Heung-Suk Seo (Hanyang University, Korea)
 70. The needs for health education of students and parents in elementary schools
Jung-Ae Lee, Seung-Sook Hwang (Kyungbok College, Korea)
 71. Body surface area estimation in Korean schoolers
Young-Mee Ahn, Sun-Ha Choi (Inha University, Korea)
 72. A comparison between elementary school children in grandparent-grandchild family and those in normal family in terms of health status and health behavior
Kwang-Su You (Chonbuk National University, Korea)
 73. Effects of ambient temperatures on physiological responses in trunk pressure
Eun-Young Song, Jeong-Wha Choi (Seoul National University, Korea)
 74. An influence of heat tolerance in wear training used the clothing microclimate in Summer
Eun-Sook Ko, Jeong-Wha Choi (Seoul National University, Korea)
 75. A study on the characteristics of the traditional houses in the Korean Cheju-do Island in terms of the mechanisms to deal with the cold and hot weathers
Bong-Ae Kim, Jeong-Lim Lee (Cheju National University, Korea)
 76. Fabric color sensibility and its relationship with color variables and natural dyes
Eunjou Yi (Cheju National University, Korea)

Closing Remarks

17:30–17:40 Closing Remarks

Kyun-Hyong Cho
(President, Korean Society of Living Environment System)