

# INTERNATIONAL SEDIMENT INITIATIVE

## NEWSLETTER

*Reporting ISI news to you quarterly*

No. 43 Dec. 26, 2016

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## NEWS

### ISI-LAC meeting, 24-25 November, 2016 in Habana, Cuba

Representatives of the International Sediment Initiative in Latin America and the Caribbean (ISI-LAC) met in La Habana, Cuba on 24-25 November, 2016. Participants from Argentina, Brazil, Chile, Costa Rica, Cuba, Mexico and Uruguay attended the meeting, supported by the Regional Hydrologist of UNESCO for the LAC region.

### IRTCES organized an International Training Workshop on River Basin Management Strategies and Techniques for Soil and Water Conservation



An International Training Workshop on River Basin Management Strategies and Techniques for Soil and Water Conservation was held in Beijing from October 9 to 15, 2016. This training workshop was hosted by the International Research and Training Center on Erosion and Sedimentation (IRTCES), and co-hosted by the China Institute of Water Resources and Hydropower Research (IWHR) and the World Association of Soil and Water Conservation. The opening ceremony was held on the afternoon of October 9 at Beijing Zi Yu Hotel. Professor Kuang Shangfu, President of IWHR and Director of IRTCES, Professor Guo Suoyan, Deputy Director of the Department of Soil and Water Conservation of the Ministry of Water Resources, and Mr. Hao Zhao, Division Director of the Department of International Cooperation, Science and Technology of the Ministry of Water Resources attended and addressed the opening ceremony.

This Training Workshop was an international training project funded by the Asia Regional Cooperation Fund, which was commissioned by the Ministry of Water Resources. The aims of the workshop were to improve the participants' overall understanding of river basin management strategies and policies for the development of water resources, to broaden knowledge and master key techniques for the control of water-induced soil erosion in river basins, and to learn and share advanced techniques for the management of water resources and the conservation of soil and water. It was hoped that this workshop would promote the development of water resources in river basins and the conservation of soil and water, and foster international cooperation and exchanges among the participants. Twenty-six international participants

from 11 countries, including Cambodia, Indonesia, Iran, Laos, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand, Timor-Leste, and Vietnam, and six domestic students from the three IRTCES Research Bases participated in the one-week training course. A number of well-known experts and scholars in the fields covered by the Workshop were invited to contribute. They included Professor Wang Zhongjing from Tsinghua University, Professor Zhang Guanghui from Beijing Normal University, Research Fellow Li Rui from the Institute of Soil and Water Conservation, Professor Zhou Shichun from the China Renewable Energy Engineering Institute, and Senior Engineer You Jinjun of the IWHR, who provided training courses on the development and management of river basin water resources, soil and water conservation strategies in river basins, the monitoring and evaluation of water and sediment discharge from river basins, and the development of soil and water conservation techniques. IRTCES Deputy Director Ning Duihu also gave the participants a lecture summarizing the conservation of soil and water in China. In addition, the training workshop extended a special invitation to a technical representative of the Beijing Datum Science and Technology Development Co., Ltd. Company to make a presentation on new services and applications for geological information system technologies in the field of soil and water conservation. During this period, the participants also visited the Shangxinzhuan Soil and Water Conservation Science and Technology Park and the IWHR's Yanqing Laboratory Base in Beijing. (Source: IRTCES)

### China introduces the River Chief System

The general offices of the Communist Party of China Central Committee and the State Council, China's Cabinet, have jointly issued a document to implement a river keeper system nationwide. A river chief, as the name suggests, will be responsible for the management and protection of watercourses, as well as preventing pollution and restoring the water ecology.

The document requires local governments and Party committees to develop out specific programs to implement the system and strengthen the management and protection of rivers. A sound nationwide river chief system is likely to be put in place by the end of 2018.

According to the document, China will establish provincial, municipal, and county-and township-level river chief systems, and appoint heads of local government at various levels as river chiefs. Each province, autonomous region and municipality should appoint its government head as its general river chief. Mayors as well as county heads should be responsible for the protection of water sources in their administrative regions.

The document also says that the river chiefs will be held accountable for any environmental damage in their region and that their performance as river chiefs will be evaluated as part of their political performance. Every January provincial Party committees and governments will have to report the progress they have made in water resource protection in the previous year to the central government.

