



# Arctic change – a global concern

A seminar enhancing science–policy interactions to understand the relevance of the Arctic region to the global climate system and to identify effective measures against climate change.

Tuesday 3 February 2015 (8.30–12.15)

House of Estates, room 15

Snellmaninkatu 9, Helsinki

The Arctic environment is witnessing rapid biophysical changes due to human influence: the permafrost is thawing and the ice cover is retreating. So far, discussions have centred on new economic possibilities, given that the extensive northern natural resources are becoming more easily accessible.

But, do we have surety that these changes will not result in unexpected and uncontrolled consequences? And, do we have certainty that the changes will be limited to the Arctic region alone or will they affect the entire globe?

The seminar is intended to increase awareness of the linkage between the Arctic region and the global climate system and show how this linkage might affect human well-being. To this end, the seminar aims at bringing together scientists, decision-makers and the civil society for constructive and forward-looking discussions.

It is anticipated that the seminar will result in more informed decision-making and in increased policy-relevance to future research in this area. The science-policy dialogue is also intended to contribute to the discussions on the global Post-2020 UN Climate Agreement and other climate change-related processes.

The seminar is jointly organized by the Finnish Ministry of the Environment, the Forum for Environmental Information and Future Earth Finland. The language of the seminar is English.

All interested stakeholders are warmly welcome to participate in the seminar. Also foreign embassies residing in Helsinki are encouraged to take part.

## Programme

Chair, **Laura Höijer**, Research Director,  
Ministry of the Environment

8.30 Coffee

9.00 Opening words, **Ms Sanni Grahn-Laasonen**,  
Minister of the Environment

9.15 Upcoming US presidency in the Arctic Council,  
Deputy Chief of Mission **Ms. Susan Elbow**

**Presentations: Global consequences of Arctic change -  
Scientific perspectives**

9.30 How is the Arctic changing because of climate change?  
An overview on the main global consequences and  
connections, Academy Professor **Markku Kulmala**,  
University of Helsinki

9.50 Global and regional implications of the Arctic Change:  
contrasting international and Russian perspectives<sup>1</sup>,  
Professor **Oleg A. Anisimov**, North-East Federal University,  
Yakutsk and State Hydrological institute, St. Petersburg, Russia

10.10 Black carbon and its effects on the Arctic,  
Senior Research Scientist **Kaarle Kupiainen**,  
Finnish Environment Institute

10.35 Questions

10.50 Coffee break

11.10 **Panel discussion: Policy responses and the role of  
the new Climate Agreement**  
Moderator: **Mr Mikael Hilden**, Director of Climate Change  
Programme, Finnish Environment Institute

- **Mr Oras Tynkkynen**, Member of the Parliament
- **Mr Jussi Nikula**, Head of Ecological Footprint Programme,  
WWF Finland
- **Mr Aleksi Härkönen**, Ambassador of Arctic Affairs,  
Ministry for Foreign Affairs
- **Dr Oleg A. Anisimov**, North-East Federal University in  
Yakutsk, Russia
- **Mr Harri Laurikka**, Chief Negotiator for Climate Change,  
Ministry of the Environment
- **Mr Jouni Keronen**, Executive Director,  
Climate Leadership Council

12.10 Conclusions

12.15 Closing of the seminar

<sup>1</sup> The presentation is co-authored by Professor Oleg Anisimov and Professor Trofim Maximov from the North-East Federal University in Yakutsk, Russia

# Keynote speakers' biographies



## Oleg Anisimov

Oleg Anisimov is a professor of physical geography in the Hydrological Institute in St. Petersburg, Russia. He is author of more than 100 scientific papers and his main research interests are in modeling the environmental impacts of changing climate, with the focus on Northern lands and permafrost. He has been involved in several joint projects targeted at predictive permafrost modeling and evaluation of socio-economic impacts of changing climate in permafrost regions. Oleg Anisimov has been involved as coordinating author in the Third (2001), Fourth (2007), and Fifth assessment reports of the Intergovernmental panel on climate change, and in 2007 he shared the Nobel Peace Prize with the IPCC writing team. He is also a contributor to the Arctic climate assessment report (2005) and to the assessment report of the Arctic Council "Snow, water, ice, and permafrost in the Arctic" (2011).



## Kaarle Kupiainen

Dr. Kaarle Kupiainen has a PhD in Environmental Science and Policy from the University of Helsinki and acts as a senior research scientist at the Finnish Environment Institute. Dr. Kupiainen's areas of expertise are emissions of air pollutants and greenhouse gases, inter alia, of black carbon and other short-lived climate pollutants (SLCPs), as well as their impacts on human health and climate locally, regionally and globally. Dr. Kupiainen is a member of several expert and working groups within the Arctic Council and its Working Groups. He has authored 67 peer-reviewed articles and has acted as a lead author in the UNEP/WMO Integrated Assessment of Black Carbon and Tropospheric Ozone as well as the assessment reports of the Arctic Monitoring and Assessment Programme (AMAP).



## Markku Kulmala

Academy Professor Markku Kulmala, Head of the Division of Atmospheric Sciences of the University of Helsinki, is a world leader in atmospheric aerosol science and one of the founders of "terrestrial ecosystem meteorology". His works cover theoretical and experimental physics, atmospheric chemistry, observational meteorology, biophysics and, in particular, biosphere-aerosol-cloud-climate interactions. Professor Kulmala leads the international research program PEEEX (Pan Eurasian Experiment), an innovative example of strong regional cooperation efforts taking place among Finland and several other European countries, Russia and China to explore challenging questions of global change in the Northern Eurasian, particularly arctic and boreal regions.