

НАУЧНО-ПРАКТИЧЕСКАЯ КОНФЕРЕНЦИЯ ПО ВОПРОСАМ ИЗМЕНЕНИЯ КЛИМАТА И ТАЯНИЯ ВЕЧНОЙ МЕРЗЛОТЫ RESEARCH AND TRAINING CONFERENCE ON CLIMATE CHANGE AND PERMAFROST THAWING Министерство Российской Фодерации по развитию Далинето Востона и Арктики Оборов Сородание Сородание и Сородание Север Сородание Сородание Сородание Сородание и С

PROGRAMME CLIMATE CHANGE AND PERMAFROST MELTING RESEARCH AND TRAINING CONFERENCE

Yakutsk

22-24 March 2023

22 March, Wednesday

10:00-11:20

Venue: Academic Council Hall at the Educational and Laboratory Building of Ammosov North-Eastern Federal University Address: 58 Belinskovo St. Opening of the Climate Change and Permafrost Melting Research and Training Conference 'Sustainability of Natural and Technical Permafrost Systems amidst Climate Change'

Organizer: Melnikov Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences

Moderator:

Mikhail Zheleznyak, Doctor of Geological Mineralogical Sciences; Corresponding Member, Russian Academy of Sciences; Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Welcome address:

Alexander Akimov, Deputy Chairman, Russian Federation Council's Committee on Federal Structure, Regional Policy, Local Self-Government, and Northern Affairs

Nikolay Korchunov, Ambassador-at-Large of the Ministry of Foreign Affairs of the Russian Federation; Chair, Arctic Senior Officials

Speakers:

Viktor Shepelev, Doctor of Geological Mineralogical Sciences; Professor, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences **Vladimir Romanovsky**, Candidate of Geological Mineralogical Sciences; Professor, University of Alaska Fairbanks, USA

Vladimir Semyonov, Academician, Russian Academy of Sciences, Deputy Director, Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences

Alexander Fyodorov, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Nikita Demidov, Candidate of Geological Mineralogical Sciences, Arctic and Antarctic Research Institute

Mikhail Grigoryev, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

10:00–11:20 Popular science lectures by leading scientists on the conference *esearch Library in* theme

Organizer: Ammosov North-Eastern Federal University

Moderator: Leonid Nikiforov, Candidate of Technical Sciences;
 42 Director, Information and Analytical Division, Department of Science and Innovation, Ammosov North-Eastern Federal University

Speakers:

Moisey Zakharov, Candidate of Geological Sciences; Associate Professor, Ecological and Geographical Division, Institute of Natural Sciences, Ammosov North-Eastern Federal University Trofim Maximov, Doctor of Biological Sciences; Deputy General Director for Science and International Projects, Yakutsk Scientific Centre, Siberian Branch of the Russian Academy of Sciences

11:20–11:40 Coffee break

11:40–13:00 Venue: Academic

Research and Training Conference 'Sustainability of Natural and Technical Permafrost Systems amidst Climate Change'

Organizer: Melnikov Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences

Section 'Current State and Dynamics of Subaqueous and Continental 58 Permafrost'

Research Library in the Main Academic Building of Ammosov North-Eastern Federal University Address: 42 Kulakovskovo St.

Council Hall at the Educational and Laboratory Building of Ammosov North-Eastern Federal University Address: 58 Belinskovo St.

Moderators:

Mikhail Zheleznyak, Doctor of Geological Mineralogical Sciences; Corresponding Member, Russian Academy of Sciences; Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Mikhail Grigoryev, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Speakers:

Dmitry Drozdov, Doctor of Geological Mineralogical Sciences, Deputy Director, Earth Cryosphere Institute, Tyumen Scientific Centre, Siberian Branch of the Russian Academy of Sciences

Yendon Garmayev, Corresponding Member, Russian Academy of Sciences, Baikal Institute of Nature Management, Siberian Branch of the Russian Academy of Sciences

Anatoly Brushkov, Doctor of Geological Mineralogical Sciences; Department Chair, Lomonosov Moscow State University

Andrey Alexeyev, Candidate of Technical Sciences, Director, Geocryological and Geotechnical Research Centre, Research Centre of Construction

Vladimir Spektor, Doctor of Geological Mineralogical Sciences; Senior Researcher, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Andrey Melnikov, Candidate of Geological Mineralogical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Andrey Kartoziya, Candidate of Geological Mineralogical Sciences, Sobolev Institute of Geology and Mineralogy, Siberian Branch of the Russian Academy of Sciences

Vladimir Tumskoy, Candidate of Geological Mineralogical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Popular science lectures by leading scientists on the conference theme

Organizer: Ammosov North-Eastern Federal University

Moderator: Leonid Nikiforov, Candidate of Technical Sciences;
Director, Information and Analytical Division, Department of Science and Innovation, Ammosov North-Eastern Federal University

Speakers:

Roman Kolesnikov, Candidate of Geological Sciences; Director, Environmental Protection Research Sector, Scientific Centre for Arctic Studies

Research Library in the Main Academic Building of Ammosov North-Eastern Federal University Address: 42 Kulakovskovo St.

