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WORLD ASSOCIATION FOR SEDIMENTATION AND EROSION RESEARCH

World Association for Sedimentation & Erosion Research – WASER

NEWSLETTER

Reporting WASER news to you regularly

2020 No. 1
(March. 26, 2020)

IN THIS ISSUE

世界泥沙研究学会简报

本期内容

NEWS

President Xi highlights Yellow River development

Ecological protection a priority for basin; water should be a controlling resource

(January 4, 2020) President Xi Jinping on Friday underscored the importance of heightened efforts in ecological protection and pursuing high-quality development in the Yellow River Basin.

Xi, who is also general secretary of the Communist Party of China Central Committee and chairman of the Central Military Commission, made the remarks as he presided over the sixth meeting of the Central Committee for Financial and Economic Affairs. He heads the committee.

It is important to follow the principles of ecological protection and high-quality development in compiling a plan for the river basin's development, and then ensure its implementation, a statement released after the meeting said.

It also called for efforts to follow an ecology-first policy, including green development, and to enable the transformation from too much intervention and overexploitation to natural restoration and recuperation.

The meeting underlined the significance of water conservation, and listed measures to curb unreasonable water consumption. Water utilization must be transformed from inefficiency to more economical methods, the meeting decided.

Different areas must give play to their comparative strengths and develop sectors such as grain production, other agriculture, industry and commerce based on natural conditions, the statement said.

The meeting also laid great emphasis on solving the major issues in the river basin area, saying that projects such as water source conservation, mitigation of soil erosion, comprehensive treatment of air pollution and treatment of polluted soil must move forward.

Pollution control in the Yellow River Basin must be stepped up, with greater water conservation efforts to replenish the water volume in the river, the statement said.

It also urged efforts to push forward the development of city clusters, including Lanzhou and Xining, and to enable the coordinated development of cities in the middle reaches of the Yellow River.

The leading role of key cities, including Xi'an and Zhengzhou, must be strengthened, the statement said, adding that city clusters in the Shandong Peninsula must play a pioneering role.

To force adjustments in industrial structure, the statement said, water should be used as an evaluation standard for land use and industrial production volume.

A project dealing with the protection of cultural heritage along the river will be implemented, and a Yellow River culture and tourism belt with international influence will be developed, the statement said.

The Yellow River Basin, which has a watershed of more than 752,000 square kilometers and covers nine provincial areas, sustains a population of 420 million people, or 30.3 percent of the nation's total, and a GDP of 2.39 trillion yuan ($343 billion), or 26.5 percent of the national total, as of the end of 2018.

Xi has always attached great importance to the ecological protection of the Yellow River Basin.

He presided over a symposium in Zhengzhou in September during which the region's ecological protection and high-quality development was placed on par with other national strategies, such as the Yangtze River Economic Belt and the Guangdong-Hong Kong-Macao Greater Bay Area.

The meeting on Friday also included the discussion of issues involved in promoting the development of a double-city economic circle in Chongqing and Chengdu — both key cities in Southwest China.

It was decided that the leading role of Chengdu and Chongqing must be emphasized so that the area can be developed into an important economic hub and a center for scientific and technological innovation. (By XU WEI | China Daily | Updated: 2020-01-04)

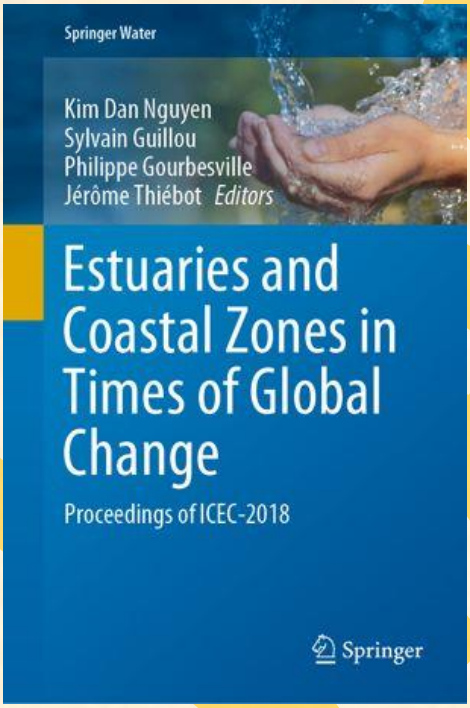
Proceedings of the 6th International Conference on Estuaries and Coasts are available online

