





# INTERNATIONAL SEDIMENT INITIATIVE

# NEWSLETTER

### Reporting ISI news to you quarterly

No. 51 July 9, 2019

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### UNESCO"国际泥沙计划"简报

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- 《国际泥沙研究》期刊 2019 年第 34 卷第 3 期/第 4 期 论文目录
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### 会议信息

- 拉丁美洲和加勒比可持续水资源管理研讨会(秘鲁, ♦ 2019年8月5-6日)
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- 第十四次河流泥沙国际学术讨论会(成都, 2019年9月 ♦ 16-19日)
- 第十届亚太海岸国际学术研讨会(越南, 2019 年 9 月 25-28日)
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- $\diamond$

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New Director of the Division of Water Sciences and Secretary of the International Hydrological Programme

Youssef Dr. Filali-Meknassi has been appointed to the post of Director of the Division of Water Sciences and Secretary the of International Hydrological Programme and has taken



up his duties on 1st June 2019. Youssef Filali-Meknassi holds a PhD in water sciences, obtained in 2003 from the "Institut National de la Recherche Scientifique pour l'eau et l'environnement" in partnership with the Ecole Polytechnique de Montréal, both in Canada.

He also obtained degrees in chemical engineering from Mohamed V University in Rabat, Morocco, and in civil engineering from the Université de Sherbrooke, Canada. He then worked as a postdoctoral researcher at the Technical University of Catalonia, Spain, where he led innovative research projects in the field of water sciences, and supervised doctoral-level students. He later joined the University of Missouri, United States of America, as an Assistant Professor.

He has published articles in many major international scientific journals. Through his experience in the field and at Headquarters, Youssef Filali-Meknassi has been exposed to an environment where the political and strategic stakes are very high.

ISI convenes Sediment Management session during the 2019 World Hydropower Congress



The ISI co-convened a session on the importance of managing sediment in the context of climate change and integrated river basin development with the IHA in Paris on May 15, 2019 during the 2019 World Hydropower Congress. Chaired by Dr. Anil Mishra, Programme Specialist of the UNESCO IHP, several experts were invited as panelists to made presentations and participate in discussions. The panelists

included:

Mr. Luiz Henrique MALDONADO, Hydrometry Specialist, Itaipu Binacional;

Prof. Manfred SPREAFICO, Chairperson of UNESCO IHP ISI, Emeritus Professor, University of Berne;

Ms. Siri STOKSETH, R&D Manager and Dam Safety Coordinator, Statkraft AS;

Prof. George ANNANDALE, International Expert; and

Ms. María UBIERNA APARICIO, Specialist, International Hydropower Association

This session discussed the importance of managing sediment in reservoir and run-of-river hydropower projects. After initial framing of hydropower operational challenges and sediment management at river basin scale, panellist highlighted on policy needs, regulatory challenges, financial incentives and initiatives that are necessary to promote sustainable hydropower and sustainable water resources development.



Our Water for Our World: the UNESCO International Water Conference calls for a paradigm shift towards water security for sustainable peace



The UNESCO International Water Conference was held at UNESCO HQs in Paris, France, on 13 and 14 May 2019. The conference advances sustainable water security and peace by

leveraging the intersectoral management of water resources.

How we manage water, bond of life and fragile resource, will define our success in achieving all goals of the 2030 Agenda for Sustainable Development. Access to water is critical to poverty reduction and human health, impacts gender equality, education, and all human activities. Ecosystems and biodiversity depend on water, it provides three-quarters of the world's renewable energy, and globally threeguarters of it is devoted to food production. Sound water management is a challenge that requires a holistic approach, harnessing expertise across disciplines at all levels. The first UNESCO International Water Conference brought together 34 Ministers\* and 1,200 experts from 126 countries in order to mobilize the expertise and foster the cooperation needed to meet this challenge.

"I am sure you will all agree that in the challenging years ahead, it is the peaceful and innovative application of science and policy, in a meaningful and understanding cultural context, will ultimately define our positive that development as a global family" said HRH Princess Sumaya bint El Hassan of Jordan, UNESCO Special Envoy for Science for Peace. "UNESCO provides for us all, a nexus of dialogue and engagement, where the concept and practices of water diplomacy and cooperation may transcend the mere transfer of knowledge, to encompass fostering strong partnerships between engaged stakeholders."

