





Enhancing environment, climate and water resilience

Regional Scientific and Practical online conference

SILK ROAD OF KNOWLEDGE

Agenda

November 24 - 27, 2020

Website of the Conference: http://conference.academic-waters.org/

PROGRAM FLOW

Tuesday, November 24

Pre-conference events		
Youth session: Water, climate and risks	11:00	$\mathbf{A}\mathbf{M}$
Poster session \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	12:30	PM
UNESCO Water Family: Cooperation in Education and	15:00	PM
Science in Central Asia (Closed Meeting)		

Wednesday, November 25

Technical Check	13:30 PM
Technical Check	
Opening \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	14:00 PM
Session I: Climate Impact Assessment	15:00 PM
Session 2: Water under climate change	17:00 PM

Thursday, November 26

11:00 AM Youth session: Rational use of water Session 3: Land Management and Food Security under 14:00 PM

Climate Change

Session 4: Potentials of Digitalization for Increasing 16:00 PM

Sustainability in Agriculture

Session 5: Water and Climate Security in Central Asia

Friday, November 27

Tecnical check		10:30 AM

Session 6: Infrastructure and logistics under Climate 11:00 AM

Change

Session 7: Decarbonization of energy systems and 14:00 PM

climate neutrality

16:00 PM Closing session



10:30 AM

18:00 PM

Technical Check

^{*}Time of sessions is indicated according to Almaty time (GTM +6)

^{*}Session duration 1.30h.

11:00 AM - Youth session: Water, climate and risks

Involving young people in scientific and practical activities on environmental issues in Central Asia. The purpose of the session is to discuss the impact of climate change on the countries of Central Asia and Afghanistan, reducing current risks by optimizing landscape management and water use.

https://us02web.zoom.us/j/82473889910

Chair: Dr.Mitusov Andrey, Kazakh-German University

Application of the ClimPact2 software product to assess the impact of climate change in Kazakhstan

Ms. Gulsara Monkaeva, Scientific and reserach center, KazHydromet, Kazakhstan

Current state of the Mountain Pamir river hydrology: Impact of basin meteorology and orography on the Vanch River Runoff

Mr. Parviz Normatov, Institute of Water Probelms, Tajikistan

Glacier Lakes Outburst Floods in Panjshir Province of Afghanistan

Mr. Abeer Ahmad Sajood, Kazakh-German University, Kazakhstan

Youth empowerment for water in Central Asia

Ms.Lyazzat Syrlybayeva, Central Asian Youth for Water" (CAY4W) Network, Kazakhstan

Tuesday, November 24

12:30 PM - Poster session

12:30 - 13:30 PM - Live broadcast of the posters on website:

http://conference.academic-waters.org/#gallery

13:30 - 14:30 PM - Q/A with the Poster's Author

Zoom Link: https://us02web.zoom.us/j/82473889910

15:00 - 17:30 PM - UNESCO Water Family: Cooperation in Education and Science in Central Asia (Closed Meeting)

The UNESCO water-related centers, chairs and committees in Central Asia will discuss their experiences on challenges and issues in conducting their activities during the COVID-19 pandemic and will share on adjustments and adaptation of their activities under the new reality.

14:00 - 15:00 PM - Opening

https://zoom.us/j/94013695463?pwd=cFJuRDNPRFBmZlVScWVaa0oxcjdQZz09

Dr. Barbara Janusz-Pawletta, Kazakh-German University Chair: Co-chair: Ms. Marhabo Yodalieva, Kazakh-German University

Welcome Speeches:

Dr. Gabriele Stauner, President of Kazakh German University

Mr. Hinrich Thölken, Director for Climate and Energy Policy and Digital, German Foreign Ministry

Dr. Hendrik Meurs, Project Management Agency DLR, International Bureau, on behalf of German **Education and Science Ministry**

Ministry of Education and Science of the Republic of Kazakhstan

Dr. Caroline Milow, GIZ - Short overview of the Green Central Asia Initiative – A transboundary dialogue on Climate, Environment and Security in CA and AFG

