

Program

Snow Engineering VI

June 1-5, 2008

**Hilton Whistler Resort
Whistler, British Columbia, Canada**

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Sunday, June 1, 2008

4:00 pm – 6:00 pm	Registration (Mt. Currie Foyer)
6:00 pm – 7:00 pm	Welcome Reception
7:00 pm – 9:00 pm	Dinner

IMPORTANT ANNOUNCEMENTS

- **Technical Sessions will be held in Mt. Currie North.**
- **Poster Sessions and meals will be held in Mt. Currie South.**
- Audiotaping, videotaping and photography of presentations are strictly prohibited.
- Speakers – Please leave at least 5 minutes for questions and discussion.
- Please do not smoke at any conference functions.
- Turn your cellular telephones to vibrate or off during technical sessions.
- Be sure to make any corrections to your name/contact information on the Master Participant List or confirm that the listing is correct. A corrected copy will be sent to all participants after the conference.

Monday, June 2, 2008

7:30 am – 8:15 am

Breakfast Buffet

8:15 am – 8:30 am

Opening Remarks

8:30 am – 10:00 am

Session 1: Structural Loading I

M. Kasperiski, Ruhr-University Bochum, Germany

A Novel Approach to the Specification of the Design Snow Load on the Example of Gable Roofs

T. Takahashi, Chiba University, Japan

Structural Damage in 2006 Heavy Snow in Japan and Reconsideration for Snow Load

N. Isyumov, The University of Western Ontario, Canada

Sliding Snow from Sloped Roofs: Its Prediction, Potential Hazards and Mitigation

10:00 am – 10:30 am

Coffee Break

10:30 am – 12:00 pm

Session 2: Roads

A. Fujimoto, University of Fukui, Japan

Possibility of Melting and Refreezing of Snow and Ice on a Road Due to Vehicle Heat

M. Horii, Nihon University, Japan

Study on Priority of Restoration of Closed Roads in a Network on Redundancy After Heavy Snowfall

Y. Ito, Civil Engineering Research Institute for Cold Region (CERI), Japan

A Research of the Relationship Between Shapes of Snowbreak Forest and Effects For Improvement on Poor Visibility

H. Baker, Rowan Williams Davies & Irwin, Inc., Canada

Snowdrift Potential at Highway Sites

12:00 pm – 1:30 pm

Lunch

1:30 pm – 3:00 pm

Session 3: Building I

I. MacKinlay, Ian MacKinlay Architects, Inc., USA

Special Problems of Complex Roofs Designed to Retain Snow

S. Kamimura, Nagaoka University of Technology, Japan

'Yuki-Kaki Dojo' – A Training Program for Snow-Removal Volunteers

Monday, June 2, 2008 (continued)

T. Thiis, Norwegian University of Life Sciences, Norway
**Measurements of Snow Penetration in Ventilation Openings
in Buildings**

J. Beyers, Rowan Williams Davies and Irwin, Inc., Canada
**Meteorological Prediction and CFD Simulation of In-Cloud
Icing on Tall Buildings**

3:00 pm – 5:00 pm

Poster Session I (with coffee)

T. Chiba, Hokkaido Institute of Technology, Japan
**Study on Relationship Between Roof Snow Sliding and
Response of Wooden Houses**

A. Flaga, Cracow University of Technology, Poland
**Wind-Tunnel Test for Snow Load Prediction on a Roof of the
Municipal Stadium in Poznan**

I. Kamishi, Snow and Ice Research Center, NIED, Japan
**Damage and Restoration of the Snow Avalanche Control
Structures Hit by the 2004 Mid-Niigata earthquake at Niigata,
Japan**

R. Kinash, AGH University of Science and Technology, Poland
**Technique of Determination of the Parameters of Snow Loads
for Towns, Peak and Passes of Carpatian Region**

T. Tsukidate, Hachinohe Institute of Technology, Japan
**A Study on the Public Housing to the Elderly People from the
Point of Snow-Measure in Snowy Area, Japan**

5:00 pm

Evening free with dinner/recreation on your own.

