United Nations Educational, Scientific and Cultural Organization

INTERNATIONAL SEDIMENT INITIATIVE

NEWSLETTER

Reporting ISI news to you quarterly

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IN THIS ISSUE

News

- Message from Ms Irina Bokova, Director-General of UNESCO, on the occasion of the World Water Day 1
- ISI teleconference convened to discuss ISI activities 1
- ISI International Training Workshop on Integrated Sediment Management in River Basins will be held in Beijing 1
- ISI-LAC meeting held in Havana, Cuba 2
- Sino-Nigerian Seminar on Technology of Reservoir Sedimentation was held in Beijing 2
- Study shows how river channels adjust to large sediment supplies 2
- China establishes South China Sea lab to explore 8-million-year-old sediments 3
- More News on ISI Website 3

Conference Report

- The First Meeting of the Joint Working Group of Lancang-Mekong Cooperation was held in Beijing 4

Publications

- Papers published in IJSR Vol.32, No 1, 2017 5
- Contents of ISWCR (Vol. 5, No.1, 2017) 5
- Technical documents provided by Prof. Newton D. Carvalho 6
- Publications in ISI Information System 6

Coming Events

- 2nd International Workshop on Sediment Bypass Tunnels (Kyoto Japan, May 9-12 2017) 7
- The 14th International Symposium on the Interactions between Sediments and Water (Italy, June 17-22, 2017) 7
- CONSOWA 2017 (Spain, 12-16 June 2017) 8
- 10th International SedNet Conference “Sediments on the move” (Italy, June 14-17, 2017) 8
- IAHS 2017 Scientific Assembly “Water and Development: scientific challenges in addressing societal issues” (South Africa, July 10-14, 2017) 8
- 37th IAHR World Congress (Malaysia, August 13-18, 2017) 9
- 13th Hydraulics in Water Engineering Conference (Australia, 13-16 November 2017) 9
- More Coming Events on ISI Website 9

UNESCO“国际泥沙计划”简报

本期内容

新闻

- 世界水日联合国教科文总干事 Irina Bokova 女士致辞1
- ISI 召开电话会议讨论活动事项 1
- ISI 流域综合泥沙管理国际培训班将在北京举行 1
- ISI 拉丁美洲及加勒比地区会议在古巴哈瓦那召开 2
- 中尼水库泥沙淤积技术研讨会在北京召开 2
- 研究揭示河道如何调整适应大量泥沙汇入 2
- 中国在南海建立深海“野外实验室”,观测 800 万年前沉积物 3
- ISI 网更多新闻 3

会议报道

- 澜沧江-湄公河合作联合工作组第一次会议在北京召开 4

出版物

- 《国际泥沙研究》期刊 2017 年第 32 卷第 1 期论文目录 5
- 《国际水土保持研究》期刊 2017 年第 5 卷第 1 期论文目录 5
- Newton D. Carvalho 教授提供的技术文件 6
- ISI 信息系统更多出版物 6

会议信息

- 第二届国际泥沙旁通隧道研讨会(日本，2017 年 5 月 9-12 日) 7
- 第十四届水沙相互作用国际研讨会(意大利，2017 年 6 月 17-22 日) 7
- CONSOWA 全球大会(西班牙，2017 年 6 月 12-16 日) 8
- 第十届国际 SedNet 会议：泥沙运动(意大利，2017 年 6 月 14-17 日) 8
- IAHS-2017 科学大会(南非，2017 年 7 月 10-14 日) 8
- IAHR 第 37 届世界大会(马来西亚，2017 年 8 月 13-18 日) 9
- 第十三届工程水力学会议（澳大利亚，2017 年 11 月 13-16 日） 9
- ISI 网更多会议信息 9

NEWS

Message from Ms Irina Bokova, Director-General of UNESCO, on the occasion of the World Water Day

Most human activities produce wastewater and over 80 percent of the world's wastewater is released to the environment without treatment. This cannot go on – this is the message of the 2017 United Nations World Water Development Report. Limiting the discharge of untreated wastewater into nature not only saves lives and strengthens healthy ecosystems – it can help advance sustainable growth.

Access to safe water and sanitation services is essential to the human rights and dignity, and the survival, of women and men across the world, especially the most disadvantaged. This is vital for progress across the 2030 Agenda for Sustainable Development – water links all 17 Sustainable Development Goals and their interconnected targets.

In the face of growing demand, wastewater can be a reliable alternative source of water – this calls for shifting the paradigm of wastewater management from 'treatment and disposal' to 'reduce, reuse, recycle and resource recovery'. Wastewater should no longer be seen as a problem, but as part of the solution to challenges that all societies are facing. Treated wastewater can be a cost-efficient, sustainable, safe and reliable alternative source of water for a variety of purposes – from irrigation and industrial uses to drinking water, particularly under conditions of water scarcity. For this, we need to change mind-sets, to raise awareness and redouble educational efforts to share the benefits of wastewater reuse.

We need to see improved wastewater management at the heart of a circular economy, balancing development with the protection and sustainable use of natural resources. The benefits are wide-ranging, with implications on food and energy security and in mitigating the impacts of climate change.

