

ICDCS 2010 Program

2nd International Conference on Durability of Concrete Structures (ICDCS 2010)



Conference Date: **24-26 November 2010**

Conference Venue: **Conference Hall, Hokkaido University, Sapporo, Japan**

<http://www.eng.hokudai.ac.jp/labo/lifetime/icdcs2010.html>

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Introduction

Concrete structures are the most widely built structures in the world. Over ten times more concrete is produced than all other construction materials put together. Concrete structures have traditionally been regarded as maintenance-free and practically unlimited in lifespan. However, over the past several decades, a number of durability problems have emerged and these have prompted research around the world on the key factors in the durability of concrete structures. It is now generally accepted that concrete structures deteriorate with time. In fact, premature deterioration of concrete structures has been a major and growing problem worldwide. Countries that are experiencing rapid economic growth have been undergoing a construction boom, and questions have arisen over the expected design lives of these projects, because of a lack of technology and experience, particularly regarding durability. There is an urgent need to formulate durability-based design and performance-based strategic maintenance methodologies to guarantee the durability of concrete structures.

To review the research findings on the durability of concrete structures and recent developments regarding such durability, the International Conference on Durability of Concrete Structures has been held. The conference aims to bring together leading experts in the field from around the world so that they may present the latest developments, share their recent achievements, discuss current problems and address future challenges in this field. The 1st International Conference on Durability of Concrete Structures (ICDCS 2008) was successfully held in Hangzhou, China, on the 26th and 27th of November 2008. Following the ICDCS 2008, the 2nd International Conference on Durability of Concrete Structures (ICDCS 2010) is being held during 24-26 November 2010 in Sapporo, Japan. The conference is sponsored by the Japan Society of Civil Engineers, the Japan Concrete Institute and the Concrete Research Committee of the Hokkaido Civil Engineering Association.

Conference Topics

The major topics for ICDCS 2010 International Conference are as follows:

- A. Influence of environment on durability
- B. Ionic/molecular transport modeling
- C. Materials for durability enhancement
- D. Material deterioration
- E. Performance of deteriorated structures
- F. Durability design
- G. Life-cycle management
- H. Methods for testing, inspection and monitoring
- I. Repair and maintenance

Sponsors

Organized by

Hokkaido University, Japan
Zhejiang University, China
Queen's University Belfast, UK

With the Sponsor of

Japan Society of Civil Engineers (JSCE)
Japan Concrete Institute (JCI)
Concrete Research Committee, Hokkaido Civil Engineering Association

Organizing Committee

Co-chair: Tamon Ueda (Japan), Hiroshi Yokota (Japan)

Yun Bai (UK)

P. A. M. Basheer (UK)

Wei-Liang Jin (China)

Yasuhiko Sato (Japan)

Takafumi Sugiyama (Japan)

Yuxi Zhao (China)

International Scientific Committee

Chair: Toyoharu Nawa (Japan)

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Xuehui An (China)

Ki-Yong Ann (Korea)

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Boonchai Stitmannathum (Thailand)

Koji Takewaka (Japan)

Jun Wei (China)

Feng Xing (China)

Kazuo Yamada (Japan)

Yoshitomo Yamada (Japan)

Yingshu Yuan (China)

Chaoying Zou (China)

Program at a Glance

| | 24 Nov Wednesday | 25 Nov Thursday | 26 Nov Friday |
|----|--|---|--------------------------------|
| 8 | Registration | Registration | Registration |
| 9 | Opening (R1) | 9:00-9:45 Keynote (R1) <i>Prof Miyagawa</i> | 9:00-11:00 Session 13 (R1) |
| | 9:30-10:15 Keynote (R1) <i>Prof Hondoh</i> | 9:50-10:35 Keynote (R1) <i>Prof Li</i> | 9:00-11:00 Session 14 (R2) |
| 10 | Coffee break/Photo | Coffee break | |
| 11 | 11:00-13:00 Session 1 (R1) | 11:00-12:40 Session 7 (R1) | Coffee break |
| | 11:00-13:00 Session 2 (R2) | 11:00-12:40 Session 8 (R2) | 11:20-11:50 Session 15 (R1) |
| 12 | | | Closing Session (R1) |
| 13 | Lunch | Lunch | Lunch |
| 14 | 14:00-14:45 Keynote (R1) <i>Mr Helland</i> | 14:00-15:40 Session 9 (R1) | Technical tour |
| 15 | 15:00-16:20 Session 3 (R1) | 14:00-15:20 Session 10 (R2) | |
| | 15:00-16:20 Session 4 (R2) | Coffee break | |
| 16 | Coffee break | 16:10-17:50 Session 11 (R1) | |
| | 16:50-18:10 Session 5 (R1) | 16:10-17:50 Session 12 (R2) | |
| 17 | 16:50-18:30 Session 6 (R2) | Move | |
| 18 | Move | | |
| 19 | 19:00-20:40 Welcome Reception | 19:00-21:00 Conference Banquet | |
| 20 | | | |