11:40-13:00

Tatyana Sakhratova, Research Fellow, Science Policy Office, Bauman Moscow State Technical University

Nikita Tananayev, Candidate of Geological Sciences; Leading Research Fellow, General Geocryology Laboratory, Siberian Branch of the Russian Academy of Sciences; Director, Research Laboratory for the Study of Climate and Ecosystems of the Northern Regions, Institute of Natural Sciences, Ammosov North-Eastern Federal University

13:00–13:50 Lunch

13:50–15:30Research Library in
the Main AcademicBuildingofAmmosovNorth-EasternFederalUniversityAddress:42Kulakovskovo St.

Discussion Platform of the Russian-Asian Consortium for Arctic Research 'Global and Local Adaptation to Climate Change'

Organizers: Ammosov North-Eastern Federal University, Russian-Asian Consortium for Arctic Research

Moderator:

Yury Danilov, Deputy Rector for the Sustainable Development of the Arctic Territories, Ammosov North-Eastern Federal University; Research Coordinator at the Russian-Asian Consortium for Arctic Research from Ammosov North-Eastern Federal University

Welcome address:

Anatoly Nikolayev, Rector, Ammosov North-Eastern Federal University; Chairman, Russian-Asian Consortium for Arctic Research

Speakers:

Vladimir Vasilyev, Executive Director, Northern Forum International Organization

Vasily Kolodeznikov, Director, Institute of Natural Sciences, Ammosov North-Eastern Federal University

Pyotr Shebalin, Scientific Secretary, Scientific Council of the Russian Academy of Sciences for the Study of the Arctic and Antarctic; Director, Institute of Earthquake Prediction Theory and Mathematical Geophysics; Corresponding Member, Russian Academy of Sciences

Viktor Dyomin, First Vice Rector, National Research Tomsk State University

Yevgeny Zakharov, Leading Research Fellow, Laboratory for the Study of the Ecological State of the Arctic, Ecological and Geographic Division, Ammosov North-Eastern Federal University

Zi-Feng Zhang, Deputy Director, International Research Centre for the Study of the Arctic Ecosystem, Harbin Institute of Technology

Zhanna Vasilyeva, Chair, Department of Technosphere Safety, Murmansk State Technical University

Jia Hongliang, Professor, College of Environmental Science and Engineering, Dalian Maritime University

Yelena Bogdanova, Professor and Leading Researcher, Lomonosov Northern (Arctic) Federal University in Severodvinsk

Lyudmila Drachkova, Chair, Department of Geography and Hydrometeorology, Higher School of Natural Sciences and Technology Yulia Zvorykina, Professor, Moscow State Institute of International Relations

Anatoly Zhozhikov, Chair, UNESCO Department, Ammosov North-Eastern Federal University

Vyacheslav Shadrin, Research Fellow, Department of History and Arctic Research, Institute for Humanitarian Research and Problems of Indigenous Peoples of the North

Roman Kolesnikov, Director, Environmental Protection Research Sector, Scientific Centre for Arctic Studies, Yamalo-Nenets Autonomous District

Alexander Kugaevsky, Deputy Rector for Analytical and Expert Activities, Ammosov North-Eastern Federal University; Director, Arctic International Studies Centre, Russian-Asian Consortium for Arctic Research

13:50–14:40Research and Training Conference 'Sustainability of Natural and
Leademic Council Technical Permafrost Systems amidst Climate Change'

Organizer: Melnikov Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences

Section 'Current State and Dynamics of Subaqueous and Continental 58 Permafrost'

Moderators:

Mikhail Zheleznyak, Corresponding Member, Russian Academy of Sciences; Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Mikhail Grigoryev, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Speakers:

Alexander Zhirkov, Candidate of Technical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Online speakers:

Giorgi Kunchuliya, MMC Norilsk Nickel

Guangli Jiang, Doctor of Sciences, Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences

Academic Council Hall at the Educational and Laboratory Building of Ammosov North-Eastern Federal University Address: 58 Belinskovo St. Huijun Jin, School of Civil Engineering, Cold Regions Science and Engineering Institute, Northeast Forestry University, China

14:40-15:30

Venue: Academic Council Hall at the Educational and Laboratory Building of Ammosov North-Eastern Federal University Address: 58 Belinskovo St.