As the United Nations agency for water sciences and education, UNESCO is working across the board to these ends, starting with the International Hydrological Programme and its network of National Committees, Centres and Chairs. Our World Water Assessment Programme provides Governments and the international community with cutting-edge and policy-relevant information on freshwater resources worldwide, pioneering also new techniques in gender-sensitive water monitoring. All of this is vital for the success of the 2030 Agenda.

At a time when demand is growing and limited resources are increasingly stressed by over-abstraction, pollution and climate change, we simply must not neglect the opportunities from improved wastewater management. We cannot afford to waste wastewater – this is UNESCO's message today.

Irina Bokov

ISI teleconference convened to discuss ISI activities

On February 24, 2017, the ISI Advisory Group held a teleconference to discuss ISI activities. Prof. Manfred Spreafico (ISI Chair), Prof. Des. Walling, Prof. Cheng Liu, Dr. Anil Mishra (UNESCO-IHP) and Mr. Hans Thulstrup (UNESCO-Beijing), members of the ISI Advisory Group, participated and discussions covered the following agenda.

- Introduction and opening;
- Update from IHP and ISI secretariat;
- ISI Workshop to be organized in China in October this year;
- ISI update from LAC region;
- ISI publication updates (Case study strategy document for UNESCO publication, Sediment Hotspots and others);
- Any other issues such as newsletters, website, and collaboration with other international organizations.

ISI International Training Workshop on Integrated Sediment Management in River Basins will be held in Beijing

The ISI International Training Workshop on Integrated Sediment Management in River Basins will be held in Beijing, China in October 2017. This represents a major ISI activity for 2017. It meets the objectives of the new strategy of ISI, which in turn contributes towards the 8th phase of IHP (2014-2021) with the title "Water security: responses to local, regional and global challenges" by addressing the wide-ranging social, economic and environmental impacts of erosion, sediment transport and sedimentation processes with due consideration of gender perspectives.

The five day training workshop will include lectures, seminars, and a one-day field visit. Topics to be covered include river basin management, soil and water conservation technology, ecology and restoration in integrated river basin management, reservoir sedimentation and sediment management technology. Participants will contribute to a seminar involving guided discussion of national case study presentations prepared by participants in advance of the Workshop. .

Participants will be nominated by UNESCO field offices in consultation with the IHP Secretariat. Additional participants, including participants from China, will be encouraged to attend the training course without financial support from the organizers.

Updated information about the workshop will be provided on the ISI website at http://www.irtces.org/isi/ .

ISI-LAC meeting held in Havana, Cuba

Representatives of participating countries attended a meeting of the International Sediment Initiative for Latin America and the Caribbean (ISI-LAC) held met in Havana, Cuba, in November 2016. During the meeting, activities agreed at the last meeting in Mexico (2015) were reviewed and activities for 2017 were confirmed. The main topics discussed were: (1) publications, including the book on Erosion Vol.3 and the CyTA special issue; (2) the Ibero-American Congress on Sediment (Costa Rica, 28-30 August 2017); (3) ISI Case Studies from the region; and (4) other activities such as the ISI-LAC web page, revision of the ToRs and a policy on sediment, ISI-LAC has contributed to the strengthening of capacity in the sediment field within the region through several workshops/seminars and conferences.

Sino-Nigerian Seminar on Technology of Reservoir Sedimentation was held in Beijing

A Sino-Nigerian Seminar on Technology of Reservoir Sedimentation was held in the International Research and Training Center on Erosion and Sedimentation (IRTCES) in Beijing on February 6, 2017. The participants came from the Regional Center for Integrated River Basin Management (RC-IRBM), in Kaduna, Nigeria and IRTCES, Both are Category II Centers under the auspices of UNESCO. The programme included both presentations and fruitful discussions.

Dr. Alayande Adegoke Waheed, Coordinator of Research and Training at RC-IRBM, and his colleagues Dr. Martin Obada Eduvie, Mr. Adamu Caleb Ibrahim and Mr. Salami Ibraheem Adedotun attended the seminar. IRTCES participants included: Prof. Ning Duihui and Prof. Liu Guangquan, Deputy Directors; Prof. Wang Yangui, Prof. Liu Cheng and Prof. Liu Xiaoying, Division Chiefs; Prof. Chen Yuehong and others. Prof. Guo Qingchao, Vice Director of the Department of Sediment Research, China Institute of Water Resources and Hydropower Research (IWHR) also attended the seminar.

Prof. Guo Qingchao, Dr. Alayande A. Waheed, Dr. Martin O. Eduvie, Prof. Ning Duihui, Prof. Wang Yangui, Prof. Liu Cheng and Prof. Liu Xiaoying made technical presentations on reservoir sedimentation, river basin management and other topics.

Prof. Liu Cheng, a member of the UNESCO-IHP-ISI Advisory Group, made a presentation introducing ISI and its Case Studies on sediment management in river basins.

The RC-IRBM experts visited the laboratory of sediment research of the Daxing Experimental Base of IWHR on February 7.

Study shows how river channels adjust to a high sediment supply

New findings undermine a common assumption about the relationship between river channel geometry and the size of sediment on the riverbed.

The seemingly simple question of what governs the shapes of river channels has been a longstanding challenge for geologists and civil engineers. A new study led by scientists at UC Santa Cruz shows that the amount of sediment a river transports is a key factor in determining river channel geometry and the size of the sediment on the riverbed.

