# Eighth International Conference on Fluvial Hydraulics

# **River Flow 2016**

July 10-14, 2016, St. Louis, USA



#### Key dates :

Sept. 1, 2015 Oct. 1, 2015 Dec. 15, 2015 March 1, 2016	Deadline for abstract submission Notification of provisional acceptance Deadline for paper submission Notification of provisional paper acceptance/review comments
March 1, 2016 March 15, 2016	Master Class applications accepted Notification of final acceptance of revised paper
March 15, 2016 April 15, 2016 May 1, 2016 May 1, 2016 July 10, 2016 July 14, 2016	Early registration begins Deadline for Master Class applications Master Class acceptance notification Early registration ends Master Classes Technical Tour

### Themes

### A. River Flow and Transport Processes

- Laboratory and eddy-resolving numerical investigations of fundamental physical processes and transport in open channels
- Field studies and numerical investigations of flow and transport in natural streams
- Theoretical modeling
- Innovative field and laboratory instrumentation for the study of flow in open channels

**Special session**: Experimental techniques used in fluvial hydraulics

# **B. Sediment Transport and River Morphodynamics**

- Mechanics of sediment transport
- Dynamics of bedforms and meandering streams
- River morphology and morphodynamics
- Bank erosion and protection
- Reservoir sedimentation
- Local scour around hydraulic structures
- Novel experimental techniques for study of particle laden flows and near-bed phenomena
- Numerical aspects of sediment transport and hyper-concentrated/granular flows

# C. River Floods

- Coupling of watershed processes with stream dynamics
- Channel-floodplain interactions driven by floods
- Geomorphic dam-break flows and breach formation

- Flood propagation and control
- Numerical prediction of floods (2-D & 1-D models)
- Management of flood risk
- Flood mitigation and societal impact of floods

**Special session**: Flood prediction and flood mitigation in the Upper Mississippi River Basin

#### D. River Management, Ecology, and Restoration

- Sustainable engineering solutions for management of natural streams
- Competing uses of rivers for energy, agriculture and transportation
- Ecological aspects of river flows
- Flow in vegetated channels
- River training & design of river restoration structures
- River dams and design of fish passage structures
- Modeling tools for river habitat management
- Dynamics of invasive species

# MASTER CLASSES

Students and young scientists interested in attending the master classes are invited to submit a two-page CV and a two-page description of their research between March 1 and April 15, 2016. Please consult the conference website for a list of master class topics. Participants will receive a certificate signed by the masters, and an invitation to a special dinner on Monday evening.

## **TECHNICAL TOUR**

A half-day tour of the National Great Rivers Research and Education Center (NGRREC) near St. Louis and the applied River Engineering Laboratory of the U.S. Army Corps of Engineers in St. Louis will be organized.



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