Roundtable 'Current Problems of the Cryosphere: The View of Young Scientists'

Organizer: Melnikov Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences

Moderator:

58 Ivan Khristoforov, Candidate of Technical Sciences and Leading Research Fellow, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Speakers:

Mikhail Zheleznyak, Corresponding Member, Russian Academy of Sciences; Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Anatoly Brushkov, Doctor of Geological Mineralogical Sciences; Department Chair, Lomonosov Moscow State University

Dmitry Sergeyev, Candidate of Geological Mineralogical Sciences; Director, Geocryology Laboratory, Sergeyev Institute of Geoecology (online)

15:30-16:00

Sergelyakh Lights Cultural Centre Address: 58

16:00-18:00

Belinskovo St.

Sergelyakh Lights Cultural Centre Address: 58 Belinskovo St.

Plenary Session 'Permafrost and the Challenges of Global Climate Change'

Moderator:

Coffee break

Ilya Doronov, Managing Director and TV Presenter, RBC TV Channel

Speakers:

- Alexander Kozlov, Minister of Natural Resources and Environment of the Russian Federation (online)
- Nikolay Korchunov, Ambassador-at-Large of the Ministry of Foreign Affairs of the Russian Federation; Chair, Arctic Senior Officials
- Rodrigo de Lima Baena Soares, Ambassador Extraordinary and Plenipotentiary of the Federative Republic of Brazil to the Russian Federation (online)
- **Takir Balykbaev**, Director, Central Asian Regional Glaciological Centre under the Auspices of UNESCO, Kazakhstan

- Vladimir Sokolov, Deputy Director, Russian Federal Service for Hydrometeorology and Environmental Monitoring (online)
- Alexander Akimov, Deputy Chairman, Russian Federation Council's Committee on Federal Structure, Regional Policy, Local Self-Government, and Northern Affairs
- Alexander Ginzburg, Chief Research Fellow, Obukhov Institute of Atmospheric Physics; Member, Public Expert Council of the National Ecology Project; Director, Development and the Environment Non-Profit Non-Governmental Foundation
- Alexander Makarov, Director, Arctic and Antarctic Research Institute (online)
- Anatoly Nikolayev, Rector, Ammosov North-Eastern Federal University
- Anna Kotlova, Associate Professor, Department of Public Law, Moscow State Institute of International Relations, Ministry of Foreign Affairs of the Russian Federation (online)

18:00-18:30 Media scrum

Sergelyak.h Lights Cultural Centre Address: 58 Belinskovo St.

Participants:

Nikolay Korchunov, Ambassador-at-Large of the Ministry of Foreign Affairs of the Russian Federation; Chair, Arctic Senior Officials Alexander Akimov, Deputy Chairman, Russian Federation Council's Committee on Federal Structure, Regional Policy, Local Self-Government, and Northern Affairs

Anatoly Nikolayev, Rector, Ammosov North-Eastern Federal University

19:00

Protocol event

Address: 12 Kirova St. (per separate programme)

23 March, Thursday

10:00-18:00

Exhibition of innovative projects by world-class scientific and Centre for Student educational centres

Initiatives at the Main Academic Building of Ammosov North-Eastern Federal University Address: 42 Kulakovskovo St.

Organizer: Sever Scientific and Educational Centre

10:00-11:20

Academic Council Hall at the Educational and Laboratory Building of Ammosov North-Eastern Federal University Address: 58 Belinskovo St.

Research and Training Conference 'Sustainability of Natural and Technical Permafrost Systems amidst Climate Change'

Organizer: Melnikov Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences

Section: Sustainability of Permafrost Ecosystems. Cryogenic Processes and Phenomena

Moderators:

Alexander Fyodorov, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Mikhail Grigoryev, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Speakers:

Trofim Maximov, Doctor of Biological Sciences; Deputy General Director for Science and International Projects, Yakutsk Scientific Centre, Siberian Branch of the Russian Academy of Sciences

Nimazhap Badmayev, Doctor of Biological Sciences, Institute of General and Experimental Biology, Siberian Branch of the Russian Academy of Sciences

Tuyara Gavrilyeva, Doctor of Economics, Engineering and Technical Institute, Ammosov North-Eastern Federal University

Sergey Velikin, Doctor of Technical Sciences, Vilyui Research Permafrost Station, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Ivan Khristoforov, Candidate of Technical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Artyom Khomutov, Candidate of Geological Mineralogical Sciences, Earth Cryosphere Institute, Tyumen Scientific Centre, Siberian Branch of the Russian Academy of Sciences

Artyom Yakimov, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Vadim Pugach, Etalon Research and Production Enterprise

10:00-11:20

Roundtable 'Climate Change in Yakutia: Forecasts and Ways to Mitigate the Consequences'

Centre for Student Initiatives at the Main Academic Building of Ammosov North-Eastern Federal University Address: 42 Kulakovskovo St.

