

World Association for Sedimentation & Erosion Research – WASER

NEWSLETTER

Reporting WASER news to you regularly

2019 No. 4

(Dec. 19, 2019)

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NEWS

Summary of the activities of WASER in 2019

As 2019 comes to an end, the Officers and Council Members of WASER would like to take this opportunity to thank you for your continuing support for the Association and wish all members a happy and prosperous New Year for 2020.

2019 has been a busy year for WASER, the various activities of the Association during the last year are summarized as follows:

1. WASER sponsored the 14th International Symposium on River Sedimentation (14th ISRS) held in Chengdu, China from September 16-19, 2019. More than 400 participants from over 25 countries and regions attended the Symposium. The President of WASER Prof. Zhaoyin Wang and the Secretary General of WASER Prof. Guangquan Liu delivered speeches on behalf of WASER and IRTCES, respectively, in the Opening Ceremony. Prof. Zhaoyin Wang chaired the Closing Ceremony, and Prof. Guangquan Liu announced that the venue of the 15th ISRS in 2020 would be Florence, Italy.

2. The Sixth Council Meeting of WASER was held in Chengdu, China on September 16, 2019. The Council Meeting was attended by 15 members, representing both the Fifth Council and the newly elected Sixth Council, as well as several observers. The meeting received the result of the poll for the election of members of the WASER Council for 2019-2022, and noted additional Council members, including the Co-opted Members and the Ex-officio Members. The meeting also formally noted the award of the International Qian Ning Prize for 2019 and the 2019 Awards for Distinguished Contributions to Sediment Research, representing the best papers published in the International Journal of Sediment Research (IJSR) between 2016 and 2018. Issues related to the future development of the Association, changes to the statutes, recruiting of members, revised membership dues, the IJSR impact factor and the co-sponsoring of international conferences were also discussed.

3. The Sixth WASER Assembly was held during the 14th International Symposium on River Sedimentation (14th ISRS) in Chengdu, China on September 19, 2019. The Executive Secretary General, Prof. Cheng Liu chaired the Assembly. The President, Prof. Zhaoyin Wang delivered a speech. Awards including the International Qian Ning Prize for 2019 and the 2019 Distinguished

Contributions to Sediment Research Awards, awarded for the best papers published in IJSR during the period 2016-2018, were announced at the Assembly.

3. WASER co-organized the International Workshop on RESCON 2 and Numerical Modelling for Assessment of Sediment Management Alternatives held on September 17 in Chengdu, China. Over 40 participants from USA, UK, Japan, Portugal and China attended the workshop. Speeches and lectures were delivered by Prof. Cheng Liu, IRTCES; Dr. Pravin Karki, Global Lead hydropower & Dams, World Bank; Prof. Gregory L. Morris, Independent Consultant, World Bank; Dr. Nikolaos Efthymiou, Independent Consultant, World Bank; and Prof. Helmut Habersack, UNESCO Chair in Integrated River Research and Engineering, BOKU.

4. Due to a significant increase in the quantity and quality of manuscript submissions, the International Journal of Sediment Research changed from being a quarterly journal to a bimonthly journal in 2019. 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.

5. WASER Co-organized a Session on 'Sediment Transport and Geo-hazard Mitigation' during the International Conference on Silk-roads Disaster Risk Reduction and Sustainable Development 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 related to the session theme.

6. WASER Presidents contributed to UNESCO publications on river control strategies and global hotspots of contemporary erosion and sediment flux. The UNESCO-ISI publication entitled "Controlling the Yellow River: 2000 years of debate on control strategies" authored by Prof. Zhaoyin Wang and Prof. Cheng Liu is available online in the UNESCO Digital Library (<https://unesdoc.unesco.org/>). This new ISI publication reviews 2000 years of debate on the relative merits of two very different strategies for controlling the Yellow River, i.e. the "wide river and depositing sediment" strategy and the "narrow river

and scouring sediment” strategy. Lessons learned from the past can not only help to clarify the historical origins of the modern Yellow River control strategy, but also shed light on the future management of the Yellow River and other river systems around the world. The UNESCO-ISI publication entitled “Erosion and sediment problems: global hotspots” co-authored by Prof. Valentin Golosov and Prof. Desmond E. Walling is available online in the UNESCO Digital Library (<https://unesdoc.unesco.org/>). This ISI publication provides a global perspective on contemporary erosion rates and sediment fluxes and the impact of global change, with particular emphasis on the problems posed by erosion and sediment transport for the sustainable management of the Earth system and for society more generally.

