





INTERNATIONAL SEDIMENT INITIATIVE

NEWSLETTER

Reporting ISI news to you quarterly

No. 50 Apr. 9, 2019

IN THIS ISSUE

News

\diamond	New ISI publication on river control strategies is	available
	in UNESCO Digital Library	1
♦	ISI teleconference convened to discuss ISI activit	ies 1
♦	International Journal of Sediment Research	becomes
	bimonthly	1
♦	Shamila Nair-Bedouelle nominated Assistant	Director-
	General for Natural Sciences at UNESCO	2
\diamond	Updated information on the 14th ISRS	2

♦ NASA says: China and India Lead the Way in Greening

Publications

♦	Papers published in IJSR Vol.34, No 1 & 2, 2019	5
♦	Contents of ISWCR (Vol. 7, No 1, 2019)	6

Coming Events

- ♦ International Conference on Silk-roads Disaster Risk Reduction and Sustainable Development (Beijing, May 11-12, 2019)
- ♦ The UNESCO International Water Conference (France, 13-14 May 2019)
 7
- 2019 World Hydropower Congress (France, May 14 -16, 2019)
 7
- ♦ CRIDA workshop (South Africa, 27 31 May 2019) 7
- 7th International Conference on Debris Flow Hazards Mitigation (USA, June 10 -13, 2019)
- ♦ 38th IAHR World Congress (Panama, Sep. 1-6, 2019) 8
- 14th International Symposium on River Sedimentation (Chengdu, China, Sept. 16-19, 2019)
- ♦ 10th International Conference on Asian and Pacific Coasts (Vietnam, September 25-28, 2019)
- ♦ River Flow 2020 (The Netherlands, 7-10 July 2020) 9
- ♦ World's Large Rivers Conference 2020 (Russia, 3-7 August 2020)
 9

UNESCO"国际泥沙计划"简报

本期内容

新闻

- ◆ 国际泥沙计划(ISI)关于河流治理的出版物可在 UNESCO数字图书馆下载 1
 ◆ 国际泥沙计划(ISI)顾问委员会召开电话会议讨论 ISI 工 作 1
 ◆ 《国际泥沙研究》期刊改为双月刊 1
- ◇ 莎米拉・奈尔-贝杜埃勒就任教科文组织自然科学助理
 总干事
 2
- ◆ 第十四河流泥沙国际学术讨论会最新消息 2
- ◆ 美国航天局称中国和印度使得地球变得更绿了 3

出版物

3

- ◆ 《国际泥沙研究》期刊 2019 年第 34 卷第 1 期/第 2 期 论文目录
 5
- ◆ 《国际水土保持研究》期刊 2019 年第 7 卷第 1 期论文
 目录 6

会议信息

- ◆ 一带一路国际减灾和可持续发展国际研讨会(北京, 2019年5月11-12日)
 7
- ♦ UNESCO 国际水资源大会(法国, 2019 年 5 月 27-31 日) 7
- ◆ 世界水电大会 2019(法国, 2019 年 5 月 14-16 日)
- ◆ 第七届泥石流灾害防治国际学术讨论会(美国, 2019 年 6月 10-13 日)
 8
- ◆ 第三十八届 IAHR 世界大会(巴拿马, 2019 年 9 月 1-6
 日) 8
- ◆ 第十四次河流泥沙国际学术讨论会(成都, 2019 年 9 月 16-19 日)
 8
- ◆ 第十届亚太海岸国际学术研讨会(越南, 2019 年 9 月 25-28 日)
 8
- ◆ 河流流动 2020(荷兰, 2020 年 7 月 7-10 日)
- ◆ 世界大河学术讨论会(俄罗斯, 2020 年 8 月 3-7 日) 9

NEWS

New ISI publication on river control strategies is available in UNESCO Digital Library



The latest 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 now 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. The levee breaches and flood disasters over the past 2000 years are analyzed and the success of the two strategies is compared. The "narrow river and scouring sediment" strategy has only short term effects for controlling levee breaches and flood mitigation. The "wide river and depositing sediment" strategy can essentially mitigate flood disasters and reduce levee breaches for a long period of time. 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.

