

## **IRISH NATIONAL HYDROLOGY CONFERENCE 2019**

**Tuesday, 19<sup>th</sup> November 2019**

### **INTRODUCTION**

The joint National Committees of the International Hydrological Programme and the International Commission on Irrigation and Drainage have the pleasure of welcoming you to the 20<sup>th</sup> annual Irish National Hydrology Conference being held on Tuesday 19<sup>th</sup> November 2019 in The Hodson Bay Hotel. The conference provides a unique forum for attendees to share policy developments, research results, and practical solutions to engineering hydrology issues.

### **MAIN TOPICS**

In hydrology, practitioners apply scientific knowledge and mathematical principles to solve practical problems relating to water, floods and droughts, erosion and sediment transport. The application of hydrological techniques to planning and design of water related projects has always been a primary concern to hydrologists. In view of the increasing complexity of water related projects, it is imperative to have a sound grasp of the classical as well as the most modern analysis techniques of scientific and engineering hydrology and skill and experience in their application. With this in mind, our invited keynote speaker, Prof. Günter Blöschl, a distinguished hydrologist from the Technical University of Vienna, will describe the key challenges facing hydrologists.

### **ORGANISERS**

#### **International Hydrological Programme (IHP)**

The UNESCO international scientific co-operative programme in hydrology and water resources, the IHP, was established to act as a catalyst to promote co-operation and research in the management of water resources, an issue which had been identified as a significant limiting factor for harmonious development in many regions and countries of the world.

#### **International Commission on Irrigation and Drainage (ICID)**

The mission of the ICID is to stimulate and promote the development of the management of water and land resources for irrigation, drainage, flood control and river training applications, including research and development and capacity building.

## **CONTENTS**

- 01 – Can we still predict the future from the past? Non-stationary flood frequency analysis in Ireland**  
Duncan Faulkner, Tom Sampson, Sarah Warren, and Fiona Byrne
- 02 – River Restoration and Natural Water Retention Measures (NWRM) – a sustainable response to climate change and achieving good status under the Water Framework Directive**  
John Stack
- 03 – Thinking outside the reach-scale box: a multiple-catchment scale analysis of river planform adjustments**  
Hannah Joyce
- 04 – Summer rainfall-runoff relationship from relatively intact Irish blanket peat covered catchments**  
Raymond Flynn, Francis Mackin, Sorcha Cahill, Claire McVeigh
- 05 – Establishing the Flood Forecast Centre and expanding Met Éireann’s rainfall radar network**  
Eoin Sherlock and Sinéad Duffy
- 06 – National Indicative Fluvial Mapping: applying and updating FSU data to support revised flood risk mapping for Ireland**  
Emma Brown, Fiachra O’Loughlin, Conor Galvin, Mark Davison, James Lanyon and David Ramsbottom
- 07 – Exploring regional water transfers to secure future water supply: a case study from the UK**  
Aodhín McBride, Mason Durant, Chris Counsell, Chris Lambert and Peter Blair