The findings, published on March 13 in the Proceedings of the National Academy of Sciences, undermine a common assumption about gravel-bed rivers. The accepted notion, supported by decades of observations, is that gravel-bed rivers reach an equilibrium, called a threshold channel, where the median-sized particles on the riverbed only start to move when the channel is full (the "bankfull flow" stage, i.e. just short of flooding).

"If all channels are threshold channels, that's convenient because it helps us make predictions for management decisions and for modeling landscape evolution," said first author Allison Pfeiffer, a doctoral candidate in Earth and Planetary Sciences at UC Santa Cruz.

But Pfeiffer found that the assumption does not hold for rivers in regions with high erosion rates leading to large amounts of sediment moving through the river channels. These conditions are common in the steep, tectonically active landscapes found along the West Coast of North America. When Pfeiffer analyzed data on channel geometries and erosion rates for gravel-bed rivers throughout North America, she found most of the rivers that violate the threshold assumption are on the West Coast.

Steep landscapes

"Rivers in steep landscapes like the Santa Cruz Mountains transport lots of sediment compared to rivers in, say, Michigan or upstate New York," Pfeiffer said. "These rivers with high sediment supplies have adjusted their geometry to transport sediments at more moderate flows, so it doesn't take a flood event to move a lot of sediment."

As a result, the sediment on the riverbed is much finer than would be predicted by the threshold channel model. Coauthor Noah Finnegan, Associate Professor of Earth and Planetary Sciences at UC Santa Cruz, explained that threshold channels may only develop in settings where a low sediment supply allows the smaller grains to be swept away and not replaced. Left behind is a layer of "armoring" on the riverbed consisting of larger particles that might only move at the highest flow rates.

"West Coast rivers tend to have a less well-developed armor layer," Finnegan said. "If you change the sediment supply, the quickest thing to adjust will be the grain size of the armor layer."

Salmon habitat

When he and his students take measurements in local rivers, he said, the results typically do not conform to the threshold channel paradigm. Pfeiffer encountered this in the course of a project to predict the distribution of salmon spawning habitat in the Santa Cruz Mountains. Salmon need gravel in a certain size range to build their nests. Using the threshold assumption, Pfeiffer's predictions of gravel size were off by a factor of three.

"That can be a huge difference for a Coho salmon," she said. "Now we know that the sediment supply is a key factor that has to be taken into consideration if we're trying to predict salmon habitat."

The findings may also have practical implications for the design of river restoration projects. Rivers are self-forming systems, and their channels form and reform with every flood event. Efforts to impose human designs on them are not always successful.

"Rivers are tricky puzzles that continue to bring us new challenges," Pfeiffer said. "The importance of the sediment supply has perhaps gone underappreciated. We don't yet have the kind of theoretical model of river channels that we'd like to have, but this study shows that the sediment supply is a variable that has to be included in the model."

Coauthor Jane Willenbring, a geologist at UC San Diego, contributed the data on erosion rates. Pfeiffer's research was supported by a grant from the ARCS Foundation.

By Tim Stephens

(Source: http://news.ucsc.edu/2017/03/river-channels.html)

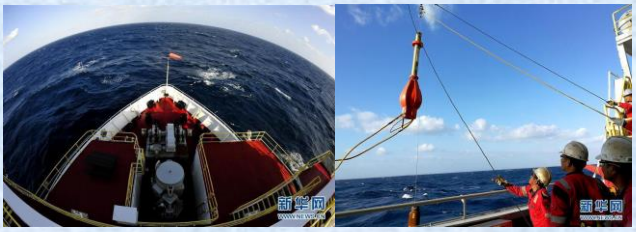
China establishes South China Sea Lab to explore 8-million-year-old sediments

China has built a field laboratory in the northeastern South China Sea, the focus of which will primarily be deep-sea sediments from 8 million years ago.

An integrated observation system of dynamic deep-sea sedimentary processes has been built to collect important marine data and sediment samples from the deep sea. The South China Sea is an ideal place to study deep-sea deposits, given its unique geographical position and complicated pattern of currents, said Liu Zhifei, a Professor at the State Key Laboratory of Marine Geology under Tongji University.

Liu noted that his team has already proven the existence of contour currents in the northern basin of the South China Sea, in addition to identifying two typical mid-ocean canyons in the region. He pointed out that the third South China Sea exploration voyage aims to trace deep sea sedimentary processes, adding that the JOIDES Resolution vessel has drilled 600 meters into the South China Sea seabed, discovering sediment samples that serve as a record of its evolution over 8 million years.

(Source: People's Daily Online, http://en.people.cn/ ）



The U.S. drilling vessel JOIDES Resolution entered the waters of the South China Sea on the afternoon of Feb. 14 to conduct a third drilling session. Thirty-three scientists from China and overseas proceeded to board the vessel. The first sampling tube of submarine sediment was drilled on Feb. 15, the Xinhua News Agency reported.