UNESCO Digital Library: https://unesdoc.unesco.org/ark:/48223/pf00003665 91.locale=en or

UNESCO-ISI Website: http://isi.irtces.org/isi/Publication/BooksandReports/ webinfo/2019/03/1552617672270515.htm

More UNESCO-ISI publications in UNESCO Digital Library:

Sediment problems and strategies for their management: experience from several large river basins (by Liu, C., Walling, D.E., Spreafico, M., Ramasamy, J., Thulstrup, H.D., and Mishra, A.)

https://unesdoc.unesco.org/ark:/48223/pf00002

58795

The Impact of global change on erosion and sediment transport by rivers: current progress and future challenges (by Walling, D.E.)

https://unesdoc.unesco.org/ark:/48223/pf00001 85078

Towards practical guidance for sustainable sediment management using the Sava River Basin as a showcase: establishment of the Sediment Monitoring System for the Sava River Basin (by International Sava River Basin Commission)

https://unesdoc.unesco.org/ark:/48223/pf00002 44651

Erosion and sediment dynamics from catchment to coast: a northern perspective, a southern perspective (by Di Silvio, G., and Basson, G.)

https://unesdoc.unesco.org/ark:/48223/pf00001 79062

ISI teleconference convened to discuss ISI activities

On April 9, 2019, an ISI Advisory Group teleconference was organized to discuss ISI activities for 2019 and 2020. Participants in the teleconference included ISI chair Prof. Manfred Spreafico, Prof. Des. Walling (UK, ISI Advisory Group), Prof. Cheng Liu (China, ISI Technical Secretariat), and Dr. Anil Mishra from UNESCO-IHP Secretariat. The following items were discussed:

1) ISI publications;

2) Proposal for ISI Workshop in Germany in 2020; and

3) The Sediment Data Base.

International Journal of Sediment Research becomes bimonthly

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 International Journal of Sediment Research, the official journal of the International Research and Training Center on Erosion and 2

Sedimentation and the World Association for Sedimentation and Erosion Research, publishes scientific and technical papers on all aspects of erosion and sedimentation interpreted in its widest sense. The Journal Impact Factor for 2017 was 1.659.

The scope of the journal includes not only the mechanics of sediment transport and fluvial processes, but also aspects related to geography, geomorphology, soil erosion, watershed



management, sedimentology, environmental and ecological impacts of sedimentation, social and economic effects of sedimentation and its assessment, etc. Special attention is paid to engineering problems related to sedimentation and erosion.

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/internationaljournal-of-sediment-research

Shamila Nair-Bedouelle nominated Assistant Director-General for Natural Sciences at UNESCO

Shamila Nair-Bedouelle took up her new duties as Assistant Director-General for Natural Sciences on 1 April 2019.

She comes to UNESCO from the United Nations Environment Programme (UNEP), where she had served as



Director of the OzonAction programme since 2012. Responsible for implementing the Multilateral Fund for the Montreal Protocol, she had coordinated a unique network of 147 national Ozone Action offices, providing developing countries with scientific and technical advice as to which alternative technologies to choose to the chemical substances depleting the Ozone Layer. A strong advocate for enhancing womens' role in science and engineering, she launched UNEP's first training programme for women technicians.

Born in 1960, Shamila Nair-Bedouelle holds a

PhD in Life Sciences from the University of Capetown in South Africa. She pursued her research career at the Institut Pasteur in Paris from January 1992 onwards then within the pharmaceutical industry at the MIT University Park in Boston, USA, from January 1994 until January 1996, when she integrated the French National Institue for Medical Research (Institut national de la santé et de la recherche médicale, INSERM). She has published in numerous scientific journals and is the co-inventor of several patents.

