

INTERNATIONAL GLACIOLOGICAL SOCIETY

International Symposium on  
Seasonal Snow and Ice



Lahti, Finland  
28 May–1 June 2012

*Co-sponsored by:*

- ❄ Department of Physics, University of Helsinki
- ❄ Micro-Dynamics of Ice (Micro-DICE) network of the European Science Foundation

SECOND CIRCULAR

October 2011

<http://www.igsoc.org/symposia/>

<http://www.gastro.physics.helsinki.fi/IGS2012/>



The International Glaciological Society will hold an International Symposium on 'Seasonal Snow and Ice' in 2012. The symposium will be held in Lahti, Finland, from 28 May to 1 June 2012.

## THEME

Seasonal ice covers wide zones around the globe, mostly in sub-polar latitudes. The main forms are seasonal snow, sea ice, lake and river ice and frozen ground. The extent of the seasonal ice zone is highly sensitive to climate as small climatic variations can have a large impact on the environment as well as human living conditions. Ice–climate feedback mechanisms are important to study, as they are often first identified in the seasonal ice zone.

New technologies have broadened our ability to examine the seasonal ice zone, though large uncertainties about its current state remain. Numerical modelling is advancing but thin ice and seasonal snow covers close to the climatological ice margin remain difficult to model because of their transient nature. Ecological impact studies in the seasonal ice zone have increased over the past ten years, and serve to further highlight the important role seasonal ice has on the many physical, chemical and biological systems of the sub-polar latitudes.

In view of these advancing technologies, modelling improvements and ecological studies, we announce a symposium focussed on the understanding of seasonal snow and ice. The goal of the symposium is to progress further in understanding how seasonal snow and ice is responding to changes in the environment and climate, and what changes can be expected in the future. This meeting seeks to address these problems by bringing together scientists from diverse communities engaged in research on snow, sea ice, freshwater lake and river ice and frozen ground.



**Micro-DICE**  
ESF Research Networking Programme  
Micro-Dynamics of Ice



UNIVERSITY OF HELSINKI



## TOPICS

Topics include, but are not limited to:

1. Observations of temporal changes of seasonal snow and ice cover, including snow and ice phenomenology, in situ observations and mathematical modelling techniques.
2. Physical, chemical and biological processes of seasonal snow and ice, including snow metamorphosis, snow structure models and the effect of snow quality on the biosphere.
3. Micro-dynamics of ice, including analysis, modelling and interpretation of ice and snow microstructures, and linking microstructures to geophysical signals.
4. Seasonal sea-ice dynamics and the impact of seasonal sea ice on the ocean, including scaling of ice dynamics, mathematical models, ice ridges, and the oceanic boundary layer under sea ice.
5. Frozen ground and permafrost, focussing on observations, theoretical advances and modelling.
6. Lake and river ice, including ecology of frozen lakes, river ice models, estuaries.
7. Ecological impact of snow cover and snow quality.
8. Remote sensing techniques applied to seasonal snow and ice, including sea and lake ice and snow-mapping technology.
9. Theoretical and numerical advances in modelling seasonal snow and ice, including coupling of cryosphere models with regional climate models and intercomparison of models.
10. Projections and forecasts of seasonal snow and ice in a changing climate, including downscaling methods and evaluations.





## ABSTRACT AND PAPER PUBLICATION

Participants wishing to present a paper (either oral or poster) at the Symposium will be required to submit an abstract by 16 January 2012. A program and collection of submitted abstracts on a USB stick will be provided for all participants at the symposium. The Council of the International Glaciological Society has decided to publish a thematic issue of the *Annals of Glaciology* on topics consistent with the Symposium themes. Submissions to this issue will not be contingent on presentation at the Symposium, and material presented at the symposium is not necessarily affirmed as being suitable for consideration for this issue of the *Annals*. Participants are encouraged, however, to submit manuscripts for this *Annals* volume. The deadline for receiving *Annals* papers is 2 May 2012.

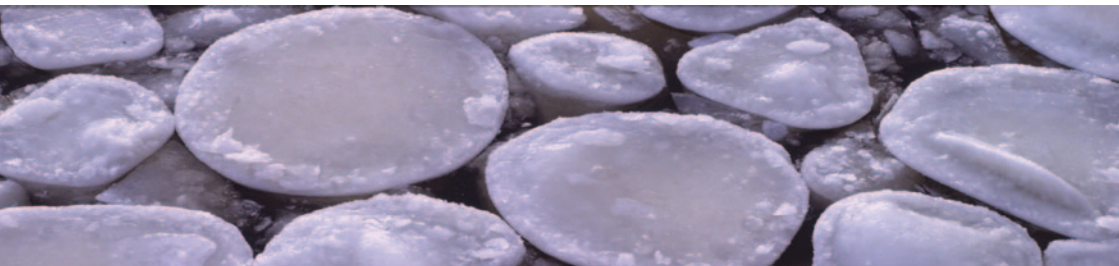
## REGISTRATION FEES

All fees are in euros, €

– Participant (IGS member):	€480
– Participant (not IGS member):	€540
– Student or retired IGS member:	€240
– Accompanying person (18+):	€170
– Accompanying person (12–17):	€100
– Accompanying person (<12):	Free
– Late registration surcharge (after 2 April 2012):	€80

The fees include the icebreaker, banquet, daily luncheons (Mon–Fri), daily morning/afternoon coffee/snacks and the mid-week excursion with an evening barbecue.