More News on ISI Website

- Minister Chen Lei calls for green development and highlights river chief system on the occasion of 2017 World Water Day and China Water Week
- Projects to improve traffic on Yangtze
- China launches Lancang-Mekong body with five countries
- Three Gorges Project generates 1 trillion kWh of electricity
- River systems a challenge for China
- Last year's crazy El Niño resulted in unprecedented beach erosion (USA)
- Xiluodu project a name card for China’s hydropower projects (China)
- Sediment diet in works for South River (USA)
- USGS Uses State-of-the-Art Science to Estimate Nutrient and Suspended-Sediment Loads in the Klamath Basin
- Coast erosion increased in 21st century

More ……
(http://www.irtces.org/isi/)

CONFERENCE REPORT

The First Meeting of the Joint Working Group for Lancang-Mekong Cooperation was held in Beijing

H.E. Mr. Zhou Xuewen, Vice Minister of the Ministry of Water Resources, met with delegates from the Lancang-Mekong five member countries in Beijing for the First Meeting of the Joint Working Group of LMC on February 26, 2017.

Mr. Zhou Xuewen welcomed the delegates from five member countries, and he pointed out that Lancang-Mekong Cooperation (LMC) was established to deal with water and water is the important mechanism for the Lancang-Mekong Cooperation among six countries. The First Meeting of Joint Working Group on Water Resources Cooperation of LMC is a crucial action to advance the implementation of the First LMC Leaders' Meeting and the Second LMC Foreign Ministers' Meeting. It will further strengthen the practical water resources cooperation under the LMC mechanism; promote the sustainable management of sub-regional water resources, and deliver real benefits to the people of six countries.

Mr. Zhou Xuewen stated that the Ministry of Water Resources of China has always attached great importance to exchange and cooperation among the Lancang-Mekong countries in the past. They have achieved successful and fruitful cooperative results in integrated water resources management, flood prevention and disaster reduction, hydrological information reporting and professional training areas, which have enhanced the sustainable development of water resources among each country.

Water resources cooperation is one of five key priority of LMC cooperation. Since last year, the Ministry of Water Resources (MWR) of China has actively implemented the spirit of the 1st LMC Leaders' Meeting, promoting the establishment of a Joint Working Group on Water Resources cooperation of LMC, as well as supporting ing the relevant work of establishing the Lancang-Mekong Water Resources Cooperation Center in China, and further supporting the national capacity building of Lancang-Mekong countries, for which MWR invited more than 130 officials, experts and scholars to come to China for exchange and training in 2016. After realizing that the Lancang-Mekong downstream countries were suffering from severe drought, China attached great importance to the situation, overcame various difficulties at home, and implemented emergency water supplementation from its domestic reservoirs to Mekong downstream countries. This helped to provide important drought relief for the Mekong Basin countries.

According to the joint observation and evaluation technical report prepared by the expert team from the Ministry of Water Resources of China and the Mekong River Commission Secretariat, the emergency water supplementation to the Mekong River achieved good results. All the Mekong Basin countries expressed praise and appreciation for China's rescuing actions. Mr. Zhou Xuewen finally wished the First Meeting of the Joint Working Group on Water Resources Cooperation of LMC great success.

The heads of the delegations of the JWG from all the five Lancang-Mekong countries expressed their appreciation for China's long-term efforts and support in the field of water resources, and they expressed a wish to strengthen technical exchange and cooperation in the water resources area, and to learn from the advanced and successful water management experience of China. This would benefit the people and help to achieve common prosperity and development across all the Basin countries

Delegates from the Department of Asian Affairs of the Ministry of Foreign Affairs, Department of International Cooperation, Science and technology of MWR, Office of State Flood Control and Drought Relief Headquarters, Bureau of Hydrology of MWR, Changjiang Water Resources Commission of MWR were present at the meeting.

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

PUBLICATIONS

Papers Published in the International Journal of Sediment Research Volume 32, No. 1, 2017

Pages 1-136

Evaluating methods to quantify sediment volumes trapped behind check dams, Saldaña badlands (Spain)
Pages 1-11
Iván Ramos-Diez, Joaquín Navarro-Hevia, Roberto San Martín Fernández, Virginia Díaz-Gutiérrez, Jorge Mongil-Manso

A semi-physical sediment yield model for estimation of suspended sediment in loess region
Pages 12-19
Wei Si, Weimin Bao, Peng Jiang, Liping Zhao, Simin Qu

Numerical investigation of the factors influencing the vertical profiles of current, salinity, and SSC within a turbidity maximum zone
Pages 20-33
Yuanyang Wan, Li Wang

Evolution of the Yellow River delta, China: Impacts of channel avulsion and progradation
Pages 34-44
Shan Zheng, Baosheng Wu, Kairong Wang, Guangming Tan, Shasha Han, Colin R. Thorne

Turbulent structure in uniform inclined open channel flow over different rough porous beds
Pages 45-52
Evangelos Keramaris

On the mechanisms of the saltating motion of bedload
Pages 53-59
Youhua Chen, Yuchuan Bai, Dong Xu

Influence of agricultural development and climate changes on the drainage valley density of the southern half of the Russian Plain
Pages 60-72
Valentin Golosov, Nadezhda Ivanova, Saniya Kurbanova

Experimental study of bed-load transport using particle motion tracking
Pages 73-81
Jaeho Shim, Jennifer G. Duan

Characteristics of micro-interface adsorption kinetics between sediments and Cu ions
Pages 82-89
Zhihe Chen, Bingchuan Zeng

Investigation of trace metals distribution in water, sediments and wetland plants of Kızılırmak Delta, Turkey
Pages 90-97
Mehmet Soner Engin, Ahmet Uyanik, Seydahmet Cay

