

INTERNATIONAL SEDIMENT INITIATIVE

NEWSLETTER

Reporting ISI news to you quarterly

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NEWS

ISI "Case Study on Utilization of Sediment Resource in the Lower Yellow River" finished

Within the framework of the UNESCO's Intergovernmental Programme for the "International Hydrological Programme (IHP-VII) activities within the International Sediment Initiative (ISI), IRTCES jointly undertake to implement pilot case study on "Utilization of Sediment Resource in the Lower Yellow River" in close cooperation with UNESCO Office in Beijing in 2010. IRTCES finishes the study and submits the research report "Case Study on Utilization of Sediment Resource in the Lower Yellow River" to the UNESCO Office Beijing on time. The contents of the report lists as:

1. Sediment Resource in the Yellow River
 - 1.1 Sediment Sources and Sediment Yield
 - 1.2 Changes in Sediment Resources
 - 1.3 Utilization of Sediment Resources
2. Sediment utilization in the main channel of the Lower Yellow River
 - 2.1 Features of the main channel formation
 - 2.2 Shaping a medium-flow channel through sedimentation distribution
 - 2.3 Warping for reinforcing river dikes
3. Sediment Utilization in Irrigation Districts along the Lower YR
 - 3.1 Introduction of the Diversion Runoff and Sediment Load
 - 3.2 Warping in Flood Period
 - 3.3 Changes of Building Material from Sediment
 - 3.4 Changing into farmland from highland by dredged sediment in the irrigation system
4. Sediment utilization in the Yellow River Delta
 - 4.1 Fluvial Processes of Yellow River Delta
 - 4.2 Land formation with sediment
 - 4.3 Comprehensive utilization of dredged sediment at the estuary
 - 4.4 Creating wetlands with sediment

Prof. Zhao-Yin. Wang of Tsinghua University honored with the 2011 Hans Albert Einstein Award

The Einstein Award Committee of the American Society of Civil Engineers (ASCE) recently informed that Prof. Zhao-Yin Wang had been selected to receive the 2011 Hans Albert Einstein Award. The award citation will read: "For his unique contributions to understanding of hyperconcentrated flows, debris flows, watershed vegetation-erosion dynamics, stream ecology and restorations, and integrated river basin management." In selecting Prof. Wang for this award the committee particularly noted his significant advances that are currently being used to address complex environmental erosion and sedimentation problems in China and all over the world.

Prof. Zhao-Yin WANG is professor of the Department of Hydraulic Engineering of Tsinghua University, China and the Chairman of the Advisory Council of the International Research and Training Center on Erosion and Sedimentation under the auspices of UNESCO. He was the first secretary-general and currently Vice Chairman of the World Association for Sedimentation and

Erosion Research (WASER) and council member of the International Association of Hydraulic Engineering Research (IAHR) and the vice-Chairman of IAHR China National Committee. Prof. Wang is the chief editor of the "International Journal of Sediment Research" and associate editor of "International Journal of River Basin Management". He is a member of the steering committee of UNESCO International Sedimentation Initiative. His research interest is mainly on sediment transportation, debris flow, turbulence structure of two-phase flow, river dynamics and river management, coastal engineering, environmental sedimentation and vegetation and erosion processes. He developed the Vegetation-erosion dynamics, which is a powerful tool for modeling and prediction of erosion and vegetation process of watersheds. In the past decade, Professor Wang devoted his efforts in the studies of river ecosystems and healthy river maintains, and Knickpoint development and step-pool system on mountain streams. In 2009, he and his research group applied an artificial step-pool system in the Wenjiagou debris flow gully in the earthquake area for debris flow control, and successfully mitigated debris flow hazard.

Hans Albert Einstein (May 14, 1904 – July 26, 1973) was a professor at University of California, Berkeley, in the field of hydraulic engineering. He was the first son of renowned physicist Albert Einstein. Hans Albert had made outstanding contributions to the engineering profession and his advancements in the areas of erosion control, sedimentation and alluvial waterways. In 1988 the ASCE created the Hans Albert Einstein Award to recognize a member who has made a significant contribution to the engineering profession in the area of erosion control, sedimentation and/or waterway development either in teaching, research, planning, design or management. (by LIU Cheng)

International Advanced Training Workshop on Water and Soil Conservation will be held in Beijing, China on Sept. 20-28, 2011

The International Advance Training Workshop on Water and Soil Conservation will be a major activity of the International Sediment Initiative (ISI) of UNESCO for 2010-2011. It should meet one of the objectives of ISI on "Education and capacity building for sustainable sediment management". The workshop has been designed to fulfill the demands of engineers, scientists, managers, stakeholders and decision-makers in various countries. Through lectures, discussions, exchanges and a one-day field study, the participants will have the opportunity to improve their professional skills in water and soil conservation theory and practical knowledge, acquire the latest concepts, techniques and information, and establish linkage among participants.