**REGISTRATION BY MAIL:** Though we strongly prefer registration through the website, it can however also be done by filling in and returning the back page of this circular. If payment by credit card is not possible, contact the IGS office to arrange for a bank transfer. Payments made after 2 April 2012 must include the additional €80 late-registration fee. When completed, please send the form to the Secretary General at the IGS address.





**ACCOMPANYING PERSONS:** The accompanying person's registration fee (€170 for ages 18 and over, €100 for ages 12–17; under 12 free) includes the icebreaker, the mid-week excursion with evening barbecue and the banquet. Short excursions and activities in and around Lahti and to Helsinki will be offered on request at additional cost. These include short trips to sightseeing spots in the city and a day trip to the surrounding regions.

**STUDENT/POSTDOC SUPPORT:** Funding is available to partially support student and postdoc attendance at this symposium. Application details will be posted on the symposium homepage by November 2011 at the latest.

**LOCATION:** The meeting will be held at Sibelius Hall, Lahti. Lahti is located in the southern part of the Finnish central lake district and has a population of about 100 000. The end of May is characterized by little precipitation and typical daily temperatures of 15–20°C (60–70°F) but peaks up to 25°C (77°F) may occur. The surroundings offer plenty of scope for geological and geographical excursions in the lake district.

**ACCOMMODATION:** Hotel information will be available later on the symposium website, with special prices for symposium participants. All these hotels will be located within a 15-minute walk of the symposium venue or can be reached using the local bus service.

**MID-WEEK ACTIVITIES:** A half-day mid-week excursion will be organized to explore some of Finland's lake district and cultural surroundings. Lahti is located in the southern corner of the central lake district of Finland, the landscape of which was formed 10 000 years ago by the retreating Fennoscandian ice sheet. The excursion will end with a barbecue and sauna on the beach.





**RECEPTION:** There will be an icebreaker reception on Sunday 27 May in the Lahti Ski Museum, located in the Ski Stadion 15 minutes' walk from the city centre. You will also be able to complete your symposium registration there. Come along to meet your fellow delegates, get your bearings and collect your registration package.

**BANQUET:** The banquet will be held on Thursday evening in the Lahti officers' club at a historic army base.

#### POST-SYMPOSIUM EXCURSION

Information will be available later on the symposium website.

Information will be updated on the symposium website, <http://gastro.physics.helsinki.fi/IGS2012/> as it becomes available.

#### IMPORTANT DATES

Abstract submission deadline:	16 January 2012
Notification of acceptance:	15 February 2012
Pre-registration deadline:	2 April 2012
Paper submission deadline:	2 May 2012
Deadline for refund:	2 May 2012
Registration and Icebreaker:	27 May 2012
Conference begins:	28 May 2012
Final revised papers deadline:	1 August 2012





#### SYMPOSIUM ORGANIZATION

Magnús Már Magnússon (International Glaciological Society)

#### SCIENTIFIC STEERING AND EDITORIAL COMMITTEE

Matti Leppäranta, Chief Editor (University of Helsinki, Finland), Lauri Arvola, Nikolai Filatov, Peter Jansson, Yuji Kodama, Zhijun Li, Lasse Makkonen, Martin Schneebeli and others to be appointed as required

#### LOCAL ORGANIZING COMMITTEE

Matti Leppäranta (Chair), Lauri Arvola, Jari Haapala, Onni Järvinen, Kari Kajuutti, Esko Kuusisto, Sirpa Rasmus, Jukka Tuhkuri

#### CONTACTS FOR FURTHER INFORMATION

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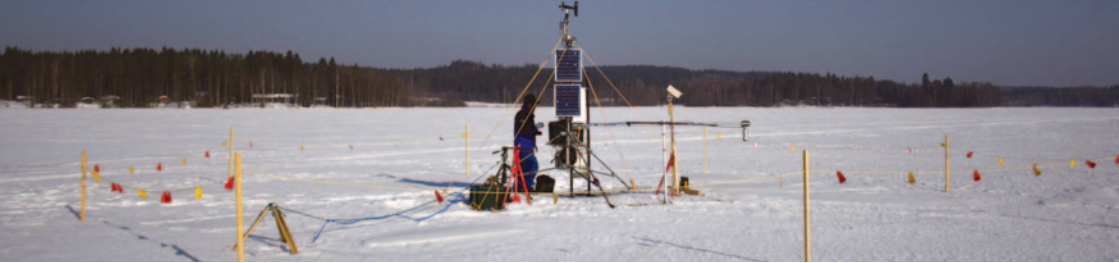
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Local symposium website: <http://www.gastro.physics.helsinki.fi/IGS2012/>





INTERNATIONAL SYMPOSIUM ON SEASONAL SNOW AND ICE  
Lahti, Finland, 28 May–1 June 2012  
REGISTRATION FORM

*Register online at [www.igsoc.org/symposia/2012/finland/registration](http://www.igsoc.org/symposia/2012/finland/registration)*

Family Name: \_\_\_\_\_

Given Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Tel: \_\_\_\_\_ E-mail: \_\_\_\_\_

Accompanied by:

Name: \_\_\_\_\_ Age (if under 18) \_\_\_\_\_

Name: \_\_\_\_\_ Age (if under 18) \_\_\_\_\_

Dietary and other requirements: \_\_\_\_\_

\_\_\_\_\_

**Registration fees (euros)**

Participant (IGS member)	€480
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TOTAL REGISTRATION FEES £ \_\_\_\_\_

Payment of registration fee by MasterCard, VISA or American Express

Card number

Expiration   /   CVV (last 3 numbers on signature strip)

Name of card holder as shown on card: \_\_\_\_\_

Signature: \_\_\_\_\_