

## World Association for Sedimentation & Erosion Research – WASER

# NEWSLETTER

Reporting WASER news to you regularly

2023 No. 4

(December 22, 2023)

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- ✧ 《国际泥沙研究》2023年第38卷第6期目录 5
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## NEWS

### The 13th International SedNet Conference held in Portugal

The 13th International SedNet Conference was held 6-8 September 2023 in Lisbon, Portugal. It attracted close to 150 participants, including sediment scientists, policy makers and managers. The Conference theme was: "Sediment continuum: applying an integrated management approach".

Oral presentations and posters were presented in 5 sessions:

- 1) Sediment quality guidance and sediment quality assessment;
- 2) Circular economy – sediment as a resource;
- 3) Sediment in coastal and marine management;
- 4) Climate change and sediments: direct and indirect consequences and opportunities; and
- 5) Sediment management concepts and sediment policy.



The conference was preceded by 3 workshops:

- 1) Measurements and good practice on sediment management: challenges and opportunities for Portugal;
- 2) SedNet Working Group meeting: Sediment Quality; and
- 3) SedNet Working Group meeting: Circular Economy.

All presentations are publicly available at: <https://sednet.org/events/sednet-conference-2023-presentations/>

The book of abstracts is available at: <https://sednet.org/events/sednet-conference-2023-book-of-abstracts/>

(Source: <https://sednet.org/>)



### IJSR Associate Editor Prof. Charles Melching visited IRTCES and gave a seminar

On November 16th, at the invitation of the International Research and Training Center on Erosion and Sedimentation (IRTCES), Prof. Charles Steven Melching, Associate Editor of the International Journal of Sediment Research, gave a seminar on "The Superfund Program and Clean-Up of Contaminated Sediment in the Fox River in Wisconsin, U.S.A." at the China Institute of Water Resources and Hydropower Research (IWHR). IWHR Vice President Ding Liuqian chaired the seminar, which was attended by experts and students from IWHR and IRTCES.

In his seminar, Prof. Melching introduced the clean-up program for contaminated sediment in the Fox River. Several clean-up technologies, including natural attenuation, dredging, capping, and in-situ treatment were analyzed and compared. The clean-up programme took 16 years and further environmental monitoring is still ongoing.



After his presentation, Prof. Melching and the participants had a lively discussion on the advantages and disadvantages of the dredging and capping method, point-source and non-point



source pollution, and environmental impact assessment.

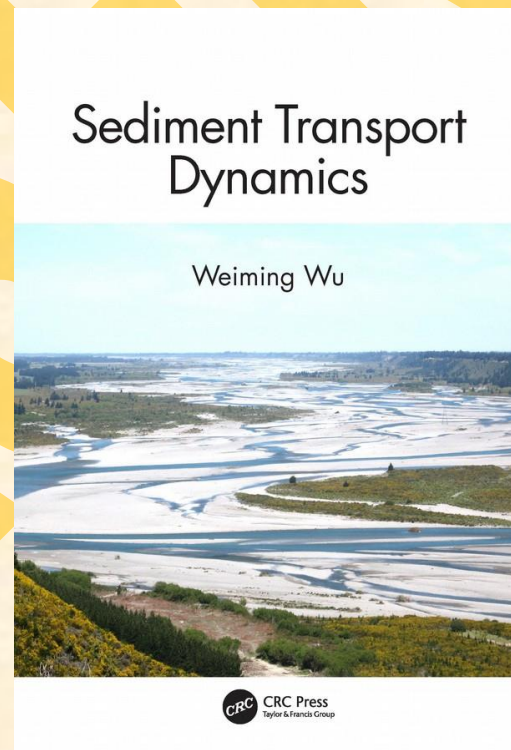


**WASER Vice President Prof. Weiming Wu published a new book *Sediment Transport Dynamics***

A new book “*Sediment Transport Dynamics*” authored by Prof. Weiming Wu was published by Taylor & Francis/CRC Press on Nov. 21, 2023. This book focuses on the fundamentals of sediment transport in surface waters. Besides the primary context of river sedimentation, this book extensively covers sediment transport under coexisting waves and currents in coasts and estuaries, as well as turbidity currents in lakes, reservoirs, channels, and the ocean. It also includes special topics that have emerged in recent years, such as the transport of mixed cohesive and noncohesive sediments, biofilm-coated sediments, and infiltrated sand within gravel and cobble beds. It has 15 chapters: introduction, sediment properties, open channel flows, sediment particle settling, incipient motion, bed forms, bed load, suspended load, total load, cohesive sediments, water-sediment two-phase flows, hyperconcentrated/debris flows, coastal sediment transport, turbidity currents, and physical modelling. It has 646 pages and cites about 1500 references. The text merges classical and new knowledge of sediment transport from various sources in English and non-English literature and refers to important contributions made by many scientists and engineers from all over the world.