Technical Program

➤ Wednesday, 24 November 2010

- 08:00 – 18:00 **REGISTRATION** First Floor Hall
- 09:00 – 09:30 **OPENING CEREMONY** Room 1 (1F)
(Chairman: Takafumi Sugiyama)
- 09:30 – 10:15 **KEYNOTE 1** Room 1 (1F)
(Chairman: Takafumi Sugiyama)
Characteristic behavior of dislocations in ice: A fundamental aspect for ductile deformation of ice (Takeo Hondoh)
- 10:15 – 11:00 **Coffee break/Group photo**
- 11:00 – 13:00 **PARALLEL SESSION**
- 11:00 – 12:40 **Session 1: Chloride Penetration 1** Room 1 (1F)
(Chairman: Kazuo Yamada)
1. Effect of exposure environment and period on chloride diffusion in concrete with inhibitor (Toru Yamaji, Yoshikazu Akira, Hidenori Hamada)
 2. Chloride ion ingress and its dependence on liquid water penetration in fly-ash concrete (Yuya Takahashi, Toshiharu Kishi, Yoshitomo Yamada)
 3. Evaluation on chloride diffusion coefficient of blast-furnace slag cement concrete (Mingdi Gao, Hidenori Hamada, Yasutaka Sagawa, Takanori Ikeda)
 4. Semi-quantification of the chloride binding capacity of hydrations using the X-ray diffraction method (Do Gyeum Kim, Ki Yong Ann)
 5. Validation of models for assessment of durability of concrete structures exposed in the chloride road environment (Luping Tang, Anders Lindvall)
- 11:00 – 13:00 **Session 2: Performance of Components and Structures 1** Room 2 (2F)
(Chairman: Yun Bai)
1. Seismic retrofit of rectangular RC beams using CFRP wrapping and CFRP anchors (Pei-Ching Chen, Min-Lang Lin, Jih-Hao Huang)
 2. Seismic reliability analysis of reinforced concrete framed buildings attacked by chloride (Chien-Kuo Chiu, Wen-Yu Jean, Yu-Wen Chang)
 3. Strategy and evaluation of seismic retrofit for the public school buildings in Taiwan (Tsung-Chih Chiou, Shyh-Jiann Hwang)
 4. 3-D numerical investigation for tunnel stability in jointed rock (Hany Madkour)
 5. Numerical simulation of damaged HPRCC plates with multi-directional cracking (Kohei Nagai, Benny Suryanto, Koichi Maekawa)
 6. Numerical investigation of the behavior of repaired reinforced concrete beams under monotonic loading (Siavash Sajedi, Farnam Ghassemzadeh, Negar Amintaheri, Mohammad Shekarchi, Iman Harsini)
- 13:00 – 14:00 **Lunch**
- 14:00 – 14:45 **KEYNOTE 2** Room 1 (1F)
(Chairman: Hiroshi Yokota)

Service life design of concrete structures-The limit state and reliability based approach given in *fib* MC SLD and ISO/WD 16204 (Steinar Helland)

15:00 – 16:20 **PARALLEL SESSION**

15:00 – 16:20 **Session 3: Chloride Penetration 2** Room 1 (1F)

(Chairman: Ki-Yong Ann)

1. Chloride contents at the concrete-steel interface (Nelson Silva, Tang Luping, Jan Erik Lindqvist, Dimitrios Boubitsas)
2. An approach for measurement of chloride threshold values (Dimitrios Boubitsas, Luping Tang)
3. Influence of freezing-thawing action on chloride penetration into concrete (Yuki Sakoi, Minoru Aba, Masami Shoya, Yoichi Tsukinaga, Takashi Sugawara)
4. Examination of seasonal variation at chloride ion with antifreeze agent (Seishi Hirano, Shinichi Miyazato, Takayuki Ishikawa, Minobu Aoyama)

15:00 – 16:20 **Session 4: Performance of Components and Structures 2** Room 2 (2F)

(Chairman: Shinichi Igarashi)