Organizer: Ammosov North-Eastern Federal University

Moderator:

Yevgeny Solovyov, Vice Rector for Science and Innovation, Ammosov42 North-Eastern Federal University

Speakers:

Nikita Tananayev, Director, Research Laboratory for the Study of Climate and Ecosystems of the Northern Regions, Ammosov North-Eastern Federal University

Alexander Ginzburg, Chief Research Fellow, Obukhov Institute of Atmospheric Physics

Irina Fyodorova, Associate Professor, Institute of Sciences, St. Petersburg State University

Julustan Hong, First Deputy Minister of Ecology of the Republic of Sakha (Yakutia)

Olga Makaryeva, Associate Professor, St. Petersburg State University (online)

Natalya Solovyova, Deputy Director, Department of International Cooperation and Climate Change, Ministry of Natural Resources and Environment of the Russian Federation

10:00–11:20Savvinov Readings: Functioning of Yakutia's Arctic and SubarcticResearch Library in
the Main AcademicEcosystems amidst the Increasing Manmade Impact and Global
Climate Change

Moderator:

Ammosov North-Eastern Federal University Address: 42 Kulakovskovo St.

ot

Building

Grigory Savvinov, Director and Chief Research Fellow, Savvinov42 Research Institute of Applied Ecology of the North, Ammosov North-Eastern Federal University

Speakers:

Grigory Savvinov, Viktor Makarov, 'Ecosystems of the Yakut Arctic: Modern Challenges and Threats'

Svetlana Mironova, Lyudmila Gavrilyeva, Georgy Bugayev, Problem of Restoring Disturbed Lands in the Arctic Territories (Based on the Example of the Udachninskoye Field)'

Yakov Volpert, Vasily Danilov, 'Current Mammal Population in the Arctic and Subarctic Territories of Yakutia and Forecast for Transformations as the Manmade Impact Intensifies'

Marta Ksenofontova, Ivan Alexeyev, 'Transformation of the Chemical Composition of Watercourses in the Arctic and Subarctic Zones amidst Manmade Impact and Climate Change'

11:20–11:40 Coffee break

11:40–13:00Research and Training Conference 'Sustainability of Natural and
Council Council Technical Permafrost Systems amidst Climate Change'

Academic Council Hall at the Educational and Laboratory Building of Ammosov North-

Organizer: Melnikov Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences

Eastern Federal University Address: 58 Belinskovo St.

Section: Sustainability of Permafrost Ecosystems. Cryogenic Processes and Phenomena

Moderators:

Alexander Fyodorov, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Mikhail Grigoryev, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Speakers:

Roman Desyatkin, Doctor of Biological Sciences, Institute of Biological Problems of Permafrost, Siberian Branch of the Russian Academy of Sciences

Tatyana Romanis, Candidate of Agricultural Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Marat Sadurtdinov, Candidate of Technical Sciences, Earth Cryosphere Institute, Tyumen Scientific Centre, Siberian Branch of the Russian Academy of Sciences

Pyotr Permyakov, Doctor of Physical and Technical Sciences, Yakutsk Scientific Centre, Siberian Branch of the Russian Academy of Sciences; Larionov Institute of Physical and Technical Problems of the North, Siberian Branch of the Russian Academy of Sciences

Viktor Ivanov, Institute of Oil and Gas Problems, Siberian Branch of the Russian Academy of Sciences

Vera Samsonova, Candidate of Geological Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Eduard Romanov, Sakhaway

Alyona Shestakova, Candidate of Geological Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Igor Syromyatnikov, Candidate of Geological Mineralogical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

11:40-13:00Roundtable 'Climate Change in Yakutia: Forecasts and Ways to
Mitigate the Consequences'

Centre for Student Initiatives at the Main Academic Building of Ammosov North-Eastern Federal University Address: 42 Kulakovskovo St.