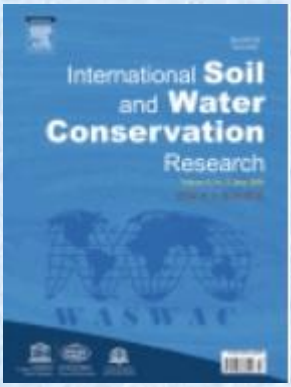
Laboratory measurements of vortex-induced sediment pickup rates
Pages 98-104
Niansheng Cheng, Adel Emadzadeh

Numerical simulation of dam-break flow and bed change considering the vegetation effects
Pages 105-120
Zhiguo He, Ting Wu, Haoxuan Weng, Peng Hu, Gangfeng Wu

Variation in hydraulic geometry for stable versus incised streams in the Yazoo River basin – USA
Pages 121-126
Nidal Hadadin

Evaluation and modification of some empirical and semi-empirical approaches for prediction of area-storage capacity curves in reservoirs of dams
Pages 127-135
Issa E. Issa, Nadhir Al-Ansari, Govand Sherwany, Sven Knutsson

Full papers are available at ScienceDirect:
http://www.sciencedirect.com/science/journal/10016279
with free access to the paper abstracts.



Contents of ISWCR (Vol. 5, No.1, 2017)

International Soil and Water Conservation Research
Volume 5, Issue 1, Pages 1-76

Effect of land use land cover dynamics on hydrological response of watershed: Case study of Tekeze Dam watershed, northern Ethiopia
Pages 1-16
Kidane Welde, Bogale Gebremariam

Methods for automatic identification and extraction of terraces from high spatial resolution satellite data (China-GF-1)
Pages 17-25
Yi Zhang, Mingchang Shi, Xin Zhao, Xiaojing Wang, Zhidong Luo, yuan Zhao

Erosion risk assessment: A case study of the Langat River bank in Malaysia
Pages 26-35
Roslan Zainal Abidin, Mohd Sofiyan Sulaiman, Naimah Yusoff

Quantifying the contribution of the root system of alpine vegetation in the soil aggregate stability of moraine
Pages 36-42
Csilla Hudek, Silvia Stanchi, Michele D'Amico, Michele Freppaz

Pro-environmental analysis of farmers' concerns and behaviors towards soil conservation in central district of Sari County, Iran
Pages 43-49
Masoud Bijani, Ezatollah Ghazani, Naser Valizadeh, Negin Fallah Haghighi

Multi-criteria decision analysis for sub-watersheds ranking via the PROMETHEE method
Pages 50-55
Tijana Vulević, Nada Dragović

Determinants of farmers' perception to invest in soil and water conservation technologies in the North-Western Highlands of Ethiopia
Pages 56-61
Desalew Meseret Moges, Aklilu Amsalu Taye

Influence of grazing exclosure on vegetation biomass and soil quality
Pages 62-68
Shagufta Qasim, Shamim Gul, Maria Hussain Shah, Fayyaz Hussain, Sarfraz Ahmad, Muhammad Islam, Gulbano Rehman, Muhammad Yaqoob, Syed Qasim Shah

The new Caribbean Nitrogen Index to assess nitrogen dynamics in vegetable production systems in southwestern Puerto Rico
Pages 69-75
Miguel Oliveras-Berrocales, David Sotomayor-Ramírez, Jorge A. Delgado, Luis R. Pérez-Alegría

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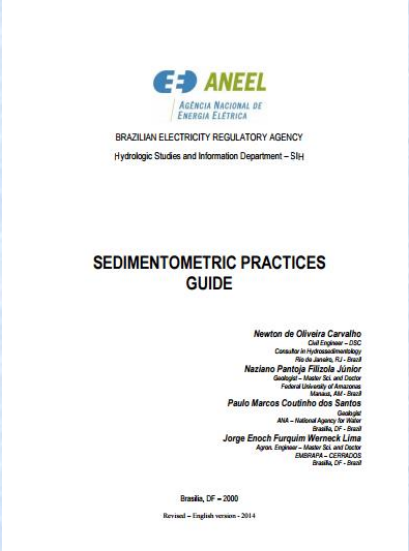
http://www.sciencedirect.com/science/journal/20956339

Technical documents provided by Prof. Newton D. Carvalho



Very many thanks are extended to Prof. Newton de Oliveira Carvalho, a distinguished expert on sediment research from Brazil, for providing technical documents for sharing within the UNESCO-IHP-ISI! The documents which can be downloaded from the section ">>Publication>>Books and Reports" of the ISI website include:

- Reservoir Sedimentation Assessment Guideline (Carvalho et al., 2014)
- Sedimentometric Practices Guide (Carvalho et al., 2014)
- Flow of Sediments in Brazil (Lima et al.) (in Portuguese)

Publications in ISI Information System

- Reservoir Sedimentation Assessment Guideline
- Sedimentometric Practices Guide
- Flow of Sediments in Brazil
- Dealing with Sediment: Effects on Dams and Hydropower Generation
- PPTs of the G-WADI Global Conference "G-WADI more than a decade enhancing water and sustainable development for arid regions"

More ……
(http://www.irtces.org/isi/info.asp)

COMING EVENTS

2nd International Workshop on Sediment Bypass Tunnels (Kyoto Japan, May 9-12 2017)