1. A survey on reactive aggregates and ASR-deteriorated bridges on Noto Expressway in Ishikawa Prefecture (Toshihiko Minato, Kazuyuki Torii)
2. The mechanisms of alkali silica reaction induced by sodium salts released from radioactive waste materials (Osvaldo Andrade, Kazuyuki Torii)
3. Mitigating effect of fly ash on the ASR-related expansion of mortar using reactive aggregate at the pessimum proportion (Takanori Ikeda, Yuichiro Kawabata, Hidenori Hamada, Kazuo Yamada)
4. Detailed investigation of 38 year old concrete sewerage pipes deteriorated by sulphuric acid attack (Daisuke Yamamoto, Hiromichi Matsushita, Isamu Sekino, Hidenori Hamada)

16:20 – 16:50 **Coffee Break**

16:50 – 18:30 **PARALLEL SESSION**

16:50 – 18:10 **Session 5: Corrosion of Reinforcements 1** Room 1 (1F)

(Chairman: Hidenori Hamada)

1. Factors to chloride threshold level for steel corrosion in concrete (M. S. Jung, Ki Yong Ann)
2. Investigation of threshold chloride concentration of steel in concrete using an embedded lead electrode (J. Furumura, G. M. Sadiqul Islam, Takafumi Sugiyama, S. Fuji)
3. Corrosion monitoring of steel bars in superstructure of open-type wharf (Mitsuyasu Iwanami, Ema Kato, Yuichiro Kawabata)
4. Durability of hybrid FRP reinforcing bars in concrete structures exposed to marine environments (Su-Jin Lee, Soo-Hwan Kim, Bo-Ra Choi, Byung-Tak Hong, Chan-Gi Park, Jong-Pil Won)

16:50 – 18:30 **Session 6: Properties of Materials and Measurements 1** Room 2 (2F)

(Chairman: Toyoharu Nawa)

1. Resistance of concrete with granulated blast furnace slag sand to sulphuric acid attack (Toshiki Ayano, Hisahiro Matsunaga, Takashi Fujii)
2. Moisture transport processes under drying-wetting actions: From experimental

evidence to modeling (Kefei Li, Chunqiu Li, Zhaoyuan Chen)

3. Evaluation of tensile behaviour of mortar immersed in a NaCl solution (Taito Miura, Yasuhiko Sato)
4. Concrete deterioration under alternate action of carbonation and sulfate attack (Fenglan Li, Rundong Gao, Shunbo Zhao, Changcheng Shi)
5. Concrete durability of tower structure for flood discharge at Bajiazui (Yan Zhou, Xiaomin Teng, Xingang Qiu)

19:00 – 20:40 **WELCOME RECEPTION**

Faculty House TRILLIUM (ENREISO)

➤ Thursday, 25 November 2010

- 08:00 – 18:00 **REGISTRATION** First Floor Hall
- 09:00 – 09:45 **KEYNOTE 3** Room 1 (1F)
(Chairman: Tamon Ueda)
Present durability measures for concrete public works in Japan: Scenario design of concrete structures (Toyoaki Miyagawa)
- 09:50 – 10:35 **KEYNOTE 4** Room 1 (1F)
(Chairman: Tamon Ueda)
Stochastic damage mechanics of concrete: Background and recent developments (Jie Li)
- 10:35 – 11:00 **Coffee break**
- 11:00 – 12:40 **PARALLEL SESSION**
- 11:00 – 12:40 **Session 7: Corrosion of Reinforcements 2** Room 1 (1F)
(Chairman: W. John McCarter)
1. Flexural behaviour of corroded reinforced concrete beams (Ju Chen, Ji-Hua Zhu, Wei-Liang Jin)
 2. The influence of difference in spatial positions in the RC deck in open-piled pier on chloride penetration and corrosion rate of steel bars in concrete (Takahiko Amino, Nobuaki Otsuki, Tsuyoshi Saito, Takashi Habuchi)
 3. Effect of electrochemical treatment at fresh condition in enhancing the corrosion resistance in concrete (Ho Jae Lee, Do Gyeum Kim, Ki Yong Ann)
 4. Durability analysis of prestressed concrete structures in chloride corrosion subjoining cyclic freeze-thaw (Chen Yu, Liu Rong-Gui, Zhou Wei-Ling, Zhang Yi-Duo, Liu Tao, Lu Chun-Hua)
 5. Damage analysis and cracking model of reinforced concrete structures with rebar corrosion (Jiang Yu, Yuxi Zhao, Wei Liang Jin)
- 11:00 – 12:40 **Session 8: Environmental Aspects** Room 2 (2F)
(Chairman: Toshiki Ayano)
1. Sustainable development in construction (Toyoharu Nawa, Kiyofumi Kurumisawa)
 2. Durability and environmental impact of concrete combining various waste and recycled materials (Michael Henry, German Pardo, Ttsugio Nishimura, Yoshitaka Kato)
 3. Improving concrete durability utilizing industrial waste products (M. Maslehuddin, Fazal-ur-Rehman Awan, M. R. Ali, M. S. Barry, Nasser Al-Osaimi)
 4. Experimental research on improving recycling and utilizing level of waste concrete (Da-Xing Qian, Ying-Wei Yun, Il-Young Jang)
 5. Early compressive strength of recycled concrete (Wu Jin, Yang Guixin, Zhang Yingjie)
- 12:40 – 14:00 **Lunch**

