# First announcement & call for papers

#### **ORGANIZERS**

European Regional Centre for Ecohydrology Polish Academy of Sciences





World Meteorological Organization



UNESCO International Hydrological Programme







UNESCO World Water

Assessment Programme





International Centre for Water Resources and Global Change u/a UNESCO





Chongging Institute of Green and Intelligent Technology

Key Laboratory of Reservoir Environment Chinese Academy of Sciences





University of Lodz





International Symposium

# **ECOHYDROLOGY**

for the **Circular Economy** 

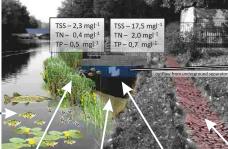
and Nature-Based Solutions towards mitigation/adaptation

to **Climate Change** 

26 - 28 September 2017 LODZ. POLAND

### ECOHYDROLOGICAL HYBRID SYSTEM

for purification of stormwaters from intensively used recreation area (project LIFE08 ENV/PL/000517, www.arturowek.pl)



BIOFILTRATION Assimilation of nutrients (N, P, C) into plant

REGULATION

OF BIOLOGICAL

**PROCESSES** 

Enhancement of filtering zooplankton by

predatory fish stocking

GEOCHEMICAL BARRIER Reduction of nutrients by geochemical structure

SEDIMENTATION Reduction of suspended matter

Interception of surface stormwaters by infiltration through dolomite/gravel be

UNDERGROUND SEPARATORY/SEDIMENTATORY SYSTEM Reduction of netroleum substances

and susspened solids





TSS - 165.0 mgl





### Co-chairs:

Maciej Zalewski (European Regional Centre for Ecohydrology of the Polish Academy of Sciences)

Johannes Cullmann (World Meteorological Organization)

Giuseppe Arduino (UNESCO International Hydrological Programme)

VENUE Lodz. POLAND



# RATIONALE

In the face of global degradation of water-related ecosystems, climate instability and growing anthropogenic impacts, there is an urgent need to integrate the existing knowledge from different environmental sciences as a key for the development of problem-solving, sustainability science. Ecohydrology, as transdisciplinary science, has been postulating ecosystem processes as management tools for sustainability by defining multidimensional goals for catchment management – WBSRC (Water, Biodiversity, Ecosystem Services for Society, Resilience to climatic changes and Cultural heritage).

Since water is a major driver of biogeochemical evolution and hence of biodiversity and biological productivity, regulation of ecohydrological processes becomes the first and fundamental step towards achieving sustainability in the catchment, particularly in human-modified and degraded systems. Since its formulation under UNESCO's International Hydrological Programme, the implementation of WBSRC strategy is creating synergy between nature-based solutions and circular economy model with constant development and increasing efficiency.

The symposium will bring together top experts from scientific institutions and international organizations and will provide an open floor for the discussion about integration of ecohydrological biotechnologies and systemic solutions with a circular economy development towards mitigation/adaptation to climate instability.

Every successful strategy must be founded with two elements: amplification of opportunities and elimination of risks. Circular economy, the rising issue of our times, focuses on "closing the loop" approach, contributes to increasing resources productivity (and decreasing of disposals), energy use and pollutants emission. To achieve the sustainability with adaptation to climate change it is necessary to implement the second element of the strategy, which is the enhancement of catchment carrying capacity (sustainability potential) with profound understanding of ecosystem processes and their dynamics. Ecohydrology, based on change from mechanistic to evolutionary approach, creates potential for the synergy effect between both circular economy and nature—based solutions.

The previous International Symposium on Ecohydrology, Biotechnology & Engineering, took place in Lodz (September 2013) and gathered over 210 experts and scientists from 31 countries.



### CALL FOR ABSTRACTS AND PAPERS

The International Scientific Committee of the Symposium welcomes the submissions in accordance with the following general topics:

Ecohydrology
Circular Economy
Bioeconomy
Nature-based solutions
Climate change adaptation, mitigation and resilience
Ecohydrological biotechnologies

Based on the reviewing process authors will be invited to make an oral/poster presentation, and to submit a full paper for a special symposium issue to be published by Ecohydrology & Hydrobiology (ELSEVIER) journal after the symposium.









www.journals.elsevier.com/ecohydrology-and-hydrobiology

# Sponsors and Exhibitors

for more details about the cooperation opportunities available at ISEHCNC 2017 please contact

info.ehcnc@ erce.unesco.lodz.pl



### IMPORTANT DATES

Registration Early registration closes Abstract Submission closes Symposium dates 01 March - 31 May 2017 30 April 2017 10 June 2017 26 - 28 Semptember 2017

## SYMPOSIUM FEES

standard registration 300,- euro late registration 400,- euro student registration 150,- euro late student registration 200,- euro

### Pre-registration

If you are interested in participating, please send an e-mail to the Symposium Secretariat at ehcnc@erce.unesco.lodz.pl for a preliminary (non-binding) registration. This will ensure that you receive further information about registration process as it becomes available.

Limited financial support will be available to assist participants from developing countries. The registration fee will include symposium proceedings and printed materials, coffee breaks, dinners, side events participation and social program.



### SESSIONS AND ACCOMPANYING EVENTS

4th Symposium of Healthy Rivers and Sustainable Water Resource Management: Reservoir carbon cycling and GHG fluxes - from the perspective of Ecohydrology for Mitigation and Adaptation to Climate Change

Chairs: Jin-song Guo, Zhe Li (Key Laboratory of Reservoir Environment, Chinese Academy of Sciences) and Maciej Zalewski (ERCE PAS, Poland)



AMBER - Adaptive Management of Barriers in European Rivers (HORIZON 2020) - Project Meeting

Chairs: Carlos Garcia De Leaniz (Swansea University, UK), and Maciej Zalewski (ERCE PAS, Poland)

Revitalisation, Ecohydrology, Nature-Based Solutions and Circular Economy for the City of Future - Scientific session

Chairs: Iwona Wagner (ERCE PAS, Poland) and Pascal Breil (National Research Institute of Science and Technology for Environment and Agriculture, France)

# Contact Information

For any queries and general questions related to the ISEHCNC please contact Symposium Secretariat e-mail: info.ehcnc@erce.unesco.lodz.pl

Webpage www.isehcnc.com will be available soon

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