Organizer: Ammosov North-Eastern Federal University

Moderator:

Yevgeny Solovyov, Vice Rector for Science and Innovation, Ammosov42 North-Eastern Federal University

Speakers:

Mayya Danilova, Minister of Economy of the Republic of Sakha (Yakutia)

Pyotr Shebalin, Scientific Secretary, Scientific Council of the Russian Academy of Sciences for the Study of the Arctic and Antarctic; Director, Institute of Earthquake Prediction Theory and Mathematical Geophysics; Corresponding Member, Russian Academy of Sciences

Sakhamin Afanasyev, Chairman, Standing Committee on Land Relations, Natural Resources, and Ecology, State Assembly (Il Tumen) of the Republic of Sakha (Yakutia)

Alexander Gliko, Presidium Member, Russian Academy of Sciences; Academician, Russian Academy of Sciences, Director of Planetary Geophysics and Geodynamics, of the Institute of Physics of the Earth, Russian Academy of Sciences

Vladimir Semyonov, Academician, Russian Academy of Sciences, Deputy Director, Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences

Natalya Sivtseva, Director, Centre for the Development of Housing and Public Utilities and Energy Efficiency Improvement, of the Republic of Sakha (Yakutia)

Savvinov Readings: Functioning of Yakutia's Arctic and Subarctic Ecosystems amidst the Increasing Manmade Impact and Global Climate Change

 Moderator: Grigory Savvinov, Director and Chief Research Fellow, Savvinov Research Institute of Applied Ecology of the North, Ammosov
 North-Eastern Federal University

Speakers:

Nimazhap Badmayev, Z. Dugarzhapova, 'Algorithm of the Information Retrieval System for Identifying Abandoned Cattle Burial Grounds on the Southern Border of the Transbaikalia Permafrost Zone **V. Velichenko,** 'Sustainable Development of Hunting to Preserve the Traditional Crafts of the North'

P. Danilov, V. Boeskorov, 'Transformation of Soils and Soil Cover of the Arctic and Subarctic Territories of Yakutia amidst Climate Change and Manmade Impact'

- 13:00–14:00 Lunch
- 14:00–15:20 Research and Training Conference 'Sustainability of Natural and Technical Permafrost Systems amidst Climate Change'

Organizer: Melnikov Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences

11:40–13:00Research Library inthe Main AcademicBuildingofAmmosovNorth-EasternFederalUniversityAddress:42Kulakovskovo St.

Roundtable: Cryogenic Resources. Opportunities for Use, Risks, and Development Prospects

Moderators:

Alexander Fyodorov, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Mikhail Grigoryev, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Speakers:

M. Cherosov, Doctor of Biological Sciences, Yakutia Scientific Centre, Siberian Branch of the Russian Academy of Sciences, Safronov Yakutsk Agricultural Research Institute

N. Filippova, Doctor of Technical Sciences, Moscow Automobile and Road Construction State Technical University

P. Skryabin, Candidate of Geological Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Jiao Jian, Deputy General Director for Foreign Economic Cooperation, XY Corporation, China

V. Spektor, Candidate of Geological Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

P. Konstantinov, Candidate of Geological Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

M. Petrov, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

M. Zakharov, Candidate of Geological Sciences, Ammosov North-Eastern Federal University

I. Misaylov, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

14:00–15:20 Open meeting with eco-oriented entrepreneurs

Centre for Student Initiatives at the Main Academic Building of Ammosov North-Eastern Federal University Address: 42 Kulakovskovo St.

Organizer: Ammosov North-Eastern Federal University

Moderator:

Yevgeny Solovyov, Vice Rector for Science and Innovation, Ammosov North-Eastern Federal University

Speakers:

L. Petrova, Yakutia Ecological Company

A. Ksenofontova, GoGreen eco-friendly market

A. Markova, Poloskun ecological detergents bottling store

M. Mestnikova, Baby City chain of licensed kindergartens

Y. Grigoryeva, Ecotaxi recyclables removal service

N. Mir, City Farmer; Founder, GROWSAKHA project

O. Grigoryeva, Chairman, Made in Yakutia Association of Entrepreneurs of the Republic of Sakha (Yakutia); General Director, Kamelek

V. Dmitrieva, Director, Eyge Centre for Environmental Education of the Republic of Sakha (Yakutia)

14:00–15:20 Research Library in

the Main Academic

of

North-

Federal

Building

Eastern

Ammosov

University

Kulakovskovo St.

Address:

Savvinov Readings: Functioning of Yakutia's Arctic and Subarctic Ecosystems amidst the Increasing Manmade Impact and Global Climate Change

Moderator:

Grigory Savvinov, Director and Chief Research Fellow, Savvinov42 Research Institute of Applied Ecology of the North, Ammosov North-Eastern Federal University

Speakers:

Y. Garmayev, 'Modern Hydrological and Geocryological Processes in Permafrost Areas of Transbaikalia'

I. Makarov, 'Mining Enterprise Waste in the Arctic and Subarctic Territories of Yakutia: Sources of a Negative Impact on Ecosystems'

A. Petrov, I. Chenokhov, 'Initial Soil Formation in Post-Technogenic Landscapes of Northern Yakutia'

M. Cheprasov, S. Fyodorov, G. Novgorodov, 'Current Focuses and Priorities of Paleozoological Research of the Mammoth Museum of the Research Institute of Applied Ecology of the North of Ammosov North-Eastern Federal University'

15:20–15:30 Coffee break

Research and Training Conference 'Sustainability of Natural and *Technical Permafrost Systems amidst Climate Change'*

Section: Permafrost Zone of Urbanized and Developed Territories

Moderators:

Alexander Fyodorov, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Mikhail Grigoryev, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

15:30–16:40 Academic Council Hall at the Educational and Laboratory Building of Ammosov North-Eastern Federal University Address: 58 Belinskovo St.