15:00 - 16:30 PM | Session I: Climate Impact Assessment

The session is organized to analyze the state of art of the climate change and climate impact research in the Central Asian region and to identify critical gaps between the current climate related information field and the demand of different local and international stakeholder groups.

https://zoom.us/j/94013695463?pwd=cFJuRDNPRFBmZlVScWVaa0oxcjdQZz09

Dr. Anastasia Lobanova, PIK, Germany Chair:

Co-Chairs: Dr. Iulii Didovets, PIK, Germany

Ms. Larissa Kogutenko, Kazakh-German University, Kazakhstan

Presentations of the Session I:

Snow, Glacier and Water Resources - An Overview of UNESCO IHP activities

Dr. Anil Mishra, UNESCO, France

Climate Change, Glacier Wastage and Water in Central Asia

Prof. Dr. Maria Shahgedanova, University of Reading, United Kingdom

Water resources management challenges in a changing climate in Central Asia

Dr. Tobias Siegfried, hydrosolutions Ltd., Switzerland

Current Trends in Central Asia Climate Change: Vulnerability and Opportunities

Prof. Dr. Vitaliy Salnikov, Al-Farabi Kazakh National University (KazNU), Kazakhstan

Session I: Climate Impact Assessment

Wednesday, November 25

Problems and relevance of the study of climate change issues in the Central Asia region

Ms. Zhanna Babagaliyeva, Independent expert on climate change, Scientific group for sustainable environment, Kazakhstan

Discussion session / Closing Remarks



(II) 16:30 - 17:00 PM - Helth break

17:00 - 18:30 PM - Session II: Water under climate change

This session is dedicated to the management of water resources under climate change in Central Asia. It aims at providing up to date innovative solutions and scientific findings to contribute to improved water resources management strategies under climate change in Central Asia.

https://zoom.us/j/94013695463?pwd=cFJuRDNPRFBmZlVScWVaa0oxcjdQZz09

Dr. Abror Gafurov, GFZ, Germany Chair:

Co-Chair: Mr. Almas Kitapbaev, Kazakh-German University, Almaty

Presentations of the Session II:

Melt water availability and runoff from small catchments under conditions of climate change in Central Asia

Prof. Dr. Martin Hölzle, University of Fribourg in Switzerland, Switzerland

Cryospheric Climate Services as an important basis for water related research and applications in **Central Asia**

Prof. D. Christoph Schneider, Humboldt University of Berlin, Germany

Impact of Climate Change on Water Resources Potential and Adaptation Measures (Case from Uzbekistan)

Prof. Dr. Abdulkhakim Salohiddinov, Tashkent Institute of Irrigation and Agricultural Mechanization Engineers, Uzbekistan

Impact of climate change on irrigation rates for agricultural crops in the south of Kazakhstan

Dr. Saken Baisholanov, Head of the Climatology Department of the International Scientific Complex "Astana", Kazakhstan

Discussion session / Closing Remarks

11:00 - 12:30 PM - Youth session: Rational Use of Water

Involving young people in scientific and practical activities on environmental issues in Central Asia. The purpose of the session is to discuss the impact of climate change on the countries of Central Asia and Afghanistan, reducing current risks by optimizing landscape management and water use.

https://us02web.zoom.us/j/84501381166

Chair: Dr. Andrey Mitusov, Kazakh-German University, Russia

Presentations:

Potentials of Digitalization for Increasing Sustainability in Irrigation Water Management

Dr. Janay Sagin, Kazakhstan

Drinking water supply management in small cities of Kazakhstan: case study of Karatau

Ms. Irina Yugai, Kazakh - German University, Kazakhstan

Comparative analysis of the efficient use of water resources in Canada, Israel and Uzbekistan

Mr. Aziz Khaydarov, Kazakh-German University, Kazakhstan

Comprehensive studies of the Kazakhstan Aral Sea region

Ms. Diana Aripkhanova, Mr. Almas Kitapbaev, Kazakh - German University, Kazakhstan

