

The Yellow Sea Rim International Exchange Meeting on Building Environment and Energy

YSRIM 2012 Program Schedule

- 1. Schedule** Feb. 3. 2012 - Feb. 5. 2012
- 2. Location** AIM-Kitakyusyu, The third floor conference room
Address: 3-8-1, Asano , Kokurakita-ku, Kitakyusyu, 802-0001, Japan
<http://www.convention-a.jp/sponsor/aim3f/floor/>

3. Program

1st day: Friday, February 3, 2012

09:30-10:00 Registration

10:00-10:10 Opening Session Moderator: Tetsuo Hayashi

10:10-11:10 Special Lecture Moderator: Shoichi Kojima

Prof. Nagano Katsunori (Hokkaido University): Heat Pump and Natural Energy

11:10-12:40 Oral Presentation 1 (Korea) Moderator: Kazuhide Ito

(18 minutes for each person, 15 minutes to do oral presentation and 3minutes to be questioned)

11:10-11:28 Typical Model of Building Energy Consumption due to Energy Saving Methods with ECO2 Program
Young-hak SONG, Keon-ho LEE (Korea Institute of Construction Technology)

11:28-11:46 Reduction Effect of Disability glare with Characteristics of Surface on Curtain Wall
Gun Joo JUNG, Geun Sug OH, Min Ho SEO, Han Ji KIM (Pukyong National University)

11:46-12:04 Investigation of Evaluation Algorithm for Energy Plant Scenario on City Level
Jin-Young Park, Yool Park, Jong-Il Park, (Dong-Eui university), Jurng-Jae Yee (Dang-A university)

12:04-12:22 Application Method of Heating and Cooling System using Seawater for Stadium
Su-Hwuy Jin, Jin-Young Park, Samuel Kim (Dong-Eui university), HyeonJu Kim (Korea Ocean Research & Development Institute)

12:22-12:40 A Study on Evaluation of Thermal Environment and Operational efficiency with AHU Using Solar Heating System in space
Won-Beom Kim, Min-Soo Kim, Jong-Soo Kum, Dong-Gyu Kim (Pukyong National University)

12:40-14:10 Lunch

14:10-15:34 Pre-Poster Presentation Moderator: Samuel Kim, Yasuyuki Shiraishi

(4 minutes for each person)

14:10-14:14 Characteristics of Urban Climate and Thermal Load Variations according to the Green Urban Planning
Seong-Hwan Yoon, In-Aeb Yeo (Pusan National University)

14:14-14:18 A research of filter performance and life cycle assessment based on the chronological use and

effective thickness of the fiber filtration
Ming-Yang Liu, Soon Chang Yang, Young-Chull Ahn(Pusan National University)