Dr. Weiming Wu is James K. Edzwald Professor of Water Engineering at Clarkson University, NY, USA. Dr. Wu earned his PhD from Wuhan University of Hydraulic and Electric Engineering, China in 1991. He was Lecturer/Associate Professor at his alma mater in 1991–1995; Research Fellow of the Alexander von Humboldt Foundation at the Institute for Hydromechanics, University of Karlsruhe, Germany in 1995–1997; and a faculty member at the National Center for Computational Hydroscience and Engineering of the University of Mississippi in 1997–2013. His research interests include fundamental sediment transport; hydro- and morphodynamics in rivers,

estuaries, coastal waters and uplands; surge and wave attenuation by vegetation; interaction between surface and subsurface flows; free surface flow and sediment transport modelling; dam/levee breach and flood modelling; and water quality and aquatic ecosystem/ecotoxicology modelling. He authored the book “*Computational River Dynamics*”, published through Taylor & Francis, UK in November 2007. He received a Best Paper Award in 2007 from the World Association for Sedimentation and Erosion Research (WASER). He is a fellow of American Society of Civil Engineers (ASCE) and a member of the International Association for Hydro-Environment Engineering and Research (IAHR). He served as Associate Editor for the International Journal of Sediment Research in 2008–2010 and for the ASCE Journal of Hydraulic Engineering in 2010–2019, and was Chair of the ASCE Computational Hydraulics Committee (2010–2012), the ASCE Task Committee on Dam/Levee Breaching (2009–2012), and the ASCE Sedimentation Committee (2016–2018). He currently serves as Vice President for WASER.



**Proposal invitation for hosting the 9th ICEC to be held in 2027**

The International Research and Training Center on Erosion and Sedimentation (IRTCES) is inviting interested parties to submit proposals for hosting the 9th International Conference on Estuaries and Coasts (9th ICEC) in 2027.

As you may already know, the 8th International Conference on Estuaries and Coasts (8th ICEC) will be held in Quebec City, Canada from August



27 to 29, 2024. We are looking forward to meeting with you there. Although it might seem far away, it is important to begin planning for the 9th ICEC, which is scheduled to be held in 2027.

The ICEC Series, organized by IRTCES since 2003, has become the leading international forum for dissemination of research and industrial practice on estuaries and coasts. IRTCES in Beijing has served as the permanent secretariat of ICEC since its inception. This conference will continue the success of its previous conferences held in Hangzhou and Guangzhou (China, 2003; 2006), Sendai (Japan, 2009), Hanoi (Vietnam, 2012), Muscat (Oman, 2015), Caen (France, 2018) and Shanghai (China, 2021). The 8th ICEC is scheduled to be held in Quebec City, Canada from August 27 to 29, 2024. With support from related international associations and the participation of experts and scholars worldwide, the ICEC has become an important and popular event. The conference provides an opportunity for scientists, engineers, researchers, and decision-makers to exchange ideas, research results and advanced techniques, and share their experiences and information across the broad field of estuaries and coasts.

IRTCES is currently in the process of selecting a venue for the 9th ICEC that is scheduled to be announced in Quebec City in 2024. Several universities and institutes have already shown interest in hosting the event. However, IRTCES is still open to more proposals for hosting the 9th ICEC in 2027. If you are interested, please submit your proposals to Prof. Hongling Shi, IRTCES (see addresses below) before January 31, 2024. The final decision regarding the venue and organizer will be made by the permanent secretariat of ICEC (IRTCES).

#### **Contacts:**

Prof. Hongling Shi (E-mail: shihl@iwhr.com )  
Prof. Jianli Zhang (E-mail: zhangjl@iwhr.com ).