Dr Nair-Bedouelle has pursued her research interests in parallel to her career at the United Nations. She has been Director of Research at the University of Paris V in France since 2000 and was nominated First Class Director of Research at INSEM in 2017.

She also has a strong interest in managing science programmes. From 2002 to 2007, she was seconded from INSEM to the European Commission to serve as scientific officer and deputy scientific coordinator of scientific programmes.

In January 2007, Dr Nair-Bedouelle was seconded from INSEM to UNESCO to head its Ethics of Science and Technology programme.

Eighteen months later, she joined UNESCO's Sector for Natural Sciences as Chief of the Unit for Africa's Science and Technology Consolidated Plan of Action within the Division for Science Policy and Capacity-building. Here, she managed the United Nations Cluster for Science and Technology in Africa and represented UNESCO at the African Ministerial Council for Science and Technology. As Coordinator of the Working Group on Gender Equality at UNESCO from January 2010 onwards, she launched the first Science Camp for Girls in South Africa and coordinated science education projects on the continent.

Africa remained the focus of her work at the Africa Department, where she evaluated UNESCO's scientific programmes on the continent from January 2012 onwards before taking up her new functions as Director of Ozon Action at UNEP. (Source: UNESCO)

Updated information on the 14th ISRS

The LOC of the 14th International Symposium on River Sedimentation (Chengdu, China, Sep. 16-19, 2019) has indicated that 312 abstracts from over 22 countries or regions have been received by the deadline for abstract submission. A total of 10 Keynote speakers have been invited, including:

Astrid Blom, Delft University of Technology,

Panayiotis (Panos) Diplas, Lehigh University, USA;

Marcelo H. Garcia, University of Illinois at Urbana-Champaign, USA;

Marwan A. Hassan, The University of British Columbia, Canada;

Hajime Nakagawa, Kyoto University, Japan;

Jeffrey A. Nittrouer, Rice University, USA;

Jinren Ni, Peking University, China;

Zhaoying Wang, Tsinghua University, China;

Xudong Fu, Tsinghua University, China; and

Chao Liu and Xingnian Liu, Sichuan University China.

If you would like to submit a paper to the 14th ISRS, despite having missed the deadline for abstract submission, please contact the LOC (isrs2019@126.com) for special permission to submit your full length paper directly. The Symposium website is: http://www.isrs2019.cn/.

NASA says: China and India Lead the Way in Greening



The world is literally a greener place than it was twenty years ago, and data from NASA satellites has revealed a counterintuitive source for much of this new foliage. A new study shows that China and India—the world's most populous countries—are leading the increase in greening on land. The effect comes mostly from ambitious treeplanting programs in China and intensive agriculture in both countries.

Ranga Myneni of Boston University and colleagues first detected the greening phenomenon in satellite data from the mid-1990s, but they did not know whether human activity was a chief cause.

They then set out to track the total amount of Earth's land area covered by vegetation and how it changed over time.

The research team found that global green leaf area has increased by 5 percent since the early 2000s, an area equivalent to all of the Amazon rainforests. At least 25 percent of that gain came in China. Overall, one-third of Earth's vegetated lands are greening, while 5 percent are growing browner. The study was published on February 11, 2019, in the journal *Nature Sustainability*.

The maps on this page show the increase or decrease in green vegetation—measured in average leaf area per year—in different regions of the world between 2000 and 2017. Note that the maps are not measuring the overall greenness, which explains why the Amazon and eastern North America do not stand out, among other forested areas.

"China and India account for one-third of the greening, but contain only 9 percent of the planet's land area covered in vegetation," said lead author Chi Chen of Boston University. "That is a surprising finding, considering the general notion of land degradation in populous countries from overexploitation."



This study was made possible thanks to a twodecade-long data record from the Moderate Resolution Imaging Spectroradiometer (MODIS) instruments on NASA's Terra and Aqua satellites. An advantage of MODIS is the intensive coverage they provide in space and time: the sensors have captured up to four shots of nearly every place on Earth, every day, for the past 20 years.