The training course will be arranged in lectures, demonstration and seminars with following topics:

- Situation of global soil erosion;
- Soil erosion types and their characteristics;
- Soil erosion mechanism and its estimation ;
- Main measures of water and soil conservation;
- Check dam for water and soil conservation in Loess Plateau in China;

- River sediment management and River Ecology Restoration
- Field study on small-watershed integrated management in the suburb area of Beijing.
- Seminar

For more information, please go to the online announcement available at:

http://www.unesco.org/water/water_events/Detailed/2171.shtml or http://www.irtces.org/isi/WebNews_View-en2.asp?WebNewsID=654

Category II centre announces International Water Law Scholarship Programme

As capacity-building support to its Partner organisations, the IHP-HELP Centre for Water Law, Policy and Science, under the auspices of UNESCO, at the University of Dundee, together with the Global Water Partnership, will offer scholarships for 30 participants to undertake a module in International Water Law, in Dundee, August 1-19, 2011. Applications will be accepted from 4 March to 30 April 2011.

The module is aimed at persons working in water resources who wish to acquire specialist knowledge of international water law, especially as it relates to transboundary water challenges in the GWP regions.

Applicants to the joint GWP-University of Dundee IWL Programme should be from GWP Partner organisations and are required to be proficient in English, either as native speakers, or to a standard of an IELTS score of 6.5. A university degree is required in Hydrology, Environmental Science, Law, Agriculture, or related field. (Source: UNESCO, <http://www.unesco.org/water/>)

IRTCES Celebrates the Chinese Lunar New Year together with UNESCO

As Chinese new lunar year, the year of rabbit, is approaching, the International Research and Training Center on Erosion and Sedimentation (IRTCES) hosted a reception in the evening on January 19 to express thanks to the close related organizations for their support. Among the invited organizations were the UNESCO Office Beijing, National Commission of China for the UNESCO and Department of International Cooperation, Science and Technology of the Ministry of Water Resources of China (MWR). The reception was attended by Dr. R. Jayakumar, Program Specialist of UNESCO Office Beijing and his colleagues, Mr. Fang Maotian and Ms. Yu Xiaoping, Secretary General and Division Chief of the National Commission of China for the UNESCO and their colleague, Mr. Jin Hai, Division Director of the Department of International Cooperation, Science and Technology of the MWR, and Mr. Gao Zhanyi and Mr. Ning Duihu, Deputy Directors of IRTCES and their colleagues.

Prof. Gao Zhanyi warmly welcomed all participants on behalf of IRTCES with sincere thanks to the UNESCO, National Commission of China for the UNESCO and the MWR for their long-term supports to the IRTCES. After briefing the last year's achievements of IRTCES Prof. Gao expressed that the IRTCES would do its best to make further progresses in the coming New Year under the guidance and supports of UNESCO, National Commission of China for the UNESCO and MWR. Mr. Fang Maotian mentioned that the successful experiences of the IRTCES, the first established UNESCO Category II center in China as well as in the world, were worth to take reference for

other UNESCO Category II centers. Dr. R. Jayakumar congratulated the achievement of IRTCES during last year and hoped to strengthen cooperation with IRTCES for this year's international training workshop and work of the technical secretariat of the International Sediment Initiative. Mr. Jin Hai expressed continuously support to IRTCES and wished IRTCES have more accomplishments in the New Year. (by Liu Cheng, IRTCES)



Yellow River basin suffers serious erosion (China)

In one of the worst examples of erosion in the world, 62 percent of the Yellow River basin area has been affected by water and soil erosion, a recently released report by the Yellow River Conservancy Commission has found.

The report, released on Dec 30, is part of a national campaign to raise public concern about environmental protection along the river and to provide guidelines for policymakers. The report includes basic information about water and soil erosion along the river, measures taken to protect the environment and future goals. Similar reports will be released regularly. The report said the area of the river basin affected by water and soil erosion covers 465,000 square kilometers. Although careful management prevents 350 to 450 million tons of mud and sand flowing into the river every year, reducing the area suffering from erosion by nearly 226,000 sq km, the need for better environmental protection in the Yellow River basin is still urgent. The report said nearly 90 percent of areas in the country that are suffering from severe water and soil erosion are in the Yellow River basin, making it one of the most-eroded areas in the world. It also said more than 20 percent of the sand and mud flowing into the river every year comes mainly from the midstream of the river, which should be the focus of attention in future management. Most of the sand and mud in the river is found in the midstream, an area of 18,800 sq km. Although this area represents only 2.5 percent of the total river basin it delivers 20 percent of the mud and sand to the river every year, the report said. The management of the river's midstream is the key to protecting the river, the report said.