14:00 – 15:40 **PARALLEL SESSION**

14:00 – 15:40 **Session 9: Properties of Materials and Measurements 2** Room 1 (1F)

(Chairman: Boonchai Stitmannaitum)

1. Structural health monitoring based on long-distance embedded optical fiber sensor (Jianghong Mao, Weiliang Jin, Yong He)
2. Developments in monitoring techniques for durability assessment of cover-zone concrete (W. J. McCarter, T. M. Chrisp, G. Starrs, N. Holmes, L. Basheer, M. Basheer, S. V. Nanukuttan)
3. Autoclam – An effective field method to measure permeability of high performance concretes (Kai Yang, P. A. M. Basheer, Yun Bai)
4. Study on new method of measuring scaling using a glossmeter (Takuya Hasegawa, Madoka Taniguchi, Osamu Katsura, Osamu Senbu)
5. Methods for testing and monitoring structural health and durability - A review of products from Amphora NDT Limited (P. A. M. Basheer)

14:00 – 15:20 **Session 10: Performance of Components and Structures 3** Room 2 (2F)

(Chairman: Luping Tang)

1. Probabilistic approach for structural performance evaluation of port RC structure (Ema Kato, Yuichiro Kawabata, Mitsuyasu Iwanami, Hiroshi Yokota)
2. Renewal of chloride damaged RC continuous hollow slab bridge (Tetsuo Matsuda, Shinichi Miyazato)
3. Structural performance of heavily deteriorated RC members serviced in marine environment for 44 years (Yuichiro Kawabata, Ema Kato, Mitsuyasu Iwanami)
4. The mechanical analysis of corroded concrete sewage pipeline subjected to flood load (Chen Zhaohui, Ma Dongsheng, Huang Jinghua)

15:40 – 16:10 **Coffee Break**

16:10 – 17:50 **PARALLEL SESSION**

16:10 – 17:50 **Session 11: Properties of Materials and Measurements 3** Room 1 (1F)

(Chairman: Jin-Keun Kim)

1. Measurement of air voids in fly ash concrete using microfocus X-ray CT (Hiroki Ikegami, Michael Angelo B. Promentilla, Takafumi Sugiyama)
2. Determination of water-cement ratio of hardened cement paste based on the estimation of under-pixel porosity for constituent phases identified by SEM-BSE image analysis (Dang Giang Hoang, Shin-ichi Igarashi)
3. Some characteristics of a self healing mortar incorporating calcium sulfo-aluminate based agents (Kritsada Sisomphon, Oguzhan Copuroglu)
4. Evaluation of continuous pore structure and diffusion coefficient of cementitious materials (Katsufumi Hashimoto, Nobuaki Otsuki, Tsuyoshi Saito, Hiroshi Yokota)
5. Numerical determination of the chloride diffusion coefficient in cracks and cracked concrete (Licheng Wang, Tamon Ueda)

16:10 – 17:50 **Session 12: Performance of Components and Structures 4** Room 2 (2F)

(Chairman: Mitsuyasu Iwanami)

1. Frost damage model to predict structural performance (Tamon Ueda, Shuichi Arai)
2. Deformation of concrete mortar with variation in moisture content and under freeze-thaw cycles (Evdon L. Sicut, Tamon Ueda)

3. Study of investigative methods into the deterioration of surface finishing materials for reinforced concrete used in urban collective housing (Jae Hong Park, Takuya Hasegawa, Osamu Senbu, Hitoshi Hamasaki, Norimoto Kashino)
4. Computational elastoplastic crack modelling for RC beams (Hany Madkour, Saif Eldeen Ahmed)
5. Experimental study on long-term exposure of MSFAC to sodium sulfate solution (Liyun Pan, Lun Li, Xiaoke Li, Shunbo Zhao)

19:00 – 21:00 **CONFERENCE BANQUET**

Sapporo Aspen Hotel

➤ Friday, 26 November 2010

08:00 – 12:00 **REGISTRATION**

First Floor Hall

09:00 – 11:00 **PARALLEL SESSION**

09:00 – 11:00 **Session 13: Properties of Materials and Measurements 4**

Room 1 (1F)

