



Dear all,

We are pleased to announce that we will be organising the first Summer school on *Intelligent Metering and Big Data in Hydroinformatics* in 2016 from the 21st June to the 8th July. We are now accepting applications, please see below for more information.

This summer school is organized with the help of researchers and experts from [University Politehnica of Bucharest](#), [UNESCO-IHE Institute for Water Education](#), [University of Iowa](#), and [Universita Degli Studi Di Milano-Bicocca](#).

Description:

CyberFlow is a three-weeks Summer school and it has the following schedule:

1. Training courses – 3 days [21th to 23th June].
2. Session to define the Summer school assignments – 1 day [24th June]
3. Problem solving sessions – 12 days [25th June to 6th July]
4. Session for presenting the final results- 2 days – [7th July to 8th July]

Training courses syllabus:

The syllabus for the training is structured into three main aspects of hydroinformatics (one for each day):

1. Introduction and Modelling
 - 1.1 Introduction to Hydroinformatics
 - 1.2. Modelling paradigms: Physically based modelling, Data driven modelling
 - 1.3. Examples/Case studies
2. Optimization and Decision Support
 - 2.1. Optimization
 - 2.2. Decision support methods: Multicriteria analysis, decision support systems
 - 2.3. Examples/ Case studies
3. Data
 - 3.1. Data sources and standards
 - 3.2 Spatial Data Infrastructures
 - 3.2. Role of cloud computing and parallel computing in Hydroinformatics

Content from all above three aspects will be addressed during the summer school. The courses are intended for a multidisciplinary audience.

Problem solving sessions:

For this section, the topics may include:

- building a code for a hydrological model and preparing it to be calibrated and validated with data. In order to determine the uncertainty bounds for some of the parameters the model will need to be run on the cloud (hundreds of instances), on Amazon or other freely available cloud. Next step will be fetching the results and building an interface that will present the results, after they have been analysed;



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- given a set of available data sources, build an interface that will fetch data from these sources and present them to the user in a web-interface that will be comprehensive to the user;
- calibrate a model of a river catchment;

Application:

To apply for a place please send a short CV (including research interests) to elena.apostol@cs.pub.ro or catalin.leordeanu@cs.pub.ro.

The Summer School is targeted at PhD/MD/undergrads students and other early career researchers. There is **no** participation **fee**.

Important dates:

The closing date for applications is: 8th June 2016

The final list of participants will be announced on 15th June 2016

Please direct all enquiries to elena.apostol@cs.pub.ro or catalin.leordeanu@cs.pub.ro.