

# **INTERNATIONAL SCIENCE INITIATIVE IN THE RUSSIAN ARCTIC**

Report from the United Kingdom

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*Presented by*

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# Government policy and implementation

*Arctic Policy Framework* published 2013

*Updated by policy paper 2018* (<https://www.gov.uk/government/publications/beyond-the-ice-uk-policy-towards-the-arctic>)

- Principles: respect, co-operation and appropriate leadership
- Commitments: helping to understand a changing Arctic through world-class science, protecting the Arctic's fragile environment, promoting prosperity in the region

*Science and Innovation Network (SIN)* (<https://www.gov.uk/world/organisations/uk-science-and-innovation-network-in-russia>)

- Supported jointly by two ministries/departments: Foreign, Commonwealth and Development Office (FCDO) and Department for Business, Energy & Industrial Strategy (BEIS)
- *SIN Russia* operational from 2010, based in British Embassy, Moscow, headed by Tatiana Iakovleva.
- Arctic Science is one of 5 identified priority areas.

*"The team works to enhance and facilitate strong, sustainable and mutually beneficial partnerships between scientists, research communities and institutions in the UK and Russia; follow developments in the science and innovation field; harness innovation prosperity partnerships and investment to grow UK-Russia innovation capabilities. SIN Russia team organize UK-Russia scientific round tables, science cafes and lectures by leading British scientists across Russia; support major science festivals and seminars to promote knowledge and bilateral scientific collaboration."*

SIN Russia is an important agent of Science Diplomacy between UK and Russia.

'All about Arctic Science Diplomacy' ASSW session ID66 (Thursday 25 March)

*NERC Arctic Office* (<https://www.arctic.ac.uk/>)

- Funded by UKRI Natural Environment Research Council; hosted by British Antarctic Survey.
- Supports UK research in the arctic; provides advice to policy makers; develops international scientific cooperation across all aspects of Arctic Research; manages the UK Arctic Research Station at Ny-Ålesund on Svalbard.
- Often works together with SIN

*UK-Russia Arctic Science Bursaries 2020*

Supported by BEIS, administered by NERC AO and SIN.

10 groups of UK-Russian university partners.

Travel affected by COVID, but strong links established and continuing.

## Research Networks

*DIMA* (Developing Innovative Multiproxy Analyses—in Siberia and the Russian Far East)  
(<https://research.ncl.ac.uk/dima/>)

(University of Southampton, University of Newcastle upon Tyne, other UK, many Russian institutions).

*Network on high-latitude vegetation disturbance, climate and remote sensing.*

(University of Cambridge, Lomonosov Moscow State University, British Antarctic Survey, University of Durham, University of Leicester, RAS Institutes...) (wgr2@cam.ac.uk)

## International projects with UK involvement

*MOSAIC* project (<https://mosaic-expedition.org/>)

October 2019-October 2020 – completed during the year

AWI-AARI-U Colorado.

7 UK teams took part, funded by BEIS and NERC.

*Changing Arctic Ocean programme* (2017-2022: £16M - NERC)

*CACOON* (Changing Arctic Carbon cycle in the cOastal Ocean Near-shore)

Partners: Northumbria University, AWI, Proudman Lab.

Russian involvement: NE Science Station, Cherskii.

(<https://www.changing-arctic-ocean.ac.uk/project/cacoon/>).

*ACRoBEAR* (Arctic Community Resilience to Boreal Environmental change: Assessing Risks from fire and disease): Lomonosov Moscow State University, University of Leeds, Norway, USA, Finland, Sweden, France.

(<https://bag.leeds.ac.uk/projects/acrobear>). Studies across the Arctic including Sakha Republic.

*JustNorth* (<https://justnorth.eu/>) (to assess the viability of new economic activities in the region)

## Bilateral research activities

### *Multiplatform remote sensing of the impact of climate change on northern forests of Russia*

Nationally bilateral project (2018-2021): Lomonosov Moscow State University, Institute of Geography RAS, Institute of Space Research RAS, University of Cambridge, British Antarctic Survey.