Workshop Statement: Sediment bypass tunnels (SBT) are hydraulic structures that gain worldwide importance as a measure to counter reservoir sedimentation. Sediments are bypassed around a dam to the tail water reach reducing sediment aggradation in the reservoir on the one hand and allowing for re-establishing sediment continuity on the other. The latter is more and more aimed at from an ecological point of view since river bed erosion downstream of the dam is decelerated along with an increase of morphological and ecological variability. The 1st IWSBT in April 2015 hosted by the Laboratory of Hydraulics, Hydrology and Glaciology at ETH Zurich, Switzerland, was a great success with 89 participants from 12 countries gathering to exchange and discuss latest research findings and experiences. We joyously invite you to participate at the 2nd IWSBT taking place in Kyoto, Japan, to further discuss newest SBT-related topics. A 1.5 day workshop will be held at Kyoto University, Uji Campus, accompanied by a 2 day field trip to Nagano Prefecture to visit the Miwa, Koshibu and Matsukawa sediment bypass tunnels. The workshop encompasses keynotes, oral presentations, poster sessions and sound discussions. We look forward to seeing you in Kyoto!

Themes: We kindly invite you to submit your abstract on one of the following topics:

A Upstream Aspects
1 Hydrology
2 Sediment Erosion & Inflow
B Tunnel
1 Hydraulics & Sediment Transport
2 Planning & Design
3 Tunnel & Inlet Works
4 Invert Abrasion
5 Maintenance
C Downstream Aspects
1 Morphological Changes
2 Ecological Effects
D Operation
1 Monitoring & Instrumentation
2 Real-time Operation

Contact: Water Resources Research Center
Disaster Prevention Research Institute
Kyoto University
Goka-sho, Uji 601-0011, Japan
email: kyoto.ecohydro@gmail.com
web: http://ecohyd.dpri.kyoto-u.ac.jp/index/2nd+Bypass+Tunnel+Wokshop.html

The 14th International Symposium on the Interactions between Sediments and Water (Italy, June 17-22, 2017)

Date: 17-22 June, 2017
Venue: Sicily, Italy

Invitation: The role of sediment in aquatic systems has attracted increasing attention in the last few decades from both an applied and a research perspective. Sediments act as both a pollutant in natural habitats as well as a vector for the transfer of chemicals such as nutrients and contaminants. Recognition of the environmental influence of both sediment and sediment-associated chemical (nutrients and contaminants) transfers and storage on aquatic ecosystems has generated much concern within both research and regulatory agencies. Studies have been undertaken by a variety of individuals in a wide range of disciplines as the environmental problems are found in rivers, lakes, wetlands, estuaries and oceans and affect the biological, chemical, physical and social components of the system.

The International Association for Sediment Water Science (IASWS), bringing together a wide range of researchers from different disciplines, seeks to promote, encourage and recognize excellence in scientific research related to sediments and their interactions with water and biota in fluvial, lacustrine and marine systems and with particular reference to problems of environmental concern.

The symposium that began in Amsterdam, Netherlands (1976) has continued on a three-year cycle, meeting in Canada (1981), Switzerland (1984), Australia (1987), Sweden (1990), U.S. (1993), Italy (1996), China (1999), Canada (2002), Slovenia (2005), Australia (2008), England (2011) and South Africa (2014). These tri-annual symposiums provide a forum for interdisciplinary discussions with the aim of better integrating knowledge of the biological, physical and chemical processes between sediments and water. The scale of the meeting is such that the exchange of ideas, techniques and approaches is fostered encouraging this integration and enabling future collaboration.

We invite you to participate in this conference. We hope that your attendance at the 14th International Symposium on the Interactions between Sediments and Water will be interesting and enjoyable for you, both scientifically and socially, and that you will enjoy your stay in Taormina.

Paolo Porto & Vito Ferro, Conference Chairs, Local organising Committee, IASWS 2017
IASWS 2017 website: http://www.iasws2017.altervista.org/
Deadline for abstract submission is August 15th 2016.
The selected papers presented in the conference will be published in a special issue of “Journal of Soils and Sediments”.

Contact: Prof. Paolo Porto
Conference Chair
Department of Agraria
University Mediterranea of Reggio Calabria
paolo.porto@unirc.it

KEY THEMES OF THE CONFERENCE

During the IASWS 2017 the following main topics will be addressed:

Theme A: Assessing and/or Restoring Disturbed Watersheds
Sediment Related Risk Assessment
Fine Particle Behavior
Sediment Geochemistry
Disturbed Catchments: Modelling and Measurement
Organic Matter and Particle Behavior
Contaminant fluxes and storage in disturbed systems
Sediment fluxes in natural and disturbed systems
Managing sediment quality/remediation of sediments
Catchment research platforms and management policy
Contaminant and nutrient behaviour in disturbed systems
Impact of wildfires on water ecosystems

Theme B: Sediment-Water Linkages in Terrestrial and Aquatic Environments
Sediment Budgets: Catchment Transfers
Sediment Budgets: Supply and Storage
Floodplain Sediment Storage