Information on river chiefs, including their names and responsibilities, will be made public so as to bring their work under public supervision. (Source: MWR, <http://www.mwr.gov.cn/>)

## Budapest Water Summit 2016 held in the capital city of Hungary



The Budapest Water Summit 2016 was held in the capital city of Hungary, Budapest, from November 28th – 30th. János Áder, President of Hungary, H.E. Mr. Peter Thomson, President of the 71st Session of the General Assembly, H.E. Ms. Ameenah Gurib-Fakim, President of Mauritius (Co-Chair), H.E. Mr. Emomil Rahmon, President of Tajikistan, H.E. Ms. Sheikh Hasina, Prime Minister of Bangladesh, all gave speeches at the inauguration session of the Summit. UN Secretary-General Ban Ki-moon gave a speech through video message. Minister Chen Lei attended the summit and delivered a keynote speech.

The Budapest Water Summit 2016 was organized by the Hungarian Government in cooperation with the World Water Council, which aims to further promote the implementation of the Sustainable Development Goals related to water (SDG6). The summit attracted nearly 1800 officials and representatives from more than 100 countries, regions and international organizations in the field of water resources. The Summit included several high-level events covering six thematic sessions on: safe and affordable drinking water, improving sanitation and hygiene, increasing water-use efficiency, integrated water resources management (IWRM), and improving water quality and water-related ecosystems. The Summit also organized special sessions, such as the Youth Forum, Science-Technology Forum, Women's Forum, Civil Forum and Sustainable Water Expo. "Water Connects - Actions for the 2030 Agenda" was announced after the Summit. This is the second time that the Republic of Hungary has organized the Budapest World Water Summit, with the first Budapest World Water Summit being held in 2013. (Source: MWR, <http://www.mwr.gov.cn/>)

## Deepening Divide Over Elbe Dredging

(Dec. 19, 2016) The struggle continues over a plan to deepen the Elbe River. Proponents say it will create jobs. Opponents have environmental concerns. A Federal Court in Leipzig will hear arguments this week in a lawsuit brought by environmental groups against State and Federal planning authorities.

The background

The Elbe is Germany's most significant waterway. A crucial stretch is the 130 kilometers between Hamburg and the mouth of the North Sea near Cuxhaven. Global shipping uses this route to offload goods at the Port of Hamburg, the most important in the region and among the top ten worldwide. The port employs 150,000 people.



The river has been deepened eight times since 1818, from 3.5 meters then to 14.9 meters today, keeping pace with global commerce that has demanded ever larger ships. The newest project aims to accommodate the new generation of mega container ships, regardless of tidal flows. The Marco Polo, for example, carries 16,000 containers and has a draft (the vertical distance between waterline and ship's keel) of 16 meters. Given present river depths and tides, such ships can only enter Hamburg at certain times and when not fully loaded.

Planners want to change this so ships with a draft of 13.5 meters can safely enter the port at any time. Currently, a maximum draft of 12.5 meters is possible when unassisted by high tide.

The lawsuit's defendants and plan supporters consider river deepening essential to Hamburg's economic development. The project would create 40,000 jobs, experts estimate. If the project goes forward as envisioned, the port will handle 25 million containers by 2025, up from 8.8 million today. If the project is blocked, the State of Hamburg fears major shipping would turn more to larger ports at Antwerp and Rotterdam. Port-dependent business would suffer, tax revenue would decrease and unemployment would increase.

Planners seek to minimize impact on the existing river ecosystem. Tidal range, that is river levels between low and high tides, should not be affected.

Tidal range is a prime cause for erosion, which previous river dredging, as well as waves generated by passing ships, have exacerbated. Tidal range at the Port of Hamburg was measured at 1.5 meters 150 years ago. Since, it has risen to 3.6 meters.

"There is a direct relationship between deepening the Elbe and the increase of the tidal range, and how strongly it increases," said Malte Siegert, director of environmental policy at the Nature and Biodiversity Conservation Union (NABU). This organization, together with the support of WWF, and BUND, another German environment group, are the lead plaintiffs.

Environment advocates have several reasons to raise alarm about the project, foremost being larger sediment deposits, Siegert said. As the river deepens, more seawater from the North Sea flows at a faster rate towards Hamburg, bringing sediment that builds up on the river bed. The Hamburg Port Authority dredges the river to counteract the

build up, which cost taxpayers 120 million euros (\$125 million) in 2015.

The Elbe's banks are feeding grounds for migratory birds, which the project would hinder. "Between erosion of the shore zones and sand deposits, the banks would be sandy regions where birds could no longer feed," she said.

