

Announcement (4 September 2014)



Jointly organized by

- **Universität für Bodenkultur Wien (BOKU)**, University of Natural Resources and Life Sciences; Institute of Water Management, Hydrology and Hydraulic Engineering (IWHW), Vienna, Austria (**principle organizer**)
- International Association of Hydrological Sciences (IAHS)
- Charles University, Prague, Czech Republic

HydroEco 2015

<http://web.natur.cuni.cz/hydroeco2015/>

5th International Multidisciplinary Conference on

Hydrology and Ecology:

Advances in Monitoring, Predicting and Managing Hydroecological Processes

13-16 April 2015, Vienna, Austria

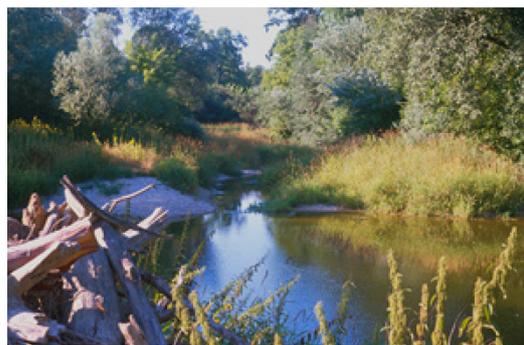
The deadline for abstract submission is 11 September 2014

SCOPE AND OBJECTIVES

Many ecological systems owe their existence to physical/chemical properties of groundwater and surface water, and can be damaged if water flow or water properties are changed by anthropogenic or natural processes. To address the relevant issues, the conference aims to bring together experts from different disciplines such as hydrologists (groundwater, surface water), ecologists, biologists, subsurface microbiologists, environmental biogeochemists, eco-technologists, geomorphologists, hydraulic engineers, forest managers, nature reserve managers, regional and landscape planners, as well as experts from governmental institutions. The unifying theme is the interaction between groundwater and (or) /surface water and ecological systems. A typical example is the hyporheic zone in riparian areas, where the ecological system interacts with water and chemical flows between surface and groundwater.

The aim of this fifth HydroEco conference – after the four previous meetings, in Karlovy Vary (Carlsbad), Czech Republic in 2006, in Vienna in Austria in 2009 and 2011, and in Rennes in France in 2013 – is fourfold:

- **to present new findings and approaches on interactions** between hydrology and ecology,
- **to promote interdisciplinary interactions** on water related issues between hydrology, hydrogeology, biogeochemistry, microbial ecology and ecology
- **to explore advances in monitoring, modelling and predicting dynamics of hydroecological processes**, and
- **to discuss management approaches and applications to tackle environmental issues, including engineering measures for ecosystem preservation and restoration** of ecologically valuable environments.



Left: from paper “A hydrological study of Waen y Griafolen blanket bog, North Wales”, by Graham Hall, Roger Cratchley & Sarah Johnson, HydroEco2006 conference. Middle: flood plain along Danube (Hans-Peter Nachtnebel, HydroEco2011). Right: wetlands in Bierbza, Poland (Tomasz Okruszko, HydroEco2011).

CONFERENCE THEMES -- Contributions are solicited addressing the following themes:

- [S1] Interactions between surface water, hyporheic zone, groundwater and unsaturated soil zone
- [S2] Interaction between plants, surface- and groundwater
- [S3] The role of evapotranspiration in the water cycle - how to better link SVAT and hydrological models?
- [S4] Modelling interactions between hydrological and biological processes
- [S5] Hydroecological tools for the assessment of aquatic and terrestrial ecosystem functions
- [S6] Transferring hydroecological process knowledge across spatial and temporal scales
- [S7] Ecosystem services: What do we know and what do we need? A cross-cutting theme for engineers, hydrologists, ecologists, land managers and economists
- [S8] Novel monitoring techniques and analytical approaches in hydroecology (including benefits from remote sensing and isotope analysis)
- [S9] Modelling and forecasting ecosystem responses to global change (land use changes, climate change)
- [S10] Hydroecological processes in mountain ecosystems
- [S11] Hydroecological processes and nutrient flows in wetlands (bogs, fens, mires, swamps, flood plains, etc.)
- [S12] Engineering measures for ecosystem preservation and restoration
- [S13] Urban hydroecology: objectives, tools and experiences
- [S14] Hydroecological processes in semi-arid regions

SCIENTIFIC ADVISORY COMMITTEE

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Further information at <http://web.natur.cuni.cz/hydroeco2015/>

Vienna is worth visiting – beautiful and pleasant city

There are many reasons to visit Vienna - the city is world famous for its imperial heritage, Schönbrunn Palace, the Belvedere, and the Hofburg. The capital scores highly thanks to the first-rate musical and cultural attractions at its concert halls, museums and theaters - from the Golden Hall of the Musikverein to the acclaimed Museum of Fine Arts and the State Opera House. Vienna is also a byword for epicurean enjoyment, with centuries of traditions shaping its coffee houses and Heuriger wine taverns. Over half of the city is accounted for by green spaces including parks and gardens, the Vienna Woods and the wetlands of the Donau Auen National Park.



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