(Chairman: Yuxi Zhao)

1. The influence of different European cements on the transport and early-age properties of concrete in the cover-zone (N. Holmes, L. Basheer, S. Nanukuttan, P. Basheer, W. J. McCarter, T. M. Chrisp, G. Starrs)
2. Experimental study of cement particle size effect on hydration process of concrete (Changjiu Chen, Xuehui An)
3. Long-term performance of high early-strength roller-compacted concrete for pavement (Jong-Pil Won, Joon-Mo Kim, Sang-Woo Lee, Jae-Wan Lee, Su-Jin Lee, Tei-Joon Choi, Sung-Ki Park)
4. Study on the flexural creep and shrinkage of high performance concrete considering effect of silica-fume and slag (Farnam Ghassemzadeh, Mohammad Shekarchi, Hamid Reza Bonyadi, Siavash Sajedi, Mohamad Javad Mohebbi)
5. Experimental study on flexural resistance of corroded reinforced concrete walls (Shunbo Zhao, Fulai Qu, Shimin Zhang, Changming Li, Pengbing Hou)
6. Life-cycle management of concrete structures (Hiroshi Yokota, Katsufumi Hashimoto)

09:00 – 11:00 **Session 14: Performance of Components and Structures 5**

Room 2 (2F)

(Chairman: Yasuhiko Sato)

1. Experimental studies on durability of FRP confined concrete columns (Lili Sui, Xing Feng, Weiwen Li, Lixiang Zou, Yingwu Zhou)
2. Behavior of beams strengthened with HPFRCC and FRP grids under static loading (Kenta Yamamoto, Y. Kikuchi, Dawei Zhang, Hitoshi Furuuchi, Tamon Ueda)
3. Variable weight model for quality evaluation of existing R.C. members (Wei-Qiu Zhong, Ai-Ping Dong)
4. The effect of fire exposure on the performance of high strength concrete frames (A. Chaboki-Khiabani, M. Bastami, M. Kordi, M. Baghbadrani)
5. Tension stiffening effects in flexural reinforced lightweight aggregate concrete beams subjected to long-term cyclic loads (How-Ji Chen, Te-Hung Liu, Kuo-Chang Jane, Hui-Wen Liao, Kung-Chung Hsu)
6. Experimental study of sulfate attack on stressed MSFAC steeped in sodium sulfate solution (Liyun Pan, Yanwei Guo, Xiaoke Li, Shunbo Zhao)

11:00 – 11:20 **Coffee Break**

11:20 – 11:50 **PLENARY SESSION**

(Chairman:)

Overall discussion and conclusions

11:50 – 12:20 **CLOSING SESSION**

1. Closing Remarks
2. Best Paper Award
3. Next ICDCS Conference

12:20 – 13:30 **Lunch**

13:30 – 18:00 **TECHNICAL VISIT** (Reservation required)

Introduction of Key Note Lecturers

Steinar Helland

Skanska Norge AS



“Service life design of concrete structures. The limit state and reliability based approach given in *fib* MC SLD and ISO/WD 16204”

Mr Helland has a background as site and area manager for heavy construction works with the contractor Skanska. He is presently heading CEN TC-104/SC-2 in charge of the new European standard for concrete related site activities, EN-13670: 2009 "Execution of concrete structures." He is also heading ISO TC-71/SC-3/WG-4 presently working out the standard "Service life design of concrete structures."

Takeo Hondoh

Professor, Institute of Low Temperature Science, Hokkaido University



“Characteristic behavior of dislocations in ice: a fundamental aspect for ductile deformation of ice”

Professor Hondoh received his Doctoral Degree in Applied Physics from Hokkaido University and served as a faculty member at Hokkaido University for more than 30 years. His research interests are in Crystal Physics, Physics of Ice, and Microphysical Processes in Ice Sheets.

Jie Li

Professor, School of Civil Engineering, Tongji University

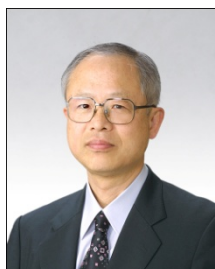


“Stochastic damage mechanics of concrete: Background and recent developments”

Professor Li is a chair professor of structural engineering of Tongji University of Shanghai, China, where he serves as President of Shanghai Institute of Disaster Prevention and Relief. He received his Ph.D. degree at the same University in 1988. From 1999 to 2004, he was honored as a Cheung Kong Scholar Professor by the Education Ministry of Chinese Government.