Sediment Associated Contaminant Transfers
Sediment Associated Nutrient Transfers
Sediment Transport
Soil Erosion
Monitoring/modelling sediment yields at multiple scales
Use of tracer technologies in sediment-water science
Dynamics of fine cohesive sediments
Theme C: Evaluating Change in Saline and/or Freshwater Habitats
Bio-Sediment Interactions
Sediment Associated Contaminants Sediment Dynamics in Aquatic Systems Hydrodynamic Effects on Sediment Processes Paleo-sediment Approach Sediment reconstruction, contaminants
Wood and fluvial ecosystems
Effect of wood on sediment structure and sorting
Theme D: Developments in monitoring and measuring sediment-water interactions and dynamics
Theme E: The role of sediment within catchment, river basin and coastal management

CONSOWA 2017 (Spain, 12-16 June 2017)

1st World Conference on Soil and Water Conservation under Global Change
Date: 12-16 June 2017
Venue: Lleida, Spain
Summary: A joint Conference of the "International Soil Conservation Organization" (19th ISCO Conference), the "World Association for Soil and Water Conservation" (Conference on Soil and Water Conservation of WASWAC), the "European Society for Soil Conservation" (8th ESSC Congress), the "International Union of Soil Science (USS-Comnmissions 3.2, 3.6), the Soil and Water Conservation Society (SWCS), the "International Erosion Control Association" (IECA) and the "World Association for Sedimentation and Erosion Research" (WASER), in parallel with the VIII Simposio Nacional sobre Control de la Degradación y Restauración de Suelos (SECS).
Sponsors: Universitat de Lleida (UdL), Spanish Society of Soil Science (SECS), ISCO, WASWAC, ESSC, IUSS, SWCS, WASER, IECA and ICEA
URL: http://www.consowalleida2017.com/
Contacts: fundacio@udl.cat

10th International SedNet Conference "Sediments on the move" (Genoa, Italy, June 14-17, 2017)

Date: June 14-17, 2017, with pre-conference sessions on 13 June 2017
Venue: the Palazzo San Giorgio, Genoa, Italy
Summary: SedNet is pleased to inform you that the 10th International SedNet Conference will be organized on 14-17 June 2017, in collaboration with DISTAV-University of Genoa and the Port Authority of Genoa.
Co-organized by DISTAV – University of Genoa, Italy
Hosted/sponsored by the Port Authority of Genoa
The conference title "Sediments on the move" refers to the fact that sediment moves from the mountains to the sea and from fresh water to marine environments thus passing cultural, political and geographical borders. But sediment is also on the move in terms of its evolving management that has been guarded, publicly discussed and jointly advanced by SedNet already for 15 years now. For more details see the brochure on the website First announcement and Call for Abstracts.
The Call for Abstracts is now open! And we kindly invite you to submit abstracts for the following conference themes:
1. Sediments moving to land, and soil moving to water
2. Sediment Balance
3. Policy for sediment management: Finding the balance; "everything is contaminated"
4. Using sediments as a resource – Sediments in a circular economy
5. Transboundary sediments
6. Innovative maintenance of river-delta-sea systems
7. Effects of remedial measures
8. Climate change; PIANC and SedNet Think Climate!
9. Sediment quality
10. Sediment quality criteria: derivation, implementation and enforcement
11. Disposal of sediments at sea
Please use the "Format for abstract" – see section "Downloads" on the right side of the conference webpage (http://sednet.org/events/sednet-conference-2017/).
Abstracts will be selected by the SedNet Steering Group either for platform presentation or for poster presentation.
Deadline: Abstracts must be submitted by email to the SedNet Secretariat before: 16 January 2017
Pre-conference sessions: The European projects Sediterra and Sedriport will organise pre-conference sessions on 13 June 2017. Participation to these sessions is free.
SEDITERRA – Guidelines for the treatment of dredged sediments consistent with a strategy and an assessment of the risks related to a land handling of sediments – provides for the capitalization of the knowledge gained from previous projects that have studied management models and treatment technologies applied to brackish and marine sediments, and the consequent experience gained by the French project partner to promote the reuse of treated dredged sediments in order to create a new supply chain in circular economy.
SEDRIPORT – Sediments, Dredging and Harbor risks – deals with problems common to the area of cooperation, arising from the emergency of the port silting: difficult to program ordinary and extraordinary dredging; incomplete and uncoordinated legislation; inconsistent regulations for the reuse of materials excavated from the port seabed; obligation to the global remediation with unsustainable costs.
Further information: Detailed information about the conference will be provided in the Conference Programme that will be published early spring 2017. Registration will also open early spring 2017.
In the meantime, if you have any questions, don't hesitate to contact the SedNet Secretariat.
Marjan Euser
SedNet Secretariat
www.sednet.org
T: +31(0)88335 7843
M: +31(0)65128 6087
E: marjan.euser@deltares.nl

IAHS 2017 Scientific Assembly "Water and Development: scientific challenges in addressing societal issues" (South Africa, July 10-14, 2017)

Date: July, 10-14, 2017
Venue: Port Elizabeth, South Africa
Summary: The South African National Committee of the International Association of Hydrological Scientists (SANC-IAHS is hosting 2017 IAHS Scientific Assembly "Water and Development: scientific challenges in addressing societal issues". The theme of the meeting is "Water and

Development: scientific challenges in addressing societal issues" which is particularly appropriate in the context of an IAHS Scientific Assembly meeting being held for the first time in sub-Saharan Africa and is well aligned with the IAHS Panta Rhei.