Discussion session / Closing Remarks

12:30 - 14:00 PM - Helth break



14:00 - 15:30 PM- Session III: Land Management and Food Security under Climate Change

Ways on how new adapted land use strategies and technologies can make land use more sustainable as well as effective under the specific natural conditions in CA will be covered during the session. Innovative and environmentally friendly technologies for locust management in the region will be presented by the experts working in the region.

https://zoom.us/j/96224623919?pwd=dnQ2Qm8vdjVXZW5jZEhiRGYycllPZz09

Chair: Dr. Peter Liebelt, Central Asia Sustainable Innovation Bureau, Kazakhstan

Co-Chairs: Dr. Maira Kussainova, Kazakh-German University, Kazakstan

Dr. Axel Paulsch, Institute for Biodiversity, Germany

Presentations of the Session III:

Climate Smart Agriculture under Climate Change Conditions

Prof. Dr. Georg Guggenberger, Leibniz Universität Hannover, Germany

Forest Landscape Restoration, Sustainable Biomass Utilization, and Effects on Food Production in Central Asia

Dr. Niels Thevs, International Centre for Research in Agroforestry, Kyrgyzstan

Preservation of selected Ecosystem Services of the Floodplain Forests along the Naryn River,

Kyrgyzstan: Perspectives and challenges on the way to sustainability in a complex

Dr. Akylbek Chymyrov, KSUCTA, Kyrgyzstan,

Mr. Florian Betz, Catholic University Eichstaett-Ingolstadt, Germany

Sustainable Development through Innovative Agricultural Insurance Products

Ms. Mashkhura Babadjanova, Tashkent State Agrarian University/IAMO, Uzbekistan

Discussion session / Closing Remarks



15:30 - 16:00 PM - Helth break



16:00 - 17:30 PM- Session IV: Potentials of Digitalization for Increasing Sustainability in Agriculture

This session will highlight the technical potentials and existing solutions of digitization and digitalization in irrigation water management. In the discussion part it aims on pathways of implementation in practice, how the presented solution could realistically be embedded into the land use and water distribution sectors.

https://us02web.zoom.us/j/85991912503

Chair: Prof. Dr. Christopher Conrad, Martin-Luther-Universität, Germany

Co-Chairs: Dr. Muhammad Usman, Martin-Luther-Universität, Germany

Mr. Almas Kitapbaev, Kazakh-German University, Kazakhstan

Presentations of Session IV:

GEO Global Agricultural Monitoring Initiative Overview: Global to National Crop Monitoring

Mr. Ian Jarvis, GEO Global Agricultural Monitoring, Switzerland

AfriCultuReS, A long-term self-sustainable & user-centered initiative in Sub-Sharan Africa on food security

Dr. Juan Suarez, Earth Observation Services for SDGs at GMV, Spain

Potential applications of remote sensing, GIS tools and data analytics for evidence-based policymaking in agriculture and water resource management

Dr. Zafar Gafurov, International Water Management Institute in Tashkent, Uzbekistan

Adaptation of Irrigation System to optimize irrigation water applications with drone measurements

Ms. Aigul Bekbayeva, GIS center of the Seifullin Kazakh Agrotechnical University (KATU), Kazakhstan

Discussion session / Closing Remarks

17:30 - 18:00 PM - Helth break

Thursday, November 26

18:00 - 19:30 PM- Session V: Water and Climate Security in Central Asia

The panel pinpoints the nexus between climate change/water and security in Central Asia. Panel participants discuss the water/security nexus at different levels of analysis – generally and more specifically using select examples.

https://zoom.us/j/91741740523?pwd=ZVNETlJ3WFAzT2xKVmtma0tsRFQ3UT09

Chair: Dr. Sebastian Mayer, Kazakh-German University, Almaty

Presentations of Session V:

Dr. Dinara Ziganshina, Scientific Information Center of Interstate Commission for Warer Coordination in Central Asia, Uzbekistan