Toyoaki Miyagawa

Professor, Civil and Earth Resources Engineering, Kyoto University



“Present durability measures for concrete public works in Japan: Scenario design of concrete structures”

Professor Miyagawa received his BS, MS and Doctor of Engineering Degree from Kyoto University, Japan. His research interests include performance over time, diagnosis, prognosis and rehabilitation of concrete structures. He is a member of JSCE, JCI, JSMS, RILEM, *fib* and ACI.

Technical Tour

Otaru Port and Professor Isami Hiroi's Heritage

Friday 26 November 13:30 - 18:00

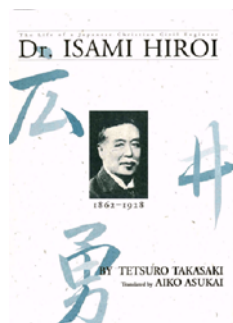
The bus will leave at 13:30 in front of the Conference Hall

Reservation is required at the Registration Desk (Participation fee: 1,000Yen).

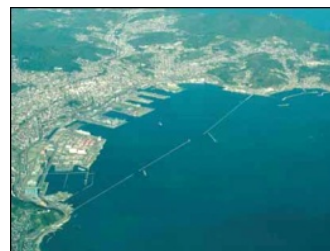
Since it may be chilly on the breakwater, warm cloth is recommended.

Otaru is located 30 km northwest of Sapporo on the Japan Sea. Opened in 1899, the port was constructed in two phases, from 1897 to 1908 and from 1908 to 1921. Dr Isamu Hiroi, who graduated from Sapporo Agricultural College and later taught there was responsible for the construction project.

A durability test of concrete began at the port of Otaru in 1897 and continues to this day making it the longest running test in the world.



<Prof Hiroi>



<Bird view of Otaru Port>



<North breakwater>



<Test specimens>

Registration and Registration Fee

Conference registration fees include: admission to all scientific programs, conference portfolio, proceedings, welcome reception, refreshments, lunches and the conference banquet. All authors are required to register in advance. This is necessary for conference organizer to prepare the Author Kit for conference participation. In order to avoid “no shows” at the conference, at least a speaker among the authors is required to register before 31 October 2010.

Fees Before 30 September 2010

Registration Fee 40,000 Yen, For Students 20,000 Yen,
For Accompanying Persons 15,000 Yen (Welcome Reception and Banquet only)

Fees After 1 October 2010

Registration Fee 50,000 Yen, For Students 25,000 Yen,
For Accompanying Persons 15,000 Yen (Welcome Reception and Banquet only)

The following two methods are possible for the payment of registration fee. The authors and conference participants are recommended to pay the registration fee primarily by the first method of the alternatives.

1. On-line Credit Card Payment through Conference Website

This method is convenient and recommended. Please visit the ICDCS 2010 official website and just click on “Online Registration” for conference registration.

2. Bank Transfer Payment

The participants who want to pay registration fee by bank transfer should first contact the secretariat. The secretariat will provide necessary information on the bank transfer payment. Note that bank transaction charges should be paid by yourself.

On-Site Registration

The On-Site Registration Desk will be open and located on the 1st floor of the conference venue, Conference Center of Hokkaido University, during the ICDCS 2010 conference. Not only the participants can register on-site, but also the already-registered participants can pick up the author and participant kit.

Conference Venue and Hotel Accommodation



<Important locations>

<A: Conference Hall, B: Clark Cafeteria, C: Chuo Cafeteria,
D: TRILLIUM (ENREISO), E: Sapporo Aspen Hotel>



<Conference Hall>

The ICDCS 2010 conference will be held at the Conference Center of Hokkaido University located in Sapporo, Japan. Hokkaido University is located on the north of JR Sapporo Station.

Location: Hokkaido University, Kita 8, Nishi 5, Kita-ku, Sapporo **(see Map A)**

Tel: 011-706-2141

There are many tourist and business hotels in the city center of Sapporo. Some hotels near the conference venue are listed in the conference official website (<http://www.eng.hokudai.ac.jp/labo/lifetime/icdcs2010.html>). Please make hotel reservation directly to the hotel.

Detailed Instructions for Oral Presentation

Presentation Time

While each key note lecture is allocated a total of 45 minutes including oral presentation and discussion, each paper in a parallel session is allocated a total of 20 minutes including oral presentation and discussion. It is kindly requested that the speakers keep the time schedule strictly.

Audio-Visual Equipment

Only Microsoft Powerpoint (*.ppt or *.pptx) files are acceptable.

All speakers are required to bring your Powerpoint file by USB-memory or CD-ROM and upload it directly to the laptop at your presentation room during the lunch/coffee break before your presentation schedule.