Speakers:

V. Kuvayev, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

G. Kuzmin, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Online speakers:

Hiyama Tetsuya, Doctor of Science, Nagoya University, Japan

Iijima Yoshihiro, Doctor of Science, Mie University Graduate School of Bioresources, Japan

G. Malkova, Candidate of Geological Mineralogical Sciences, Earth Cryosphere Institute, Tyumen Scientific Centre, Siberian Branch of the Russian Academy of Sciences

S. Yerokhin, Candidate of Geological Mineralogical Sciences, Institute of Water Problems and Hydropower Engineering, National Academy of Sciences of the Kyrgyz Republic

15:30–16:40 Competition of green youth scientific projects

Organizer: Ammosov North-Eastern Federal University

Moderator:

Ivan Yadrikhinsky, Candidate of Geological Sciences; Associate Professor, Ecological and Geographical Department, Institute of Natural Sciences, Ammosov North-Eastern Federal University

Participants:

N. Nikitin, Student of Group M-TB-21, 'Organization of Engineering and Hydrometeorological Surveys on the Territory of Batagay-Alyt (Environmental Safety)'

K. Kopyrina, Student of Group M-TB-21, 'Monitoring the Impact of Geomagnetic Disturbances on Traffic Accidents in Yakutsk'

D. Filatova, Student of Group M-TB-21, 'Creation of an Interregional Environmental Policy in Russia as a Way to Ensure the Environmental and Economic Security of the Regions (Based on the Example of the Republic of Sakha (Yakutia), Magadan and Irkutsk Regions, and the Arctic Zone of the Russian Federation)'

T. Sleptsov, Student of Group M-TB-21, 'Monitoring of the Impact of Climate Change on Certain Aspects of Crop Production in Central Yakutia'

K. Obutov, Student of Group A-FG-22, 'Urban GIS Platform as a Tool for the Urban Studies of the Future'

O. Yudina, Student of Group BA-GO-19, 'Botanical Garden: An Ecotourism Site'

T. Alexeyeva, Student of Group M-TB-21, 'Phytoindication of Air Pollution by Emissions from the Yakutsk Landfill in Terms of Growth in Light Coniferous Forest'

Centre for Student Initiatives at the Main Academic Building of Ammosov North-Eastern Federal University Address: 42 Kulakovskovo St. V. Andreyeva, Student of Group M-TB-21, 'Mechanical Composition of Young Soils and Soils of Overburden Diamond Mining Dumps in Western Yakutia'

Research Library in the Main Academic Building of Ammosov North-Eastern Federal University Address: 42 Kulakovskovo St.

15:30–16:40 Savvinov Readings: Functioning of Yakutia's Arctic and Subarctic esearch Library in e Main Academic Climate Change

Moderator:

Grigory Savvinov, Director and Chief Research Fellow, Savvinov42 Research Institute of Applied Ecology of the North, Ammosov North-Eastern Federal University

Speakers:

I. Bolotov, 'Fauna of the Arctic Zone of Eurasia amidst the Changing Climate'

B. Kochurov, 'The Russian North: How to Balance Nature and Human Activity in the Current Geopolitical Situation'

P. Petrov, 'Epizootic Situation of Anthrax Burial Sites in the Yakutia Permafrost'

L. Gavrilyeva, S. Mironova, 'Vegetation of Tin Deposits in Yakutia (Based on the Example of Deputatsky Mining and Processing Plant)'
N. Solomonov, 'Ichthyofauna Reactions to Manmade Impact in the Subarctic and Taiga Water Bodies of the Republic of Sakha (Yakutia)'

16:40–17:00 Coffee break

Sergelyakh Lights Cultural Centre Address: 58 Belinskovo St.

17:00-19:00

Sergelyakh Lights Cultural Centre Address: 58 Belinskovo St.

