

## Stuttgart Offers More - Welcome to Hospitality!

Stuttgart lies in a lush valley, nestling between vineyards and thick woodland on the River Neckar. With a population of about 600,000, the capital of Baden-Wuerttemberg is the urban center of south-west Germany. The Stuttgart area has the reputation of being the 'cradle of the automobile', and visitors associate it primarily with technological innovation and thriving industry.

The academic tradition of the University of Stuttgart goes back to its probably most famous graduate student: Gottlieb Daimler, the inventor of the automobile. The University is one of the leading technical universities in Germany with highly ranked programs in civil, mechanical, industrial and electrical engineering. The University's High Performance Computing Center Stuttgart supports researchers from Germany and Europe as well as industry with leading-edge supercomputing technology. In addition, the Fraunhofer Society, a German research organization for the advancement of applied research, and the Max Planck Society, active primarily in fundamental science, are located here.

However, the Stuttgart region is not only the home of large car companies and science and research organizations but has a wealth of historic buildings ranging from medieval castles and Baroque palaces to magnificent royal residences and picturesque ruins. There are no fewer than 19 mineral springs that spout some 22 million liters of crystalline mineral water daily. Since some are attributed with healing properties, there is a booming local spa industry. With its impressive car museums, exclusive art exhibitions, its fascinating history, famous architecture, and world-class ballet company, the Stuttgart region has cultural activities for everybody, whatever their tastes and interests. Those who are up for more can feel reassured: the most famous spots in Germany like Heidelberg, the Loreley on the Rhine, Cologne Cathedral and Neuschwanstein Castle are only a few hours away.

## Organized by



Universität Stuttgart - Institute for Modelling Hydraulic and Environmental Systems - Department of Hydraulic Engineering and Water Resources Management



Chairperson of the Local Organizing Committee:  
Prof. Dr.-Ing. Silke Wieprecht  
wieprecht@iws.uni-stuttgart.de  
+49 711 685 - 64461



Contact:  
Dr. rer. nat. Karolin Weber  
kw@iws.uni-stuttgart.de  
+49 711 685 - 64777

## Sponsored by



World Association for Sedimentation and Erosion Research



International Research and Training Center on Erosion and Sedimentation

## Co-Sponsored by



United Nations Educational, Scientific and Cultural Organization



International Sediment Initiative



International Association for Hydro-Environment Engineering and Research



# ISRS 2016

## 13<sup>th</sup> International Symposium on River Sedimentation

Sediment on the Move

Innovative Management  
Strategies in Riverine Systems:  
from old problems to new solutions

September 19 – 22, 2016  
in Stuttgart, Germany



Stuttgart Schlossplatz (Castle square)  
Copyright Stuttgart-Marketing GmbH

## Invitation and Background

On behalf of the entire Local Organizing Committee, I take great pleasure in inviting you to the 13<sup>th</sup> International Symposium on River Sedimentation (ISRS2016), which will be held from September 19<sup>th</sup> to 22<sup>nd</sup> 2016 in Stuttgart, Germany. Held triennially since 1980 under the auspices of the International Research & Training Center on Erosion and Sedimentation (IRTCES), the symposium series provides an important forum for scientists, engineers and policy-makers to share information, exchange ideas and collaborate in the field of erosion and sedimentation processes.

Sediment dynamics in fluvial systems is of high ecological, economic and human-health-related significance worldwide. Appropriate management strategies are needed to limit maintenance costs as well as minimize potential hazards to the aquatic and adjacent environments. Human interventions, from nutrient/pollutant release to physical modifications by river regulation, have a large impact on sediment quantity and quality and thus on river morphology as well as ecological functioning. Truly understanding sediment dynamics requires multidisciplinary approaches. But how do we transfer new insights on complex interactions in fine sediments into sustainable management strategies? Can we win new partners by integrating biota? Can we do more with less?

We hope to provide a stimulating symposium event with interesting talks and tours.

Silke Wieprecht

(Chairperson of the Local Organizing Committee)

## Key Dates

Abstract submission	September 1 <sup>st</sup> , 2015
Abstract notification	October 1 <sup>st</sup> , 2015
Paper submission	February 1 <sup>st</sup> , 2016
Paper notification	April 1 <sup>st</sup> , 2016
Early bird registration	May 31 <sup>st</sup> , 2016
Conference	September 19 <sup>th</sup> to 22 <sup>nd</sup> , 2016

## Theme & Topics

(Status 03/2014)

The theme of the symposium is

### **Sediment on the Move - Innovative Management Strategies in Riverine Systems: from old problems to new solutions**

The symposium topics include:

1. **Sediment Sources:** Aspects of land erosion and sediment input, management strategies influencing sediment yield
2. **Sediment Transport in Rivers and Lakes:** Transport processes, fundamental considerations, aspects of hydraulic and sediment transport, morphological processes
3. **Geomorphology Meets Ecology:** Interaction between biota and sediments, from macro- to microscale to impact stability, erosion, transport, deposition and consolidation
4. **Sedimentation Processes:** Reservoir and lake sedimentation, impacts on hydraulic structures (intakes, bridges, weirs, dams, etc.)
5. **Erosion Processes:** Impacts on hydraulic structures (foundations), effects on groundwater, special effects (sorting, armoring, etc.)
6. **Morphology and Water Quality:** Sediments as a source of contaminants, ecotoxicological and environmental aspects, mitigation measures, morphology and floodplains
7. **How to Address Sediment Dynamics Better:** Data collection, measurement techniques, and requirements for models
8. **Innovative Management Strategies:** Can we do more with less? Sediment removal, sediment trapping, hydraulic and ecological constructions
9. **Social, Economic and Political Aspects of Sediment Management**

## Technical Visit

The Rhine is one of Europe's most used rivers: It is an important navigation channel and ecosystem, provides energy from hydropower stations, and serves as a source of cooling water for many thermal power plants. In this context, sediment management plays a key role. In the upstream part of the river, a large number of power plants collect most of the sediments. In order to prevent the bed from further erosion, sediment is artificially introduced downstream of the previous barrage. The middle section of the Rhine experiences severe sedimentation processes and thus intensive dredging work is being carried out. Thus, Rhine is an ideal location to learn more about sediment transport and management.

A one-day technical visit will be arranged for all participants. It will take you to the Iffezheim barrage, a hydropower station with one of the largest fish passages in Europe. At this barrage, approx. 160.000 m<sup>3</sup>/year of sediment are introduced to the river by barges.

## Tours for Accompanying Persons

During the symposium, accompanying participants will have the opportunity to visit Neuschwanstein, one of the most popular of all the palaces and castles in Europe. A classical concert will be organized in the monastery of Maulbronn, a perfectly preserved medieval monastery complex which is inscribed in the World Heritage List. Guided tours of Stuttgart will also be offered. As an additional evening event, a visit to the Stuttgart Ballet, one of the world's most renowned dance companies, can be organized.