"This long-term data lets us dig deeper," said Rama Nemani, a research scientist at NASA's Ames Research Center and a co-author of the study. "When the greening of the Earth was first observed, we thought it was due to a warmer, wetter climate and fertilization from the added carbon dioxide in the atmosphere. Now with the MODIS data, we see that humans are also contributing."

China's outsized contribution to the global greening trend comes in large part from its

programs to conserve and expand forests (about 42 percent of the greening contribution). These programs were developed in an effort to reduce the effects of soil erosion, air pollution, and climate change.

Another 32 percent of the greening change in China, and 82 percent in India, comes from intensive cultivation of food crops. The land area used to grow crops in China and India has not changed much since the early 2000s. Yet both countries have greatly increased both their annual total green leaf area and their food production in order to feed their large populations. The agricultural greening was achieved through multiple cropping practices, whereby a field is replanted to produce another harvest several times a year. Production of grains, vegetables, fruits and more have increased by 35 to 40 percent since 2000.



How the greening trend may change in the

future depends on numerous factors. For example, increased food production in India is facilitated by groundwater irrigation. If the groundwater is depleted, this trend may change. The researchers also pointed out that the gain in greenness around the world does not necessarily offset the loss of natural vegetation in tropical regions such as Brazil and Indonesia. There are consequences for sustainability and biodiversity in those ecosystems beyond the simple greenness of the landscape.

Nemani sees a positive message in the new findings. "Once people realize there is a problem, they tend to fix it," he said. "In the 1970s and 80s in India and China, the situation around vegetation loss was not good. In the 1990s, people realized it, and today things have improved. Humans are incredibly resilient. That's what we see in the satellite data."

NASA Earth Observatory images by Joshua Stevens, using data courtesy of Chen et al., (2019). Story by Abby Tabor, NASA Ames Research Center, with Mike Carlowicz, Earth Observatory.

Reference: Chen *et al.* (2019), China and India lead in greening of the world through land-use management. *Nature Sustainability*, (2) 122–129.

(Source: https://www.earthobservatory.nasa.gov/)

PUBLICATIONS



Papers Published in the International Journal of Sediment Research Volume 34, No. 1, 2019

Pages 1-84 (January 2019)

Estimation of debris flow discharge coefficient considering sediment concentration

Namgyun Kim, Hajime Nakagawa, Kenji Kawaike, Hao Zhang

Pages 1-7

The effects of hydrogen bonding on the shear viscosity of liquid water

Hongwei Fang, Ke Ni, Jian Wu, Jun Li, ... Danny Reible Pages 8-13

Impact of environmental variables on spatial and seasonal internal phosphorus loading in a mesoeutrophic lake Katarzyna Kowalczewska-Madura, Ryszard Gołdyn, Julia Bogucka, Katarzyna Strzelczyk Pages 14-26

Prediction of sedimentation in reservoirs by combining catchment based model and stream based model with limited data Abebe Tadesse, Wenhong Dai Pages 27-37

Portable rainfall simulator for plot-scale investigation of rainfall-runoff, and transport of sediment and pollutants Julien Boulange, Farag Malhat, Piyanuch Jaikaew, Kazuki Nanko, Hirozumi Watanabe Pages 38-47

Trophic functioning of macrobenthic fauna in a tropical acidified Bornean estuary (Southeast Asia) Mohammad Belal Hossain Pages 48-57

Partition-coordinated control of soil and water loss for chestnut forests in the Yanshan Mountain Region, China Xinhui Ding, Guangquan Liu, Xiaoying Liu, Yongsheng Xie, Zhichun Yue Pages 58-64

Assessment of water body change and sedimentation rate in Moulay Bousselham wetland, Morocco, using geospatial technologies Mounir Karim, Mehdi Maanan, Mohamed Maanan, Hassan

