

A Proposal for a new UArctic Thematic Network



POPs and Chemicals of Emerging Concern in the Asian Arctic

Yi-Fan Li, Ph.D

Harbin Institute of Technology, China

Anatoly N. Nikolaev, Ph.D

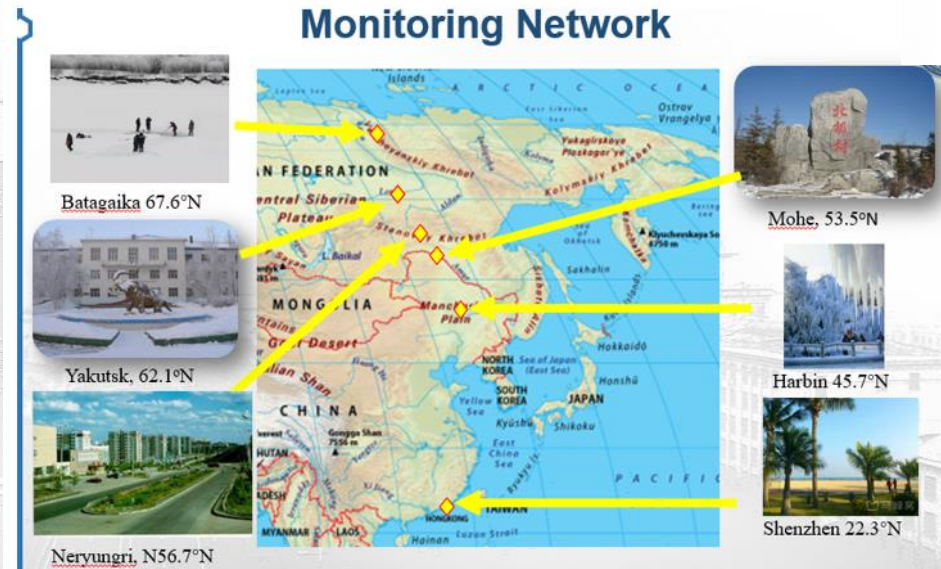
North-Eastern Federal University, Russia

Copenhagen, Denmark, February 25-27, 2020

Photo: Jiannan Wang ©

Focus: Thematic area: Natural Sciences and Health & Education

- To establish a Thematic Network amongst experts of different disciplines and from all three major northern regions to study “**POPs and Chemicals of Emerging Concern in the Asian Arctic**”
 - To study the occurrence, trends, and sources of persistent organic pollutants (POPs) and chemicals of emerging concern (CECs) in multiple environmental compartments in the Asian Arctic, their impact on the health of the ecosystems and indigenous people, and their response to climate change
 - To investigate the differences in sources and fate of the contaminants between Russia and China
 - To train students and faculties with Arctic knowledge and research ability
- * A special meridian sampling program including 6 monitoring sites, from Asian Arctic of Russia (Batagaika, Verkhoyansk Region) to the City of Shenzhen, South of China has been established.



Aim and Objectives

- To create and strengthen knowledge and understanding the pathways, fate of POPs and CEACs in the Asian part of the Arctic and the Arctic as a whole
- To create close collaboration with the Arctic Council working group of Arctic Monitoring and Assessment Programme (AMAP) for the monitoring work
- To support of the UNECE Convention on Long-range Transboundary Air Pollution (LRTAP Convention) for long-range transport modeling by working with the Task Force on Hemispheric Transport of Air Pollutants (HTAP)
- To address how scientific communities can increase the Arctic indigenous people resilience to the impacts of pollutants and the climate change in their area in comparison with people in the other Arctic regions and China.
- To establish International Arctic School (IAS) working closely with UArctic N2N Programme for training students and faculties with Arctic knowledge and research abilities
- To develop new joint Arctic courses among partner institutes



* IAS Winter School 2020

Planned Activities:

1. Research cooperation

- Air and soil sampling at the 6 sites (started already)
- Joint laboratories and research team among partner institutes (started already)
- Joint research publications/workshops/conferences
- Coordinated contributions to international working groups
- Collaboration/sharing data archives

2. Joint educational programs/ Knowledge sharing in education

- International Arctic School (IAS) Summer/Winter Schools on Arctic environment and ecosystem, with the special inclusion of 1-2 indigenous students full financial supported
- Internships and joint educational programs for graduate studies and research
- Joint training workshop for Arctic sample collection, treatment and analysis
- Sharing existing courses and developing new courses
- Exchange programs for undergraduate and graduate students
- Collaboration with other UArctic thematic networks (such as Permafrost, Natural Hazards, Arctic Extractive Industries, Arctic Plastic Pollution, and Science Diplomacy)



Partners



- Harbin Institute of Technology (HIT), China
- North-Eastern Federal University, Russia
- Russian Association of Indigenous Peoples of the North (RAIPON)
- Norwegian University of Life Science, Norway
- University Center in Svalbard (UNIS), Norway
- Norwegian University of Science and Technology, Norway
- Aarhus University, Denmark
- Environment and Climate Change Canada
- GRID-Arendal, Norway
- Polar Research Institute of China
- Chinese Research Academy of Environmental Sciences
- Dalian Maritime University, China