#### Divert to JadeWeserPort

Shippers could turn to the JadeWeserPort, a deepwater hub at Wilhelmshaven that opened in 2012. The State of Hamburg was part of the original construction project, agreed to in 2000 with the Federal Government, Lower Saxony and Bremen. It backed out two years later and announced plans to deepen the Elbe.

The two projects amount to an expensive redundancy, Siegert said, with the JadeWeserPort costing \$1.6 billion and the Elbe project an additional \$940 million. "This is the reason for our protest: They decided on the first port, and now they should coordinate traffic, so that the really large ships can go to Wilhelmshaven or, under certain restrictions, to Hamburg." (Source: DW, <http://www.dw.com/> )

### World's largest shiplift starts round-the-clock operations (China)

(Nov. 19, 2016) The permanent shiplift at China's Three Gorges Dam started its round-the-clock operations on Friday after its first phase of two-month trial operation ended.

The shiplift began trials in September operating from 8 a.m. to 5 p.m. each day. The round-the-clock trial will last until the water level of the Three Gorges Reservoir falls to 145 meters, said the Three Gorges Navigation Authority.

Tests for night operations were conducted one week ago.

The shiplift, designed by a Chinese and German team, is the largest and most sophisticated in the world, according to the China Three Gorges Corp.

It has been installed to complement the five-tier ship lock next to it, for the world's largest hydropower project on the Yangtze River, China's longest. The trial operation will last one year.

The vertical-hoisting elevator helps ships with a maximum displacement of 3,000 tonnes, to traverse the dam. The water level behind the dam is up to 113 meters higher than the downstream river. (Source: China Daily)



#### More News on ISI Website

- The 2nd World Irrigation Forum was held in Thailand
- The Sino-Austria Workshop on Operation & Development of Sustainable Hydropower was held in Beijing
- SedNet-ICPDR-ICPER Round Table Discussion: Bringing together experiences in sediment management concepts – Elbe meets Danube

More .....  
(<http://www.irtces.org/isi/>)

## CONFERENCE REPORT

### “G-WADI: More than a decade enhancing water and sustainable development for arid regions” was held in Beijing



Participants gather for the opening session of the G-WADI Global Conference

The Global Network on Water and Development Information for Arid Lands (G-WADI) celebrated a decade of achievements with an international conference entitled “G-WADI: More than a decade enhancing water and sustainable development for arid regions”. The meeting took place on 25-27 October 2016 in Beijing, China.

G-WADI was established by UNESCO's International Hydrological Programme (IHP) in 2004 to strengthen the global capacity for management of water resources in arid and semi-arid regions. It brings together an expert scientific network of UNESCO Regional Centres and IHP National Committees to promote global capacity for the management of water resources in arid and semi-arid areas. The conference gathered scientists from all regional G-WADI networks from the developed and developing world, sharing experiences and technological developments related to hydrology in water scarce areas.

In its opening session, the G-WADI's advisory members and experts reflected on the achievements of G-WADI over the past twelve years. These include the formation of five regional expert networks, the creation of the G-WADI GeoServer – an open source server to share geospatial data that provides real-time precipitation data.

IHP collaborated with the Center for Hydrometeorology and Remote Sensing (CHRS) of the University of California, Irvine, on the development of tools to provide access to global satellite estimates of precipitation at high spatial and temporal resolutions. The G-WADI PERSIANN-CCS GeoServer employs remote sensing technologies and artificial intelligence to estimate rainfall globally from satellite imagery in near real-time and high spatiotemporal resolution. It offers graphical tools and a data service to help in emergency planning and management for natural disasters related to hydrological processes.

The Namibia Drought Hydrological Services (NHS) uses G-WADI GeoServer data to prepare a daily flood/hydrological drought bulletin with up-to-date information on flood and drought conditions for local

communities. The mobile app RainMapper features a geographical search engine with a user-friendly interface displaying local real-time precipitation. The app was used to track Typhoon Rammasun (considered one of the only two category 5 super typhoons on record in the South China Sea) across the Philippines in July 2014.

Furthermore, the development of African and Latin American Drought Monitors, and the publication of 15 papers on hydrological modelling, water management and groundwater modelling in arid and semi-arid regions were also highlighted during the conference. These developments have contributed significantly to the improved management of water resources in arid and semi-arid regions, and have increased the resilience of water-stressed communities to better plan for and respond to water scarcity and extreme hydrological events.