#### **Tree-planting stops desert extending**

Every year from March to May, hundreds of workers from Gansu province and the Ningxia Hui autonomous region in Northwest China arrive at the Kubuqi Desert in Ordos, Inner Mongolia autonomous region, for the annual tree-planting season. The workers toil in the desert planting saplings as part of efforts to control the spread of the sand.

For nearly two months, they live in temporary accommodations, such as tents or cabins, deep within the desert. In order to be closer to the planting areas, the lodgings are often situated far

from towns, requiring supplies to be brought in from nearby settlements.

Usually operating in pairs, the workers share the task of digging tree holes, planting the saplings and transporting the materials.



*Two workers dig holes using a handheld motorized auger so they can plant tree saplings in the Kubuqi Desert, China's seventh-largest expanse of arid land, in Ordos, Inner Mongolia autonomous region, on April 27. (Credit: LIU LEI/XINHUA)*

Using large handheld motorized augers that weigh more than 10 kilograms, the workers can dig more than 1,000 holes a day. Trekking through the sandy terrain, they carry bundles of saplings and can cover more than 10 kilometers every day.

The Kubuqi, which adjoins a stretch of the Yellow River, is the country's seventh-largest desert.

Years of concerted efforts have seen the amount of sediment running into the river from the desert reduced by 80 percent, while the vegetation coverage rate has reached 53 percent.

The dedication of the sand-control workers has played a vital role in achieving these environmental milestones.



*A female worker carries tree-planting equipment as she treks across the desert in Ordos. LIU LEI/XINHUA*





One worker digs tree holes while another places saplings in them. The workers usually operate in teams of two. LIU LEI/XINHUA



An aerial view of the prefabricated cabin where the workers live during each year's tree-planting season in the Kubuqi. The buildings are usually located deep in the desert to reduce journey times to the planting areas. LIU LEI/XINHUA

(Source: China Daily)

### Storms or sea-level rise—what really causes beach erosion?

Beaches are dynamic. They change from week to week and month to month. Have you ever wondered what causes these changes? Or how beaches might fare as sea levels rise and if storms increase in frequency and severity?



Credit: CCO Public Domain

To help answer these questions, we studied 50 years of change at Bengello Beach, near Moruya airport on the New South Wales south coast. This is a typical beach with moderate waves and no hard infrastructure such as sea walls or houses built over dunes. The results therefore represent natural beach change over half a century. This helps us understand the natural behavior of beaches around the world.

We found that the main driver of coastal erosion is frequent storms of moderate intensity. These storms remove sand from the beach. This sand is generally returned within a matter of months. But what about more extreme events?

In the 50 years of monitoring, offshore wave buoys recorded 21 storms where maximum wave heights exceeded 10 meters. That is roughly equivalent to the height of a three-story building. These larger events cause even greater erosion, so the beach takes longer to recover.

### The 'biggest of the big' storms

Some of the largest events in the record have been particularly destructive, for example the storm in June 2016 where a residential swimming pool washed onto the beach at Narrabeen-Collaroy. Or the June 2007 event when the Pasha Bulka container ship broke its mooring and washed up on Nobbys Beach in Newcastle. Both storms also caused substantial beach erosion at Bengello.

One sequence of storms stands out in the record. The successive storm events of May–June 1974 including the renowned Sygna Storm of May 1974. During these two months, more than a B-double truck full of sand was cut away from every meter strip of beach (95 cubic meters of sand per meter of beach), and the shoreline moved inland farther than the length of an Olympic swimming pool (63m).

Astonishingly, it took five and half years for the beach to recover to its previous condition after these events. The recovery was hampered by more severe storms in 1976 and 1978, which interrupted the gradual build-up of beach sand.

No other storms in the record have had such a huge impact on the beach. Importantly, this is our only quantitative record of this event because it occurred before satellite imagery was available. Therefore it is not captured by tools such as CoastSat and Digital Earth Australia Coastlines, which derive shoreline positions from more than 30 years of satellite images, and have proved so powerful in understanding recent shoreline changes.

But how often do the biggest storms occur? Looking into the past, research suggests an erosion event of this magnitude has occurred at least one other time in the past 500 years.

### Can beaches survive future sea-level rise?

So how will beaches fare in a warming world where sea-level rise accelerates and coastal storms intensify?

