

Announcement (31 July 2010)



Jointly organized by

- Universität für Bodenkultur (BOKU), University of Natural Resources and Applied Life Sciences; Institute of Water Management, Hydrology and Hydraulic Engineering (IWHW), Vienna, Austria
- International Commission on Groundwater, of the International Association of Hydrological Sciences (IAHS)
- Charles University, Prague, Czech Republic

The conference is supported by many organizations, such as UNESCO (IHP), INTECOL, USGS, ISSM, FH-DGG, BHS, NHV, and BES.

HydroEco'2011

<http://www.natur.cuni.cz/hydroeco2011/>

3rd International Multidisciplinary Conference on **Hydrology and Ecology:** **Ecosystems, Groundwater and Surface Water** **– Pressures and Options**

2-5 May 2011, Vienna, Austria

The deadline for abstract submission is 14 September 2010

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 resulting issues, this conference brings together engineers and researchers from engineering and ecological disciplines. The disciplines include, but are not limited to, hydrology, ecology, environmental engineering, biology, chemistry, geochemistry, environmental biogeochemistry, and subsurface microbiology. 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 goals of the conference are

- (1) to provide information that will help that interactions between groundwater, surface water and ecology are better understood, measured, simulated, and managed, and
- (2) to improve the technological basis for policy decisions (including WFD implementation) related to the management and reconstruction of ecologically valuable environments and the use of water resources in these environments.

Focus of HydroEco2011

HydroEco2011 has as focus “Pressures and Options”. An important pressure are the global changes, that refer to stresses both from the human activity and from natural changes. The natural changes include the natural climate change. The “Options” refer to the solutions to the problems and needs the society faces with regard to the functioning and quality of ecosystems. For this focus, the planned session “Global change (human activity, natural changes): from noises to trends“ will allow to draw attention to, among others: long term series, pertinent scales of appraisal of changes, indicators of changes, the importance of combining ecology and hydrology to define new sensitive tools to measure changes, revisiting the current monitoring strategies/policies, modelling, and dealing with uncertainties.

CONFERENCE SESSIONS -- The following sessions are planned:

- Session A: Interactions between surface water, hyporheic zone, saturated and unsaturated groundwater
- Session B: Connections between ecology and groundwater recharge and evapotranspiration
- Session C: Plant-groundwater interactions
- Session D: Links between hydrology and biogeochemistry in groundwater
- Session E: Modelling surface-water-groundwater systems
- Session F: Modelling interactions between hydrology and ecology
- Session G: Management, legal and regulatory issues
- Session H: Bio-indicators of groundwater and surface water quality
- Session I: Land use implications (including restoration and ecohydrology)
- Session K: Global change (human activity, natural changes): from noises to trends
- Session S: Landscape versus local controls on water quality in small streams
- Session S-WFD: Upscaling from individual ecosystems to groundwater bodies in the light of the Water Framework Directive implementation

SCIENTIFIC ADVISORY COMMITTEE

The following scientists are members of the Scientific Advisory Committee:

Richard Alexander (*USA*), Okke Batelaan (*Belgium*), Marc Bierkens (*the Netherlands*), Kevin Bishop (*Sweden*), Elisabeth Boyer (*USA*), Tim Burt (*UK*), Jan Fleckenstein (*Germany*), Andrea Goltara (*Italy*), Christian Griebler (*Germany*), David Hannah (*UK*), Ron Harvey (*USA*), Kate Heppell (*UK*), Carl Christian Hoffmann (*Denmark*), Stefan Krause (*UK*), Josef Krecek (*Czech Republic*), Michael McClain (*the Netherlands*), Brent D. Newman (*Austria*), Bertel Nilsson (*Denmark*), Tomasz Okruszko (*Poland*), Gilles Pinay (*UK*), Philippe Quevauviller (*Belgium*), Boris Schröder (*Germany*), Johan Schutten (*UK*), Mathieu Sebilo (*France*), Edward A Sudicky (*Canada*), Tetsuro Tsujimoto (*Japan*), Sjoerd van der Zee (*the Netherlands*), Niko Verhoest (*Belgium*)

ORGANIZING COMMITTEE

- Hans-Peter Nachtnebel, Universität für Bodenkultur Wien (IHW-BOKU), Vienna, Austria
- Karel Kovar, Netherlands Environmental Assessment Agency (PBL), Bilthoven, the Netherlands
- Zbynek Hrkal, Charles University, Prague, Czech Republic

Further information at <http://www.natur.cuni.cz/hydroeco2011/>