Water cooperation, as a powerful lever for peace and sustainable development, was a central theme for this first conference. When discussing their experience of mechanisms to manage shared water resources, Member States' representatives stressed the need for a strong political will for dialogue and cooperation to create effective tools and measures for implementation. They highlighted that such mechanisms must be supported by an improved knowledge-base of water resources and capacity-development to further technical knowledge on this vital resource. They also called for more scientific dialogue between riparian countries of shared basins across the world.

Noting UNESCO's long-standing experience in fostering water cooperation, they remarked that the Organization could provide a platform for such multidisciplinary dialogues, as it is uniquely placed to foster solutions based on intersectoral cooperation, combining, through its mandate, the sciences, education, culture, communication and information sharing.

Over two days, the participants shared their

experience and solutions on many aspects of water management, including ethics, natural hazards and disaster risk management, cultural heritage, gender equality, research and technological innovation. A summary report of each thematic panel will share the recommendations of the relevant dialogues and discussions.

"Promoting water security and sustainable peace were at the heart of the conference's ambitions" said Mr. Xing Qu, UNESCO Deputy Director General, in his closing remarks. "Today we call for a fundamental shift in the way we look at water. Today in Paris, this International Water Conference, convened by the Director-General of UNESCO, calls for a trans-sectoral approach to water that will lead us to achieve the 2030 agenda and its 17 Sustainable Development Goals and related targets. Today, the UNESCO Secretariat commits to fostering collaboration between its sectors towards sustainable water security and peace."

The Conference was organized by UNESCO, support from the Global with Energy Development and Cooperation Interconnection Organization (GEIDCO), the Syndicat pour l'assainissement de interdépartemental l'agglomération Parisienne (SIAAP), the Regulation Agency for Water, Energy and Sanitation Services of Federal District of Brazil (ADASA) and the magazine Techniques Sciences Méthodes.

You can also directly access videos of the Opening Ceremony:

### English:

http://webcast.unesco.org/live/vod/2019/sc/20191 305\_sc\_room-01/en/

#### French:

http://webcast.unesco.org/live/vod/2019/sc/20191 305\_sc\_room-01/fr/

and of the Closing Session

#### English:

http://webcast.unesco.org/live/vod/2019/sc/20191 405\_sc\_room-01/en/

### French:

http://webcast.unesco.org/live/vod/2019/sc/20191 405\_sc\_room-01/fr/

(Source: UNESCO, http://www.unesco.org)

# ISI-planning meeting convened to discuss the ISI Training Workshop to be held in 2020

On May 29, 2019, an ISI-planning meeting was organized by web conference to discuss an ISI Training Workshop to be held in Koblenz, Germany in 2020. Participants in the meeting included Dr. Stephan Dietrich (Scientific officer at the International Centre for Water Resources and Global Change), Prof. Des. Walling (UK, ISI Advisory Group), Prof. Cheng Liu (China, ISI Technical Secretariat), Dr. Thomas Oliver Hoffmann (Germany, ISI Expert Group), and Dr. Anil Mishra (UNESCO-IHP Secretariat). The following details of the workshop were discussed:

1) Topics: River Basin Sediment Monitoring and Management;

2) Venue and Date: Federal Institute of Hydrology, Koblenz, Germany. About 5 days at appropriate date, possibly in September 2020;

3) Organizers: International Centre for Water Resources and Global Change under the auspices of UNESCO, German Federal Institute of Hydrology, International Sediment Initiative – IHP – UNESCO, and International Research and Training Center on Erosion and Sedimentation.

# Journal Impact Factor of International Journal of Sediment Research Increases to 1.970

The 2019 Journal Citation Reports (JCR) were released by Clarivate Analytics in June. The International Journal of Sediment Research Journal Impact Factor for 2018 is 1.970.



In the past three years, the Journal Impact Factor of IJSR has

increased year on year: 1.494 in 2016 and 1.659 in 2017. We would like to express our sincere thanks to our Associate Editors, reviewers, authors and readers for their invaluable contribution and great support.