This beach has sufficient sand to enable recovery after extreme storm events such as those experienced in the La Niña period of 1974–78. This degree of recovery is related to each beach's so-called "sand budget."

Recent research has even suggested extreme storms can replenish beaches with more sand from deeper waters.

Under present-day conditions this beach appears to have the capacity to fully recover. This means that it and other similar beaches with positive sand budgets can absorb certain levels of sea-level rise—but only up to a point. There will be a threshold beyond which a beach starts to retreat unless a new source of sand is supplied.

Sources of beach sand could come from deeper water offshore or from neighboring beaches alongshore. These "credits" of sand into the beach budget may help them maintain their current position. Other NSW beaches in credit include the northern end of Seven Mile Beach near Gerroa, Nine Mile Beach north of Tuncurry and Dark Point just north of Hawks Nest. Around Australia, we can use time-series of shoreline change to estimate beach sand budgets.

Beaches in sand "deficit" are more vulnerable to sea level rise. Examples include the southern end of Stockton Beach and Old Bar in NSW and the northern end of Bribie Island in Queensland.

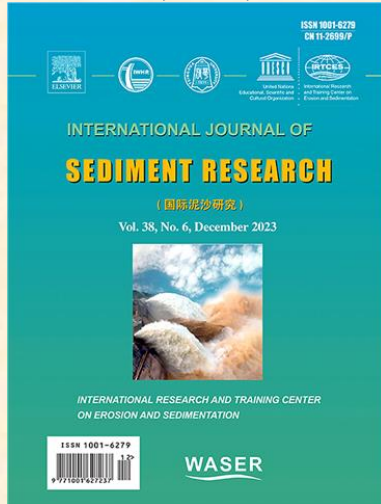
In a dynamic and volatile future, it is more important than ever that we maintain long-term records of beach change. This will ensure we have a critical baseline of data to test future projections. Monthly surveys at the site are continuing.

(Source: <https://phys.org/news/2023-11-storms-sea-level-rise-what-beach-erosion.html>)



# PUBLICATIONS

## Contents of *International Journal of Sediment Research* Volume 38, No. 6, 2023



Volume 38, No.6, 2023  
Pages 781-910 (December 2023)

[Local scour around submerged angled spur dikes under ice cover](#)

Guowei Li, Jueyi Sui, Sanaz Sediqi, Mauricio Dziedzic  
Pages 781-793

[A two-dimensional double layer-averaged model of hyperconcentrated turbidity currents with non-Newtonian rheology](#)

Yining Sun, Ji Li, Zhixian Cao, Alistair George Liam Borthwick  
Pages 794-810

[Scour hole reduction at a diversion channel junction using different entrance edge shapes](#)

Ahmed Yahya Abdulhafedh, Nashwan Kamalaldeen Alomari, Ahmed Mohammed Sami Al-Janabi  
Pages 811-820

[Experimental study on the effect of hydrodynamic conditions on flocculation and settling properties of fine-grain sediment](#)

Bismark Odum, Chunyang Xu, Yongping Chen, Yinpeng Yao, Yan Zhou  
Pages 821-833

[Assessment of ecological risk for heavy metals in surface sediment of an urban river in a developing country](#)

Md Saiful Islam, Md Humayun Kabir, Mir Mohammad Ali, Md Towhidul Islam, ... Abubakr M. Idris  
Pages 834-846

[Ensemble and optimized hybrid algorithms through Runge Kutta optimizer for sewer sediment transport modeling using a data pre-processing approach](#)

Enes Gul, Mir Jafar Sadegh Safari, Omer Faruk Dursun, Gokmen Tayfur  
Pages 847-858

[Robust low-rank learning multi-output regression for incipient sediment motion in sewer pipes](#)

Mir Jafar Sadegh Safari, Shervin Rahimzadeh Arashloo  
Pages 859-870

[Characterization of the micro-interfacial interactions of heterogeneous particulate matter \(fine-grained sediment and microplastics\) with copper ions](#)

Jing Ou, Zhihe Chen, Tung-Chiung Chang  
Pages 871-879

[Experimental study on flocculation and sedimentation characteristics of cohesive fine sediment measured using ultrasound in the Pearl River Estuary](#)