Water and soil erosion have been major problems for China for decades. According to research by the Asian Development Bank, the economic losses caused by water and soil erosion are equal to about 3.5 percent of the country's annual GDP, Sun Honglie, academician of the Chinese Academy of Sciences, told Xinhua News Agency in October 2010. From 1950 to 1999, more than 9 billion tons of mud and sand flowed into the lower reaches of the Yellow River, raising the riverbank by 2 to 4 meters, Sun said. The latest statistics from the commission showed that during the period of the 11th Five-Year Plan (2006-

2010), more than 2 billion tons of mud and sand had been prevented from flowing into the river, helping to improve conditions for plant and human life in the area. (By Wang Qian, China Daily. <http://english.peopledaily.com.cn/>)

China pledges to spend more in repairing dangerous reservoirs

China will spend more than 62.54 billion yuan (about 9.48 billion U.S. dollars) in repairing and consolidating its legions of dangerous small reservoirs across the country in the forth coming five years, according to a statement released after an executive meeting of the State Council held on Tuesday.

The meeting was presided over by Premier Wen Jiabao. The spending plan is part of the country's efforts to combat increasingly frequent natural disasters such as floods and drought. The majority of the nation's existing reservoirs had many problems after decades of use, which had severely affected flood-control efforts, the statement said. Over the past three years, the government has spent more than 70 billion yuan to improve 7,356 medium- and small-sized reservoirs. Also at the meeting, a guideline for accelerating the development of modern crops and seeds was discussed and passed. The meeting agreed to build a batch of standardized and intensive large-scale seed-planting bases by the end of 2020. Such development would play a critical role in promoting long-term agricultural production and ensuring grain security, the statement said. A draft regulation on land reclamation was also passed at the meeting. (Source: Xinhua, <http://www.xinhuanet.com/>)

USDA Releases Study Showing Conservation Practices Protect Water Resources In The Chesapeake Bay Watershed(USA)

Effective use of conservation practices and systems by farmers in the Chesapeake Bay watershed are reducing sediment and nutrient losses from cultivated cropland. Recently, the U.S. Department of Agriculture released a study, "Assessment of Conservation Practices on Cultivated Cropland in the Chesapeake Bay Region," which quantifies these environmental gains and identifies opportunities for further progress.

"Agriculture plays an important role in protecting water quality and maintaining economic stability in this watershed," said Dave White, Chief of the USDA Natural Resources Conservation Service, as he announced the study results today. "This study confirms that farmers are reducing sediment and nutrient losses from their fields. Our voluntary, incentives-based conservation approach is delivering significant and proven results. This study will help us improve our conservation practices in the Chesapeake Bay area."

The study also shows that there are opportunities for further reductions of sediment and nutrient losses from agriculture by focusing conservation activities on the most vulnerable acres. Well managed farmland is among the best land uses for sustaining natural resources in the watershed. Conserving working lands will be instrumental in meeting objectives for a healthy Chesapeake Bay.

Key findings of the Conservation Effects Assessment Project (CEAP) study include:

- Conservation practices have reduced edge-of-field losses of sediment by 55 percent, nitrogen in surface runoff by 42 percent, nitrogen in subsurface flow by 31 percent and phosphorus by 40 percent.
- Targeting enhances effectiveness and efficiency. Use of additional conservation practices on acres with a high need for additional treatment can reduce per-acre sediment and nutrient losses by more than twice that of treatment of acres with low or moderate conservation needs.
- Comprehensive conservation planning and implementation are essential. The study shows that the most significant conservation concern on cultivated cropland in the watershed is the loss of nitrogen by leaching and overland flow. Suites of conservation practices that include soil erosion and comprehensive nutrient management are required to address soil erosion and nutrient losses simultaneously.

The CEAP results will be used to improve the focus on priority conservation needs and results in the Chesapeake Bay Watershed. This is the second CEAP study for cultivated cropland. NRCS is the lead USDA agency for CEAP. The complete Chesapeake Bay cropland study report and findings from other CEAP studies can be found at

www.nrcs.usda.gov/technical/nri/ceap/chesapeake_bay/index.html .