Rhinane, ... Lahssen Baidder Pages 65-72

Two-thousand years of debates and practices of Yellow River training strategies Zhaoyin Wang, Cheng Liu Pages 73-83



Papers Published in the International Journal of Sediment Research Volume 34, No. 2, 2019

Pages 85-190 (April 2019)

A SEM-based method to determine the mineralogical composition and the particle size distribution of suspended sediment

Sylvain Pinet, Bruno Lartiges, Jean-Michel Martinez, Sylvain Ouillon

Pages 85-94

Artificial neural network simulation for prediction of suspended sediment concentration in the River Ramganga, Ganges Basin, India

Mohd Yawar Ali Khan, Fuqiang Tian, Faisal Hasan, Govind Joseph Chakrapani

Pages 95-107

Unexpected sedimentation patterns upstream and downstream of the Three Gorges Reservoir: Future risks Yifan Huang, Jinsheng Wang, Mei Yang Pages 108-117

Characterization of horseshoe vortex in a developing scour hole at a cylindrical bridge pier Dawei Guan, Yee-Meng Chiew, Maoxing Wei, Shih-Chun Hsieh Pages 118-124

Prediction of daily sediment discharge using a back propagation neural network training algorithm: A case study of the Narmada River, India Nibedita Bisoyi, Harish Gupta, Narayan Prasad Padhy, Govind Joseph Chakrapani Pages 125-135 Download PDFArticle preview

Effects of non-submerged boulder on flow characteristics – A field investigation Hossein Afzalimehr, Mohammad Reza Maddahi, Danial Naziri, Jueyi Sui Pages 136-143

Erodibility study of sediment in a fast-flowing river Cheng He, David Nguyen Pages 144-154

Dynamic characterization of the migration of a mining pit in an alluvial channel Bandita Barman, Bimlesh Kumar, Arup Kumar Sarma Pages 155-165

Modeling aggregate size distribution of eroded sediment resulting from rain-splash and raindrop impacted flow processes

Selen Deviren Saygin, Gunay Erpul Pages 166-177

Evaluation of redox-sensitive metals in marine surface sediments influenced by the oxygen minimum zone of the Humboldt Current System, Northern Chile Alexis Castillo, Jorge Valdés, Abdel Sifeddine, Sue-Ellen

Vega, ... Yery Marambio Pages 178-190

Full papers are available at ScienceDirect:

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



Contents of ISWCR (Vol. 7, No.1, 2019)

International Soil and Water Conservation Research Volume 7, Issue 1 Pages 1-108 (March 2019)

Pisha sandstone: Causes, processes and erosion options for its control and prospects

Zhishui Liang, Zhiren Wu, Wenyi Yao, Mohammad Noori, ... Lin Deng

Pages 1-8

Modelling surface runoff using the soil conservation servicecurve number method in a drought prone agro-ecological zone in Rwanda

Dieudonne Uwizeyimana, Stephen M. Mureithi, Simon M. Mvuyekure, George Karuku, Geoffrey Kironchi Pages 9-17

Sustainable land management practices, off-farm work participation and vulnerability among farmers in Ghana: Is there a nexus?

Gazali Issahaku, Awal Abdul-Rahaman Pages 18-26

The assessment of water-borne erosion at catchment level

using GIS-based RUSLE and remote sensing: A review Kwanele Phinzi, Njoya Silas Ngetar

Water quality and sediment contamination assessment of Pazarsuyu Stream, Turkey using multivariate statistical methods and pollution indicators Fikret Ustaoğlu, Yalçin Tepe Pages 47-56

Impact of mine waters on chemical composition of soil in the Partizansk Coal Basin, Russia Ola Arefieva, Alina V. Nazarkina, Natalya V. Gruschakova, Julia E. Skurikhina, Vera B. Kolycheva Pages 57-63

Prediction of spatial land use changes based on LCM in a GIS environment for Desert Wetlands – A case study: Meighan Wetland, Iran Amir Ansari, Mohammad H. Golabi Pages 64-70