The conference also focused on future opportunities for expanding the reach and impact of G-WADI. The role of citizen science in bridging the local data and knowledge gaps and facilitating community participation was recognised.

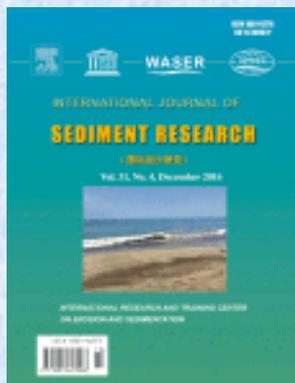
Day two of the conference featured scientists from several regions of the globe delivering case studies on how G-WADI's scientific tools have been successfully adopted at the national level to support improved water management. Representatives from the Government of Namibia presented on national experiences integrating G-WADI facilitated precipitation estimates from G-WADI Geo Server real-time global high-resolution (~4km) satellite precipitation product, PERSIANN-CCS (Precipitation Estimation from Remotely Sensed Information using Artificial Neural Networks - Cloud Classification System). PERSIANN-CCS is a product of the University of California, Irvine's CHRS.

Other examples illustrated how scientific data and processes related to precipitation and climate predictions could be applied in other regions to enhance climate change resilience. Several UNESCO Category 2 Centres and IHP flagship programmes engaged in hydrological research presented their ongoing work and contribution to the G-WADI programme.

The final day of the G-WADI conference saw participants consider the way forward for the programme. In particular, participants discussed how to develop more concrete policy linkages from G-WADI tools, how to integrate trans-disciplinary considerations into hydrological research, and the role of G-WADI in supporting the achievement of the sustainable development agenda.

Summarizing the conclusions of the conference, Marielza Oliveira, Director of the UNESCO Beijing Office, noted in her closing remarks: “Our common future depends on how we look after, share and manage water”. (Source: UNESCO)

## PUBLICATIONS



### Papers Published in the International Journal of Sediment Research Volume 31, No. 4, 2016

Pages 279-394

Stream turbidity responses to storm events in a pristine rainforest watershed on the Coral Coast of southern Fiji  
Pages 279-290

Arishma R. Ram, James P. Terry

Characteristics of particle size distributions for the collapsed riverbank along the desert reach of the upper Yellow River  
Pages 291-298

Anping Shu, Fanghua Li, Haifei Liu, Guosheng Duan, Xing Zhou

Simulating bed evolution following the Barlin Dam (Taiwan, China) failure with implications for sediment dynamics modeling of dam removal  
Pages 299-310

Hsiao-Wen Wang, Desiree Tullos, Wei-Cheng Kuo

Effects of biological soil crusts on water infiltration and evaporation Yanchi Ningxia, Maowusu Desert, China  
Pages 311-323

Bai Li, Jiarong Gao, Xiuru Wang, Lan Ma, Qiang Cui, Maik Vest

Heavy metal content in relation to particle size and organic content of surficial sediments in Miami River and transport potential  
Pages 324-329

Berrin Tansel, Syed Rafiuddin

Hurricane impacts on turbidity and sediment in the Rookery Bay National Estuarine Research Reserve, Florida, USA  
Pages 330-340

Sha Lou, Wenrui Huang, Shuguang Liu, Guihui Zhong, Elijah Johnson

Quantitative, SEM-based shape analysis of sediment particles in the Yellow River  
Pages 341-350

Daming Li, Yangyang Li, Zhichao Wang, Xiao Wang, Yanqing Li

Revisiting functional no-flow events in the Lower Yellow River  
Pages 351-359

Rong Huang, Tianhong Li, Lianjun Zhao

Sediment transport under the presence and absence of emergent vegetation in a natural alluvial channel from Brazil  
Pages 360-367

Yuri Jacques Agra Bezerra da Silva, José Ramon Barros

Cantalice, Vijay P. Singh, Cinthia Maria Cordeiro Atanázio Cruz, Wagner Luís da Silva Souza

An evaluation of visual and measurement-based methods for estimating deposited fine sediment  
Pages 368-375

Elizabeth Conroy, Jonathan N. Turner, Anna Rymszewicz, Michael Bruen, John J. O'Sullivan, Mary Kelly-Quinn