Qinqin Liu, Xiaojian Liu, Jian Chen, Peng Hou, ... Huan Gao  
Pages 880-890

[Index model equation analysis: A case study of the risk and source of inorganic contaminants in roadside uncontaminated soil of the Egi oil producing area, Niger Delta](#)

Elechi Owhoeke, Asmat Ali, Okorundu Justin Nnaemeka, Kingsley John Orié, ... Abdur Rashid

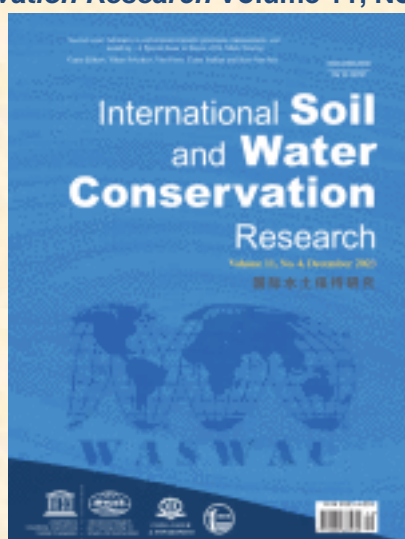
Pages 891-900

[Establishment and development of the World Association for Sedimentation and Erosion Research](#)

Cheng Liu, Zhaoyin Wang, Des E. Walling  
Pages 901-909

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 *International Soil and Water Conservation Research* Volume 11, No.4, 2023**



Volume 11, Issue 4  
Pages 589-764 (December 2023)

[Advances in soil erosion research: Mechanisms, modeling and applications - A special issue in honor of Dr. Mark Nearing](#)

Viktor Polyakov, Claire Baffaut, Vito Ferro, Scott Van Pelt  
Pages 589-591

[Roles of raindrop impact in detachment and transport processes of interrill soil erosion](#)

Xunchang John Zhang  
Pages 592-601  
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[Plot investigation on rill flow resistance due to path tortuosity](#)

Francesco G. Carollo, Costanza Di Stefano, Alessio Nicosia, Vincenzo Palmeri, ... Vito Ferro  
Pages 602-609

[Gully internal erosion triggered by a prolonged heavy rainfall event in the tableland region of China's Loess Plateau](#)

Jiayi Wang, Yan Zhang, Kunheng Li, Ziqing Zhang, Chang Chen  
Pages 610-621

[Performance evaluation of a water erosion tracer using plot-scale experiments and process-based modeling](#)

Joao M. Villela, Jamil A.A. Anache, Alex M. Watanabe, Dennis C. Flanagan, ... Silvio Crestana  
Pages 622-632

[Structure-from-Motion Photogrammetry and Rare Earth Oxides can quantify diffuse and convergent soil loss and source apportionment](#)

Pia Benaud, Karen Anderson, Mike R. James, Timothy A. Quine, ... Richard E. Brazier  
Pages 633-648  
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[Spatial distribution of soil erosion and its impacts on soil productivity in Songnen typical black soil region](#)

Yun Xie, Jie Tang, Yan Gao, Zhijia Gu, ... Xiaoyu Ren  
Pages 649-659

[Comparison and quantitative assessment of two regional soil erosion survey approaches](#)

Lixia Dong, Suhua Fu, Baoyuan Liu, Bing Yin  
Pages 660-668

[Calibration, validation, and evaluation of the Water Erosion Prediction Project \(WEPP\) model for hillslopes with natural runoff plot data](#)

Shuyuan Wang, Ryan P. McGehee, Tian Guo, Dennis C. Flanagan, Bernard A. Engel  
Pages 669-687

[Saturation-excess overland flow in the European loess belt: An underestimated process?](#)

Valentin Landemaine, Olivier Cerdan, Thomas Grangeon, Rosalie Vandromme, ... J. Patrick Laceby  
Pages 688-699

[Streamflow prediction in ungauged catchments by using the Grunsky method](#)

Bruno K. Marchezepe, André Almagro, André S. Ballarin, Paulo Tarso S. Oliveira  
Pages 700-712

[Towards a better understanding of pathways of multiple co-occurring erosion processes on global cropland](#)

Pasquale Borrelli, Christine Alewell, Jae E. Yang, Nejc Bezak, ... Panos Panagos  
Pages 713-725