(Source: Water Online, <http://www.wateronline.com/>)

More News in ISI Website

- Contents of IJSR (Vol. 26, No.1, 2011)
- Presidents of WASWAC Visit IMHE, CAS (China)
- Watching Columbia River sediment from space (USA)
- Hong Kong, China: Plan for New Sediment Dump Site at Lantau Moves Ahead
- Prof. Zhao-Yin. Wang of Tsinghua University honored with the 2011 Hans Albert Einstein Award
- China launches national Water Week campaign
- Minister Chen Lei wrote an article for World Water Day & China Water Week (China)
- Water for Cities: responding to the urban challenge
- USDA Releases Study Showing Conservation Practices Protect Water Resources In The Chesapeake Bay Watershed(USA)
- DVD on international hydrology and water resources: 11,000 copies to be launched in India
- Category II centre announces International Water Law Scholarship Programme
- The world celebrates World Water Day (22 March)
- International Advanced Training Workshop on Water and Soil Conservation will be held in Beijing, China on Sept. 20-28, 2011
- China to invest 52 billion yuan in south-north water diversion
- China pledges to spend more in repairing dangerous reservoirs
- Environmentalists say dumping of river sediment outdated (Australia)
- China to step up water conservancy development efforts
- UNESCO sponsored International Workshop on 'Education for Managing Hydrological Extremes and Related Geo-Hazards' held in Pakistan
- Who's responsible for increased sediment? (USA)

- IRTCES Celebrates the Chinese Lunar New Year together with UNESCO
- Brazil landslides: Military steps up rescue operation
- Australia's Queensland faces 'biblical' flood

More
[\(http://www.irtces.org/isi/\)](http://www.irtces.org/isi/)

CONFERENCE REPORT

UNESCO sponsored International Workshop on 'Education for Managing Hydrological Extremes and Related Geo-Hazards' held in Pakistan



Workshop Inaugural Session

UNESCO sponsored International Workshop on 'Education for Managing Hydrological Extremes and Related Geo-Hazards' held in the National University of Sciences and Technology of Pakistan (NUST) in Islamabad on January 24-26, 2011. The workshop was sponsored by UNESCO and Higher Education Commission of Pakistan, and organized by the School of Civil and Environmental Engineering, NUST.

Hydrological extremes (floods and droughts) and related geo-hazards are of growing concern for global, regional and national stakeholders. It is therefore important to build capacities at all levels to understand, predict and manage potential impacts of land-use, population, climate change and increased frequency of related geo-hazards such as landslides on regional and global freshwater resources. Recent floods in Pakistan have also highlighted the need to strengthen national, provincial and local capacities to manage hydrological extremes and related geo-hazards through dedicated education and training programs. Objectives of the Workshop: 1) To identify examples of best practices of water education for managing hydrological extremes at all educational levels and how these can be used to strengthen education systems in Pakistan and the South Asia region; 2) To analyze examples of best practices to identify barriers and opportunities; and 3) To develop a work plan to enable effective water education in Pakistan and South Asia at all educational levels.

Seventeen representatives from UNESCO water family and international organizations and universities in Pakistan were invited to make presentations in four sessions: training of higher level policy stakeholders in flood and drought, advanced tertiary level education and

research, training middle level managers and technicians, and community education and capacity building. The speakers from the UNESCO water family includes: Prof. Soontak Lee, Chairperson of the Intergovernmental Council of IHP; Dr.HAN Qunli, Director and Representative of UNESCO Tehran Cluster Office; Prof. Bart Schultz, UNESCO-IHE; Prof. E.R.N. Gunawardena, University of Peradeniya, SriLanka; Prof. Olusanjo Bamgboye, Executive Director of the National Water Resources Institute, Nigeria; Prof. Kuniyoshi Takeuchi, Director of ICHARM; Dr. Homayoun Motiee, Director of RCUWM-Tehran; and Prof. LIU Cheng, IRTCES-China.

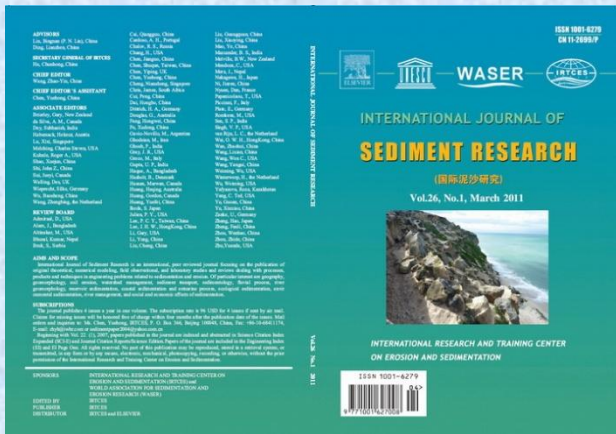
Based on a SWOT analysis as a result of the workshop the key issues and messages were primarily framed for Government of Pakistan and the international community, in particular for future strategic plans. This analysis provided useful directions and recommendations for the relevant organisations in the region, the private sector and NGOs and for practitioners including academics, researchers, trainers, teachers and mass media professionals.

