AGENDA

International Conference of the Eastern Europe, Caucasus, and Central Asia Network of Water Management Organizations (EECCA NWO)

"Science and Innovations for Water Security"

September 23-24, 2019 Yekaterinburg, Russia

23 September

14:00

Official opening

PLENARY SESSION

Welcome speeches:

- **Prof. N.B. Prokhorova** (RosNIIVH) host institution
- Prof. D.V.Kozlov, EECCA NWO President
- **J.-F. Donzier**, Honorary General Secretary, International Network of Basin Organizations

SESSION 1. WATER SECURITY OF TRANSBOUNDARY WATER BODIES IN THE CONTEXT OF GROWING WATER SCARCITY

Moderator: Prof. D.V.Kozlov, EECCA NWO President

Presentations of country representatives on key aspects:

- country case-studies on meeting the water security challenges
- re-distribution of river run-off
 - Yu.M. Luzhkov (Russia) Transfer of flow of the Siberian rivers. Current aspects
 - Prof. D.V.Kozlov Safety and operability of hydraulic facilities located along watercourses of big cities (case-study of Moscow agglomeration)
 - M.Ya. Makhramov (BWO Amu Darya) Improving water resources management in the Amu Darya Basin in the context of growing water scarcity
 - B.M. Kizyayev (VNIIHiM, Russia) Water supply issues in Russia's regions and their solution

- A.V. Puzanov (Institute of Water and Ecological Problems, Russian Academy of Sciences) On the project of water transfer via a pipeline from Upper Ob to China
- A.V. Shalikovskiy (Eastern branch of FBGU RosNIIVKH, Russia) Causes and effects of flooding in Zabaikal Krai
- D.R. Ziganshina (SIC ICWC) Water diplomacy, law and science serving to the benefit of water security
- I. Dairov (Regional Mountain Center, Kyrgyzstan), Adaptation of Mountain Areas of Central Asia to Climate Change
- N.N. Balgabayev (KazNIIVH, Kazakhstan) Water development prospects in Kazakhstan

Discussion

Dinner

24 September

9:00

SESSION 2: INNOVATION-BASED WATER SECTOR DEVELOPMENT STRATEGY *Moderators:* S.D. Belyaev (RosNIIVH), S.A. Bekmaganbetov (EC IFAS)

Presentations of country representatives on key aspects:

- country experiences in water innovation projects;
- state policy on mitigation of anthropogenic load on surface water;
- ecological implications of surface water pollution;
- setting benchmarks for allowable water exposure;
- matters related to compensation of damage caused by violations of law on surface water protection from pollution;
- advanced development of science and technology infrastructure of the water sector and application of innovation technologies;
- creating favorable conditions for integrated water resources management system.
- S.A. Bekmaganbetov (representative of the Republic of Kazakhstan in EC IFAS) Relevance of establishing the International Water and Energy Consortium of Central Asia as a sustainable regional mechanism for integrated water-energy use
- S.D. Belyaev (RosNIIVH, Russia) The concept of the State policy on mitigating impacts of non-point pollution sources on surface water
- Sh.O. Muradov (Karshi Economic Engineering Institute, Uzbekistan) The set of innovation technologies for efficient water use in the Aral Sea Basin
- K.V. Krutikova (RosNIIVH, Russia) Progress achieved in the integrated water resources management

- Yu.B. Merzlikina (RosNIIVH, Russia) Water sector digitalization: challenges and opportunities
- L.F.Camilo (St. Thomas University, Columbia), Strategies for adaptation to climate change for sustainable management of water resources of small islands
- H.S.Makhkamov (BWO Syrdarya), Experience and Prospects for Development of Automation of Hydraulic Facilities in the Syrdarya River basin

Discussion

Coffee-break

SESSION 3: NEW INNOVATIVE APPROACHES/IDEAS TO EFFICIENT AND EFFECTIVE WATER MANAGEMENT

Moderators: **V.A. Dukhovny** (SIC ICWC / Secretariat EECCA NWO), **I.O. Nerov** (Far East branch of FBGU RosNIIVKH, Russia)

Presentations of country representatives on key aspects:

- Role of innovations in improving functioning of agricultural entities
- Prospects for the development and improvement of the water sector
- Special aspects of innovation development in country scale
 - V.A. Dukhovny (SIC ICWC / Secretariat EECCA NWO) Results of application of RS-based methods in water management in Central Asia
 - I. Djurayev (representative of the Republic of Uzbekistan in EC IFAS) Prearalie the zone of environmental innovations and technology
 - O.Kazantseva (Eco-TIRAS, Moldova) Approaches to assessment of hydropower impacts on river ecosystem services (Dniester River case-study)
 - N.K. Vakhonin (Land Reclamation Research Institute, Belarus) Developing an integrated information system to support economic and environmental decisions in land reclamation and use based on GIS, DB, and Web-technology
 - Yu.V. Krolevetskaya (Far East branch of FBGU RosNIIVKH, Russia) Information-analytical support of water right licensing (Amur BWA case-study)
 - Sh.O. Muradov (Karshi Economic Engineering Institute, Uzbekistan) –Double flow regulation as the important factor of water resilience of irrigated land
 - I.O. Nerov (Far East branch of FBGU RosNIIVKH, Russia) Information support system for hydrological modeling in the Amur River Basin
 - K.A. Kurganovich (Eastern branch of FBGU RosNIIVKH, Russia) RS-based spatial-temporal analysis of intensity of land use in the territories of the Zabaikal Krai subjected to flooding using the deep learning algorithms

Lunch

14:00

SESSION 4: ROLE OF SCIENCE AND EDUCATION FOR ECOLOGICALLY SAFE ENVIRONMENT AND IN INNOVATIVE WATER DEVELOPMENT

Moderators: Prof. S.R. Ibatullin, Prof. Yu. V. Repin

Presentations of country representatives on key aspects:

- science as a facilitator of innovations;
- better integration of education, science and practices
- competence requirements and new standards;
- fostering ecologically concerned thinking in higher educational institutions;
- science and practices in preparing water professionals;
- water and sanitation engineer ecologist;
- training and needs in the water sector;
- training facilities and meeting professional expectations;
- water sector professional development.
 - Prof. S.R. Ibatullin (International Training Center for the Safety of Hydraulic Structures, Kazakhstan) Forming the common water education space in Central Asia
 - N.P. Mamataliev (Kyrgyz National Agrarian University) Preparation of water professionals for Kyrgyzstan sectoral institutions in the context of IWRM
 - A.R. Fazylov, Z. Kobyuliev (IWP and HE of AS RT, Tajikistan) Status and prospects of training system for the water sector
 - Prof. N.K. Kipshakbaev (Kazakh branch SIC ICWC, Kazakhstan) Sustainable development of the Republic of Kazakhstan through water security
 - **J.-F. Donzier**, Honorary General Secretary, International Network of Basin Organizations

Discussion

Closing statements, discussion, and adoption of the EECCA NWO Conference resolution