The proceedings of the 6th International Conference on Estuaries and Coasts (France, August 20-23, 2018) (ICEC-2018) have been published by Springer and are available online at the website:

https://link.springer.com/book/10.1007/978-981-15-2081-5

This book is a collection of extended papers based on presentations given during the ICEC 2018 conference, held in Caen, France, in August 2018. It explores both the limitations and advantages of current models, and highlights the latest developments concerning new numerical schemes, high-performance computing, multi-physics and multi-scale methods, and better interaction with field or scale model data. Accordingly, it addresses the interests of practitioners, stakeholders, researchers, and engineers active in this field.

The ICEC -2018 was co-sponsored by WASER.



The relationship between Andean vegetation, precipitation and soil erosion

Plants may stabilize slopes, yet rainfall often intensifies soil erosion. Until now, just how these two things interact to form mountain topography was only clear for a few small regions on Earth. In a new study, Professor Todd Ehlers, Dr. Jessica Starke and Dr. Mirjam Schaller of the Geosciences Department at the University of Tübingen, Germany, investigated how plants and climate shape topography. They did this in a large study of the 3,500 kilometer long western edge of the Andes Mountains in Peru and Chile. They found that the question of how plants influence the landscape and erosion can have different answers, depending on what area is investigated. Key factors identified are the climate zone and plant cover. In the dry Atacama Desert, for example, sparse vegetation is sufficient to hold the soil in place; while higher erosion rates can be seen in the wetter and more temperate regions where plant cover is denser. The study has been published in the latest edition of the journal Science.

The area of the Andes investigated extends almost the entire length of South America, from 6 to 36 degrees south latitude. This region covers six climate zones, from very dry to temperate. "Along the western edge of the Andes, many individual studies have determined the rates of soil erosion over the past million years," says Todd Ehlers. "Yet the results were inconsistent and could not be easily explained." To evaluate the rate of erosion, the researchers used what are known as cosmogenic nuclides, which are produced on the Earth's surface by cosmic rays from space. The nuclides accumulate only when the ground is exposed. Using the concentration of the isotopes from sediments in 86 rivers, the researchers could calculate how fast the mountains eroded. "We supplemented earlier results from 74 study sites in Peru and Chile with 12 new measurements to fill the gaps," says Ehlers. This enabled him and his team to study changes in mountain erosion in different vegetation and climate zones along the Andes. The erosion rates varied between 1.4 meters to 150 meters per million years.

Complex connections

Plants use their roots to hold the soil onto slopes and slow down water flowing over the surface, thereby stabilizing slopes. But, plants can also enhance erosion by using their roots to break down rocks into soil that is more easily eroded. However, the situation becomes more complex when rainfall is taken into account. Rainfall is important for vegetation, but is also a key driver for

soil erosion. "You might think that the denser the plant cover, the less erosion there would be. This simple correlation is correct for some regions of the Andes" Ehlers says. "However, other factors such as the rate of rainfall also play an important role. It's exciting to now see how mountain erosion reflects this interaction between plants and rainfall." For example, in the temperate Andean regions there is dense plant cover due to heavy rainfall. This rainfall is high enough that it increases soil erosion, despite the presence of dense vegetation. However, in regions with even denser vegetation than temperate areas, plants are able to outpace the effects of rainfall on erosion and slopes are stabilized, and steeper.

"Our large-scale investigation across this broad climate and vegetation gradient in the Andes helps us to better understand the observations from many other studies," Ehlers explains. "Previous studies were mostly conducted in geographic regions restricted in terms of their environment or climate. It's only when working with a large region that you see the big picture of how plants and climate interact with landscapes." Vegetation forms a link between the biosphere and the Earth's surface. "Our study is an example of a new scientific frontier where the Earth and life sciences meet. We are learning more and more about how strongly the solid and living parts of the Earth interact, and we can observe the effects of these interactions over long time scales of thousands of years," says Ehlers. (by Dr. Karl Guido Rijkhoek, University of Tübingen. Source: https://phys.org/)

More information: J. Starke et al. Latitudinal effect of vegetation on erosion rates identified along western South America, Science (2020). DOI: 10.1126/science.aaz0840

Sediment Study of Georgica Pond, Long Island, New York, USA

In its ongoing effort to remediate the degraded condition of Georgica Pond, which has experienced toxic algal blooms every summer since 2012, a group of pondfront property owners sought and received permission from the East Hampton Town Trustees to take part in a sediment chronology study.