Prof. Gretchen Kalonji, Assistant Director General for natural science of UNESCO, participated in the workshop and made a speech in the inaugural session. Pakistan Minister Hameedullah Jan Afridi for Environment and Minister Pir Aftab Hussain Shah Jilani for Science and Technology attended the inaugural and closing sessions as chief guests and made speeches, respectively. UNESCO officials including Dr. Shahbaz Khan, Chief of Sustainable Water Resources Development and Management Section of UNESCO, and Dr.HAN Qunli, Director and Representative of UNESCO Tehran Cluster Office, participated in the workshop, made speech and presentation, chaired discussions and moderated SWOT analysis. (by Liu Cheng, IRTCES)



Prof. Gretchen Kalonji, ADG for natural science of UNESCO, makes a speech in the inaugural session

**Papers Published in Issue 1 Volume 26, 2011,
 International Journal of Sediment Research**



Volume 26, Number 1 March 2011

Technical Papers

An improved method for evaluating the seasonal variability of total suspended sediment flux field in the Yellow and East China Seas

PANG Chongguang, YU Wei, YANG Yang, and HAN Danxiu

Incipient motion of gravel in a bottomless arch culvert

B. M. CROOKSTON and B. P. M. TULLIS

Time lag between reduction of sediment supply and coastal erosion

HUANG Guangwei

A new closure methodology for 1D fully coupled models of mobile-bed alluvial hydraulics: application to silt transport in the Lower Yellow River

N. HUYBRECHTS, ZHANG Y. F, and M. A. VERBANCK

Effect of non-point source pollution on water quality of the Weihe River

LI Jiake, LI Huaien, SHEN Bing, and LI Yajiao

Turbulent flow field over fluvial obstacle marks generated in a laboratory flume

B. S. MAZUMDER, H. MAITY, and T. CHADDA

Modified vegetation-erosion dynamics model and its application in typical watersheds in the Loess Plateau

CHEN Yuehong, WANG Feixin, LIU Guangquan, YU Xinxiao, JIA Guodong, and GAN Ping

Effect of sediment on concentration of dissolved phosphorus in the Three Gorges Reservoir

CAO Zhijing, ZHANG Xinbao, AI Nanshan

Study on the transport of suspended sediment in an open channel flow with permeable spur dikes

Zu-peng GU, Ryosuke AKAHORI, and Syunsuke IKEDA

Technical notes

A methodological approach for estimating turbidity in a river

Annamaria De VINCENZO, Bruno MOLINO, Rosa VIPARELLI, and Pompilio CARAMUSCIO

Cover Photo: Wave erosion at a beach near the Cape of Good Hope, South Africa

Publications in ISI Information System

- Assessment of the Effects of Conservation Practices on Cultivated Cropland in the Chesapeake Bay Region (USDA)
- UNESCO Water Chair releases book Risk Analysis of Water Pollution
- UNESCO-IHP releases new brochure on Urban Water Series
- Reservoir Sedimentation in Brantas River Basin, Indonesia
- Contaminated Sediments in European River Basins(SedNet)
- Integration of Sediment in River Basin Management (SedNet)
- Bedload-Surrogate Monitoring Technologies (Gray et.al)
- Effects of Urbanization, Construction Activity, Management Practices, and Impoundments on Suspended-Sediment Transport in...
- Storminess and Environmental Changes in the Mediterranean Central Area (Diodato & Bellocchi)
- International Sediment Initiative (ISI) Case Study Report: Volga River

More

(<http://www.irtces.org/isi/info.asp>)

COMING EVENTS

4th International Conference on Estuaries and Coasts (Vietnam, Oct.8-11, 2012)

Date: 8-11 October 2012

Venue : T45 Conference Hall, Water Resources University, Hanoi, Vietnam

Summary: The 4th International Conference on Estuaries and Coasts (ICEC-2012) will be held in Hanoi, Vietnam, co-organized by Water Resources University and the International Research and Training Center on Erosion and Sedimentation (IRTCES). The ICEC2012 aims at providing a forum for discussion and exchange among researchers and scientists in the field of estuary and coast.

Organizer: Water Resources University, Vietnam

Sponsors: International Research and Training Centre on Erosion and Sedimentation (IRTCES)

Co-Sponsors: UNESCO, IAHR, IAHS, WASER, and other institutes and organizations to be invited

Secretariat: Water Resources University, Vietnam

Permanent Secretariat: IRTCES

Conference Themes: Vision and Imagination – Water in an Era of Change, with sub-themes

Climate Change

Water Resources and Hydrology

Environmental and Ecological Hydraulics

Coastal and Estuarine Hydrodynamics

Estuarine and Coastal Management

Design, Maintenance and Management of Waterways

in Estuaries and Harbors

Research Technologies for Estuarine Engineering

Coastal Structures

Coastal Hazard

URL: <http://www.icec2012.edu.vn/>

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ISI International Advanced Training Workshop on Water and Soil Conservation

From 2011-09-20 **to** 2011-09-28

Venue: Beijing, China

Summary: The international advanced training workshop has been designed with a view to fulfilling the demands of engineers, scientists, managers, stakeholders and decision-makers in various countries. Through lectures, discussions, exchanges and a one-day field study, the participants will be able to improve their professional skills in water and soil conservation theory and practical knowledge, acquire the latest concepts, techniques and information, and establish linkage among participants. This training workshop will be a major activity of the International Sediment Initiative (ISI) of UNESCO for 2010-2011. It is expected to meet one of objectives of ISI on education and capacity building for sustainable sediment management.

