





P5: RUSSIAN STATE HYDROMETEOROLOGICAL UNIVERSITY

Saint Petersburg, Russia

Departments concerned with SUNRAISE-related topics:

- Faculty of Ecology (Department of Applied and System Ecology; and Department of Geo-ecology, Nature Use and Environmental Safety)
- Faculty of Meteorology (Department of Meteorology, Climatology and Atmosphere Protection)
- Institute of Hydrology and Oceanography (Department of Water-Technical Surveys)
- Institute of Continuous Education

Contact person: Dr. Eduard Podgaiskii (podgaisky@rshu.ru)

SUNRAISE-RELEVANT RESEARCH TOPICS

| 1. | Methods and means of satellite monitoring of sea ice in the Arctic |
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| 2. | Influence of global dynamic processes on the composition and structure of the Arctic |
| | stratosphere |
| 3. | Construction of the "sea ice-ocean-atmosphere" system in the Arctic |
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| 4. | Variability of the gas composition of the Arctic in a changing climate |
| 4.5. | Variability of the gas composition of the Arctic in a changing climate Urbanisation of the indigenous people of the Arctic and sustainable development of |
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KEY PERSONALITIES, POTENTIAL MASTER'S AND DOCTORAL SUPERVISORS

- > Dr. Denis Alexeev Research interests: Applied and system ecology
- Prof. Dr. Nadezhda Sanotskaya Research interests: Hydrology; Hydraulics; Water resources; Statistics
- Prof. Dr. Larisa Timofeeva Research interests: Catchment hydrology; Application of satellite data in hydrology; Interdisciplinary studies; Transboundary water bodies; Modern approaches for teaching hydrology
- Prof. Dr. Aleksandr Evdokimov Research interests: Mineral resources of Russian Arctic





CURRENT AND PAST PROJECTS

| Project 1: "Arctic PIRE: Promoting Urban Sustainability in the Arctic" Project 1: "Arctic PIRE: Promoting Urban Sustainability in the Arctic" Project 2: "Development of a complex of digital educational solutions for continuous professional development in the field of hydrometeorological support and environmental monitoring in the Arctic zone - Federal Innovation Platform 'Hydromet-Arctic'" Project 3: "Provision of specialised hydrometeorological information to ensure navigation in the Barents and White Seas and the area of the Prirazlomnaya OIRFP" Project 4: "Climate change and environmental protection in the Arctic-perception, education and environmental transformation" Project 5: "Transarctic-2019" Project 5: "Transarctic-2019" Project 6: "Business Index North" Project 7: "Strengthening the capacity of MSP stakeholders and decision makers (Capacity4MSP)" Project 7: "Strengthening the capacity of MSP stakeholders and decision makers (Capacity4MSP)" Funded by: Interreg, Project type: building relations with external stakeholders opportunities Project 7: "Strengthening the capacity of MSP stakeholders and decision makers (Capacity4MSP)" | COMMENT AND TAKET MOSECIO | | |
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| Urban Sustainability in the Arctic" Foundation (NSF), Office of the Director (OD), USA Keywords: Urban sustainability; Arctic zone Project 2: "Development of a complex of digital educational solutions for continuous professional development in the field of hydrometeorological support and environmental monitoring in the Arctic zone - Federal Innovation Platform 'Hydromet-Arctic'" Project 3: "Provision of specialised hydrometeorological information to ensure navigation in the Barents and White Seas and the area of the Prirazlomnaya OIRFP" Project 4: "Climate change and environmental protection in the Arctic-perception, education and environmental transformation" Funded by: Gazprom-Neft Project type: building relations with external stakeholders Keywords: Arctic zone development Project 4: "Climate change and environmental protection in the Arctic-perception, education and environmental protection in the Arctic-perception, education and environmental protection in the Arctic perception, education and environmental protection in Arctic Project 5: "Transarctic-2019" Funded by: Government of Russia Keywords: Environmental protection in Arctic Project 6: "Business Index North" Funded by: Ministry of Project type: research, education, building relations with external stakeholders Keywords: Sustainability in the Arctic; Business opportunities Project 7: "Strengthening the capacity of MSP stakeholders and decision makers (Capacity4MSP)" Funded by: Interreg, European Union | | | |
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| Keywords: MSP; Baltic region; Capacity building | | | rescuren |





CURRENT AND RECENT PhD THESES

- ➤ Ekaterina Bulavina "Snow cover toxicity as an indicator of the ecological status of urban areas" (2018 ongoing)
- ➤ Ilya Pavlov "The influence of climatic parameters of the Vologda Oblast on the transport of pollutants in the atmosphere and the deposition of pollutants in urban areas" (2018 ongoing)
- ➤ Rahmatullozoda Akobirdzhon "Hydrochemical regime of rivers of South-Western Tajikistan" (2017 2020)
- ➤ Sherali Murtazoyev "Geoecological analysis of air pollution factors in the city of Dushanbe" (2018 2021)

RESEARCH AMBITIONS IN RELATION TO SUNRAISE

educational centres

| 1. | Implementation of research activities and provision of consulting services in the field | | |
|----|-----------------------------------------------------------------------------------------|--|--|
| | of satellite oceanology, hydrometeorology, environmental management, and | | |
| | environmental safety for the Arctic zone | | |
| 2. | Improvement of the system for training specialists and outreach | | |
| 3. | Setting up the Centre of Arctic and Climate Research at the institution | | |
| 4. | Development of a Microplastic Lab and an Arctic Lab in the institution | | |

ENABLERS AND BARRIERS ENCOUNTERED FOR RESEARCH DEVELOPMENT

Enablers Barriers Highly experienced professionals Low salaries of teaching and support personnel Track record in research Staff leakage Good connections to alumni Increased average age of teachers Growing interest in professional education Increased pedagogical load of academic staff Changes in national legislation Outdated development plan of the > Implementation of state institution programmes in the profile areas of the institution Unforeseen risks, such as a pandemic Uniqueness of the training offered > Activation of participation in scientific and educational projects Development of scientific and





NATIONAL RESEARCH/ POLICY SUPPORTING RESEARCH DEVELOPMENT

1. Strategy for developing Russia's Arctic zone and ensuring national security up to 2035

CAPABILITY IMPROVEMENT TARGETED TO FULFIL THE ASPIRED RESEARCH GOALS

Improvements are desired in:

- > Multimedia equipment
- > Training for academic or technical staff in language skills
- ➤ Integration into the world-leading research
- Marketing policy
- ➤ Maintenance of educational buildings and dormitories

ENABLERS AND BARRIERS ENCOUNTERED FOR RESEARCH TRAINING

| Enablers | Barriers |
|----------|--------------------------------------------------------------|
| - | High competition for funds and excellence |
| | Small number of budget-funded places at post-graduate school |