

Vienna, Dec.09.

Dear colleague,

We would like to draw your attention to our next HydroPredict'2010 International Conference and we kindly invite you to submit an abstract.

**2nd International Interdisciplinary Conference on Predictions for Hydrology,
Ecology, and Water Resources Management:
Changes and Hazards caused by Direct Human Interventions and Climate Change,
to be held in Prague, Czech Republic, in the period 20-23 September 2010.**

<http://www.natur.cuni.cz/hydropredict2010/>

ABSTRACT SUBMISSION

Abstracts are due by 1 February 2010.

<http://www.natur.cuni.cz/hydropredict2010/index.php?id=6>

OBJECTIVES AND SCOPE

Over the last fifty years increasing damages from natural hazards are reported at the global scale (e.g. Directive 2007/60/EC on the assessment and management of flood risks [1] and the reinsurance company Munich Re AG [2]). According to the 2003 United Nations World Water Development Report (United Nations World Water Assessment Programme. 2003), between 1991 and 2000 over 665,000 people died in 2,557 natural disasters - 90% of which were water-related and 97% of the victims were from developing countries [3] . The recorded annual economic losses associated with these disasters have grown from US\$30 billion in 1990 to US\$70 billion in 1999.

[1] http://ec.europa.eu/environment/water/flood_risk/index.htm

[2] http://www.munichre.com/en/ts/geo_risks/default.aspx

[3] http://ec.europa.eu/environment/water/water-framework/index_en.html

The reasons for that increase in damages and fatalities are manifold. First, due to climate induced changes the frequency and intensity of natural hazards may have increased and second, due to direct human interventions and modifications of the flow paths of water the exposure to hazards has been magnified. Large areas suffer from deforestation and erosion leading to faster runoff formation and extended low flow periods. As a consequence, the exposure of the population living in low land areas to natural hazards, such as floods has dramatically increased in the last decades.

The conference has three objectives:

(1) To present models for describing hazardous processes and their impacts with a high spatio-temporal resolution. This would provide the basis for predictive tools and early warning systems in different environmental settings.

(2) To describe methods to discriminate among impacts originating from climate change and impacts caused by direct human interventions, such as deforestation, overexploitation of groundwater resources, land development, water abstraction from rivers and urbanization.

(3) to bring together experts from different disciplines such as geomorphologists, meteorologists, hydrologists, hydraulic engineers, forest managers, water resources engineers, regional and landscape planners, as well as experts from governmental institutions and from the insurance sector, to exchange experiences about the adaptation and mitigation of adverse effects.

CONFERENCE THEMES and TOPICS

Theme A1 : How can we identify and quantify water-related changes due to direct human interventions (analysis of long-time past records, future developments);

Theme A2 : How can we identify and quantify water-related changes due to climate change (analysis of long-time past records, future developments);

Theme B : How can we discriminate among impacts of direct human interventions and impacts caused by climate change, and how can we quantify the impacts;

Theme C : How can we quantify/ predict changes in water-related hazards;

Theme D : How can we adapt to / mitigate water-related hazards; resilient and robust ways to adapt to water-related disasters.

For TOPICS distinguished within each of these themes, please refer to conference website.

SPECIAL SESSION

In addition to the above themes and topics, one Special Session is planned: Special Session on Uncertainty in Predicting the Impacts of Catchment Change and its Implications for Decision Making. This special session will be convened by Prof. Keith Beven (Lancaster University, UK), Dr Sárka Blazková (T.G. Masaryk Water Research Institute, Prague, Czech Republic), Prof. Phil Haygarth (Lancaster University, UK) and Prof. Enda O'Connell (Newcastle University, UK).

<http://www.natur.cuni.cz/hydropredict2010/index.php?id=32>

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VENUE

The conference will take place in the conference centre of the Czech University of Life Sciences Prague (Česká zemědělská univerzita v Praze, ČZU) in Prague. For an overview map please refer to:

<http://www.natur.cuni.cz/hydropredict2010/index.php?id=5>

ACCOMMODATION

Accommodation is offered in six hotels of different categories. You can book the hotels via the Conference Secretariat. Details can be found on:

<http://www.natur.cuni.cz/hydropredict2010/index.php?id=16>

With best regards,

Hans Peter Nachtnebel

on behalf of the Organizing Committee
(Zbynek Hrkal, Karel Kovar, Hans Peter Nachtnebel, Svatopluk Matula)