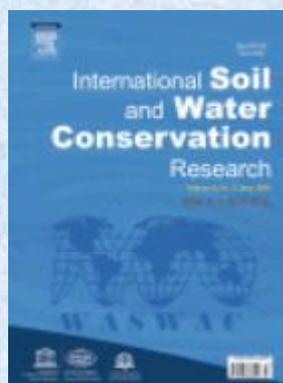
Graded and uniform bed load sediment transport in a degrading channel  
Pages 376-385

Zhijing Li, Zhixian Cao, Huaihan Liu, Gareth Pender

Effect of best management practice implementation on sediment and phosphorus load reductions at subwatershed and watershed scale using SWAT model  
Pages 386-394

Jasmeet Lamba, Anita M. Thompson, K.G. Karthikeyan, John C. Panuska, Laura W. Good

Full papers are available at ScienceDirect:  
<http://www.sciencedirect.com/science/journal/10016279>  
with free access to the paper abstracts.



### Contents of ISWCR (Vol. 4, No.4, 2016)

International Soil and Water Conservation Research

Volume 4, Issue 4, Pages 237-314(Dec. 2016)

Use of the Nitrogen Index to assess nitrate leaching and water drainage from plastic-mulched horticultural cropping systems of Florida  
Pages 237-244

Edilene C.S. Marchi, Lincoln Zotarelli, Jorge A. Delgado, Diane L. Rowland, Giuliano Marchi

On-farm gains and losses of soil organic carbon in terrestrial hydrological pathways: A review of empirical research  
Pages 245-259

Gunasekhar Nachimuthu, Nilantha Hulugalle

Understanding the attitudes and practices of paddy farmers for enhancing soil and water conservation in Northern Iran  
Pages 260-266

Dariush Ashoori, Asghar Bagheri, Mohammad Sadegh Allahyari, Anastasios Michailidis

Effect of land cover on channel form adjustment of headwater streams in a lateritic belt of West Bengal (India)  
Pages 267-277

Suwendu Roy, Abhay Sankar Sahu

Understanding the spatial distribution of hydrologic sensitive areas in the landscape using soil topographic index approach

Pages 278-283

Yiwen Wu, Subhasis Giri, Zeyuan Qiu

Assessment of spatial and seasonal water quality variation of Oum Er Rbia River (Morocco) using multivariate statistical techniques

Pages 284-292

Ahmed Barakat, Mohamed El Baghdadi, Jamila Rais, Brahim Aghezzaf, Mohamed Slassi

Spatial distribution of heavy metals in the middle Nile delta of Egypt

Pages 293-303

Mohamed S. Shokr, Ahmed A. El Baroudy, Michael A. Fullen, Talaat R. El-beshbeshy, Ali R. Ramadan, A. Abd El Halim, Antonio J.T. Guerra, Maria C.O. Jorge

Civil-GIS incorporated approach for water resource management in a developed catchment for urban-geomorphic sustainability: Tallowa Dam, southeastern

Australia

Pages 304-313

Ali K.M. Al-Nasrawi, Brian G. Jones, Yasir M. Alyazichi, Sarah M. Hamylton, Mohammed T. Jameel, Ali Faraj Hammadi

Free full papers and open access are available at ScienceDirect :

<http://www.sciencedirect.com/science/journal/20956339>

### Publications in ISI Information System

- PPTs of the G-WADI Global Conference "G-WADI more than a decade enhancing water and sustainable development for arid regions"
- Methods for the Estimation of Erosion, Sediment Transport and Deposition in Steep Mountain Catchments
- PPTs of the Workshop on International Sediment Advancements

More .....

(<http://www.irtces.org/isi/info.asp>)

## COMING EVENTS

### 2nd International Workshop on Sediment Bypass Tunnels (Kyoto Japan, May 9-12 2017)

**Workshop Statement:** Sediment bypass tunnels (SBT) are hydraulic structures that gain worldwide importance as a measure to counter reservoir sedimentation. Sediments are bypassed around a dam to the tail water reach reducing sediment aggradation in the reservoir on the one hand and allowing for re-establishing sediment continuity on the other. The latter is more and more aimed at from an ecological point of view since river bed erosion downstream of the dam is decelerated along with an increase of morphological and ecological variability. The 1st IWSBT in April 2015 hosted by the Laboratory of Hydraulics, Hydrology and Glaciology at ETH Zurich, Switzerland, was a great success with 89 participants from 12 countries gathering to exchange and discuss latest research findings and experiences. We joyously invite you to participate at the 2nd IWSBT taking place in Kyoto, Japan, to further discuss newest SBT-related topics. A 1.5 day workshop will be held at Kyoto University, Uji Campus, accompanied by a 2 day field trip to Nagano Prefecture to visit the Miwa, Koshibu and Matsukawa sediment bypass tunnels. The workshop encompasses keynotes, oral presentations, poster sessions and sound discussions. We look forward to seeing you in Kyoto!