The International Journal of Sediment Research is an international, peer-reviewed journal, focusing on the publication of original theoretical. numerical modelling, field observational and laboratory studies and reviews dealing with processes, products and techniques in the field of sedimentation and erosion. Of particular interest are contributions covering geomorphology, geography, soil erosion, watershed management, sediment transport, processes, sedimentology, fluvial fluvial geomorphology, reservoir sedimentation, coastal sedimentation and estuarine processes, sediment-related ecological and environmental problems, river management, and social and economic effects of sedimentation. Researchers

are encouraged to submit their important papers to the International Journal of Sediment Research.

The journal became the official journal of the World Association for Sedimentation and Erosion Research (WASER) in 2004. The journal has been available to a global audience electronically via the premier online platform ScienceDirect since 2008.

If you have any questions when submitting your paper, please email sedimentpaper@foxmail.com

The Journal website can be found at : https://www.journals.elsevier.com/international-journal-of-sediment-research

WASER Co-organized Session on 'Sediment Transportation and Geo-hazard Mitigation' held in Beijing during the SiDRR Conference



The World Association for Sedimentation and Erosion Research (WASER) and the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences (IGSNRR, CAS) successfully co-organized a session on 'Sediment Transportation and Geohazard Mitigation' during the International Conference on Silk-roads Disaster Risk Reduction and Sustainable Development (SiDRR, http://www.sidrr.com) which was held on May 11-12, 2019 in Beijing, China, to promote international cooperation and collaboration on hazard mitigation and sustainable development in countries along the Silk Roads.

Experts from Canada, Italy, United Kingdom and China attended the session and shared their views and research progress focusing on the session theme. Eleven presentations (including six invited talks) were made during the session, with topics covering sediment connectivity, hazards and management in mountain basins; hydro-sediment-morphodynamic models and applications; sky rivers; and fluvial processes of incised rivers.

Dramatic decrease of sediment in the Danube and Rhine Rivers



Figure 1. Annual suspended sediment loads in the Rhine River at Lobith in the period 1952-2016.

Dramatic sediment deficits have already been reported for rivers such as the Mekong, Yellow River, Yangtze and Mississippi and their delta's and coastal seas. However, very recent findings for the Danube and Rhine rivers also show dramatic reductions for Europe: 60% reduction of suspended sediment input by the Danube to the Black Sea (Habersack, 2019) and 70% reduction of the suspended sediment load of the Rhine at its entry point to the Netherlands since 1952 (van der Perk et al., 2019). These figures for the Rhine and Danube only relate to suspended sediment and information for bedload (gravel and sand) is not yet readily available. What are the impacts? We need to significantly advance the state-of-the-art in our integrated and holistic understanding of the societal, economic as well as ecological impacts resulting from a deficit of sediment in the oceans, seas, coastal and inland waters. Hopefully Horizon Europe will provide a great opportunity for advancing this understanding. Based on that understanding, sustainable (nature-based) solutions can be proposed to restore and protect the flow of sediment from inland waters to seas and oceans in Europe as well as globally.

### References:

Habersack (2019) The importance of sediments for a sustainable Danube river basin management,

van der Perk et al. (2019) Examination of the declining trend in suspended sediment loads in the Rhine River in the period 1952-2016, see pages 73-74 in the Book of Abstracts of the 2019 NCR (Netherlands Centre for River studies) days

(Source: SedNet, https://sednet.org/)

# Workshop on Sediment Management held during the 2019 World Hydropower Congress

The workshop on Sediment Management was held in Paris on May 13, 2019 during the 2019 World Hydropower Congress.

Sediment management contributes to

maintaining the storage capacity, reducing the operating risks, and minimising river connectivity impacts. Managing sediment is essential to extend the life of a project, to ensure a reliable and sustainable source of water and energy, and to maintain the sediment transport continuity.

This workshop focused on the impacts of sedimentation. available sediment the management techniques and provided training in RESCON 2 tool and other numerical tools to determine an effective strategy that contributes to sustainable reservoir operation. It was demonstrated how the numerical and the physical scale models can support the design of sediment management measures. The workshop culminated with the presentation of successful case studies and open discussion with the participants.