Delphi Evaluation of Experts' Perspective on Water Security in Central Asia

Ms. Aliya Assubaeva, Nazarbaev University, Kazakhstan

Dams in Central Asia: Opportunities and Challenges

Dr. Filippo Menga, University of Reading, United Kingdom

Building trust in transboundary water governance through epistemic communities

Ms. Bota Sharipova, Kazakh-German University, Kazakhstan

Discussion session / Closing Remarks

11:00 - 12:30 PM- Session VI: Infrastructure and logistics under 14:00 - 15:30 PM- Session VII: Decarbonization of Climate Change

The session will analyze investments in infrastructure and logistics under the increasing challenges of climate change in the region. There will be a discussion on how the transport corridor affects the economic potential of linking cities and regions starting from the quality of transport infrastructure and leading to their export potential.

https://zoom.us/j/91067462856?pwd=UEh3ZTlmRzhzUW8ycGVVRytTZFkzZz09

Mr. Eisa Khan Ayoob Ayoobi, Capacity Building Division of the CAREC Institute, China **Chair:**

Co-Chair: Ms. Yelena Yerzakovich, Kazakh-German University, Kazakhstan

Presentations of Session VI:

CAREC Corridor Performance Measurement and Monitoring (CCPMM)

Dr. Iskandar Abdullaev, CAREC Institute, China

The way to increase private finance into Water Infrastructure in CAREC region

Dr. Nella Hendriyetty, Asian Development Bank Institute

Kazakhstan as a bridge between Europe and Asia

Prof. Zhandos Kegenbekov, Faculty of Engineering & Information Technology, Kazakh-German University, Kazakhstan

Evidence based infrastructure financing: case of Uzbekistan

Dr. Umid Abidhadjaev, Center for Economic Research and Reforms of Uzbekistan, Uzbekistan

Impact of the Silk Road Corridor on affected regions: case study of Kazakhstan

Dr. Aisuly Taisarinova, Kazakh-German University, Kazakhstan

Discussion session / Closing Remarks

12:30 - 14:00 PM - Helth break

November 27 energy systems and climate neutrality

Friday,

The session will start with an overview of the context of climate change and fossil fuel emissions and clarify the necessity of changing the fossil-based energy systems globally until 2050. There will also be an illustration of the strategy of the European Union and its member states towards climate neutrality as well as challenges in the transformation of the energy system in the Central Asian region.

https://zoom.us/j/91067462856?pwd=UEh3ZTlmRzhzUW8ycGVVRytTZFkzZz09

Prof. Dr. Lutz Mez, Free University of Berlin, Germany **Chair:**

Co-Chair: Mr. Alexey Kobzev, Kazakh-German University, Kazakhstan

Presentations of Session VII:

The Push for Climate Neutrality

Prof. Dr. Miranda Schreurs, Bavarian School of Public Policy, Technical University of Munich, Germany

The European Target Triade for Energy Efficiency, Renewables, Greenhouse Gas Reduction and **Policies to Achieve the Targets**

Prof. Dr. Wolfgang Eichhammer, Competence Center, Netherlands

Conceptual approach for the sustainable introduction of renewable energy sources in Kazakhstan

Dr. Kairat Bakenov, Kazakh research Institute of energy named after Acad. Sh. CH. Chokin, Kazakhstan

Steps and obstacles to decarbonizing the economy of Uzbekistan

Dr. Bahtiyor Eshchanov, Westminster University, Uzbekistan

Discussion session / Closing Remarks

16:00 - 17:30 PM - Closing Session

https://zoom.us/j/91067462856?pwd=UEh3ZTlmRzhzUW8ycGVVRytTZFkzZz09

Dr. Barbara Janusz-Pawletta, Kazakh-German University, Kazakhstan Chair:

Co-Chair: Ms. Marhabo Yodalieva, Kazakh-German University, Kazakhstan

Prof. Paolo Farah, West Virginia University - Global Governance and Water Resources (keynote speech)

Session Briefings: Key recommendations

Agreement and approval of recommendations

Closing speeches / Summing up and conclusion