(by Cheng Liu)



Opening Ceremony of the 14th ISRS



Plenary report (Prof. Zhaoyin Wang)



ISRS symposium banner hand over



Sixth Council Meeting of WASER



Sixth WASER Assembly of WASER



International Qian Ning Prize for 2019



2019 Distinguished Contributions to Sediment Research Awards



Steady increase in SCI Impact Factor for IJSR



International Workshop on RESCON 2 and Numerical Modelling for Assessment of Sediment Management Alternatives



Session on 'Sediment Transport and Geo-hazard Mitigation'



UNESCO-ESI publication entitled "Controlling the Yellow River: 2000 years of debate on control strategies"



UNESCO-ESI publication entitled "Erosion and sediment problems: global hotspots"

A Round-Table meeting addressing the global decreased delivery of sediment by rivers to seas will be held Beijing

A Round-Table meeting addressing the global decreased delivery of sediment by rivers to seas will be held in Beijing, China on April 8-9, 2020. Invited global experts, stakeholders as well as potential research and innovation funding organizations will come together with sediment experts from the UNESCO Intergovernmental Hydrological Programme (IHP), the International Research and Training Center on Erosion and Sedimentation (IRTCES), the China Institute of Water Resources and Hydropower Research (IWHR) and the European Sediment Network (SedNet), co-organizers of the Round-Table, to raise awareness of the above issue and to suggest further actions. The meeting is also involving as cooperative partners the IHP World's Large Rivers Initiative (IWRI), the IHP International Sediment Initiative (ISI) and the World Association for Sedimentation and Erosion Research (WASER).

NEWS FROM THE SEDIMENT WORLD

WASWAC World Conference IV held in India



The 4th WASWAC World Conference was successfully held in New Delhi, India from November 5-9, 2019, with 263 participants from 13 countries. The theme of the conference was "Soil and Water Resources Management for Climate Smart Agriculture and Global Food and Livelihood Security". This conference was jointly organized by WASWAC, ISCO AND SCSI, and was hosted by the Soil Conservation Society of India, New Delhi, co-sponsored by the Indian Council of Agricultural Research (ICAR), DST-SERB, NABARD, ISSSR, NBA, NRAA, CSIR and ISRO and supported by IUSS and ESSC.

The conference received many greeting messages from both the host country government and many international organizations, including those from the Vice-President of India, the Minister of Agriculture & Farmers' Welfare, Rural Development and Panchayati Raj, the Minister for Jal Shakti, the MS Swaminathan Research Foundation, the Indian Department of Agricultural Research & Education, the Indian Council of Agricultural Research, the International Crops Research Institute for the Semi-Arid Tropics, the International Rice Research Institute, the International Water Management Institute, the International Union of Soil Sciences, the Soil and Water Conservation Society, the Indian Council of Agricultural Research and the Watershed Management Society of Iran.

At the opening ceremony, the President of the Soil Conservation Society of India, Dr. Suraj Bhan, as the host of the conference, and the President of WASWAC, Prof. Li Rui, gave welcoming speeches. Then the Chief Guest, Dr. Trilochan Mohapatra, introduced the conference-related publications.

The panel discussion topic was "Soil and Water Conservation under changing climate scenarios: Issues and Challenges". Prof. Li Rui from the Institute of Soil and Water Conservation, Prof. Miodrag D. Zlatic, from Belgrade University, Dr. Samir A El-Swaify from ISCO, Sh. V.W.

Ambekar, ex-director of Agriculture, Dr. Jose L. Rubio from the Universitat de Valencia, Dr. C.P. Reddy from MoRD, Gol, Dr. Suraj Bhan from SCSI, Prof. Mohammad H. Golabi from the University of Guam and representatives from NABARD and NBA participated in the panel discussion.