Sara Davison, executive director of the Friends of Georgica Pond Foundation, presented a proposal at the trustees' meeting on Monday that a mechanized vessel be used to extract a one-meter-long, four-inch-diameter core from the pond bottom in the coming summer. The proposal is a collaboration of the Gobler Lab at Stony Brook University's School of Marine and Atmospheric Sciences and Matthew Waters of Auburn University's Department of Crop, Soil, and Environmental Sciences, whom Ms. Davison described as an expert on lake coring.

Georgica Pond is eutrophic, with excessive nitrogen inputs from ground and surface water runoff feeding dense plant life, the decomposition of which is blamed for choking the pond of oxygen, the condition known as hypoxia. To combat that decomposition, the Friends of Georgica Pond Foundation has operated an aquatic weed harvester in recent summers to remove macroalgae before its decomposition can promote blooms of cyanobacteria, the blue-green algae that have beset the pond annually. (The group recently received permission to operate the harvester again this year.)

"Paleolimnological studies that employ sediment coring," according to the proposal, "offer an opportunity to explore and reconstruct the history of eutrophication [harmful algal blooms] and other algae in Georgica Pond and may, in turn, provide insight regarding the history of the watershed." Paleolimnological studies are based on analyses of sediment cores and biological records.

The proposal is part of a larger project. "They're designing an experiment for several lakes on Long Island," Ms. Davison said, "and they would like to include Georgica Pond."

Dr. Waters is the author of "A 4,700-Year History of Cyanobacteria Toxin Production in a Shallow Subtropical Lake," a study in which sediment coring revealed three periods of toxin abundance, only one of which was associated with recent, European settlement in the Lake Griffin watershed in central Florida.

The hope, Ms. Davison said, is "to learn more about the commonness of blue-green algae in the environment of Georgica Pond" and how it relates to land use.

The core will be split between the labs at Stony Brook and Auburn. At the latter its strata will be dated using isotopes and analyzed for levels of organic carbon, organic nitrogen, and other geochemical parameters. "The geochronology of

algal communities will be assessed via quantification of algal pigments, algal toxins, harmful algal blooms, and associated toxin synthesis genes within the core," according to the proposal. (By Christopher Walsh, Source: https://www.easthamptonstar.com/)

Ministerial Meeting of Lancang-Mekong Water Resources Cooperation commenced in Beijing

On December 17, 2019, a Ministerial Meeting of Lancang-Mekong Water Resources Cooperation (LMWC) commenced in Beijing, China. H.E. E Jingping, Minister of Water Resources, the People's Republic of China, presided over the meeting and delivered a keynote speech. H.E. Bun Hean, State Secretary of Ministry of Water Resources and Meteorology, the Kingdom of Cambodia, H.E. Sommad Pholsena, Minister of Natural Resources and Environment, the Lao People's Democratic Republic, H.E. Win Khant, Executive Secretary of the Ministry of Transport and Communications, the Republic of the Union of Myanmar, H.E. Tewan Liptapallop, Minister Attached to the Prime Minister's Office, the Kingdom of Thailand, and H.E. Le Cong Thanh, Deputy Minister of Natural Resources and Environment, the Socialist Republic of Vietnam, attended the meeting and made keynote speeches.

Minister E Jingping pointed out that this meeting was an essential measure to implement the consensuses reached at two meetings among the state leaders on Mekong-Lancang cooperation, and an important platform for six countries to enhance policy dialogue, information exchange and technical cooperation in the field of water resources. The theme of the meeting – Enhancing Water Partnership for Sustainable Development" – reflects the good wishes of China and the Mekong countries to build a community of shared future for the Lancang-Mekong countries, and shows the common determination of the six countries to realize water-related goals of the UN 2030 Agenda for Sustainable Development with every endeavor.

Minister E stressed that by adhering to the concept of development-prioritized, equal consultation, pragmatism and efficiency, and openness and inclusiveness, LMWC shall reinforce the establishment of a cooperation mechanism, push forward rational development and utilization, create a high-level information platform, and advance joint consultation, common construction and sharing, so as to build up LMWC as a "flagship brand" of Lancang-Mekong cooperation. Minister E raised four points to deepen LMWC. First, LMWC shall fully respect the right of six countries for rational development and utilization of water resources. Second, LMWC shall take the major concerns of each other into full consideration. Third, win-win results of six countries can only be achieved through joint cooperation in the Lancang-Mekong Basin. Fourth, LMWC should be conducted by the Mekong-Lancang countries themselves based on discussions.