Organizers: International Sediment Initiative (ISI) of UNESCO; International Research and Training Centre on Erosion and Sedimentation (IRTCES); Ministry of Water Resources, P.R. China

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URL:

http://www.irtces.org/isi/isi_document/2011/isi_training_workshop_irtces_2011.pdf

http://www.unesco.org/water/ihp/events/isi_training_workshop_irtces_2011.pdf

International Conference on the Status and Future of the World's Large Rivers (Vienna, 11-14 April 2011)

Date: 11-14 April 2011

Venue : University of Natural Resources and Applied Life Sciences, Vienna

Summary: The pressures and impacts on the World's Large Rivers have increased greatly in recent years, as a consequence of their exploitation to meet human needs. Large rivers are particularly exposed to problems of multiple uses, often with conflicting aims. At the global scale, there is no overview assessment of the current status of the World's Large Rivers, the conflicting demands on such rivers, and likely future anthropogenic impacts, as well as the potential for restoration and the associated problems. The International Conference on "The Status and Future of the World's Large Rivers" 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. A statement, agreed by the participants, will be produced to assess the existing and future needs of large rivers in order to better integrate their use, protection and restoration and to devise an action plan.

The conference is sponsored by: UNESCO, IAHR, IAHS and WASER

The conference is organised by BOKU - University of Natural Resources and Applied Life Sciences, Vienna. Take the opportunity to participate in the conference on the World's Large Rivers, to be held from 11 – 14 April 2011, and visit the beautiful city of Vienna. We look forward to welcoming you to Vienna!

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

Contacts: worldslargerivers@boku.ac.at

RCEM2011 - The 7th IAHR Symposium on River, Coastal and Estuarine Morphodynamics (Beijing, Sept. 6-8, 2011)

Date: Sept. 6-8, 2011

Venue : Beijing, China

Summary: The IAHR Subcommittee on River, Coastal and Estuarine Morphological processes (RCEM) held the first 6 of this successful series of conferences in Genova, Italy; Obihiro, Hokkaido, Japan; Barcelona, Spain; UIUC, Illinois, USA; Enschede, the Netherlands; and Santa Fe City, Argentina. The language of the conference is English. The IAHR Symposia on River, Coastal and Estuarine Morphodynamics provide a forum for the scientists and river engineers to share ideas and research results on river, coastal and estuarine morphodynamics. Tsinghua University will host the 7th IAHR Symposium on River, coastal and estuarine morphodynamics in the year 2011. The central theme of this conference is "Impacts of Hydro-Projects on River, Coastal and Estuarine Processes".

Organizer: Tsinghua University, Beijing, China

Themes: The scope of the conference will be broad, covering all issues related to river, coastal and estuarine morphological processes. Specific themes include, but are not limited to:

Processes

Sediment yield and sediment transport
Incised rivers
Alluvial rivers
Deltas, estuaries, bays
Responses of river and estuaries to floods and storms
Environmental and ecological aspects of morphological processes

Field investigations, experiments, and simulations

Impacts of catastrophic events on morphological processes
Landslide and debris flow
Turbulent flow in rivers and coastal areas
Modeling of catchment and fluvial processes

Man-nature interaction

Impacts of large hydraulic structures on catchment, fluvial and coastal processes
Disturbance of stream-lake systems and its environmental and ecological impacts
Sedimentation processes in large reservoirs
River engineering and restoration, habitat protection, environmental flows

Focuses

River confluences, tributaries and distributaries
Bedforms, bars and braiding
River bends and meandering, scouring and bank erosion
Turbidity currents and submarine morphodynamics
Tidal flats, coastal and shelf bedforms

URL: <http://sklhse.tsinghua.edu.cn/rcem2011/rcem2011.html/>

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34th IAHR Biennial Congress (Australia, 26 June-1 July 2011)

Date: 26 June-1 July 2011

Venue: Brisbane, Australia at the Brisbane Convention and Exhibition Centre

Summary: The 34th Biennial Congress of the International Association of Hydraulic Engineering and Research (IAHR) will be held in Brisbane, Australia at the Brisbane Convention and Exhibition Centre on 26 June-1 July 2011. Engineers Australia and its National Committee on Water Engineering (NCWE) are collaborating with IAHR to organize the 34th IAHR Biennial Congress together with the 33rd National Hydrology and Water Resources Symposium and the 10th National Conference on Hydraulics in Water Engineering.