- 14:18-14:22 A study on the current use of filters for water purifier
Jae-Ik Cho, Young-Chull Ahn(Pusan National University)
- 14:22-14:26 A Study on Select an Optimal Location of an Illuminance Sensor for Lighting Control System of Indoor Lighting of Apartment Houses
Heon-Jun Park, Kwang-Hyun Kim, Jurng-Jae Yee(Dong-A UNIVERSITY)
- 14:26-14:30 A Study on Development for Building Energy Performance Evaluation Tool- Deriving of Statistics Equation and Analysis of Heat-load Pattern According to Sensitivity Variables -
Young-Ju Cho, Seong-Hee Kim(Dong-A UNIVERSITY) , Hwan-Yong (KimGyeongsang National University), Jurng-Jae Yee(Dong-A UNIVERSITY)
- 14:30-14:34 Experiments & CFD Simulation of Indoor Temperature and Airflow Distribution in the Office Building applied by V.A.V Line Diffuser
Ji-Eun Lee, Hyun-Soo Kim, Jurng-Jae Yee(Dong-A UNIVERSITY)
- 14:34-14:38 Estimation of indoor air quality in the healthcare facilities of aged using Computational Fluid Dynamics
Sung-Jun YOO, Tae-Wan Kim(Yeungnam University), Jang-Hoo Seo(Chosun University), Jeong-Hoon Yang(Yeungnam University)
- 14:38-14:44 Study on Physiology Responses according to CO2 concentration in a closed indoor space
Gi-Deok Lee, Jong-Soo Kum, Dong-Gyu Kim, Soo-Jin Yu, Yong-Hyun Jung(Pukyong National University)
- 14:44-14:48 Variation of Indoor Temperature in industrial settings by Operation Method in Heating System using Solar Heat
Ji-Hoon Lee, Gi-Deok Lee , Dong-Gyu Kim, Yong-Hyo Park, Jong-Soo Kum(Pukyong National University)
- 14:52-14:56 A study on Energy Consumption Status of Rail Station
Sung-Meen Yoon, Jae-Hong Lee , Kyung-Hee Lee(Pukyong National University)
- 14:56-15:00 Research on Distributed Diverse Energy-Supply System of Civilian Residential Building in Shanghai
Jianxing Ren, Qunyin Gu, Fangqin Li, Yongwen Yang, Qingrong Liu(Shanghai University of Electric Power), Weijun Gao(The University of Kitakyushu)
- 15:00-15:04 Study on Development of a Connection Type Air Handling Unit: Performance Comparison with an Air Handling
Kunihiko KITAMURA, Takafumi OGAWA(Kyudenko Corporation), Yasutaka MURATA(Sojo University), Osamu ISHIHARA(Shokei University)
- 15:04-15:08 Energy use of Residential Buildings in China
Tatsuya Kawabe, Tetsuo Hayashi, Koji Nomura, Kayoko Kondo (Kyushu University)
- 15:08-15:12 Measurement Survey of the Internal Heat Generation in Commercial Buildings
Shinya Imai, Yasunori Akashi, Daisuke Sumiyoshi, Shin-ichi Urayama (Kyushu University)
- 15:12-15:16 Energy Saving Effects of Solid Oxide Fuel Cell Co-Generation Systems for Residential Housing
Yuki Okuda, Yasunori Akashi, Daisuke Sumiyoshi(Kyushu University), Akihito Ozaki(Kyoto Prefectural University), Rei Kumanomidou(Kyushu University)
- 15:16-15:20 Hybrid air-conditioning system using natural ventilation in an office building; Evaluation of indoor thermal and air environment in an office building using natural ventilation based on CFD analysis coupled with HVAC control for each zone
Ryuichi Yasunaga, Yasuyuki Shiraiishi(The University of Kitakyushu), Yoshie Uchikawa (Nippon

Steel Engineering Co., LTD), Yasushi Nakamura (Nippon Steel Engineering Co., LTD)

- 15:20-15:24 Evaluation of Heat Transfer Characteristics in an Underground Pit System Based on CFD Analysis
Tomoya SAKAMOTO, Yumi ASHITANI, Yasuyuki SHIRAISHI, Yuji RYU(The University of Kitakyushu)
- 15:24-15:28 Study on Effective Use of Heating in Houses for Thermal Comfort and Energy Saving
Keiko Yoshikawa, Shoichi Kojima, Kazuaki Nakaohkubo(Saga University), Masaki Manabe(Oita University)
- 15:28-15:32 Thermal Fluid-Flow Characteristics in Flow Flat Channel of Plate Heat Exchanger in Various Block Attachment Pattern
Takato Yamamoto, Shuichi Torii(Kumamoto University)
- 15:32-15:36 Development of the suitable combustor and combustion characteristic of biofuels
Shun Matsuda, Shuichi Torii(Kumamoto University)
- 15:36-15:34 Layered Model of Health-determining Factors of Housing and Regional Environment in the City of Kitakyushu
Kazue Oshige, Yasuyuki Shiraishi(The University of Kitakyusyu),Toshiharu Ikaga(Keio University), Shintaro Ando(Keio University)

15:40-17:10 Poster Session

18:10-20:00 Banquet (Rihga Royal Hotel Kokura) Moderator: Weijun GAO

20:00~ Information Exchange Meeting

2nd day: Saturday, February 4, 2012

10:00-11:50 Oral Presentation 2 (China) Moderator: Yasunori Akashi, Young-Chull Ahn