[Atlas of precipitation extremes for South America and Africa based on depth-duration-frequency](#)



[relationships in a stochastic weather generator dataset](#)

Andrew Fullhart, David C. Goodrich, Menberu B. Meles, Paulo Tarso S. Oliveira, ... Shea Burns  
Pages 726-742

[Long-term trends of precipitation and erosivity over Northeast China during 1961–2020](#)

Wenting Wang, Shuiqing Yin, Juan Yu, Zeng He, Yun Xie  
Pages 743-754

[Legacy earthen berms influence vegetation and hydrologic complexity in the Altar Valley, Arizona](#)

Mary H. Nichols, Sara E. Duke, Chandra Holifield Collins, Lauren Thompson  
Pages 755-763

Free full papers and open access are available at ScienceDirect :

<https://www.sciencedirect.com/journal/international-soil-and-water-conservation-research>.

WATER

# COMING EVENTS

## 9th Conference on Physical Modelling in Coastal Engineering - Coastlab24 (The Netherlands, May 13-26, 2024)

**Date:** May 13-16, 2024

**Venue:** Delft, the Netherlands

Summary: The 9th Conference on Physical Modelling in Coastal Engineering - Coastlab24 will be held in May 13, 2024 to May, 16 2024. Welcome to join in! The following is the detailed introduction: CoastLab is a conference whose focus is on Physical Modelling in Coastal Engineering and Science. CoastLab is organized under the auspices of and in collaboration with the Coastal and Maritime Hydraulics Committee of the International Association of Hydro-Environment Engineering and Research (IAHR). Coastlab24 builds on the success of previous conferences in Porto (2006), Bari (2008), Barcelona (2010), Ghent (2012), Varna (2014), Ottawa (2016), Santander (2018) and Zhoushan (2020).

Theme and Topics: In the coastal zone, many developments are taking place, with much attention to themes like:

- Climate change impacts, adaptation, mitigation
- Multifunctional and nature-inclusive designs
- Development of ports and marine terminals
- Wave, wind and tidal energy
- Industrial outfalls

To cater for these developments continuous development in modelling capabilities is required, in topics such as:

- Coastal hydrodynamics, coastal processes
- Coastal flooding, flood prevention, shore protection
- Coastal and ocean structures, breakwaters, revetments
- Scour, sediment transport, morphology
- Wave-structure interactions, loading, response
- Wave run-up and overtopping
- Laboratory technologies, measurement systems
- Synoptic measurement systems (e.g. laser scanning, imaging, motion tracking, Particle Image Velocimetry)
- Coastal field measurement and monitoring
- Wave synthesis, generation, and analysis
- Scale effects and uncertainty analysis
- Composite modelling and validation (physical, numerical, field, and AI)
- Extreme events – assessment and mitigation
- Tsunami hydrodynamics, impacts, and mitigation
- Mixing, water quality
- Physical modelling case studies
- Navigation, ship motions

Presentations will be given, and discussions will be held about these topics. The programme includes PhD workshops, welcome reception, technical tour plus banquet, and optional post conference tour. Moreover, an exhibition with companies and suppliers will be present.

### Key dates:

Early-bird registration deadline 15 January 2024

Abstract submission deadline 1 September 2023

Notification acceptance 15 October 2023

Full paper submission deadline 15 December 2023

Conference 13-16 May 2024

**URL:** <https://coastlab24.dryfta.com/>

## Centennial Celebration and Congress of the International Union of Soil Sciences (Italy, May 19-21, 2024)

**Date:** 19-21 May, 2024

**Venue:** Florence, Italy

**Summary:** The custodian of soil science will celebrate its centennial contribute to the nature and human wellbeing in 2024.

The event will also empower the linkages with different disciplines, policy makers, stakeholders, institutions, and associations to effectively address civil society needs within agriculture, forestry, environment, urban planning, energy, education, and other societal issues.

The celebration will occur on May 19th and will be followed by two intense days of congress, with plenary and parallel scientific sessions. Both soil scientists and specialists from other disciplines will participate to each session, focusing on past achievements and future challenges.

The congress will be followed by technical/scientific excursions that will range from short local to long trips, spanning from Alps to Sicily.