Tuesday, June 3, 2008

7:00 am – 8:30 am

Breakfast Buffet

8:30 am – 10:00 am

Session 4: Building II

K. Hosokawa, Hokkaido Institute of Technology, Japan
A Study on the Optimal Installation of Photovoltaic Systems in Snowfall Areas

T. Lovlin, Rowan Williams Davies & Irwin, Inc., Canada
Snow Loads and Roof Installation – A Building Code Disconnect

V. Meløysund, SINTEF Building and Infrastructure, Norway
Economical Effects of Differentiating Roof Snow Loads

10:00 am – 10:30 am

Coffee Break

10:30 am – 12:00 pm

Session 5: Snow Drift I

M. O'Rourke, Rensselaer Polytechnic Institute, USA
Simulation of 50 Year Drift Loads

S. Sakurai, Hokkai-Gakuen University, Japan
Estimation of Ununiform Snow Accumulations on Roofs Based on Wind Tunnel Tests Using Artificial Snow and Wind Pressure Coefficients

G. Kimbar, Cracow University of Technology, Poland
A New Approach to Similarity Criteria for Predicting a Snow Load in Wind-Tunnel Experiments

12:00 pm – 1:30 pm

Lunch

1:30 pm – 3:00 pm

Session 6: Snow Technology

M. Kobiyama, Muroran Institute of Technology, Japan
The Study on the Heat Exchange System Through a Horizontal Borehole in a Snow Mound

N. Yasumura, Yamaguchi University, Japan
Development of Pipe Heating System with Geo-Thermal Tank and Its Rational Maintenance

S. Kamimura, Nagaoka University of Technology, Japan
Ice-Making Process by Radiation Cooling

S. Kamimura, Nagaoka University of Technology, Japan
A Simple Air-Conditioning System Using Built-In Snow Storeroom

Tuesday, June 3, 2008 (continued)

3:00 pm – 5:00 pm

Poster Session II (with coffee)

T. Hannuki, Nihon University, Japan

Studies on Snow Accumulation around Buildings with Pilotis in Drifting Flow

S. Pichugin, Poltava National Technical University, Ukraine

Reliability Estimation of Steel Structures under Snow Loads

S. Kamimura, Nagaoka University of Technology, Japan

The Chu-Etsu Earthquake and 2005 Snow-Hazards Coupling

K. Takeichi, Hokkai-Gakuen University, Japan

Experimental Study on the Effects of Anti-Freezing Pavements of Grooving Type Based on the Full Scale Wheel Load Tracking Tests in the Laboratory

S. Kobayashi, Niigata University, Japan

An Example of Automatic Record of Snow in a Mountain Area in Japan

T. Tsutsumi, Hokkaido Northern Regional Building Research Institute, Japan

Growth Process of Snow Cornice on a Roof

5:00 pm

Evening free with dinner/recreation on your own.

Wednesday, June 4, 2008

7:00 am – 8:30 am

Breakfast Buffet

8:30 am – 10:00 am

Session 7: Avalanche

H. Matsushita, Civil Engineering Research Institute for Cold Region, Japan

A Shear Strength of New Snow Under Conditions of Low Temperature and High Snowfall Intensity

A. Jones, Chris Stetham & Associates, Canada

Large Avalanche Protection Canopies for Mine Access Tunnel, Galore Creek Mine project, BC, Canada

A. Shoji, Protech Engineering Inc., Japan

Dynamic Characteristics of a High-Density Snow Block Falling on the Slope

10:00 am – 10:30am

Coffee Break

10:30 am – 12:00 pm

Session 8: Snow Drift II

T. Thiis, Norwegian University of Life Sciences, Norway

Measurement and Numerical Simulations of Snow Accumulation on Curved Roofs

T. Lovlin, Rowan Williams Davies & Irwin, Inc., Canada

Cost Implications of Roof Step Orientation

T. Okaze, Tohoku University, Japan

Modeling of Drifting Snow Development in a Boundary Layer and its Effects on Wind Field

Y. Tominaga, Niigata Institute of Technology, Japan

CFD Prediction of Snowdrift Around a Cubic Building Model

12:00 pm – 1:30 pm

Lunch

1:30 pm – 5:00 pm

Optional Field Trip – Walking Tour and Bus Tour (Bus transportation provided.)

TOPIC - DESIGNING IN SNOW COUNTRY: SNOW MANAGEMENT ISSUES FACING BOTH COMMERCIAL AND RESIDENTIAL BUILDINGS AT WHISTLER RESORT

7:00 pm – 8:00 pm

Social Hour

8:00 pm – 10:00 pm

Banquet

Thursday, June 5, 2008

7:00 am – 8:30 am

Breakfast Buffet

8:30 am – 10:00 am

Session 9: Structural Loading II

P. Delpech, CSTB, France

Quantitative Assessment of Snow Loads on Complex and Extended Roof Shapes

M. O'Rourke, Rensselaer Polytechnic Institute, USA

Eave Ice Dams

V. Meløysund, SINTEF Building and Infrastructure, Norway

Development of Design Snow Loads on Roofs in Norway

10:00 am – 10:30 am

Coffee Break

10:30 am – 12:00 pm

Session 10: Summaries and Future Research Directions

- **Structural Loading**
- **Roads**
- **Buildings**
- **Snow Drift**
- **Snow Technology**
- **Avalanche**

12:00 pm

Distribution of boxed lunches and departure