(18 minutes for each person, 15 minutes to do oral presentation and 3 minutes to be questioned)

- 10:00-10:18 A GIS-supported dynamic district energy planning based on building energy demand and local energy sources
D.W. Yu, H.W Tan, Y.J Ren (Tongji University)
- 10:18-10:36 Study on the Performance of a Solar Assisted Ground Source Heat Pump Heating System for a Biogas Reactor
Yong LEI, HongWei TAN (Tongji University)
- 10:36-10:54 A Study On The Thermal Parameters Of The Residential Building Envelops In The Mixed Climate Zone
Xiaobo ZHANG, Xu ZHANG, Xiang Zhou, Yuan YUAN(Tongji University), Jing WANG (zhonghai trust Co., Ltd)
- 10:54-11:12 A temperature humidity independent control air-conditioning in residential buildings and its control strategy
Liu chang, Xu ZHANG, Xiang Zhou, Yuan YUAN(Tongji University), Jing WANG (zhonghai trust Co., Ltd)
- 11:12-11:30 Modeling and validation of variable refrigerant flow systems
Yonghua ZHU, Xinqiao JIN, Zhimin DU, Sijie FU, Xing FANG, Bo FAN (Shanghai Jiao Tong University)
- 11:30-11:48 The energy saving potential of free cooling for chilled water in an electronic factory
Jian YAN, Xinqiao JIN, Zhimin DU, Sijie FU, Xing FANG, Bo FAN (Shanghai Jiao Tong University)

11:50-12:00 Technical Tour Guidance Moderator: Takao Katsura

12:00-13:30 Lunch

13:30-15:00 Oral Presentation 3 (Japan) Moderator: Gun Joo Jung

(18 minutes for each person, 15 minutes to do oral presentation and 3 minutes to be questioned)

- 13:30-13:48 Prediction Study of Energy Consumption in Household and Energy Saving Method in Lhasa city based on On-site Survey
Eriko TAMURA, Yasunori AKASHI (Kyushu University), Jia-ping LIU (Xi'an Univ. of Architecture and Technology) Yan-feng LIU (Xi'an Univ. of Architecture and Technology), Daisuke Sumiyoshi (Kyushu University), Akihito Ozaki (Kyoto Prefectural University), En LI (Kyushu University)
- 13:48-14:06 Application of Lattice Boltzmann Method for Turbulent Flow Simulation in Indoor Environment
Tomo Inoguchi, Kazuhide Ito (Kyushu University)
- 14:06-14:24 Energy use of Residential Buildings in South-East Asia
Tomoaki Kuroda, Tetsuo Hayashi, Koji Nomura, Kayoko Kondo (Kyushu University)
- 14:24-14:42 The construction of Recycling-Oriented Demonstration Area by Utilizing Renewable and Unused Energy Resource
Liyang Fan, Weijun Gao, Fukabori Hidetoshi, Ru Ye (The University of Kitakyusyu)
- 14:42-15:00 A Study on Thermal Environment of Social Welfare Facilities in Winter
Yan JIANG, Yuji RYU (The University of Kitakyusyu)

15:00-15:20 Coffee Break

15:20-16:50 Panel Discussion: Plans to Create a Low-carbon Society (Kitakyushu, Shanghai, Busan)

Moderator: Tetsuo Hayashi

Panelist: Weijun GAO, Hongwei Tan, Samuel Kim

16:50-17:00 Closing Ceremony Moderator: Yuji Ryu

19:00~ Information Exchange and Operation Meeting

3rd day: Sunday, February 5, 2012

- 09:30 Start of technical tour
- 09:30-09:50 Move (Bus)
- 09:50-10:50 Technical Tour 1 (Eco-house, Hydrogen town) Moderator: Takao Katsura
- 10:50-11:00 Move (Bus)
- 11:00-12:00 Technical Tour 2 (Kitakyushu Technology Center, Nippon Steel Engineering Co., Ltd.)
Moderator: Takao Katsura
- 12:00-12:20 Move (Bus)
- 12:20 End of technical tour



Kitakyushu Eco-house



Kitakyushu Technology Center of Nippon Steel Engineering