A pre-congress visit to Villa Lubin in Rome, the historical place where the IUSS was founded, is scheduled on May 18th.

### Sessions:

1. Equity, diversity, and inclusivity in soil sciences
2. Soil and humanity
3. Soil Governance
4. Soil health in achieving the Sustainable Development Goals
5. Soil in the circular economy
6. Soil in the digital era
7. Soil sciences impact on basic knowledge
8. Other

**URL:** <https://centennialiu2024.org/>

### Contacts:

Organizing secretariat

**Email:** [centennialiu2024@aimgroup.eu](mailto:centennialiu2024@aimgroup.eu)

## The 15th International Conference on Hydroinformatics (Beijing, China, May 27-31, 2024)

**Date:** May 27-31, 2024

**Venue:** Beijing, China

**Organizer:** Ministry of Water Resources (MWR) of People's Republic of China & China Institute of Water Resources and Hydropower Research (IWHR)

**Invitation:** Ministry of Water Resources (MWR) of People's Republic of China and China Institute of Water Resources and Hydropower Research (IWHR) are pleased to invite the international Hydroinformatics community to the 15th International Conference on Hydroinformatics – HIC 2024, held in Beijing, China, on 27 – 31 May 2024. Hydroinformatics is defined as the study of the flow of information and the generation of knowledge related to the dynamics of water in the real world, through the integration of modelling, information technologies and artificial intelligence considering sustainability and social implications for decision support and smart management of water-based systems. International Conference on Hydroinformatics (HIC) has a long tradition, dating back to 1994 for its first edition. The next 15th HIC 2024 will celebrate its 30th anniversary and the development of a vivid Hydroinformatics community. The conference will serve as a perfect venue and platform for practitioners, engineers, researchers, scientists, managers and decision makers from Europe, Oceania, and Americas to meet their Asian counterparts to exchange the most recent developments in the Hydroinformatics field and the urgent water related issues.



**Theme and Topics:** From Nature to Digital Water: Challenges and Opportunities

**List of main topics:**

- Technologies for water management and monitoring
- Big-data, knowledge, and water data management
- Emerging solutions in modelling methods (AI, high performance computing, cloud computing).
- Digital transformation of urban water systems
- Hydraulic and hydrological modeling
- Climate change impacts
- Environmental and coastal hydroinformatics
- Complex water systems, remote sensing and control
- COVID-19 pandemic reflected in hydroinformatics
- Water – Energy – Food nexus
- Innovation in education and training in hydroinformatics

**URL:** <https://hic2024.scimeeting.cn/>

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**Tel:** +86 10 68781345

**E-mail:** [contact@hic2024.org](mailto:contact@hic2024.org)

### The 10th International Symposium on Environmental Hydraulics (Scotland, June 25-27, 2024)

**Date:** 25 – 27 June 2024

**Venue:** Aberdeen, Scotland

**Invitation:**

We are pleased to announce that the 10th International Symposium on Environmental Hydraulics (ISEH) will be held in Aberdeen, Scotland on the 25 – 27 June 2024. Sponsored by the International Association of Hydro-Environment Engineering and Research (IAHR), the 10th ISEH will build on the success of previous ISEH symposia in bringing together international experts to present and discuss new research, technical innovations and case studies relating to the symposium's theme "environmental hydraulics for a sustainable and resilient future". The Fluid Mechanics Research Group at the University of Aberdeen are proud to host the event, bringing the symposium to the UK for the first time in its history, and to Europe for the first time since the 6th ISEH held in Athens in 2010. It will be held within the University's historic Old Aberdeen campus, providing an ideal setting in which to share knowledge and to meet old and new friends. We very much look forward to extending a warm Scottish welcome to you in June 2024.