The conference will feature 26 thematic sessions. UNESCO- IHP will convene the session on "Facilitating Scientific contributions in water diplomacy and cooperation processes" (session #26) and will also co-convene the sessions "Hydrology and the Anthropocene" (session #1); "Understanding spatio-temporal variability of water resources and the implications for Integrated Water Resources Management (IWRM) in the semi-arid east and southern Africa" (session #3); "Extreme events: links between science and practice" (session #13); and "Graduate Schools in Water Sciences" (session #25)

URL: http://iahs.info/IAHS-2017.do

37th IAHR World Congress (Malaysia, August 13-18, 2017)

Date: August 13 - 18, 2017

Venue: Kuala Lumpur, Malaysia

Invitation: On behalf of the IAHR World Congress 2017 LOC, we are delighted to extend an invitation to you to join us in Kuala Lumpur, Malaysia for the IAHR World Congress 2017. The National Hydraulics Research Institute of Malaysia (NAHRIM), Department of Irrigation and Drainage Malaysia (DID) and the River Engineering and Urban Drainage Research Centre (REDAC), Universiti Sains Malaysia (USM) are collaborating with IAHR to organize theI AHR World Congress 2017.

The Congress theme "Managing Water for Sustainable Development - Learning from the Past for the Future" focuses on the central roles of river and sediment management, flood management, environmental hydraulics and industrial flows, coastal, estuarine and lakes management, urban water management, water resources management, and hydro informatics / computational methods as well as experimental methods in our changing world, and how these roles link to the broader issues. Careful management and innovative solutions are required and to deal with uncertainty in the natural world as well as the changing human world. We look forward to welcoming you to Kuala Lumpur in August 2017.

Ir. Dr. Azuhan Mohamed
Director General NAHRIM

Key Dates:
Abstract Submission: August 1, 2016
Abstract Notification: November 1, 2016
Paper Submission: February 1, 2017
Paper Notification: April 1, 2017
Paper Correction: May 1, 2017
Early Bird Registration: April 30, 2017
Congress: August 13 - 18, 2017

URL: http://www.iahrworldcongress.org/
Contact:iahr@iahr.org

13th Hydraulics in Water Engineering Conference (Australia, 13-16 November 2017)

The National Committee on Water Engineering and Engineers Australia is pleased to announce that the 13th Hydraulics in Water Engineering Conference will be held at the Dock Side, Sydney on 13-16 November 2017 (http://hiwe2017.com.au/). The conference will cover all aspects of Hydraulics in Water Engineering.

The Scientific Committee of the 13th Conference on Hydraulics in Water Engineering is inviting Authors to submit Abstracts to any of the following themes.

Conference Themes

- Applied Hydraulics(Best engineering practice, Risk management, Climate change adaptation, Education)
- Hydraulic structures (Conveyance structures, Dam operations, Hydropower, Flow structure interactions)
- Infrastructure(Storm water, Bridges, Pipes and pumps, Irrigation)
- Coastal Hydraulics (Ports and harbours, Shoreline protection, Geomorphology)
- Riverine Hydraulics (Rivers, Estuaries, Sediment transport, Wetlands)
- Numerical methods (Computational Fluid Dynamics, Smoothed-particle hydrodynamics, Flood forecasting)
- Environmental(Eco hydraulics, Environmental fluid mechanics, Ocean outfalls, Stratification, Water quality)
- Hydraulic Methods (Technology, Innovations, Physical modelling, Data collection, Industrial processes)

Submission Details

Download the Abstract Template provided and submit all Abstracts toabstracts@hiwe2017.com.auby31stMarch 2017. Once the Abstract has been accepted, authors are required to submit a full paper for peer review.

Further details and the Abstract Template can be found on the conference webpage: http://hiwe2017.com.au/call-for-abstracts/

Key Dates for your diary

Abstract submission closes 31 March 2017
Notification of acceptance of Abstracts 28 April 2017
Full papers due 23 June 2017
Final date for submission of revised full papers 15 Sept 2017
All oral presentation to be submitted October 2017

On behalf of the Local Organising Committee and the Scientific Committee
Stefan Felder (Chair of the Scientific Committee)

More Coming Events in ISI Website

- River Flow 2018 (France, Sept. 3-7, 2018)
- 21st Congress of IAHR-APD (Indonesia, Sept. 3-5, 2018)

More ……
(http://www.irtces.org/isi/)

INTERNATIONAL SEDIMENT INITIATIVE (ISI)

International Hydrological Programme (IHP)
UNESCO

ORGANISATION: UNESCO

Blanca Jimenez Cisneros	UNESCO, Paris
Hans Dencker Thulstrup	UNESCO, Beijing
Anil Mishra	UNESCO, Paris

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

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ISI TECHNICAL SECRETARIAT
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/

Secretary-General:
Hu, Chunhong China

Contact
Liu, Cheng China

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ISI Technical Secretariat
The ISI Newsletter is sent quarterly to ISI Governance members and interested experts. Please send your contributions to the ISI Chairperson at manfred.spreafico@hispeed.ch or ISI technical Secretariat at chliu@iwhr.com
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Editor: Dr. 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
Editor Assistant: Mr. Liu An
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Large concrete blocks using in the construction of the "Future City", Colombo, Sri Lanka
The construction is undertaken by the China Harbour Engineering Company LTD.