		6	9
Meg BISHWAKARMA General Manager, Hydro Lab (Wohrd Bank Group- sponsored)	Greg MORRIS Director, GLM Engineering	Pravin KARKI Global Lead Hydropower and Dams, World Bank Group	George ANNANDALE International Expert
			Moderator & IHA contact
5	5		
Nikolaos EFTHYMIOU	Helmut HABERSACK	Rajeev VISHNOI	María UBIERNA APARICIO
Consultant, World Bank Group	UNESCO Chair in Integrated River Research and Engineering, BOKU	Director, Tehri Hydropower Corporation (World Bank Group - sponsored)	Hydropower Specialist, International Hydropower Association

Workshop on RESCON 2 and numerical modeling for assessment of sediment management alternatives will be held during the 14<sup>th</sup> ISRS

The Workshop on RESCON 2 and numerical modelina for assessment of sediment management alternatives will be held in Chengdu. China on September 17, 2019 during the 14th International Symposium on River Sedimentation (14<sup>th</sup> ISRS). The workshop will include a training on the technical analysis tool RESCON 2 that enables the identification of economically optimal and technically feasible approaches to sustainably manage reservoirs for water supply and hydropower generation in early project development phases. In addition, the capabilities of numerical and physical modeling to support detailed sediment management studies will be demonstrated. The main objective is to showcase the application of the aforementioned technical analysis to practical examples at different stages of project development. The workshop is coorganized by World Bank, the World Association for Sedimentation and Erosion Research (WASER), Sichuan University and UNESCO Beijing. You may have details of the workshop by visiting the 14th ISRS website at: http://www.isrs2019.cn/.

### PUBLICATIONS



Papers Published in the International Journal of Sediment Research Volume 34, No. 3, 2019

Pages 191-294 (June 2019)

Satellite-based monitoring of contrasting characteristics of suspended sediment discharged from the Red and the Ma river systems along the northern coast of Vietnam Yoshimitsu Tajima, Kavinda Gunasekara, Hung Thanh Nguyen

Pages 191-204

Wind-induced hydrodynamic changes impact on sediment resuspension for large, shallow Lake Taihu, China Abdul Jalil, Yiping Li, Ke Zhang, Xiaomeng Gao, ... Kumud Acharya Pages 205-215

An optimized use of limited ground based topographic data for river applications Mohamed Jaballah, Benoit Camenen, André Paquier, Magali Jodeau Pages 216-225

Simulating soil loss rate in Ekbatan Dam watershed using experimental and statistical approaches

Seyed Davood Mohammadi, Fateme Naseri, Roghaye Abri

Pages 226-239

Numerical modeling of lock-exchange gravity/turbidity currents by a high-order upwinding combined compact difference scheme Liang Zhao, Ching-Hao Yu, Zhiguo He Pages 240-250

Distribution of geochemical fractions of phosphorus and its ecological risk in sediment cores of a largest brackish water lake, South Asia

Saroja Kumar Barik, Satyanarayan Bramha, Tapan Kumar Bastia, Dibakar Behera, ... Prasanta Rath Pages 251-261

The ratio of measured to total sediment discharge Chun-Yao Yang, Pierre Y. Julien Pages 262-269

Effects of rainfall patterns on runoff and rainfall-induced erosion Morteza Alavinia, Farzin Nasiri Saleh, Hossain Asadi Pages 270-278

Numerical simulation of sedimentation process in reservoirs and development of a non-coupled algorithm to improve long-term modeling Zeinab Khorrami, Mohammad Ali Banihashemi Pages 279-294 Full papers are available at ScienceDirect: https://www.sciencedirect.com/journal/internationaljournal-of-sediment-research with free access to the paper abstracts.



Papers Published in the International Journal of Sediment Research Volume 34, No. 4, 2019

Pages 295-399 (Aug. 2019)

Generalized algorithms for particle motion and collision with streambeds

Patricio A. Moreno-Casas, Fabián A. Bombardelli, Juan Pablo Toro

Pages 295-306

The impact of climate change and human activities on streamflow and sediment load in the Pearl River basin Chuangshou Wu, Changchen Ji, Benwei Shi, Yaping Wang, ... Jinbin Mu Pages 307-321

Sediment transport trends and cross-sectional stability of a lagoonal tidal inlet on the Central Coast of Vietnam Do Minh Duc, Tran Thanh Tung, Patrick McLaren, Tran Ngoc Anh, Dinh Thi Quynh Pages 322-334

Long-term coastal erosion assessment along the coast of Karnataka, west coast of India K. Sowmya, M. Dhivya Sri, Aparna S. Bhaskar, K.S. Jayappa Pages 335-344 Download PDFArticle preview