Minister E put forward three aspirations to carry out the outcomes of this meeting. First, deeply research the philosophy of LMWC, and reach cooperation consensus. Second, define major principles for development and utilization of water and hydropower resources in the Lancang-Mekong Basin, and clarify responsibilities and rights of concerned countries. Third, strengthen the publicity of cooperative consensuses of LMWC, to create public support and sound atmosphere for LMWC.

Ministers from Cambodia, Laos, Myanmar, Thailand and Vietnam spoke highly of the great significance of the meeting, undertook in-depth experience exchange on water governance, reviewed cooperation outcomes, and put forward aspirations and suggestions on deepening LMWC. All countries expressed willingness to strengthen consultation and dialogue, experience exchange and project coordination, enhance mutual benefit and trust, promote the implementation of the outcome of this ministerial meeting, and further upgrade the level of LMWC.

The meeting heard the work report of the Joint Working Group on LMWC, unveiled the Joint Statement of the Ministerial Meeting on LMWC and the Proposed List of the Programs on LMWC, and witnessed the signing of the Memorandum of Understanding on Cooperation between the Lancang-Mekong Water Resources Cooperation Center and the Secretariat of the Mekong River Commission.

More than 60 representatives from water departments and ministries of foreign affairs of the six countries, and the Secretariat of the Mekong River Commission attended the meeting.

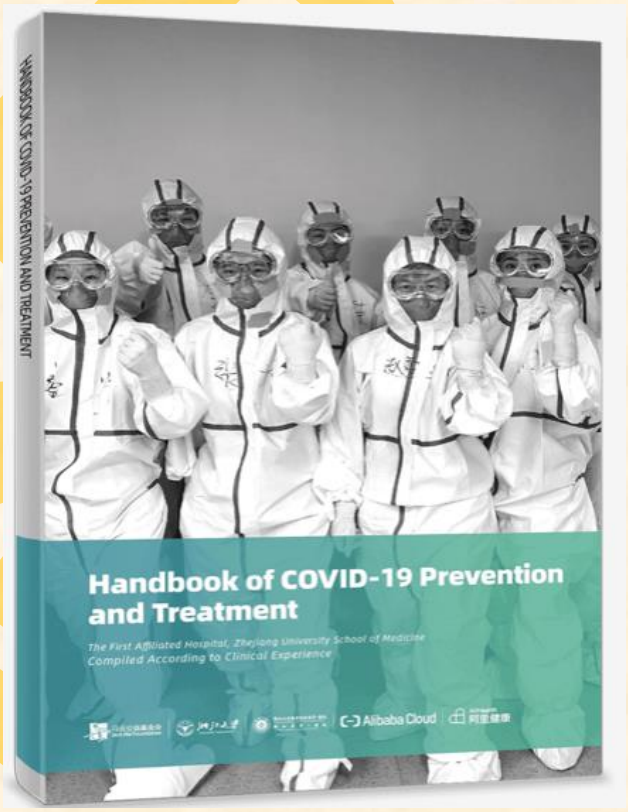
(Source: MWR, http://www.mwr.gov.cn/)

Tips on COVID-19 Prevention

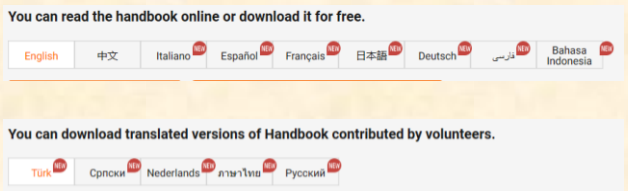
More information and tips on COVID-19 are available at: China Daily: https://www.chinadaily.com.cn/china/special_coverage/2020novelcoronavirus
Xinhua: http://www.xinhuanet.com/english/special/2020coronavirus/index.htm

Global MediXchange for Combating COVID-19 (GMCC): https://covid-19.alibabacloud.com/