The five day conference generated fruitful discussions concerning the following topics: soil degradation assessment and remediation, water resource conservation and management, climate smart techniques for sustainable agriculture, land use planning and management for food and livelihood security, biodiversity conservation and strategic soil and water management, future strategies for resource conservation to mitigate climate change, next generation nutrient and water management in agriculture, socio-economic issues in resource management for livelihood security, policy interventions in soil and water management for global food security, bio-industrial approaches to watersheds for food and livelihood security, geospatial techniques and simulation modelling for soil and water management, and new paradigms in soil health and nutrient management. (Source: WASWAC)

The Second International Conference on All Material Fluxes in River Eco-Systems held at Peking University, China



The Second International Conference on All Material Fluxes in River Eco-Systems was held at Peking University, China from October 11-13, 2019. The conference was sponsored by the Key Laboratory of Water and Sediment Sciences at Peking University, the State Key Laboratory of Hydrosience and Engineering at Tsinghua University, the State Environmental Protection Key Laboratory of All Materials Flux in Rivers, the State Key Laboratory of Plateau Ecology and Agriculture, Qinghai University, and the National Natural Science Foundation of China. Professor Jinren Ni

from Peking University and Professor Guangqian Wang from Tsinghua University were the chairmen of the conference. More than 230 experts, scholars, and graduate students from more than 10 countries attended the conference. This conference was aimed at promoting the exchange of innovative ideas and the latest progress in the study of various substances (including water, sediment, nutrients, trace substances, aquatic organisms and greenhouse gases, etc.) in river ecosystems and their relationships, and explored the key scientific issues and development trends associated with river material fluxes and river health maintenance.

The opening ceremony was co-chaired by Professor Gregory Korshin from the University of Washington and Professor Xudong Fu from Tsinghua University. Professor Jinren Ni gave a keynote report entitled "An Introduction of All Material Fluxes in Large River Eco-Systems", Professor Ni elaborated the concept system, method system, technical system and management system related to "all matter fluxes in rivers", introduced the latest progress in the field of research on all matter fluxes in rivers, and looked forward to the prospect of comprehensive management of river basin based on all matter fluxes in rivers. Professor Jean-Philippe Croue of Curtin University in Australia introduced the structural properties and environmental effects of colloid and soluble organics, and proposed a new method for separating single organics from the natural complex water environment, which provided a new idea for the study of the properties of natural organics in river system. Professor Jizhong Zhou from University of Oklahoma introduced the progress in research using genomics to study the migration and transformation of pollutants in groundwater environments and the function of microbial ecosystems. Professor Jamie Lead from the University of South Carolina described the environmental hazards of synthetic nanoparticles and their migration and transformation in river ecosystems.

The conference involved five parallel sessions, with more than 130 high-level academic reports, including invited lectures by more than 40 distinguished experts and scholars from home and abroad. The participants promoted in-depth discussions and exchanges related to frontier scientific issues concerning changes in water and sediment fluxes, the evolution of river landscapes, and biogeochemical transformation of organic matter, pollutants and nutrients. The participants also discussed trace substances in rivers and their environmental impact, the mechanism of interaction between substances in river systems, greenhouse gases and global climate change, the method systems of river health and risk

assessment, the influence of natural and human activities on river fluxes, monitoring methods for all material fluxes in rivers, and data acquisition and mining.

The closing ceremony of the conference was chaired by Professor Alistair Borthwick from the University of Edinburgh and Professor William Johnson from the University of Utah. Professor James Tiedje from Michigan State University, Professor Gary Parker from the University of Illinois, Professor Gordon Huang from the University of Regina, Professor Yuan Zhiguo from the University of Queensland, Professor Satoshi Okabe from Hokkaido University, Professor Marc Benedetti from the Institut De Physique Du Globe De Paris presented excellent keynote conference reports.

The conference was notable for its outstanding papers and reports and the atmosphere of free discussion, which provided a platform for experts and scholars to exchange academic ideas and promoted interdisciplinary research and international cooperation in the field of all material fluxes in rivers.

Prof. Cheng Liu, Executive Secretary General of the WASER, was invited to make a keynote presentation at the conference.

Danube sediment data analysis published



Curve of Danube River. Credit: Getty Images

The EU Interreg Danube Transnational Programme has published its data analysis for the future sediment management plan for the river: www.interreg-danube.eu/uploads/media/approved_project_output/0001/37/96aa5f0389e23a912c019a07ffa96a21d63348de.pdf. The programme investigates how to tackle adverse changes in the sediment load caused by riverbed straightening and hydropower dams and dykes, which contribute to flood risks and reduces navigation possibilities and hydropower production. It also leads to the loss of biodiversity within the Danube Basin.