Plenary session 'Science-Business Collaboration to Preserve Permafrost and Adapt to Climate Change'

Moderator:

Ilya Doronov, Managing Director and TV Presenter, RBC TV Channel

Speakers:

- Aysen Nikolayev, Head of the Republic of Sakha (Yakutia)
- Alexander Gliko, Academician, Russian Academy of Sciences; Doctor of Physical and Mathematical Sciences
- Munkhmaral Tumennasan, Adviser to the President of Mongolia
- Vladimir Panov, Special Representative for the Development of the Arctic, of Rosatom State Corporation; Deputy Chairman, State Commission for Arctic Development (online)

- Roman Berdnikov, First Deputy General Director, RusHydro (online)
- Vladimir Sokolov, Deputy Director, Russian Federal Service for Hydrometeorology and Environmental Monitoring (online)
- Jiao Jian, Deputy General Director for Foreign Economic Cooperation, XY Corporation, China
- Mikhail Zheleznyak, Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences
- Vladimir Romanovsky, Director, Permafrost Laboratory, Geophysical Institute, University of Alaska (Fairbanks, USA)
- Andrey Alexeyev, Director, Centre for Geocryological and Geotechnical Research, Gersevanov Research Institute of Bases and Underground Structures
- Vladimir Semyonov, Academician, Russian Academy of Sciences; Deputy Director for Science, Obukhov Institute of

Atmospheric Physics, Russian Academy of Sciences; Director, Climatology Laboratory, Institute of Geography, Russian Academy of Sciences; Doctor of Physical and Mathematical Sciences

Agreement signings:

- Cooperation Agreement on Climate Change and Permafrost Thawing

Signatories:

Aysen Nikolayev, Head of the Republic of Sakha (Yakutia) Anatoly Nikolayev, Rector, Ammosov North-Eastern Federal University

Leonid Vladimirov, President, Academy of Sciences of the Republic of Sakha (Yakutia)

- Cooperation Agreement between XY Investment Group and Project Management Centre of Sever Scientific and Educational Centre

Signatories:

Jiao Jian, Deputy General Director for Foreign Economic Cooperation, XY Corporation, China

Yevgeny Kolganov, Director, Project Management Centre of Sever Scientific and Educational Centre

- Cooperation Agreement between the Russian-Asian Consortium for Arctic Research and Project Management Centre of Sever Scientific and Educational Centre Signatories: Anatoly Nikolayev, Rector, Ammosov North-Eastern Federal University; Chairman, Russian-Asian Consortium for Arctic Research

Yevgeny Kolganov, Director, Project Management Centre of Sever Scientific and Educational Centre

19:00-19:30 Press scrum

Sergelyakh Lights Cultural Centre Address: 58 Belinskovo St.

Participant: Aysen Nikolayev, Head of the Republic of Sakha (Yakutia)

24 March, Friday

Research and Training Conference 'Sustainability of Natural and Technical Permafrost Systems amidst Climate Change'

Melnikov Permafrost Institute of the Siberian Branch of the

10.00-11.20

Organizer: Melnikov Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences

Sciences 36 Address: Merzlotnaya St.

Russian Academy of Section: Thermal and Mechanical Interaction of Natural and Technical Systems in Permafrost

Moderators:

Alexander Fyodorov, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Mikhail Grigoryev, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Speakers:

Y. Skachkov, Candidate of Geological Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

L. Gagarin, Candidate of Geological Mineralogical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

V. Andreyeva, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

R. Ivanova, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

P. Yefremov, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

N. Torgovkin, Candidate of Geological Mineralogical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

A. Petrova, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

R. Sysolyatin, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

A. Vasilyev, Melnikov Permafrost Institute, of the Siberian Branch of the Russian Academy of Sciences

S. Starodubtsev, Candidate of Physical and Mathematical Sciences; Yakutsk Scientific Centre, Siberian Branch of the Russian Academy of Sciences; Shafer Institute of Cosmophysical Research and Aeronomy, Siberian Branch of the Russian Academy of Sciences

O. Trifonov, Gazprom VNIIGAZ

R. Zhang, Doctor of Technical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Y. Loktionov, Candidate of Technical Sciences, Lomonosov Northern (Arctic) Federal University

P. Sazonov, Research Centre of Construction, Gersevanov Research Institute of Bases and Underground Structures

11:20–11:40 Coffee break

11:40–13:00 Research and Training Conference 'Sustainability of Natural and Technical Permafrost Systems amidst Climate Change'

Melnikov

Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences Address: 36 Merzlotnaya St. **Organizer:** Melnikov Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences

Russian Academy of Section: Construction and Survey Technologies in the North

Moderators:

Alexander Fyodorov, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Mikhail Grigoryev, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Speakers:

A. Filimonov, TomskNIPIneft

D. Churzhakova, TomskNIPIneft

V. Khilimonyuk, Candidate of Geological Mineralogical Sciences, Lomonosov Moscow State University

P. Ksenofontov, Sakhatransneftegaz

G. Antonovskaya, Doctor of Technical Sciences, Laverov Federal Centre for Integrated Arctic Research, Ural Branch of the Russian Academy of Sciences