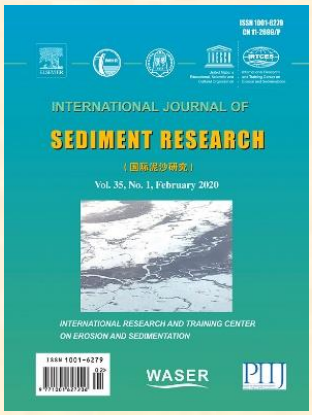
Handbook of COVID-19 Prevention and Treatment (English Version): https://www.alibabacloud.com/zh/universal-service/pdf_reader?pdf=Handbook_of_COVID_19_Prevention_en_Mobile.pdf



Handbook in more languages can be downloaded freely at GMCC: https://covid-19.alibabacloud.com/



PUBLICATIONS



Papers Published in the International Journal of Sediment Research Volume 35, No. 1, 2020

Pages 1-114 (Feb. 2020)

Numerical simulation of incipient particle motion
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Two-dimensional numerical simulation of sediment transport using improved critical shear stress methods
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Turbulence characteristics of flow past submerged vanes
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The uncertainty of the Shannon entropy model for shear stress distribution in circular channels
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Appraisal of the carbon to nitrogen (C/N) ratio in the bed sediment of the Betwa River, Peninsular India
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Linear spectral unmixing algorithm for modelling suspended sediment concentration of flash floods, upper Tekeze River, Ethiopia
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Measuring the geometry of a developing scour hole in clear-water conditions using underwater sonar scanning
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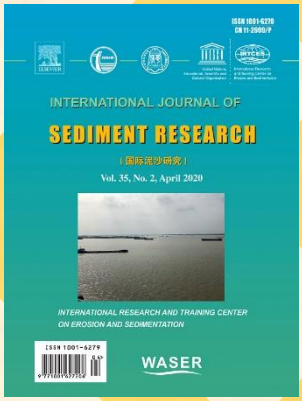
Full papers are available at ScienceDirect: https://www.sciencedirect.com/journal/international-journal-of-sediment-research with free access to the paper abstracts.



Papers Published in the International Journal of Sediment Research Volume 35, No. 2, 2020

Pages 115-226 (April. 2020)

Uniform and graded bed-load sediment transport in a degrading channel with non-equilibrium conditions
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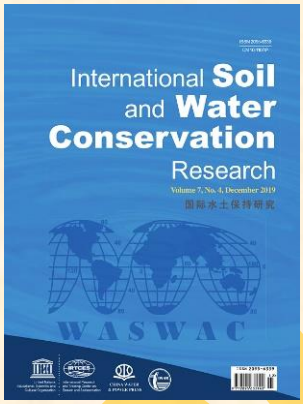
Full papers are available at ScienceDirect: https://www.sciencedirect.com/journal/international-journal-of-sediment-research with free access to the paper abstracts.



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Adoption of technologies that enhance soil carbon sequestration in East Africa. What influence farmers' decision?
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Free full papers and open access are available at ScienceDirect : https://www.sciencedirect.com/journal/international-soil-and-water-conservation-research

COMING EVENTS

CoastLab 2020 (China, May 25-29, 2020)

Date: 2020/5/25 - 2020/5/29
Venue: Zhoushan, China
Hosts: Zhejiang University & Dalian University of Technology, co-organized by Sichuan University & Zhejiang Ocean University
Summary: On behalf of the CoastLab2020 Organizing Committees, it is our great pleasure to invite you to participate in the 8th International Conference of Physical Modeling in Coastal Science and Engineering (CoastLab2020) during the 25th -29th of May, 2020 in Zhoushan, China. CoastLab2020 is organized under the auspices of the International Association of Hydro-Environment Engineering and Research (IAHR) and will be jointly hosted by Zhejiang University, Dalian University of Technology, Sichuan University and Zhejiang Ocean University. CoastLab2020 will build on the successes of previous conferences held in Porto (2006), Bari (2008), Barcelona (2010), Ghent (2012), Varna (2014), Ottawa (2016) and Santander (2018). It will provide a stimulating and enriching forum to discuss the latest developments in physical modeling applied to coastal engineering and in new trends in coastal sciences. We are looking forward to collaborating with the Coastal and Maritime Hydraulics Committee of IAHR to host a successful CoastLab2020 in Zhoushan. (Prof. Pengzhi Lin, Prof. Zhiguo He, and Prof. Dezhi Ning)
URL: http://www.coastlab2020.com/
Conference Email: coastlab2020@zju.edu.cn
(LOC: the Zhoushan conference shall be postponed from May 25-29 to about 3~4 months later. The exact dates of the conference will be carefully selected and then announced ASAP, not later than 1st May, 2020.)