For the analysis, the project team collected and analysed sediment transport data along the river from the Black Forest in Germany to the Black Sea.

The collected data included information on morphological changes, the longitudinal profile, dredging, sediment variations, and water levels. These data were referenced against historical data to validate the changes.

Sediment dredging along the Danube River has been performed mainly for water management, such as river training works, navigation and flood protection, construction of hydropower plants, and for commercial purposes, such as the sale of gravel and sand for construction.

Dredging data were considered important. “Overdredging for commercial purposes has often caused riverbed degradation leading to a fall in the surface and ground water levels in certain stretches of the Danube River. Sediment feeding has been performed downstream of the hydropower plants in order to reduce the impact of riverbed degradation, only in several stretches of the Danube in Germany and Austria,” it is stated in the report.

“The most complete data were collected for the period between 1991–2016. Some of the partner countries provided fairly detailed data on dredging, such as Germany, Austria, Slovakia, [and] Hungary, including the annual volume, locality, and purpose of dredging with smaller or no data gaps. By contrast, some countries provided only the total volume of sediments dredged in longer river stretches in selected years,” the report authors stated.

One of the main conclusions was therefore that a unified approach to collecting data was needed to simplify future monitoring.

A manual on morphological monitoring based on data collection in this report, more detailed analysis, and available scientific knowledge are available in the report titled ‘Long-term morphological development of the Danube in relation to the sediment balance’.

(Source: <https://dredgingandports.com/>)

Soil erosion must be stopped ‘to save our future’, says UN agriculture agency

Although soils are essential for human well-being and the sustainability of life on the planet, they are threatened on all continents by natural erosion, the Food and Agriculture Organization (FAO) said on World Soil Day, calling for their protection.

Healthy soils are the basis for healthy habitats for all living beings. They provide food, clean water, raw materials and various ecosystem services.

But salinity, acidification and loss of biodiversity are just some of the threats that soils are currently facing.

This year’s World Soil Day commemoration focuses on reversing soil erosion for our future.

“We are celebrating a treasure beneath our feet which hosts a quarter of the planet’s biodiversity and provides about 95 per cent of our food”, said Eduardo Mansur, FAO’s Director of the Land and Water Division.

Unsustainable agriculture practices and other improper land use changes, such as illegal deforestation, can accelerate erosion up to a thousand times, according to FAO.

Soil erosion affects soil health and productivity by removing the highly fertile topsoil and exposing the remaining soil.

It decreases agricultural productivity, degrades ecosystem functions and amplifies hydrogeological risk, such as landslides or floods.

“Soil erosion can also cause significant losses in biodiversity, damage to urban and rural infrastructure and, in severe cases, lead to displacement of human populations”, explained Mr. Mansur.

FAO spelled out that by 2050, it may reduce up to 10 per cent of crop yields, which is equivalent to removing millions of hectares of land from crop production.

“We must stop soil erosion to save our future”, stressed Mr. Mansur. “It takes up to 1,000 years to form one centimeter of top soil, but this one centimeter can be lost with just one heavy rainfall if soil cover is not protected”.

To prevent and minimize soil erosion, farmers and other land users can adopt sustainable soil management practices under an enabling environment.

Underscoring that FAO is ready to support them, he urged everyone to take action.

“Fighting soil erosion must be everyone’s fight”, he concluded. “Join our effort. Stop soil erosion and save our future.”

World Soil Day is held annually on 5 December to focus attention on the importance of healthy soil and to advocate for the sustainable management of soil resources. (Source: UN, <https://news.un.org/en/>)

China requires further improvement of sedimentation in the Yellow River

BEIJING Sept. 23 (Xinhua) - China's Ministry of Water Resources called for further improvement of sedimentation in the Yellow River to safeguard the long-term stability of the river.

The ministry called for prioritizing water conservation, improving the allocation of water resources and stepping up efforts to protect instream flows.

In terms of ecological protection and high-quality development of the Yellow River basin, the ministry underscored that more efforts should be made to protect water resources.

The ministry demands that officials protect the ecological environment of key rivers and lakes, gradually restore the damaged water ecosystems and improve the system of lake chiefs and river chiefs so as to sustainably improve the ecosystems of rivers and lakes.

Authorities should insist on water and soil conservation, strictly control man-made soil erosion and further reduce sediment deposition in the lower reaches of the Yellow River, said the ministry.