**Themes:** We kindly invite you to submit your abstract on one of the following topics:

#### A Upstream Aspects

##### 1 Hydrology

##### 2 Sediment Erosion & Inflow

#### B Tunnel

##### 1 Hydraulics & Sediment Transport

##### 2 Planning & Design

##### 3 Tunnel & Inlet Works

##### 4 Invert Abrasion

##### 5 Maintenance

#### C Downstream Aspects

##### 1 Morphological Changes

##### 2 Ecological Effects

#### D Operation

##### 1 Monitoring & Instrumentation

##### 2 Real-time Operation

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### The 14th International Symposium on the Interactions between Sediments and Water (Italy, June 17-22, 2017)

**Date:** June 17-22, 2017

**Venue:** Taormina, Italy

**Invitation:** The role of sediment in aquatic systems has attracted increasing attention in the last few decades from both an applied and a research perspective. Sediments act as both a pollutant in natural habitats as well as a vector for the transfer of chemicals such as nutrients and contaminants. Recognition of the environmental influence of both sediment and sediment-associated chemical (nutrients

and contaminants) transfers and storage on aquatic ecosystems has generated much concern within both research and regulatory agencies. Studies have been undertaken by a variety of individuals in a wide range of disciplines as the environmental problems are found in rivers, lakes, wetlands, estuaries and oceans and affect the biological, chemical, physical and social components of the system.

The International Association for Sediment Water Science (IASWS), bringing together a wide range of researchers from different disciplines, seeks to promote, encourage and recognize excellence in scientific research related to sediments and their interactions with water and biota in fluvial, lacustrine and marine systems and with particular reference to problems of environmental concern.

The symposium that began in Amsterdam, Netherlands (1976) has continued on a three-year cycle, meeting in Canada (1981), Switzerland (1984), Australia (1987), Sweden (1990), U.S. (1993), Italy (1996), China (1999), Canada (2002), Slovenia (2005), Australia (2008), England (2011) and South Africa (2014). These tri-annual symposiums provide a forum for interdisciplinary discussions with the aim of better integrating knowledge of the biological, physical and chemical processes between sediments and water. The scale of the meeting is such that the exchange of ideas, techniques and approaches is fostered encouraging this integration and enabling future collaboration.

We invite you to participate in this conference. We hope that your attendance at the 14th International Symposium on the Interactions between Sediments and Water will be interesting and enjoyable for you, both scientifically and socially, and that you will enjoy your stay in Taormina.

Paolo Porto & Vito Ferro, Conference Chairs, Local organising Committee, IASWS 2017

IASWS 2017 website: <http://www.iasws2017.altervista.org/>

Deadline for abstract submission is August 15th 2016.

The selected papers presented in the conference will be published in a special issue of "Journal of Soils and Sediments".

**Contact:** Prof. Paolo Porto

Conference Chair

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#### KEY THEMES OF THE CONFERENCE

During the IASWS 2017 the following main topics will be addressed:

**Theme A:** Assessing and/or Restoring Disturbed Watersheds

Sediment Related Risk Assessment

Fine Particle Behavior

Sediment Geochemistry

Disturbed Catchments: Modelling and Measurement

Organic Matter and Particle Behavior

Contaminant fluxes and storage in disturbed systems

Sediment fluxes in natural and disturbed systems

Managing sediment quality/remediation of sediments

Catchment research platforms and management policy

Contaminant and nutrient behaviour in disturbed systems

Impact of wildfires on water ecosystems

**Theme B:** Sediment-Water Linkages in Terrestrial and Aquatic Environments

Sediment Budgets: Catchment Transfers

Sediment Budgets: Supply and Storage

Floodplain Sediment Storage

Sediment Associated Contaminant Transfers  
 Sediment Associated Nutrient Transfers  
 Sediment Transport  
 Soil Erosion  
 Monitoring/modelling sediment yields at multiple scales  
 Use of tracer technologies in sediment-water science  
 Dynamics of fine cohesive sediments  
**Theme C:** Evaluating Change in Saline and/or Freshwater Habitats  
 Bio-Sediment Interactions  
 Sediment Associated Contaminants Sediment Dynamics in Aquatic Systems Hydrodynamic Effects on Sediment Processes Paleo-sediment Approach Sediment reconstruction, contaminants  
 Wood and fluvial ecosystems  
 Effect of wood on sediment structure and sorting  
**Theme D:** Developments in monitoring and measuring sediment-water interactions and dynamics  
**Theme E:** The role of sediment within catchment, river basin and coastal management