International Symposium on River sediment quality and quantity (Poland, June 1-5, 2020)

Date: June 1-5, 2020
Venue: Bydgoszcz, Poland
Summary: It is a pleasure on behalf of International Association of Hydrological Sciences (IAHS) - Commission on Continental Erosion (ICCE) to invite you to:
The International Symposium on *River sediment quality and quantity: environmental, geochemical and ecological perspectives*
The Symposium takes place in Bydgoszcz, Poland in June 1-5, 2020. Subjects of the Conference:

- Sediment quantity – cascades, budgets, yields
- Sediment impacts on river channel hydromorphology and management
- Sediment quality – geochemistry, nutrients, contaminants, emerging issues
- Sediment-biota interactions
- Business Day - inland waterways development in Middle-East Europe

Conference programme will include:

- Oral and poster thematic sessions
- Field excursion on Vistula river - ship and by bus
- Social events and post-conference tours
- Gala-dinner at Mill Island - a green oasis in the city centre
- Business Day

The first IAHS/ICCE International Symposium was held in Florence, Italy more than 30 years ago, and recent symposia have been held in Dundee, UK in 2006; Christchurch, New Zealand in 2008; Warsaw, Poland in 2010; Chengdu, China in 2012; New Orleans, USA in 2014; Okehampton, UK in 2016 and in Moscow, Russia in 2018. The 2020 ICCE Symposium will be held at Bydgoszcz in Poland, at the Kazimierz Wielki University.
URL: https://icce2020.ukw.edu.pl/jednostka/icce2020
Contacts:
Michał Habel
Marta Brzezińska
Kazimierz Wielki University
Institute of Geography
Department of Revitalization of Inland Waterways
ul. Pl. Kościeleckich 8
85-033 Bydgoszcz
e-mail: icce2020@ukw.edu.pl

River Flow 2020 (The Netherlands, 7-10 July 2020)

Date: 7-10 July 2020
Venue: Delft, Netherlands
Summary: The 10th Conference on Fluvial Hydraulics under the auspices of IAHR, River Flow 2020, will be held in Delft, Netherlands, from 7 to 10 July 2020, (with masterclasses on the 6th of July).The conference themes are: rivers in urbanised areas; climate change and extreme events; river functions under pressure; nature based solutions; the healthy river; river resources: food, energy, water; the digital river; river fundamentals.
Deadline for abstract submission: 15 August 2019.
URL: http://www.riverflow2020.nl
(LOC: we are considering web-based alternatives which can be attractive, flexible and safe. At this moment we are sorting out the most realistic options and their implications.)

World's Large Rivers Conference 2020 (Russia, August 2-6, 2021)

Date: August 2-6, 2021
Venue: Moscow, Russia
Summary: This WASER- / ISI-co-sponsored conference aims to provide a global forum for a wide-ranging discussion of key issues related to research on large rivers and to their effective and sustainable management, involving both scientists and decision makers. The conference will be organised by MSU - Lomonosov Moscow State University, Russia, and BOKU - University of Natural Resources and Life Sciences, Vienna, Austria. We kindly ask all interested authors to submit their work within the topics of
- Hydrology, Hydraulics & Hydroclimatic Impacts
- Sediment Transport & River Morphology
- River Pollution, Ecology & Restoration
- Integrated River Management

Special focus will be given this time to **Climate Change** and its impact - not only in general, but also specifically related to **Russian and Arctic Rivers**.
Supported by: WASER World Association for Sedimentation and Erosion Research; **UNESCO** United Nations Educational, Scientific and Cultural Organization; **IAHR** International Association of Hydro-Environment Engineering

and Research; **IAHS** International Association of Hydrological Sciences; **IAG** International Association of Geomorphologists. All WASER- and ISI-members can benefit from a reduction of conference fees of 10%.
URL: http://worldslargerivers.boku.ac.at/wlr/
(LOC: Due to the Corona Virus the World´s Large Rivers Conference in Moscow will be postponed by one year and take place in Moscow from 2-6 August 2021.)

