

## About Hohai University

Hohai University (HHU), established in 1915 as Hohai Engineering School and with a long history of over 100 years, is a state key university directly administered by Chinese Ministry of Education with Hydraulic Engineering and Water Resources as its distinctive feature, engineering subjects as its priority, and coordinated development of multiple disciplines.



HHU has three campuses in two cities taking up an area of about 1.7 million square meters, namely the Xikang Road Campus and Jiangning Campus in Nanjing and Changzhou Campus in Changzhou City. HHU has now over 3400 faculties and staff, and 32898 full-time students.

The discipline of Hydraulic Engineering and Water Resources at HHU ranks No.1 nationwide in the Discipline Assessment conducted by Chinese Ministry of Education and enjoys remarkable reputation worldwide. The disciplines of Engineering and Environment/Ecology are in the top 1% of world ESI ranking.



## Technical Tours

### ◎ Tianmu Lake

Tianmu lake is located in Liyang City of Jiangsu Province, China. It is currently graded as an AAAAA nature reserve. The lake region covers an area of 17.92 km<sup>2</sup>, and its depth ranges from an average of 6 m to a maximum of 15.0 m.



### ◎ Pingqiao Rock Dam



Pingqiao rock dam is located 2 km to the southeast of Tianmu lake. It was built in 1975, and is the largest masonry arch dam in Asia. The dam is 24 m high and 122 m long.

### ◎ Shahe Reservoir

Shahc Reservoir is situated within the Tianmu lake area. It was built in 1957, and was upgraded several times after 1980s. It currently has a maximum water storage of 112 million m<sup>3</sup>. The reservoir is also equipped with a pumped-storage plant with a capacity of 1500 MW.



## International Workshop on Coastal Dynamics & Environment

June 11-16, 2018  
Nanjing China | Hohai University



## Workshop Introduction

To further promote international reputation of discipline of Harbor, Coastal and Offshore Engineering, the Key Laboratory of Coastal Disaster and Defence (Hohai University) founded by Chinese Ministry of Education will hold an international workshop on coastal dynamics and environment on 11-16 June, 2018. The workshop has invited 14 talks from the three partner Universities, i.e. the University of Auckland, Nanyang Technological University, and Hohai University, and will cover a variety of research topics, such as estuary and coastal hydrodynamics, sediment transport, hydraulic structures, polluted water treatment, and urban water management. The experts and students attending the workshop will share their latest research progress and discuss the potential cooperation in application of international joint research projects, students and staff exchanges, etc. The workshop will also include a technical excursion (14-16 June) to Tianmu Lake District.

## Sponsor

Key Laboratory of Coastal Disaster and Defence  
(Hohai University), Chinese Ministry of Education

## Organizing Committee

### Chair:

Prof. Jisheng Zhang  
Vice Dean of College of Harbour, Coastal and Offshore Engineering  
Hohai University

### Secretary-General:

Dr. Dawei Guan  
Lecturer of College of Harbour, Coastal and Offshore Engineering  
Hohai University