A holistic computational model for prediction of clay suspension structure Yuan Guo, Xiong (Bill) Yu Pages 345-354

Local scour around two side-by-side cylindrical bridge piers under ice-covered conditions Mohammad reza Namaee, Jueyi Sui Pages 355-367 Download PDFArticle preview

Development of benthic macroinvertebrates sediment index (BSI) for bioassessment of freshwater sediment Pil Jae Kim, Jong Hyeon Lee, In Ae Huh, DongSoo Kong Pages 368-378

Implementing of the JPWSPC method in RIV1H for unsteady flow modeling in general river networks

Dejun Zhu, Yongcan Chen Pages 379-386

Critical movement of large rocks in currents and waves L.C. van Rijn Pages 387-398

Corrigendum to "Numerical simulation of sedimentation process in reservoirs and development of a non-coupled algorithm to improve long-term modeling" [International Journal of Sediment Research 34 (3) (June 2019) 279– 294]

Zeinab Khorrami, Mohammad Ali Banihashemi Page 399

Full papers are available at ScienceDirect:

https://www.sciencedirect.com/journal/internationaljournal-of-sediment-research with free access to the paper abstracts.



### Contents of ISWCR (Vol. 7, No.2, 2019)

International Soil and Water Conservation Research Volume 7, Issue 2 Pages 109-202 (June 2019)

Persistence in tillage decisions: Aggregate data analysis Dat Q. Tran, Lyubov A. Kurkalova Pages 109-118

Suspended sediment load prediction using non-dominated sorting genetic algorithm II Mahmoudreza Tabatabaei, Amin Salehpour Jam, Seyed Ahmad Hosseini Pages 119-129

Soil loss estimation using rusle model to prioritize erosion control in KELANI river basin in Sri Lanka Cassim Mohamed Fayas, Nimal Shantha Abeysingha,

Korotta Gamage Shyamala Nirmanee, Dinithi Samaratunga, Ananda Mallawatantri Pages 130-137 Accuracy of sedimentgraph modeling from topography map scale and DEM mesh size Seyed Hamidreza Sadeghi, Mostafa Moradi Dashtpagerdi, Hamidreza Moradi Bekabdarkoolai, Jeroen M. Schoorl

Hamidreza Moradi Rekabdarkoolai, Jeroen M. Schoorl Pages 138-149

Quantitative analysis of morphometry on Ribb and Gumara watersheds: Implications for soil and water conservation

Daniel Asfaw, Getachew Workineh Pages 150-157

Land use in agricultural landscapes with chernozems contaminated after Chernobyl accident: Can we be confident in radioecological safety of plant foodstuff? Olga Komissarova, Tatiana Paramonova Pages 158-166

Dynamic study of infiltration rate for soils with varying degrees of degradation by water erosion Yujie Wei, Xinliang Wu, Jinwen Xia, Rubing Zeng, ... Tianwei Wang Pages 167-175

Use of a calibrated SWAT model to evaluate the effects of agricultural BMPs on sediments of the Kalaya river basin (North of Morocco)

Hamza Briak, Rachid Mrabet, Rachid Moussadek, Khadija Aboumaria

Pages 176-183

Postglacial incision-infill cycles at the Borisoglebsk Upland: Correlations between interfluve headwaters and fluvial network

Yuliya V. Shishkina, Ekaterina V. Garankina, Vladimir R. Belyaev, Ilya G. Shorkunov, ... Tatiana A. Verlova Pages 184-195

Trees as large-scale natural phononic crystals: Simulation and experimental verification Jiankun Huang, Yifan Liu, Yaguang Li Pages 196-202

Free full papers and open access are available at ScienceDirect : https://www.sciencedirect.com/journal/international-soiland-water-conservation-research

### **COMING EVENTS**

Seminar: "Towards sustainable water management in Latin America and the **Caribbean:** exchange experiences of of methods to conserve, increase availability and improve the efficiency of water use"

#### Date: 05 August 2019 - 06 August 2019 Venue: Lima, Peru

**Summary:** Water management in Latin America and the Caribbean is a challenge that increases in complexity with regard to climate change in relation to different factors such as population growth, the increase in the area of irrigated agriculture, development, industrialization, among others. In response to the problems, several successful initiatives to improve sustainable water management have been developed and implemented. These practices could be replicated, extrapolated or adapted in other areas of the region and the planet, however, many are not being disseminated adequately.