8th International Conference on Flood Management (USA, Aug. 17-19, 2020)

Date: August 17 – 19, 2020
Venue: Iowa City, Iowa, USA
Hosted by: The University of Iowa, Iowa Flood Center, IIHR
Summary: The 8th International Conference on Flood Management (ICFM8) offers a platform to discuss a range of flood related issues and stimulate progress in the management of flood risk. The 8th International Conference on Flood Management (ICFM8) seeks to further advance global research, practice and policy in flood management. With an emphasis on 'resilience', the theme for ICFM8 marks the further progress of integrated approaches to flood management which were first embraced as the International Symposia on Flood Defence (Kassel 2000, Beijing 2002, Nijmegen 2005 and Toronto 2008), the precursor of the subsequent ICFM series (ICFM5 - Tokyo, 2011; ICFM6 - São Paulo 2014; ICFM7 - Leeds, 2017). ICFM8 will be held in Iowa City, Iowa, USA on August 17 - 19, 2020, and will be hosted by the Iowa Flood Center, a research group of the century old IIHR-Hydroscience & Engineering (IIHR) at The University of Iowa. The theme of ICFM8 is 'Lowering Risk by Increasing Resilience' and will focus on building resilience into current and future flood management strategies and approaches as envisioned by the United Nations programmatic documents Sustainable Development Goals (SDGs) and the Sendai agreement on Disaster Risk Reduction (DRR) adopted in 2015. The conference is an integral part of the week-long centennial celebrations at IIHR.

URL: https://icfm2020.org/

Contact: Marian Muste (marian-muste@uiowa.edu)
(LOC: we can organize the conference as planned if the conference participants submit their final papers in time (i.e., May 29, 2020). We are also considering alternatives such as virtual attendance or postponing the conference. No matter what, we will publish the papers submitted to the conference in the ICFM8 e-proceedings.)

14th International Conference on Hydroscience & Engineering (Turkey, September 22-25, 2020)

Date: September 22-25, 2020
Venue: Çesme, Turkey
Summary: 14th of the International Conference on Hydroscience & Engineering, ICHE 2020 will be held in Çesme, Turkey on September 22-25, 2020. The International Conference on Hydroscience & Engineering began in Washington DC in 1993, and followed by Beijing hosted ICHE in 1995, Cottbus (1998), Seoul (2000), Warsaw (2002), Brisbane (2004), Philadelphia (2006), Nagoya (2008), Chennai (2010), Orlando (2012), Hamburg (2014) Tainan (2016) and Chongqing (2018). These conferences provided a common ground researchers and engineers to report and discuss the latest scientific advancements and practitioner's solutions in hydroscience and engineering. ICHE 2020 conference aims to bring together researchers and practicing engineers to share the latest scientific and technological advancements in hydroscience and engineering, and will provide networking opportunities for future activities. Participants will be able to hear experts in the field discuss the latest achievements in in issues relevant to Hydro-Engineering for Sustainable Development.
Conference Themes

- Coastal and Maritime Hydraulics
- Dam Hydraulics and Safety
- Computational Hydraulics and Turbulent flows
- Water Resources and Climate Change
- Fluvial Hydraulics and Waterway Navigation
- Water Quality and Ecohydraulics
- Watershed Hydrology and Management
- Sediment Transport and Reservoir Sedimentation
- Groundwater Flow and Contaminant Transport
- Hydropower and Sustainable Energy
- Urban Flooding and Drainage
- Advances in Laboratory Measurements and Instrumentation
- Field Measurements and Data Collection

Key Dates

- Abstract Submission: Sept. 1 – Nov. 15, 2019
- Full-Paper Submission: Feb. 1 – April 30, 2020
- Revised Full-Paper Submission: July 15, 2020
- Early Bird Registration: Feb. 1 – July 15, 2020

URL: https://www.iche2020.org/

The 7th International Conference on Estuaries and Coasts (Shanghai, China, October 18-21, 2021)