Spatial assessment of the areas sensitive to degradation in the rural area of the municipality Čukarica Natalija Momirović, Ratko Kadović, Veljko Perović, Miloš Marjanović, Aleksandar Baumgertel Pages 71-80

Effects of patchy distributed Artemisia capillaris on overland flow hydrodynamic characteristics Guanhua Zhang, Jiajun Hu Pages 81-88

A reference evapotranspiration map for Bosnia and Herzegovina Sabrija Čadro, Salwa Cherni-Čadro, Mihajlo Marković, Jasminka Žurovec Pages 89-101

The contribution of the European Society for Soil Conservation (ESSC) to scientific knowledge, education and sustainability

Carmelo Dazzi, Wim Cornelis, Edoardo A.C. Costantini, Mihail Dumitru, ... Ivan Vasenev Pages 102-107

Free full papers and open access are available at ScienceDirect : https://www.sciencedirect.com/journal/international-soil-andwater-conservation-research International Conference on Silk-roads Disaster Risk Reduction and Sustainable Development (Beijing, May 11-12, 2019)

Date: May 11-12, 2019 Venue: Beijing, China

venue: Beijing, China

Summary: The Silk Road, beginning in the Han Dynasty (207 BC-220 BC), crosses more than 70 countries and affects some 4.4 billion people (63% of the world). For centuries, the Silk Road has played an essential role in connecting the East and the West, through the exchange of trade, science technology and civilization. However, due to active underlying geological structures, including rapid tectonic uplift, climate change, and natural hazards (e.g., earthquakes, landslides, floods, typhoons, tsunamis, etc.) that occur frequently, these conditions place threats on both social development and livelihoods along the Silk Road. Furthermore, numerous challenges related to disaster risk reduction exist in this area, including a lack of background information and data sharing mechanism, as well as an absence of a scientific risk assessment method, and mitigation countermeasures, etc.

As a result of this serious situation, and integrated with the Sendai Framework for Disaster Risk Reduction and the Sustainable Development Goals 2030, there is an urgent need to promote international cooperation in disaster risk reduction and sustainable development along the Silk Road. Resilience against natural hazards must be improved and an international platform for joint research and information sharing relevant to disaster risk reduction and sustainable development is needed. Therefore, an international research program for the disaster risk reduction along the Silk Roads is being implemented under the umbrella of SiDRR (Silk-roads Disaster Risk Reduction) by Chinese Academy of Sciences.

The implementation of this program will enhance disaster prevention and will contribute to our ability to guarantee the security of livelihood of the affected countries. Based on this understanding, the Chinese Academy of Sciences (CAS), China Association for Science and Technology, and United Nations Environment Programme (UNEP) and International Scientific Partners will jointly host the International Conference on Silk-roads Disaster Risk Reduction and Sustainable Development in Beijing, on May 11-12, 2019.

Hosts: Chinese Academy of Sciences (CAS); China Association for Science and Technology; United Nations Environment Programme (UNEP)

Conference website: http://www.sidrr.com/

Contacts:

E-mail: sidrr@imde.ac.cn Contact persons: Dr. Xiaoqing Chen Email: xqchen@imde.ac.cn Tel:13008104468 Dr. Chaojun Ouyang Email: cjouyang@imde.ac.cn Tel:15928089209 Dr. Gordon G. D. Zhou Email: gordon@imde.ac.cn Tel:13980660182

UNESCO International (France, May 13-14, 2019) Conference

Water

Venue: Paris, France

Summary: Building on the interdisciplinary experience and expertise of UNESCO in the fields of education, sciences (both natural, social and human sciences), culture and communication, the Conference will bring stakeholders together around the table in order to address the need for an intersectoral approach to the governance and management of water resources. The Conference will aim to provide economically, socially and environmentally sustainable solutions, thus contributing to water security and peace.