Your own PC is not allowed to use for oral presentation. Also do not upload your Powerpoint file just before your presentation. This will expedite smooth process of presentation and avoid unnecessary delay due to file switching.

Official Language

The official language of the conference is English. Oral presentation shall be made in English.

Group Photo

Group photo will be taken during the morning coffee break of the 1st day of the conference. All the participants are requested to gather in Room 1 immediately after the keynote lecture 1.

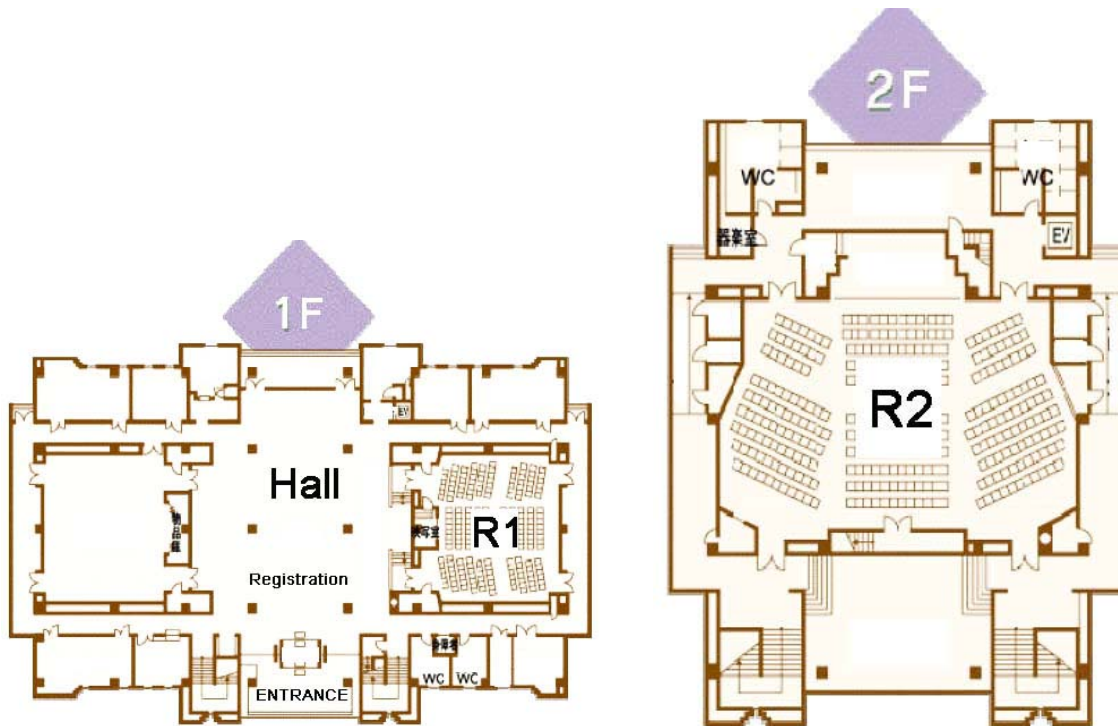
The photo can be collected at the registration desk from 16:30 on 24 Nov till 12:00 on 26 Nov. The photo will not be sent by post after the conference. Never forget to collect your photo.

Lunch

Each registered participant will receive three pieces of meal coupons for your lunches valid on 24, 25 and 26 November. The meal coupons are valid at Clark Cafeteria (**see Map B**) and Chuo Cafeteria (**see Map C**) only. You can purchase any kind of dish up to JPY 500 with a coupon. At the cafeteria, please choose dishes, proceed to a cashier, and hand the coupon. If the total amount of your meal is over 500 Yen, the rest of amount should be paid by yourself. If the total amount of your meal is less than 500 Yen, the balance will NOT be refunded.

Smoking rule

Smoking is prohibited inside the Hokkaido University Campus except for designated smoking spots and inside the banquet hall in Sapporo Aspen Hotel.



<Floor map of the Conference Hall>

Social Events

Interesting social programs will be arranged. The participants will enjoy not only the academic/technical presentations and discussions, but also social programs during the conference. The following exciting social programs are scheduled.

Welcome Reception

Time: Wednesday, 24 November 2010, 19:00-21:00

Venue: Faculty House TRILLIUM (ENREISO) (see Map D)

All the conference participants and accompanying persons registered for the conference are invited to the Welcome Reception. A meal and drinks will be served in an informal atmosphere. The Welcome Reception will provide an ideal opportunity to meet new friends and to rekindle old friendship. Some short welcoming speeches will be arranged during the reception.