### CONSOWA 2017 (Spain, 12-16 June, 2017)

1st World Conference on Soil and Water Conservation under Global Change

**Date:** 12-16 June 2017

**Venue:** Lleida, Spain

**Summary:** A joint Conference of the "International Soil Conservation Organization" (19th ISCO Conference), the "World Association for Soil and Water Conservation" (Conference on Soil and Water Conservation of WASWAC), the "European Society for Soil Conservation" (8th ESSC Congress), the "International Union of Soil Science (USS-Commissions 3.2, 3.6), the Soil and Water Conservation Society (SWCS), the "International Erosion Control Association" (IECA) and the "World Association for Sedimentation and Erosion Research" (WASER), in parallel with the VIII Simposio Nacional sobre Control de la Degradación y Restauración de Suelos (SECS).

**Sponsors:** Universitat de Lleida (UdL), Spanish Society of Soil Science (SECS), ISCO, WASWAC, ESSC, IUSS, SWCS, WASER, IECA and ICEA

**URL:** <http://www.consowalleida2017.com/>

**Contacts:** fundacio@udl.cat

### 10th International SedNet Conference "Sediments on the move" (Genoa, Italy, June 14-17, 2017)

**Date:** June 14-17, 2017, with pre-conference sessions on 13 June 2017

**Venue:** the Palazzo San Giorgio, Genoa, Italy

**Summary:** SedNet is pleased to inform you that the 10th International SedNet Conference will be organized on 14-17 June 2017, in collaboration with DISTAV-University of Genoa and the Port Authority of Genoa.

Co-organized by DISTAV – University of Genoa, Italy

Hosted/sponsored by the Port Authority of Genoa

The conference title "Sediments on the move" refers to the fact that sediment moves from the mountains to the sea and from fresh water to marine environments thus passing cultural, political and geographical borders. But sediment is also on the move in terms of its evolving management that has been guarded, publicly discussed and jointly advanced by SedNet already for 15 years now. For more details see the brochure on the website First announcement and Call for Abstracts.

The Call for Abstracts is now open! And we kindly invite you to submit abstracts for the following conference themes:

1. Sediments moving to land, and soil moving to water
2. Sediment Balance
3. Policy for sediment management: Finding the balance; "everything is contaminated"
4. Using sediments as a resource – Sediments in a circular economy
5. Transboundary sediments
6. Innovative maintenance of river-delta-sea systems
7. Effects of remedial measures
8. Climate change; PIANC and SedNet Think Climate!
9. Sediment quality
10. Sediment quality criteria: derivation, implementation and enforcement
11. Disposal of sediments at sea

Please use the "Format for abstract" – see section "Downloads" on the right side of the conference webpage (<http://sednet.org/events/sednet-conference-2017/>).

Abstracts will be selected by the SedNet Steering Group either for platform presentation or for poster presentation.

**Deadline:** Abstracts must be submitted by email to the SedNet Secretariat before: 16 January 2017

**Pre-conference sessions:** The European projects Sediterra and Sedriport will organise pre-conference sessions on 13 June 2017. Participation to these sessions is free.

SEDITERRA – Guidelines for the treatment of dredged sediments consistent with a strategy and an assessment of the risks related to a land handling of sediments – provides for the capitalization of the knowledge gained from previous projects that have studied management models and treatment technologies applied to brackish and marine sediments, and the consequent experience gained by the French project partner to promote the reuse of treated dredged sediments in order to create a new supply chain in circular economy.

SEDRIPORT – Sediments, Dredging and Harbor risks – deals with problems common to the area of cooperation, arising from the emergency of the port silting: difficult to program ordinary and extraordinary dredging; incomplete and uncoordinated legislation; inconsistent regulations for the reuse of materials excavated from the port seabed; obligation to the global remediation with unsustainable costs.

**Further information:** Detailed information about the conference will be provided in the Conference Programme that will be published early spring 2017. Registration will also open early spring 2017.