The ministry also called for systematic protection of cultural heritage along the Yellow River and improvement of the monitoring system of the water conservation sector.

Provinces and cities take aim at illegal sand mining along the Yangtze River

Oct. 11, 2019 (China Daily) - Police in 10 provinces and cities along the Yangtze River have cracked down on 90 groups involved in illegal sand mining during the past nine months, the Ministry of Public Security said on Thursday. They have uncovered 1,667 criminal cases related to illegal mining and seized over 1.79 billion yuan (\$251 million) related to sand mining, 305 sand mining vessels and 2.88 million cubic meters of sand.

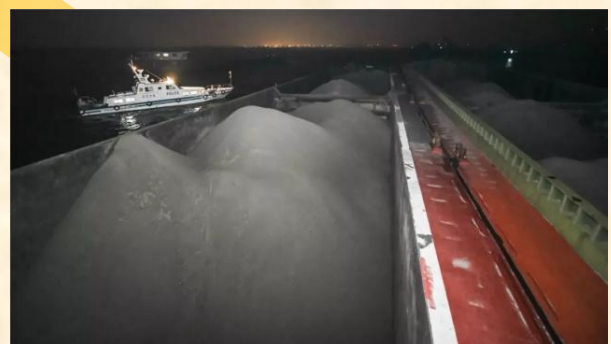
On Jan 11 2019, the ministry launched a one-year campaign cracking down on illegal sand mining and deployed public security forces in the cities of Shanghai and Chongqing, as well as in Jiangsu, Anhui, Jiangxi, Hubei, Hunan, Sichuan, Guizhou and Yunnan provinces. Due to the huge profits realized from the critical building material, sand mining has become a key money maker for organized criminals.

Tang Wenfa, police chief of Yueyang, Hunan province, said such illegal activities could seriously

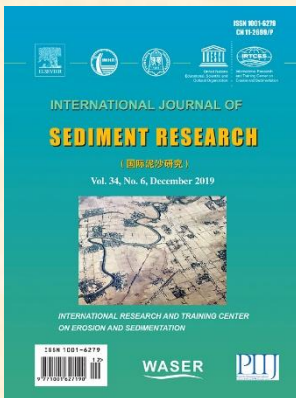
disrupt public security. "Illegal sand mining vessels were mainly active at night to avoid police, but they caused multiple boat accidents in the waterway," Tang said. "The large-scale sand mining vessels can drill to a depth of 20 meters, which could alter a river's course and endanger protection works on both banks, causing the collapse of dams."

"Some local officials may even get involved in illegal sand mining, tempted by huge profits from criminals under "protective umbrellas", Tang said. Yueyang is investigating over 100 tip offs in this regard, and six officials have been detained, he added.

Huang Ruixue, political commissar of the Criminal Investigation Bureau of the ministry, said that the police will rely on existing institutional mechanisms for fighting organized crime. Cooperation among provinces and departments has achieved results. Police and water resources departments in Hubei, harbor supervision departments and the Changjiang River Administration of Navigational Affairs shut down 39 illegal mining areas and dismantled 536 docks. A group consisting of 50 people from Hubei, Hunan and Chongqing was also smashed by the joint law enforcement team, Huang said. (Source: China Daily)



PUBLICATIONS



Papers Published in the International Journal of Sediment Research Volume 34, No. 6, 2019

Pages 509-516 (Dec. 2019)

Bedload transport from analytical and turbulence phenomenological perspectives
Subhasish Dey, Sk Zeeshan Ali, Ellora Padhi
Pages 509-530

From fluvial dynamics to eco-fluvial dynamics
Guojian He, Hongwei Fang, Jianyu Wang, Tao Zhang
Pages 531-536

Modeling the impact of dam removal on channel evolution and sediment delivery in a multiple dam setting
R.E. Poepl, T. Coulthard, S.D. Keesstra, M. Keiler
Pages 537-549

Turbulent mechanisms in open channel sediment-laden flows
Hai Huang, Hongwu Zhang, Deyu Zhong, Yinglong J. Zhang
Pages 550-563

Laboratory experiments evaluating sedimentation and mound formation of obliquely discharged sand particles in stagnant water
Masoud Manzouri, Amir Hossein Azimi
Pages 564-576