Date: October 18-21, 2021 (Tentative)
Venue: East China Normal University, Shanghai, China
Organizers:
East China Normal University
Sponsors: International Research and Training Center on Erosion and Sediment Research (IRTCES); World Association for Erosion and Sediment Research (WASER)
Co-sponsors: International Association for Hydro-Environment Engineering and Research (IAHR).....(to be invited)
Secretariat: East China Normal University
Summary: The International Conference on Estuaries and Coasts (ICEC) is a triennial event initiated by the International Research and Training Center on Erosion and Sedimentation (IRTCES). Six such conferences have now been held in Hangzhou and Guangzhou, China; Sendai, Japan; Hanoi, Vietnam; Muscat, Oman, and Caen, France in 2003, 2006, 2009, 2012, 2015 and 2018. With support from related international associations, and with the participation of experts and scholars worldwide, the ICEC has attracted wide attention and has become an important and popular event. The ICEC provides an opportunity for scientists, engineers, researchers and decision-makers to exchange ideas, research results and advanced techniques, and develop collaboration and friendships. The 7th International Conference on Estuaries and Coasts (ICEC-2021) will be held in the East China Normal University, Shanghai, China during October 18-21, 2021.
Overall Theme:
Anthropocene Coasts
Topics of the Conference (tentative)**:**
1. Hydrodynamics in estuaries and coasts: tides, waves, circulations, and their interactions;
2. Sediment transport dynamics: sand, mud and their mixture;
3. Multi-scale morphodynamics: tidal flats, estuaries, deltas, beaches, dunes, eco-morphodynamics…;

4. Coastal management: flood defense, ecosystem conservation, human-nature interactions…
URL: (to be provided)
Contacts: (to be provided)

15th International Symposium on River Sedimentation (Florence, Italy, September, 2022)

Date: September, 2022 (Three consecutive days at the end of August / beginning of September, 2022)
Venue: Florence, Italy
Organizer: University of Florence and University of Padua
Sponsors: International Research and Training Center on Erosion and Sediment Research (IRTCES); World Association for Erosion and Sediment Research (WASER)
Co-sponsors: International Association for Hydro-Environment Engineering and Research (IAHR).....(to be invited)
Secretariat: University of Florence, Italy
Permanent Secretariat: IRTCES
Summary: The triennial International Symposium on River Sedimentation (ISRS) was initiated in 1980. Since its foundation, IRTCES has served as the permanent secretariat of ISRS. WASER was inaugurated at the 9th ISRS in 2004, and the ISRS has since become the official Symposium of WASER. The objective of the ISRS is to provide a forum for scientists, engineers, researchers and decision makers to exchange ideas, research results and technical advances, , and to share experience and information relating to the study of sediment and its management.
Symposium Theme and Topics:
The theme of the symposium is
Sustainable Sediment Management in a changing Environment (tentative)
The symposium topics include (tentative):
1. Sediment transport
2. Reservoir sedimentation
3. River morphodynamics
4. Coastal morphodynamics
5. Ecomorphodynamics
6. Sediment related disaster
7. Plastic in river and coastal systems
8. Interaction between sediment dynamics and hydraulic structures
9. Integrated Sediment Management at the River Basin Scale
10. Social, economic & political problems related to sediment and water management
URL: (to be provided)
Contacts:
Dr. Luca Solari
Department of Civil and Environmental Engineering, University of Florence
Via di S. Marta 3, 50139 Firenze, Italy
TEL: +39 3488605446
E-mail: luca.solari@unifi.it

World Association for Sedimentation & Erosion Research

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International Research and Training Center on Erosion and Sedimentation (IRTCES)
under the auspices of UNESCO
P.O. Box 366, 20 Chegongzhuang West Rd.
Beijing, 100048, China
Fax: +86-10-68411174
http://www.irtces.org/

CONTACTS

Prof. LIU Guangquan
P.O. Box 366, 20 Chegongzhuang West Rd.
Beijing, 100048, China
Tel: +86-10-68786410(O)
Fax: +86-10-68411174
E-mail: gqliu@iwhr.com

Prof. LIU Cheng
P.O. Box 366, 20 Chegongzhuang West Rd.
Beijing, 100048, China
Tel: +86-10-68786410(O)
Fax: +86-10-68411174
E-mail: chliu@iwhr.com; cliu.beijing@gmail.com

WASER URL: http://www.waser.cn

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Newsletter Editor: Liu Cheng
P.O. Box 366, 20 Chegongzhuang West Rd.
Beijing, 100048, China
Fax: +86-10-68411174
E-mail: chliu@iwhr.com

Advisor: Prof. Des. E. Walling

Newsletter Layout and Production:
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WORLD ASSOCIATION FOR SEDIMENTATION AND EROSION RESEARCH

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WASER website: http://www.waser.cn

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