**URL:** <https://abdn.eventsair.com/iseh2024/>

**Contacts:**

For general enquiries please contact the event administrators, CPD & Events Services

Research and Innovation, Room 28,  
University Office,

King's College,  
Aberdeen, AB24 3FX,  
Scotland

**Call Us:** +44(0)1224 272523

**Email:** [iseh2024@abdn.ac.uk](mailto:iseh2024@abdn.ac.uk)

### 8th International Conference on Estuaries and Coasts (Canada, August 27-29, 2024)

**Date:** August 27-29, 2024

**Venue:** Quebec City, Canada

**Organizers:** Hydraulic and Environmental Research Groups of INRS (Canada); Clarkson University (USA)

**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)

**Secretariat:** Hydraulic and Environmental Research Groups of INRS (Canada)

**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). Seven such conferences were held in Hangzhou and Guangzhou, China; Sendai, Japan; Hanoi, Vietnam; Muscat, Oman; Caen, France; and Shanghai, China in 2003, 2006, 2009, 2012, 2015, 2018 and 2021, respectively. 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 8th International Conference on Estuaries and Coasts (ICEC 2024) will be held in Quebec City, Canada during August 27-29, 2024. The ICEC 2024 will provide a venue for intellectual and enlightening discussions of ideas. The conference program will be broad with topics. The local program and advisory committees are working to prepare an exciting and outstanding conference. Academics, government organizations, industrial partners and interested citizens are invited to attend this conference. We look forward to welcoming you for our next conference in the beautiful city of Quebec! -The ICEC organizing committee

**Theme:**

Resilient Estuaries and Coastal Zones under Global Challenges

**Topics of the Conference:**

1. Saline intrusion and sea level rise: measurements, modelling and forecasting;
2. Waves, storm surges and tsunami: measurements, modelling, forecasting and warning systems;
3. Estuarine and coastal flows and their evolution by climate change;
4. Sediment transport and morphological change in estuaries and coastal zones;
5. Megacity developments under the threat of sea level rise and climate change;
6. Environment and ecosystem changes in estuaries and coastal zones;
7. Integrated coastal zone management for sustainable developments in the context of global change;
8. Impacts of watershed developments on estuaries and coastal zones;
9. Shoreline protection and beach nourishment;
10. Interactions between estuarine and coastal systems;
11. Resilient engineering solutions in estuaries and coastal zones.

**URL:** <https://icec2024.org/en>

**Contacts:**

Quebec Conference Secretariat

Conferium2828 Laurier Blvd.

Quebec City, Quebec

G1V 0B9

Canada

**Phone:** +1 418 522 8182

Toll free (Canada and U.S.): +1 800 618 8182

Monday to Friday - 09:00 to 16:00 U.S. / Canadian Eastern Time

**Email:** [icec2024@conferium.com](mailto:icec2024@conferium.com)

## River Flow 2024 (UK, Sep. 2-6, 2024)

**Date:** 2-6 September 2024

**Venue:** Liverpool, UK

**Summary:** The 12th Conference on Fluvial Hydraulics under the auspices of IAHR, River Flow 2020, will be held 2-6 September 2024 in Liverpool, UK. Organized since 2002 under the auspices of the Fluvial Hydraulics Committee of the International Association for Hydro-Environment Engineering and Research (IAHR), the River Flow Conference Series has become one of the main international forum for dissemination of research and industrial practice on fluvial hydraulics and river engineering. Following on the tradition and success of previous editions of River Flow conferences, River Flow 2024 will feature a day devoted to Master Classes for young researchers, daily keynote lectures, ample time for the presentation and discussion of accepted contributions (full papers and extended abstracts), and the presentation of the Stephen E. Coleman Award distinguishing the best paper first authored by a young researcher.

**Topics:**

The conference will as well cover issues related, but not limited to:

1. River morphodynamics and management
2. Hydraulic structures and impacts on local and catchment sediment transport, flow regime and ecology
3. Sediment, pollutant and microplastic dynamics in rivers
4. Fluid Mechanics, numerical modelling and two-phase flow
5. Climate change and adaptation
6. Monitoring techniques and AI?

**URL:** <https://www.ljmu.ac.uk/conferences/river-flow>

**Contacts:**

If you have questions, please do not hesitate to e-mail or call: RF2024@ljmu.ac.uk.

Dr Iacopo Carnacina

**Email:** i.carnacina@ljmu.ac.uk



# World Association for Sedimentation & Erosion Research

# WASER

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and Sedimentation

International Research and Training Center on  
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**WORLD ASSOCIATION FOR  
SEDIMENTATION AND EROSION  
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**Membership dues for 6 years (\$US or Chinese RMB, or equivalent Euros) :**

[IJSR Printed copy] Regular (\$480 or RMB3000)  Corporate (\$660 or RMB 5000)

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

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