

## **OVERVIEW**

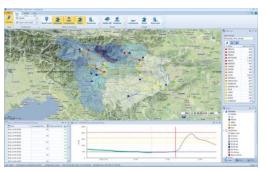
Flood forecasting has been used for decades to help predict the timing and severity of river and urban flooding due to extreme weather events as well as seasonal precipitation and snowmelt processes. However, many of the flood forecasting systems currently in use are in-house, adhoc systems which have evolved over many years and are maintained and run by one or two key personnel. Although these systems are currently serving the needs of these organizations, the architecture of the systems are outdated, they require staff resources to be allocated to non-core activities like software development, and they are often using over-simplified forecasting methods.

This one day workshop provides an introduction to the opportunities, benefits, challenges, and requirements for implementing a modern flood forecasting system. Although many of the concepts and workflows will be generic in nature, the presentations will focus on the features, functionality, and capabilities of DHI's data management, decision support and operational forecasting system. The system incorporates three integrated products called MIKE INFO, MIKE PLANNING and MIKE OPERATIONS.

**MIKE INFO** is a data management system that is comprehensive and a flexible data management integration software focused on making temporal and spatial datasets available for a variety of purposes. It supports the management, analysis, presentation and publication of historical and online data and information to facilitate decision making.

**MIKE PLANNING** is a software product for scenario analysis and decision support. It supports a structured and transparent analysis and comparison of model-based scenario simulations as well as a more objective and transparent decision making process.

MIKE OPERATIONS is an online modelling framework for water forecasting and operational control. The software is designed for model -based forecast services and for online operational control of river systems, water collection systems and water distribution systems.



#### BENEFITS

- Learn about leading tools for data management, decision support and operational forecasting
- Participate in discussions and network with modelling experts at DHI and in the water authorities and utilities

### FEES

Participation in the seminar is free of charge.

## DATE AND LOCATION

Monday May 02, 2016 McMaster University Burke Science Building (BSB), Room 340 1280 Main Street West Hamilton, ON

Registration starts at 8:00 am Wrap up by 4:30 pm

## REGISTRATION & MORE INFORMATION

Barbara White THE ACADEMY by DHI Manager, 1-888-344-9233 Telephone

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# INTRODUCTION TO IMPLEMENTATION AND OPERATION OF A MODERN FLOOD FORECASTING SYSTEM

### **KEY TOPICS:**

- Powerful data integration capabilities that allow you to import historic and current data from a variety of sources including test files, spreadsheets and other database solutions.
- Time Series processing and quality assurance tools for hydrological and meteorological data processing
- GIS processing, visualization and how to link to supervisory control and data acquisition (SCADA) systems
- Scenarios for comparative assessments based on MIKE Powered by DHI modelling systems as well as other systems
- Multi-criteria analyses for objective scenario comparison using performance indicators, decision criteria, ranking and stakeholder preferences
- Assessing long-term impacts of climate change using climate data from global and regional climate models
- High system performance and reliability through our powerful and precise simulation engines
- Ability to run models in ensemble mode so that you can include probabilities and risks in your operational decisions
- Real-time system optimization

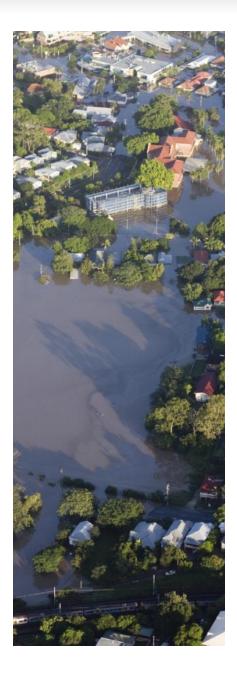
### **AGENDA**:

08:00 – 09:00 – Registration and refreshments
09:00 – 09:30 – Overview of flood forecasting and some example projects
09:30 – 10:30 – Introduction to MIKE INFO, PLANNING AND OPERATIONS
10:30 – 10:45 – Refreshment Break
10:45 – 12:00 – Introduction to hydrometric data management tools (MIKE INFO)
12:00 – 13:00 – Lunch
13:00 – 14:30 – Introduction to decision support analysis and planning tools

(MIKE PLANNING) 14:30 – 14:45 – Refreshment Break

14:45 – 16:15 – Introduction to process automation and operational systems (MIKE OPERATIONS)

16:15 - 16:30 - Wrap up



## THE ACADEMY BY DHI

THE ACADEMY offers a palette of courses and knowledge sharing activities designed to fit your needs and challenges. We offer standard and/or tailored training and seminars - face-2-face as well as online.

**Our seminars, workshop and user group meetings** offer you the opportunity to share your knowledge, ideas, experiences and research results with other professionals, researchers and modellers across a large number of technical areas.

**MIKE Powered by DHI courses** focus on practical skills, hands-on exercises and teaching you how to get the most out of your software. These courses also enable you to understand the power of the MIKE tools for building decision support systems.

Thematic courses allow you to apply concepts, applications and decision support principles to the entire business process within current areas: aquaculture and agriculture, energy, climate change, flooding, coast and marine, surface and groundwater, urban water, industry, environment and ecosystems, product safety and environmental risk, etc.

**Our trainers** are experienced professionals, many of whom are recognised international experts in their fields. The use of highly skilled trainers guarantees the quality of THE ACADEMY courses.

Learn more about THE ACADEMY on www.theacademybydhi.com

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