The Conference will be organized around several thematic panels, tackling technological innovation, education for sustainable development, ethics, data for decision-making, peace, gender-responsive approaches, heritage, global change and its effects on freshwater and ocean systems, energy, and disasters.

Objectives of the conference:

- Bringing everyone around the table to discuss intersectoral approaches to the governance and management of water resources.
- Launching a Call for Action to foster, embrace, and adopt intersectoral water management.
- Sharing good practices enabling participation, transparency and information-sharing.
- Giving evidence of the importance of interdisciplinarity and the integration of sciences to support Member States in reaching the goals of the water-related international agendas.

For more information about the Conference and to register online, please visit:

https://en.unesco.org/waterconference and use the registration code: WATER2019

2019 World Hydropower Congress (France, May 14 -16, 2019)

Date: 14-16 May 2019

Venue: Paris, France

Summary: The World Hydropower Congress brings together industry, government, finance, academia and civil society to set priorities for the future direction of the hydropower sector. The seventh Congress, organised by the International Hydropower Association (IHA) will be held in Paris. With the theme of 'The Power of Water for a Sustainable World', the biennial event in May 2019 will focus on hydropower's role in delivering on the Paris Agreement and the Sustainable Development Goals. Up to 100 countries are expected to be represented at the Congress. Details on registration, the agenda and speakers will be announced in the coming months. Contact us to express your interest in participating in or sponsoring the Congress.

Conference

erence

website:

https://www.hydropower.org/congress/

CRIDA workshop (South Africa, 27 - 31 May 2019)

Date: 27-31 May 2019 Venue: Stellenbosch University, in Western Cape, South Africa

Date: 13-14 May 2019

Summary: Achieving and maintaining water security is increasingly challenging under current climatic variability and projected climate change, especially in vulnerable areas such as mountainous and semi-arid regions. Therefore, there is a need to identify pathways to integrate the science-based understanding of climate impacts on water security into mitigation and adaptation policies.

Therefore the 'Climate Risk Informed Decision Analysis (CRIDA): Collaborative Water Resources Planning for an Uncertain Future' methodology was developed. A CRDA capacity-building workshop will be organized in Cape Town, Southern Africa, to train key stakeholders on the different aspects of the CRIDA approach and to move towards the identification of potential case studies for demonstrative purposes. The workshop will also serve as a stakeholder meeting to identify the potential further activities in the region. This is particularly important in a region suffering from severe water insecurity over the last decades, as highlighted by the water shortages threatening the City of Cape Town in April 2018.

Website: https://en.unesco.org/climwar/capacity/crida

7th International Conference on Debris Flow Hazards Mitigation (USA, June 10 -13, 2019)

Date: 10 June 2019 - 13 June 2019

Venue: Golden, Colorado USA

Summary: We are pleased to announce that the 7th International Conference on Debris-Flow Hazards Mitigation will be held June 10 - 13, 2019 in Golden, Colorado, USA on the campus of Colorado School of Mines. With the beautiful Rocky Mountains covering half the state, Colorado shares the problem of debris-flow hazards with other mountainous areas of the world. Against this backdrop, scientists, engineers, and policy makers from around the world will be able to share new research and ideas in the field of debris flows. This website provides initial details of the conference and venue. Additional information will be added as the conference date approaches.

Conference website: http://dfhm7.csmspace.com/

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, IAHS, International Sediment Initiative (ISI)-IHP-UNESCO....(to be invited)

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 14th for the International Symposium on 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 (Weilin Xu, Chairperson of the LOC) series. .

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:

Email: isrs2019@126.com 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

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%.

More information:

URL: http://worldslargerivers.boku.ac.at/wlr/

E-Flyer:

http://worldslargerivers.boku.ac.at/wlr/images/stories/downlo ads/wlr2020_flyer.pdf



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

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

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International Sediment Initiative

Crescent lake in Maduo County, Qinghai Province, China, the Source Region of the Yellow River. (by Cheng LIU)