In the meantime, if you have any questions, don't hesitate to contact the SedNet Secretariat.

Marjan Euser

SedNet Secretariat

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### 37th IAHR World Congress (Malaysia, August 13-18, 2017)

**Date:** August 13 - 18, 2017

**Venue:** Kuala Lumpur, Malaysia

**Invitation:** On behalf of the IAHR World Congress 2017 LOC, we are delighted to extend an invitation to you to join us in Kuala Lumpur, Malaysia for the IAHR World Congress 2017. The National Hydraulics Research Institute of Malaysia (NAHRIM), Department of Irrigation and Drainage Malaysia (DID) and the River Engineering and Urban Drainage Research Centre (REDAC), Universiti Sains

Malaysia (USM) are collaborating with IAHR to organize the IAHR World Congress 2017.

The Congress theme "Managing Water for Sustainable Development - Learning from the Past for the Future" focuses on the central roles of river and sediment management, flood management, environmental hydraulics and industrial flows, coastal, estuarine and lakes management, urban water management, water resources management, and hydroinformatics / computational methods as well as experimental methods in our changing world, and how these roles link to the broader issues. Careful management and innovative solutions are required and to deal with uncertainty in the natural world as well as the changing human world. We look forward to welcoming you to Kuala Lumpur in August 2017.

**Ir. Dr. Azuhan Mohamed**

Director General NAHRIM

**Key Dates:**

Abstract Submission: August 1, 2016

Abstract Notification: November 1, 2016

Paper Submission: February 1, 2017

Paper Notification: April 1, 2017

Paper Correction: May 1, 2017

Early Bird Registration: April 30, 2017

Congress: August 13 - 18, 2017

**URL:** <http://www.iahrworldcongress.org/>

**Contact:** [iahr@iahr.org](mailto:iahr@iahr.org)

**More Coming Events in ISI Website**

- River Flow 2018 (France, Sept. 3-7, 2018)
- 21st Congress of IAHR-APD (Indonesia, Sept. 3-5, 2018)

More .....

(<http://www.irtces.org/isi/>)



**INTERNATIONAL SEDIMENT INITIATIVE (ISI)**  
International Hydrological Programme (IHP)  
UNESCO

**ORGANISATION: UNESCO**

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**ISI URL:** <http://www.irtces.org/isi/>

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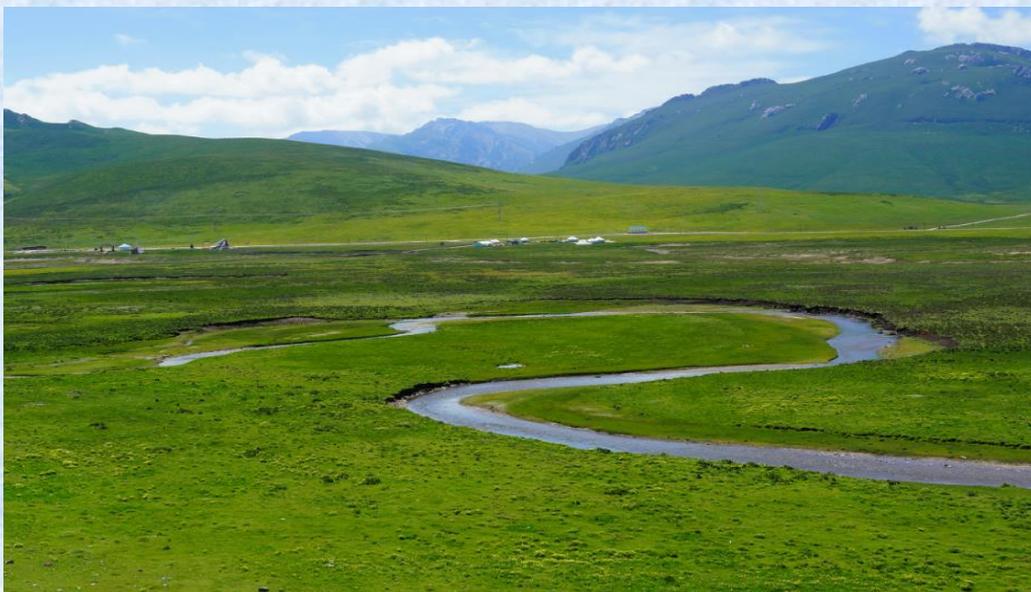
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*Area of the Yellow River Source (by Cheng Liu)*