



Second Announcement of the 5th  
International Conference on

**Plant and Microbe Adaptations to Cold  
(PMAC 2009)**

**Aas, Norway**

**4 – 8 December 2009**

**Registration and Accommodation  
Information**

**Call for Abstracts**

website : <http://www.umb.no/conferences/article/pmac2009>

Correspondence: [PMAC2009@umb.no](mailto:PMAC2009@umb.no)

## INVITATION

Following meetings in Japan 1997, Iceland 2000, Canada 2003 and Italy 2006, we will organize the next meeting on Plant and Microbe Adaptations to Cold (PMAC) in Aas, Norway, at the campus of the Norwegian University of Life Sciences, 4-8 December 2009.

## THEMES OF THE WORKSHOP

The PMAC aims to bring together students, experts, researchers, and industrial companies interested in the effect of low temperature on plants and microorganisms, their physiological and genetic adaptation to frost and cold and interactions between plants and microorganisms. One of the main themes of the conference will focus on the effect of climatic changes; how this can be predicted with mathematical models, and also on the knowledge gaps for making reliable models on the effect of climatic changes on winter survival of plants.

## TENTATIVE PROGRAM

### ***Theme 1 The Environment*** (Organizer Anne Marte Tronsmo)

What is a 'normal' environment? *Speaker to be announced*

Effect of low temperature on the abiotic environment: Soil frost

*Lars Egil Haugen, Norway*

Snow – An environment conducive to psychophilic fungi, “Snow moulds” - *Naoyuki Matsumoto, Japan*

### ***Theme 2 Effects of "Cold" on plants and microorganisms***

#### **Theme 2A Plants** (Organizer J Einset)

Cold stress in plants – physiological/biochemical responses to low temperature (freezing and chilling injury) - *Christiaan van der Schoot, Norway*

#### **Theme 2B Microorganisms** (Organizer A Tronsmo)

Cold stress in microbes - *Rosa Margesin, Austria*

#### **Theme 2C Effects of indirect cold stress** (Organizer Bjarni Gudleifsson)

Physical and chemical winter stresses to plants - *Bjarni Gudleifsson, Iceland*.

### ***Theme 3 Cold adaptation in living organisms***

#### **Theme 3A Physiological adaptations in plants** (Organizer J E Olsen)

Physiological cold adaptation in plants– acclimatization, cold hardening in herbaceous plants. - *Marcin Rapacz, Polen*

Physiological cold adaptation in plants– acclimatization, cold hardening in woody plants. - *Øystein Johnsen, Norway*.

#### **Theme 3B Genetic adaptation in plants- plant breeding** (Organizer O A Rognli)

Genetic cold adaptation in plants. - *Garbor Galiba, Hungary*.

Association mapping to identify new determinants for frost resistance in barley. - *Luigi Cattivelli, Italy*

**Theme 3C: Cold adaptation in microorganisms** (Organizer A Tronsmo)

Cold adaptation in fungi. - *Tamotsu Hoshino, Japan*

**Theme 4 Plant- microbe interaction in cold environment** (Organizers A M Tronsmo and I S Hofgaard)

Plant – microbe interaction in cold environment – *Denis Gaudet, Canada*

Genetic and molecular bases of snow mould resistance in annual bluegrass. - *Annick Bertrand, Canada*

Biological control of plant diseases in cold environment. - *Tom Hsiang, Canada*

Mycoparasitism and mineral sequestration of *Trichoderma atroviride*, a

cold adapted biological control agent, and its effects on plants. - *Jenifer Huang McBeath, USA*

**Theme 5 Climatic changes - Challenges**

What challenges must plants and microbes face in a new environment?

**Theme 5A Modeling (Simulating) the effects of climatic change** (Organizer Trond Rafoss)

Modelling the effects of climate change. - *Marcel van Oijen, UK.*

**Theme 5B. Biological responses to climate change. What are our main knowledge gaps?**

**Panel discussion:**

Soil microflora in a changing climate

Plant acclimatization and freezing tolerance under a changing climate (J Einset)

Plant diseases in a changing winter climate (A M Tronsmo)

Breeding plants that tolerates an unpredictable climate (O A Rognli)

## REGISTRATION

Completed registration forms should be sent by e-mail or fax to the Conference Secretariat by the deadline of **September 15st, 2009**.

Please indicate your choice of poster or oral presentation on the registration form. For both the posters and the oral presentations, a one page abstract should be submitted by October 1st 2009. Given restrictions on time, it may not be possible to give everyone the opportunity to give an oral presentation. Therefore, poster sessions will be organized to enable participants to present their work. From the abstracts, the organizing committee will select speakers for short oral communications (15-20 min, discussion included) or poster presentations. Selected authors will be informed regarding the oral/poster presentation assignment, by **October 15<sup>th</sup>, 2009**.

Projectors for computer presentations will be available. Participants should bring their presentation on a CD or memory stick. Overhead projectors will only be available upon special request.

Abstracts can be submitted as e-mail attachments preferably in Word and sent to [PMAC2009@umb.no](mailto:PMAC2009@umb.no) Please follow the abstract format indicated below.

### ABSTRACT FORMAT

Paper format: A-4; Line spacing: 1,5; Title in CAPITAL letters, Times New Roman 14pt, centred; Name of authors, underline presenting author, use superscript symbols for affiliation, Time New Roman 12pt, centred; Affiliation of all authors, Times New Roman 10pt, centred.