The Congress theme "Balance and Uncertainty: Hydraulic Engineering in a Changing World" focuses on the central roles of hydraulic engineering, hydrology, and water resources for our changing world, and how these roles link to the broader issues. A balance is continually being sought between competing values in water engineering, including the environment, the economy, tourism, social and indigenous values, health aspects, aesthetics, and the needs of current and future generations. Careful management and innovative solutions are required to

balance these competing values, and these solutions must be able to deal with the uncertainty in the natural world as well as the changing human world.

By 2011, it will have been 26 years since an IAHR Biennial Congress was held in Australia. The last time was Melbourne in 1985.

URL: <http://www.iahr2011.org/>

Contacts: info@iahr2011.org

APAC2011 - The 6th International Conference on Asian and Pacific Coasts (Hong Kong, Dec. 14-16, 2011)

Date: Dec. 14-16, 2011

Venue: Hong Kong, China

Summary: Hong Kong, widely celebrated as Asia's world city, is increasingly integrated with the Pearl River Delta Region of China. Sustainability of Hong Kong depends on coastal developments that require engineering solutions. The issues of concern include coastal reclamation, offshore wind farms, coastal water quality, Hong Kong-Zhuhai-Macau Bridge, and other coastal infrastructure projects. This international conference hosted by The University of Hong Kong will be a platform for engineers and researchers to keep abreast of the current scientific and technological advancements in coastal, port, ocean engineering, and other related fields. The University of Hong Kong is organising the 6th International Conference on Asian and Pacific Coasts in December 2011, which will be a platform for engineers and researchers to keep abreast of the current scientific and technological advancements in coastal, port, ocean engineering, and other related fields.

Organizer: University of Hong Kong

Themes: The scope of the conference will be broad, covering all issues related to coastal, harbour, and ocean engineering. Specific themes include, but are not limited to:

- Beach erosion and sediment transport
- Climate change and sea level rise
- Coastal infrastructure developments
- Hydrodynamics of offshore structures
- Lowland development and reclamation
- Marine ecology and environments
- Marine and offshore wind energy
- Oil spill and environmental hazards
- Port works (dredging, seawall design, etc.)
- Sea water intrusion
- Tsunami, waves and tides
- Wastewater disposal
- Wetlands

URL: <http://www.civil.hku.hk/apac2011/>

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ISELE - International Symposium on Erosion and Landscape Evolution (Alaska, USA, September 18-21, 2011)

Date: Sept 18-21, 2011

Venue : Anchorage, Alaska, USA

Summary: Soil erosion caused by water and/or wind is a continuing problem throughout the world that threatens the capacity of the Earth to produce food, fiber, and renewable sources of energy for an ever-increasing population. Additionally, eroded sediment is a major air and water pollutant, causing many detrimental off-site impacts. Erosion by wind and/or water processes continually impacts the evolution of landscapes. With global climate change, erosion and landscape evolution may be accelerated, particularly in regions such as Alaska, where increases in air temperature of just a few degrees may shift large landscape areas from frozen to thawing and more erodible conditions. This symposium provides a forum for participants to discuss the current status and the future of soil erosion research. This international conference is hosted by the American Society of Agricultural and Biological Engineers (ASABE) and held in conjunction with the Association of Environmental and Engineering Geologists (AEG) annual meeting. Submission deadline for paper abstracts is December 31, 2010.

Organizer: American Society of Agricultural and Biological Engineers (ASABE)

Themes: The scope of the conference will be broad, covering all issues related to water and aeolian soil erosion, and subsequent landscape evolution. Specific themes include, but are not limited to:

- Erosion Processes (Detachment, Transport, Deposition)
- Prevention and Control of Upland and In-Stream Erosion
- Highly Disturbed, Urban Areas, and Arid Lands
- Erosion Processes in Wetlands, Coastal, and Glacial Areas
- Aeolian Erosion and Fugitive Dust Emission
- Impacts of Global Change on Erosion Processes and Landscape Evolution

URL: <http://twosweet.bse.vt.edu/ISELE2011/index.html>

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12th International Symposium on the Interactions between Sediments and Water (Dartington, England, 19-23 June 2011)

Date: 19-23 June 2011

Venue: Dartington, Devon, England

Summary: 12th International Symposium on the Interactions between Sediments and Water, Dartington, Devon, England. Organised by the International Association for Sediment Water Science (IASWS)

URL: <http://www.IASWS.org>
and www.geog.plymouth.ac.uk/IASWS2011

5th International Conference on Flood Management (Japan, Sept.27-29, 2011)

Date: 27-29 September 2011

Venue: . Tsukuba, Japan

Summary: International Conference on Flood Management (ICFM) is the only recurring international conference wholly focused on flood related issues. It is designed to bring together practitioners and researchers alike, including engineers, planners, health specialists, disaster managers, decision makers, and policy makers engaged in various aspects of floodplain management. It provides a unique opportunity for these various specialists to come together to exchange ideas and experiences.