A. Tseyeva, Candidate of Technical Sciences, Yakutsk Scientific Centre, Siberian Branch of the Russian Academy of Sciences; Larionov Institute of Physical and Technical Problems of the North, Siberian Branch of the Russian Academy of Sciences

A. Pavlov, Preserving the Permafrost

A. Derevtsov, Ammosov North-Eastern Federal University
A. Zhang, Candidate of Technical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences
I. Ryakhovskikh, Gazprom VNIIGAZ

V. Yefremov, Doctor of Technical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences
S. Popov, Doctor of Technical Sciences, Institute of Oil and Gas Problems, Siberian Branch of the Russian Academy of Sciences
T. Nazarov, Ammosov North-Eastern Federal University
I. Mestnikova, Ammosov North-Eastern Federal University
A. Shepelev, Candidate of Biological Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences
A. Shepelev, Candidate of Biological Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences
A. Naberezhny, Candidate of Technical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences
Y. Ivanov, Vilyui Research Permafrost Station, Siberian Branch of the Russian Academy of Sciences
P. Pavlova, Candidate of Technical Sciences, Institute of Oil and Gas,

Siberian Federal University

13:00–14:00 Lunch

14:00-18:00

Melnikov 7 Permafrost Institute of the Siberian 6 Branch of the Russian Academy of Sciences Address: 36 S Merzlotnaya St. F

Research and Training Conference 'Sustainability of Natural and Technical Permafrost Systems amidst Climate Change'

Organizer: Melnikov Permafrost Institute of the Siberian Branch of the Russian Academy of Sciences

Section: Construction and Survey Technologies in the North Roundtable: Yakutia: A Platform to Research Earth's Cryosphere

Moderators:

Alexander Fyodorov, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Mikhail Grigoryev, Doctor of Geological Sciences; Deputy Director, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

Online speakers:

Y. Gorelik, Doctor of Geological Mineralogical Sciences, Earth Cryosphere Institute, Tyumen Scientific Centre, Siberian Branch of the Russian Academy of Sciences

L. Lebedeva, Candidate of Geological Mineralogical Sciences, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences

A. Zemlyanovskaya, St. Petersburg State University

Y. Konechnaya, Candidate of Technical Sciences, Laverov Federal Centre for Integrated Arctic Research, Ural Branch of the Russian Academy of Sciences

O. Makaryeva, Candidate of Technical Sciences, St. Petersburg State University

P. Kotov, Candidate of Geological Mineralogical Sciences, MMC Norilsk Nickel

D. Abramov, Lomonosov Moscow State University

L. Khrustalev, Doctor of Technical Sciences, Lomonosov Moscow State University

A. Gorbunova, Lomonosov Moscow State University

S. Alexeyev, Doctor of Geological Mineralogical Sciences, Institute of the Earth's Crust, Siberian Branch of the Russian Academy of Sciences **Wei Shan**, Professor, Cold Regions Science and Engineering Institute, Northeast Forestry University, China

Ying Guo, Professor, Cold Regions Science and Engineering Institute, Northeast Forestry University, China

E. Chimitdorzhiyeva, Candidate of Biological Sciences, Institute of General and Experimental Biology, Siberian Branch of the Russian Academy of Sciences

O. Ponomareva, Candidate of Geological Mineralogical Sciences, Sergo Ordzhonikidze Russian State University for Geological Prospecting

M. Dokukin, Candidate of Geological Sciences, High Mountain Geophysical Institute

G. Oblogov, Candidate of Geological Mineralogical Sciences, Earth Cryosphere Institute, Tyumen Scientific Centre, Siberian Branch of the Russian Academy of Sciences

V. Khomyakova, St. Petersburg State University

A. Ostashov, State Hydrological Institute

Y. Chuvilin, Candidate of Geological Mineralogical Sciences, Skolkovo Institute of Science and Technology

S. Malyshko, Institute of Monitoring of Climatic and Ecological Systems, Siberian Branch of the Russian Academy of Sciences

B. Zhou, Lomonosov Moscow State University

S. Markov, Candidate of Physical and Mathematical Sciences, Trofimuk Institute of Petroleum Geology and Geophysics, Siberian Branch of the Russian Academy of Sciences

S. Milanovsky, Radionda

O. Tregubov, Candidate of Geological Mineralogical Sciences, Shilo North-Eastern Integrated Research Institute, Far Eastern Branch of the Russian Academy of Sciences

A. Moyakunova, Arctic Research Centre, Republic of Sakha (Yakutia)

08:00–22:00 Visiting the Lena Pillars Nature Park