See the example abstract: Abstract\_Template.rtf.

## POSTERS

Two poster sessions will be organized on Saturday and Sunday. Maximum poster size will be 90 cm in width and 180 cm in height. Pins and adhesives will be provided.

## PRELIMINARY PROGRAM OUTLINE

The meeting will start on the evening of December 4 with registration and reception, followed by 3.5 days for sessions and a conference dinner with Norwegian specialities. Oral and poster presentations will be given and time will be devoted for discussion.

To arrange all the necessary details for the scientific meeting, please send us the abstract ([PMAC2009@umb.no](mailto:PMAC2009@umb.no), fax: +47 64 96 56 01) **not later than 1<sup>st</sup> October 2009**, (the registration form should be filled out and sent to us **by the 1st September 2009**).

Tentative schedule:

Friday 4 December	17.00 - 20.00 h	Registration
	18.00 -	Get together, welcome buffet
Saturday 5 December	08.00 – 10.00	Registration
	09.00 - 16.00 h	Oral presentations including lunch and coffee breaks
	16.00 – 18.00h	Poster session
Sunday 6 December	09.00 – 16.00 h	Oral presentations including lunch and coffee breaks
	16.00 – 18.00 h	Poster session
Monday 5 December	09.00 - 17.30 h	Oral presentations including lunch and coffee breaks
	18.00	Conference dinner
Tuesday 8 December	09.00 - 11.30 h	Oral presentations
	11.30 – 12.00	Closing of the conference
	12.00 - 13.00	Lunch

## ACCOMMODATION

Accommodation will be available at Thon Hotel Ski in the city of Ski, approx. 20 km S of Oslo. Thon Hotel Ski is located across the street from Ski Railway Station. In addition, both the airport shuttle bus and local buses have stops adjacent to Ski Railroad Station.

The web site <http://www.thonhotels.com/Hotels/Countrys/Norway/Ski/Thon-Hotel-Ski/> gives more information on the hotel and its location.

**Please make your own reservation directly to [ski@thonhotels.no](mailto:ski@thonhotels.no)** and give the Booking number: 926180 to obtain the reduced PMAC conference price of NOK 950, - per night per person, and NOK 1150, for a double room for two. The room must be booked before the 1st of October.

## TRAVEL FROM OSLO AIRPORT GARDERMOEN TO SKI

**By bus** – take SKI bus Nor-Way Bussekspress (<http://www.nor-way.no/>) that stops outside the Gardermoen arrival hall at platform B15. It leaves every hour on the hour. Travel time 1 h 20 min. (Price NOK 205).

**By train** - take the airport train (Flytoget) to Oslo (NOK 170) and change trains to Ski. The airport train leaves every 20 min. There are frequent trains from Oslo to Ski either marked Ski or Moss (Price NOK 57).

### **TRAVEL DIRECTLY FROM OSLO AIRPORT GARDERMOEN TO AAS**

**By bus** – take FREDRIKSTAD bus Nor-Way Bussekspress that stops outside the Gardermoen arrival hall at Platform B27. Buy ticket to Korsegården (Price NOK 230). It leaves 10 min past every hour except 12 and 14 hours. Distance from Korsegården to the University is ca 1 km. You can ask the bus driver to order a taxi for you from Korsegården to the campus.

**By train** - take the airport train to Oslo (the airport train leaves every 20 min) and change to train marked Moss. The train leaves 48 min past every hour. (Price Oslo to Aas NOK 75). Remember to leave the train at Aas.

All times and prices for trains and buses may be changed. We will send train and bus timetables to registered participants. For the time schedule for airport buses see

<http://www.flybussekspressen.no/>

### **TRANSPORT BETWEEN SKI AND AAS**

Local bus 906 between Ski and Aas. From Ski take Dyrløkke bus; from Aas take Bøleråsen bus. Leaves every half hour. Bus stop in Ski is the Ski Railroad Station; bus stop in Aas is University/Aud Max. (Between building 50 and 51 on the map. The conference and the reception will take place in building 55)

### **WORKSHOP SECRETARIAT**

Secretariat; Liv Korslund, fax +47 64 96 56 01; e-mail: [PMAC2009@umb.no](mailto:PMAC2009@umb.no)

Conference convenor: Anne Marte Tronsmo, IPM, Norwegian University of Life Sciences NO 1432 Aas, Norway phone +47 92605766; e-mail: [anne-marte.tronsmo@umb.no](mailto:anne-marte.tronsmo@umb.no)

### **INTERNATIONAL ADVISORY SCIENTIFIC COMMITTEE**

Bjarni E. Guðleifsson, Naoyuki Matsumoto, Tamotsu Hoshino, Annick Bertrand, Karen Tanino and Luigi Cattivelli

### **LOCAL COMMITTEE**

**Anne Marte Tronsmo**, Odd Arne Rognli, John Einset, Arne Tronsmo, Jorunn E. Olsen, Ingerd S. Hofgaard and Trond Rafoss.

### **IMPORTANT DATES**

Deadline for registration/payment of registration fee	September 15 <sup>st</sup> 2009
Deadline for submission of abstracts	October 1 <sup>st</sup> 2009
Notification of receipt of abstract (oral/poster)	October 15 <sup>th</sup> 2009

Looking forward to an exciting meeting;  
On behalf of the organizing committee:

*Anne Marte Tronsmo*