The UNESCO International Hydrological Program (IHP), within the framework of G-WADI programme in coordination with the Regional Water Center for Arid and Semi-Arid Zones of Latin America and the Caribbean (CAZALAC)- G-WADI LAC secretariat and the "Water security and climate change adaptation project in Peruvian glacier-fed river basins" (RAHU Project) have decided to join efforts to compile information on traditional and modern techniques for sustainable water management. Within this framework, they are organizing the Seminar "Towards sustainable water management in Latin America and the Caribbean: exchange of experiences of methods to conserve, increase availability and improve the efficiency of water use" that will take place in Lima, Peru, August 5 - 6, 2019. This activity will bring together implementers of sustainable water management techniques, as well as professionals who have analyzed the current situation, as well as other stakeholders involved in the subject.

As a result of the Seminar, an analytical inventory of sustainable water management techniques in LAC, to be published by UNESCO.

# 38th IAHR World Congress (Panama, Sep. 1-6, 2019)

### Date: 01 September 2019 - 06 September 2019 Venue: Panama City, Panama

**Summary:** Global interest in water has increased rapidly in recent years. Many water issues are high on the political agenda, whether it concerns the lack of access to safe water and sanitation or the increase in water - related disasters due to floods and droughts. This challenge must be addressed by management and policy decisions informed by science and engineering knowledge that is relevant, credible, legitimate and delivered in a timely manner. Therefore the discipline of hydro-environment engineering and research is more important than ever. The 38th IAHR World Congress will bring together the key players in the sector from around the globe in "Water – Connecting the World", from 1-6 September 2019 in Panama. We look forward to meeting you there! (Peter Goodwin, IAHR President)

Conference website: http://iahrworldcongress.org/

14th International Symposium on River Sedimentation (Chengdu, China, Sep. 16-19, 2019)

Date: September 16 – 19, 2019 Venue: Chengdu, China Organizer: Sichuan University

**Sponsors:** International Research and Training Center on Erosion and Sediment Research (IRTCES); World

Association for Erosion and Sediment Research (WASER) **Co-sponsors:** IHAR, National Inland Waterway Regulation Engineering Research Center, CRSRI

Summary: China's water-related infrastructure has developed by leaps and bounds leading to further advances in scientific and technical research. Consequently, the role of sediment research is becoming more challenging than ever before. In the midst of these advances, the International Symposium on River Sedimentation (ISRS) will return to China after the successful Yichang Symposium 12 years ago. On behalf of the 14th ISRS Organizers, we would like to warmly invite you to join us in Chengdu. China 14<sup>th</sup> International Symposium on for the River Sedimentation (ISRS-2019). The Symposium will be held with the theme of "Integrated Sediment Management in Rivers and Coasts". We look forward to welcoming you to Chengdu in September 2019 and we are confident that this symposium will be one of the most successful in the ISRS series. . (Weilin Xu, Chairperson of the LOC)

### Symposium Theme and Topics:

The theme of the symposium is:

Integrated Sediment Management in Rivers and Coasts Under this theme, the symposium topics include:

- A. Sediment yield and erosion processes;
- B. Sediment transport;
- C. Sedimentation in estuarine and coastal areas;
- D. Reservoir sedimentation;
- E. Erosion processes;
- F. Environmental and ecological sediment;
- G. Sediment related disasters;
- H. Modelling and measurement techniques;
- I. Integrated sediment management.

#### **Technical Tours:**

 Ancient Dujiangyan irrigation project, one of the oldest water projects in the world (2270 years old), which is stll working today for flood control and irrigation, due to its success in dealing with problems caused by sediment deposition and scour.