(Funding: British Council, Russian Ministry of Science and Higher Education)

### *Constraining the deglaciation of the Eurasian / Fennoscandian Ice Sheets*

*improving the relative sea level record of the White Sea region; long-term lake evolution:*

Lomonosov Moscow State University, Northumbria University.

### *Palaeoclimate and permafrost dynamics in Siberia.*

Northumbria University, University of Irkutsk, others...

*Arctic Voices* (Leeds, Yakutsk): combines the analysis of satellite data with ethnographic work among local communities to try to get a more nuanced picture of how wider anthropogenic influences are affecting observable trends in wildfire activity in the region.

### *Creating a UK-Russian research network on disturbance and recovery of*

*terrestrial arctic and boreal ecosystems* (Cambridge, LMSU, IG RAS, IKI RAS, BAS)

Activities: Early-career science seminars, science festivals in Cambridge and Moscow, networking meeting. (Funding: FCDO/SIN Russia)

## Conferences, workshops, seminars

### *UK-Russia Arctic Science Links Webinars*

New series from September 2020.

Venues: Khanty Mansiysk, Tomsk, Kola Science Centre and Association of Maritime Heritage.

Around 200 attendances for the online sessions. Keen to host more and all ideas welcome.

Bringing together researchers in the UK and Russia, especially in areas that they might otherwise not have had opportunity to hear about. Organised by the NERC Arctic Office & SIN.

### *UKPN-APECS Russia Arctic Science Priorities Conference*

Supported by the Arctic Office and SIN.

### *UK-Russia Joint Session on Arctic Marine Research Expeditions*

At the end of October, as part of the MARESDU 2020 Conference in Moscow, organised by MSU.

Speakers from UK and Russia, including from the NERC Changing Arctic Ocean Programme.

Looking at joint opportunities for UK-Russia Arctic marine work. Organised by SIN, but with promotion work from the Arctic Office.

### *Arctic Interdisciplinary Studies (ARCTIS)*

interdisciplinary field course in the Russian Arctic  
organized by

UK Polar Network

APECS Russia

Kola Science Centre of the Russian Academy of Sciences.

Facilitate bilateral and interdisciplinary (Atmosphere, Cryosphere, Terrestrial, Marine and Social & Humanities) cooperation between early career scientists from the United Kingdom and Russia on Arctic natural and social studies.

Venues: Apatity, Kirovsk and Murmansk, (February 2019), Khanty Mansiysk (February 2020).

## Conferences, workshops, seminars [cont.]

*Remote sensing of vegetation at high latitudes in response to climate change and other disturbances:*

- Early-career scientist conference, (Moscow, online: November 2020).
- Networking meeting (Cambridge, online: February 2021)
  - organised by Institute for Space Research RAS, Institute of Geography RAS, University of Cambridge, MSU, and British Antarctic Survey
  - funded by FCDO/SIN Russia

*SPERARE* Workshops (not specifically Arctic but included).

Online workshops December 2020, March 2021. Funded by FCDO.

*University Alliance forum on Climate Change* (<http://uk-russia-alliance.ru/climate-change/eng>)

Not specifically but Arctic but included

UK-Russian one-day meeting on climate change, Feb 2021

Participation: LMSU, HSE Moscow, Yugra State University, Manchester Metropolitan University, University of Strathclyde, University of Leeds, University of Cambridge, University of Southampton.

## Publications

*The Marine Biologist* Magazine - Special Issue

Forthcoming Special Issue, focused on UK-Russia marine work, and the Russian marine Arctic in general.

Publication expected early May 2021.

*Polar Record* - Special Issue on Arctic Science Diplomacy

Supported by NERC Arctic Office and SIN as Guest Editors etc.

*Remote Sensing* – Special Issue on Remote Sensing of the Russian Boreal Forest

Accepting submissions till February 2022

(Olga Tutubalina, Gareth Rees editors)