Banquet

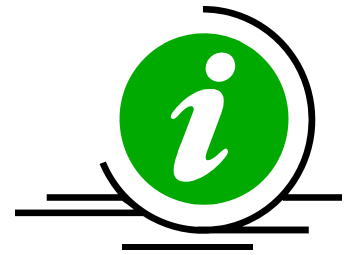
Time: Thursday, 25 November 2010; 19:00-21:00

Venue: Sapporo Aspen Hotel (see Map E)

All the conference participants and accompanying persons registered for the conference are invited to the Banquet. Vegetarian meal and Muslim meal will be prepared and served for participants who desire them.

Information Desk

To make your stay more comfortable, volunteer staff at the Sapporo International Communication Plaza will help you with providing various information such as sightseeing, shopping, ATM or convenience stores nearby, transportation, etc. If you have any question or need help, please feel free to ask any volunteer staff at the Information Desk that is located near the registration desk.



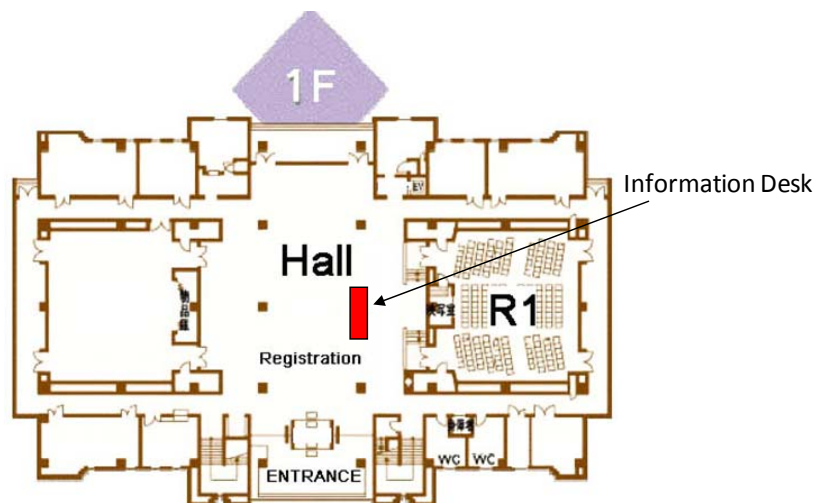
Information Desk Hours

24 November; 8:00-14:30

25 November; 9:30-14:30

26 November; 9:30-13:00

English speaking volunteers are available all time during the above hours. Chinese speaking volunteers are available partly.



How to Reach Conference Venue

The most convenient way to Sapporo from most parts of Japan is taking airplanes for Chitose Airport. Chitose Airport directly links major airports in Japan such as Tokyo International Airport (Haneda), Narita International Airport, Chubu International Airport, Kansai International Airport, and Fukuoka International Airport. Chitose Airport is also directly accessible from some cities in Asia, such as Seoul, Shanghai, Taipei, etc.

To your hotel from Chitose Airport: By JR train; it will take 36 minutes from Chitose Airport Station to Sapporo Station and the cost is 1,040 Yen (one way). From Sapporo station, walking, taxi or subway to your hotel. By Airport Limousine; it will take about 60 to 80 minutes to Sapporo Station stopping over major hotels. The fair is 1,000 Yen.

General Information

Passport & Visa

Any foreigners to enter Japan must have a valid passport. Participants requiring an entrance visa should apply to Japanese Consulate in their countries prior to departure.

Currency & Credit Cards

The unit of Japanese currency is Yen. One US dollar is equivalent to about 82 Yen in early November 2010. Foreign bank notes can be converted into Japanese Yen at major banks, airports and major tourist hotels. Major credit cards such as Visa and Mastercard are acceptable at most stores and hotels.

Electricity

In Japan, normally electricity of 100 volts is used.

Weather

Normally, the weather is a bit cold in late November in Sapporo with an average temperature of around 10°C (50°F), ranging from 5°C (41°F) to 15°C (59°F). If you are lucky, you may see snowing.

Tipping

Tipping is not a traditional Japanese custom. It is not necessary to tip a taxi driver unless he assists you with luggage or provides an extra service.

Hokkaido University

Hokkaido University started out in 1876 as Sapporo Agricultural College, the first modern academic institute in Japan. Its curriculum which combined agricultural and civil engineering disciplines was developed following that of the Massachusetts Agricultural College and classes were taught by foreign experts. Since the Japanese government purpose of setting up SAC was to develop Hokkaido, an untamed land, using the advanced knowledge of foreign faculty and subsequently SAC graduates, it is not wrong to say that civil engineering education in Japan started in earnest at SAC.