#### **Post Symposium Tours:**

Two post-symposium tours (3-5 days each) will be organized:

Jiuzhaigou valley (UNESCO world heritage site);

- Three Gorges Project.
- URL: http://www.isrs2019.cn /

#### Contacts:

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Telephone: +86-28-85403957

Fax: +86-28-85401807

Mailing address: State Key Laboratory of Hydraulics and Mountain River Engineering, Sichuan University, No.24 South Section 1, Yihuan Road, Chengdu, P.R. China, 610065

10th International Conference on Asian and Pacific Coasts (Vietnam, September 25-28, 2019)

#### Date: September 25-28, 2019

Venue: Thuyloi University, Hanoi, Vietnam

**Summary:** The International Conference on Asian and Pacific Coasts (APAC) is an international conference to promote academic and technical exchange on coastal related studies that include coastal engineering and coastal environmental problems, among the Asian and Pacific countries/regions. A wide range of organizations from Asian and Pacific countries/regions are its active participants or sponsors. The Conference is held once every two years.

The 10th International Conference on Asian and Pacific Coasts (APAC2019) will extend the series of biennial conferences with the first one being held in Dalian, China in 2001 with the name of Asian and Pacific Coastal Engineering (APACE). To reflect a broader scope, the conference was renamed Asian and Pacific Coasts (APAC) and it was subsequently held every two years in different countries and regions including Japan (2004), Korea (2005), China (2007), Singapore (2009), HongKong SAR (2011), Indonesia (2013), India (2015), and the Philippines (2017). These conferences have acted as a welcome forum for reporting and discussing the latest advancements in Coastal, Ocean and Port Engineering and as such, have always been highly valued by all participants.

#### Organizers:

The Chinese Ocean Engineering Society (COES)

The Coastal Engineering Committee of the Japan Society of Civil Engineers (JSCE)

The Korean Society of Coastal and Ocean Engineers (KSCOE).

Theme of the Conference: Living with nature, coping with coastal changes

Topics of the Conference:

- 1. Ocean wave, tides, storm surge and tsunami
- 2. Beach erosion and coastal sediment transport
- 3. Coastal and estuarine hydrodynamics
- 4. Lowland development and reclamation
- 5. Beach development and coastal protection
- 6. Marine ecology and coastal environments
- 7. Marine and offshore renewable energy
- 8. Climate change and coastal adaptation

9. Coastal hazards and risk assessment

10. Mekong Delta, beach erosion and saltwater intrusion

### Conference website: http://apac2019.tlu.edu.vn/

Contacts:

Assoc.Prof. Nguyen Cao Don Thuyloi University, 175 Tay Son Str., Dong Da, Hanoi,Vietnam Email: apac2019@tlu.edu.vn Phone: +84 24 3654 1053 Fax: +84 243 653 3351

### Second International Conference on All Material Fluxes in River Eco-Systems (China, Oct. 11-13, 2019)

Date: Oct. 11-13, 2019 Venue: Beijing, China

**Summary:** Healthy river eco-systems are essential for sustaining the natural environment and human society. Understanding of the material fluxes in river basins, including those fluxes that are related to water, sediment, nutrients, trace materials, living organisms, and greenhouse gases, could enable improved monitoring and restoration of river eco-systems. An overview of the current status of approaches and results necessary for accounting for all material fluxes in large rivers is thus of the utmost

importance. The 2nd International Conference on All Material Fluxes in River Eco-systems (AMFR 2019)will provide a global forum for a wide-ranging discussion of key issues related to research on all material fluxes in river ecosystems, and to their effective and sustainable management. A primary aim of this conference is to promote future collaboration between the participants on research into combined fluxes in large river systems. The conference program will comprise invited and contributed oral presentations. Potential presenters and attendees are encouraged to contact the organizing committee via amfr2019@pku.edu.cn.

Deadline for abstract submission: August 15, 2019.

Contacts: Dr. Juan Liu and Ms. Feifei Zhang, amfr2019@pku.edu.cn

# 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

## World's Large Rivers Conference 2020 (Russia, 3-7 August 2020)

Date: 3-7 August 2020

Venue: Moscow, Russia

**Summary:** This WASER 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%.

### More information:

URL: http://worldslargerivers.boku.ac.at/wlr/ E-Flver:

http://worldslargerivers.boku.ac.at/wlr/images/stories/downlo ads/wlr2020 flyer.pdf



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

### **ORGANISATION: UNESCO**

Youssef Filali-Meknassi UNESCO, Paris Philippe Pypaert UNESCO, Beijing Anil Mishra UNESCO, Paris

ISI URL: http://www.irtces.org/isi/

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International Sediment Initiative



The Yarlung Zangbo River, Tibet, China. (by Cheng LIU)