The 5th International Conference on Flood Management (ICFM5) marks the continued advancement of flood management practices and policies around the world. The name change from "Defence" as used in the previous four events to "Management" is reflective of the more integrative approaches to flood management that nations are increasingly employing. The first International Symposium on Flood Defence, held in Kassel, Germany in 2000, emphasized flood defence measures with each successive event (Beijing 2002, Nijmegen 2005 and Toronto 2008) evolving towards more integrative approaches, including risk, vulnerability and capacity building.

The ICFM5 theme is "Floods: From Risk to Opportunity", reflective of the continued trend towards a broader understanding of how we collectively make use of the opportunities provided by floods and flooding, cope with risks posed by them and plan for and respond to flood events.

Organizer: International Centre for Water Hazard and Risk Management (ICHARM)

URL: <http://www.ifi-home.info/icfm-icharm/icfm5.html>

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Coastal Sediments'11 (USA, May 2-6, 2011)

Date: May 2-6, 2011

Venue : Miami, Florida, USA

Summary: The conference Organizing Committee welcomes you to the Seventh International Symposium on Coastal Engineering and Science of Coastal Sediment Processes—Coastal Sediments '11!

The Coastal Sediments'11 conference is the seventh in the series following the inaugural conference in 1977. The Coastal Sediments technical specialty conferences provide an international forum for exchange of information among coastal engineers, geologists, marine scientists, shallow-water oceanographers, and others interested in the physical processes of coastal sediment transport and morphology change.

Coastal Sediments 11 will continue to maintain the high quality of presentations and Proceedings which has made the event a valuable professional learning experience with a legacy of a frequently consulted Proceedings volume.

URL: <http://coastalsediments.cas.usf.edu/>

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Symposium on Two-phase Modelling for Sediment Dynamics in Geophysical Flows (France, April 26-28, 2011)

Date: April 26-28, 2011

Venue : Electricité De France Research & Development, Paris, France

Summary: Sediment transport is key to many geophysical applications: sediment deposition and resuspension processes in rivers and estuaries, morphological evolution of waterways and coastal zones, formation and displacement of turbidity maxima in estuaries, impacts of sediment drainage, breaching process in dyke- and dam-break flows, etc. In this research field, two-phase approaches have been more and more developed since they describe the physical processes responsible for sediment transport more realistically than a single-phase approach.

The THESIS-2011 (Symposium on Two-phase Modelling for Sediment Dynamics in Geophysical Flows) has the following objectives:

1. To establish a forum for discussing and exchanging experience and knowledge within the international research community for developing two-phase approaches applicable to sediment dynamics in geophysical flows;
2. To review the state-of-the-art of the two-phase approach for sediment dynamics;
3. To promote international cooperation and promote development of a research agenda for this research domain.

URL: http://www.shf.asso.fr/upload/manifestation_programme112.pdf

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More Coming Events in ISI Website

- 4th International Conference on Estuaries and Coasts (Vietnam, Oct.8-11, 2012)
- APAC2011 - The 6th International Conference on Asian and Pacific Coasts (Hong Kong, Dec. 14-16, 2011)
- 5th International Conference on Flood Management (Japan, Sept.27-29, 2011)
- ISI International Advanced Training Workshop on Water and Soil Conservation
- ISELE - International Symposium on Erosion and Landscape Evolution (Alaska, USA, September 18-21, 2011)
- RCEM2011 - The 7th IAHR Symposium on River,

Coastal and Estuarine Morphodynamics (Beijing, Sept. 6-8, 2011)

- 34th IAHR Biennial Congress (Australia, 26 June-1 July 2011)
- 12th International Symposium on the Interactions between Sediments and Water (Dartington, England, 19-23 June 2011)
- Coastal Sediments'11 (USA, May 2-6, 2011)
- Symposium on Two-phase Modelling for Sediment Dynamics in Geophysical Flows (France, April 26-28, 2011)
- International Conference on the Status and Future of the World's Large Rivers (Vienna, 11-14 April 2011)
- 7th International SedNet conference (Venice, 6-9 April 2011)
- The 4 th International Symposium Water Resources and Sustainable Development (Algeria, Feb., 2011)

More

(<http://www.irtces.org/isi/>)

Newsletter Layout and Production:

ISI Technical Secretariat

The ISI Newsletter is sent quarterly to ISI-Steering Committee members and interested experts. Please send your contributions to the Chairman of ISI SC at manfred.spreadico@googlemail.com or ISI technical Secretariat at chliu@iwhr.com



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