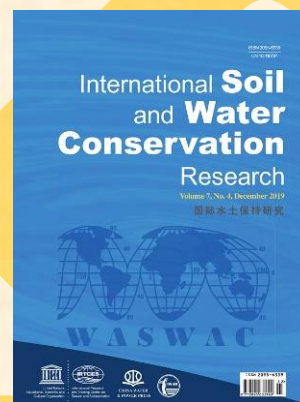
Application of Bayesian model and discriminant function analysis to the estimation of sediment source contributions
Pengfei Du, Donghao Huang, Duihu Ning, Yuehong Chen, ... Jingjing Xu
Pages 577-590

Small river basin and estuarine sediment fluxes: The magnitude necessary for coastal dispersion and siltation effects on a coral reef
Paula Sagilião Isacksson, Eduardo Guilherme Gentil de Farias, Francisco José Dias, Roberto Nascimento de Farias, ... Mauricio Mussi Molisani
Pages 591-599

Comparing carbon accumulation in restored and natural wetland soils of coastal Louisiana
Glenn M. Svir, Charles E. Sasser, Ronald D. DeLaune, Elizabeth O. Murray
Pages 600-607

The use of woods-run chips in filter socks to control erosion and sedimentation during petroleum development in the Appalachian Basin
Shawn T. Grushecky, Louis M. McDonald, Lawrence Osborn
Pages 608-615

Full papers are available at ScienceDirect:
<https://www.sciencedirect.com/journal/international-journal-of-sediment-research> with free access to the paper abstracts.



Contents of ISWCR (Vol. 7, No.4, 2019)

International Soil and Water Conservation Research
Volume 7, Issue 3
Pages 317-394 (Dec. 2019)

Soil genetic erosion: New conceptual developments in soil security
Carmelo Dazzi, Giuseppe Lo Papa
Pages 317-324

Improving cover and management factor (C-factor) estimation using remote sensing approaches for tropical regions
André Almagro, Thais Caregnatto Thomé, Carina Barbosa Colman, Rodrigo Bahia Pereira, ... Paulo Tarso Sanches Oliveira
Pages 325-334

Efficiency of wheat straw mulching in reducing soil and water losses from three typical soils of the Loess Plateau, China
Abbas E. Rahma, David N. Warrington, Tingwu Lei
Pages 335-345

Using Ecosystem Service Modeler (ESM) for Ecological Quality, rarity and Risk Assessment of the wild goat habitat, in the Haftad-Gholleh protected area
Amir Ansari, Mohammad H. Golabi
Pages 346-353

Determinants for adoption of physical soil and water conservation measures by smallholder farmers in Ethiopia
Million Sileshi, Reuben Kadigi, Khamaldin Mutabazi, Stefan Sieber
Pages 354-361
Download PDFArticle preview

Drought and conflicts at the local level: Establishing a water sharing mechanism for the summer-autumn rice production

in Central Vietnam
Chuong Van Huynh, Catharien Terwisscha van Scheltinga,
Ty Huu Pham, Non Quoc Duong, ... Jos Timmerman
Pages 362-375

Farmers' decision to adopt watershed management
practices in Gibe basin, southwest Ethiopia
Fekadu Mengistu, Engdawork Assefa
Pages 376-387

Combined effect of micro silica with clay, and gypsum as
mulches on shear strength and wind erosion rate of sands

Fateme Naghizade Asl, Hamid Reza Asgari, Hojat Emami,
Mohammad Jafari
Pages 388-394

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

WATER

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

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>

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

Date: 3-7 August 2020

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/>

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)

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 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/>

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

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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/>

WASER

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

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**WORLD ASSOCIATION FOR
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(Note: IJSR – International Journal of Sediment Research. The subscription fee for IJSR is USD 96 or RMB 900 per year.)

☐ Bank transfer

Beneficiary: World Association for Sedimentation and Erosion Research

Bank: Industrial and Commercial Bank of China, Beijing Municipal Branch, Beijing, PRC

Account No: 0200001409089020987 Swift code: ICBKCNBJBJM

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NOTE:

All members will receive newsletters, and enjoy discounted registration for the International Symposia on River Sedimentation and other International Conferences organized by WASER, and will receive IJSR and other publications at a preferential price.

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IRTCES, P. O. Box 366, No.20 Chegongzhuang Road West, Beijing, 100048, China Fax:

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

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