### Secretariats:

Mr. Dake Chen Mr. Yuan Li Mr. Lai Jiang Mr. Jialin Zhao

## Contact Information:

E-mail: CE\_HHU2018@163.com  
Address: No.1 Xikang Road, Nanjing 210098, China

## Workshop Program

Date	Time	Program
10 June	Arrive in Nanjing, Hotel Check-in, Welcome Dinner	
	Session Chair: Jisheng Zhang	
	8:30-8:35	Welcome Address, <i>Jinhai Zheng</i>
	8:35-9:20	Scour at Hydraulic Structures, <i>Bruce Melville</i>
	9:20-9:50	Multi-scale Morphodynamic Processes in Coastal Restoration, <i>Chi Zhang</i>
	9:50-10:10	Tea Break
	10:10-10:55	Propeller Jet Flow and Erosion, <i>Yee-Meng Chiew</i>
	10:55-11:25	Demonstration Project of Tidal Stream Energy in Zhoushan, China, <i>Jisheng Zhang</i>
	11:25-11:55	Current Scour at Vibrating Monopiles, <i>Dawei Guan</i>
	11:55-14:00	Lunch
11 June	Session Chair: Chi Zhang	
	14:00-14:30	Flood Risk Adaptation Under Climate Change and Land-use Changes, <i>Asaad Shamseldin</i>
	14:30-15:00	Seasonal Circulation and Variability over the Inner Shelf of the Northern South China Sea, <i>Xiaomei Ji</i>
	15:00-15:30	Strategies to Manage Seawater Intrusion, <i>Chunhui Lu</i>
	15:30-15:50	Tea Break
	15:50-16:20	Water Quality of Impacted Waterbodies in New Zealand and India and Technologies for Restoring These, <i>Naresh Singhal</i>
	16:20-16:50	Microorganism and Bioremediation, <i>Yi Li</i>
	16:50-17:20	Microbial Technology for Vegetative Building in Coastal Beach, <i>Lihua Chen</i>
17:20-20:00	Dinner	
12 June	Session Chair: Dawei Guan	
	8:30-9:00	Progress in Tsunami-related Research, <i>N.A.K. Nandasena</i>
	9:30-10:00	Guided Waves over the Ocean Ridge, <i>Gang Wang</i>
	10:00-10:30	Non-hydrostatic Modelling of Estuarine and Coastal Hydrodynamics, <i>Jian Shi</i>
	10:30-10:50	Tea Break and Group Photo
	10:50-11:50	Research Discussion amongst the Three Parties (Hohai, UoA and NTU) for Potential Cooperation, <i>Chaired by Jisheng Zhang</i>
	11:50-14:00	Lunch
	14:00-14:40	Lab Visit in Xikang Road Campus
	14:40-17:30	Lab Visit in Jiangning Campus
	17:30-20:00	Dinner
13 June	NHRI Visit (Hosted by NHRI)	
14-16 June	Technical Excursion	

**Note:** The location for all the presentations on 11-12 June is Room 301, State Key Laboratory of Hydrology-Water Resources and Hydraulic Engineering, Xikang Road Campus, Hohai University.

## Invited Experts



Prof. Jinhai Zheng, Hohai University  
*Cheung Kong Distinguished Professor of Chinese Ministry of Education*  
*Distinguished Young Scholar of National Science Foundation of China*  
Research areas: estuarine and coastal hydrodynamics, fluid mechanics, nearshore hydrodynamics and morphodynamics  
E-mail: jhzheng@hhu.edu.cn

Prof. Bruce Melville, The University of Auckland  
*Fellow of the Royal Society of New Zealand*  
*Distinguished Fellow of the Institution of Engineers New Zealand*  
Research areas: fluid mechanics, hydraulics, hydrology, water resources engineering, sediment transport, sediment erosion, bridge scour, tsunami  
E-mail: b.melville@auckland.ac.nz



Prof. Yee-Meng Chiew, Nanyang Technological University  
Research areas: fluvial, coastal and offshore engineering, sediment erosion and scour, sediment transport and turbulence  
E-mail: cymchiew@ntu.edu.sg

Prof. Jisheng Zhang, Hohai University  
Research areas: wave-seabed-structure interaction, offshore renewable energy engineering, coastal engineering  
E-mail: jszhang@hhu.edu.cn



A/Prof. Asaad Shamseldin, The University of Auckland  
Research areas: hydrology and water resources, urban water management, floods and tsunami modelling, natural hazard mitigation  
E-mail: a.shamseldin@auckland.ac.nz

Prof. Wei Zhang, Hohai University  
Research areas: estuarine and coastal hydrodynamics, estuarine morphodynamics, saltwater intrusion  
E-mail: zhangweihhu@126.com



A/Prof. Naresh Singhal, The University of Auckland  
Research areas: contaminated sites remediation, groundwater flow and transport, landfill processes, stormwater management  
E-mail: n.singhal@auckland.ac.nz

Prof. Fusheng Ni, Hohai University  
Research areas: dredging equipment, dredging process, sediment transport, CFD modeling, fluid mechanics  
Email: fushengni@163.com



Prof. Chunhui Lu, Hohai University  
Research areas: coastal aquifer, groundwater remediation, saltwater-freshwater mixing, seawater intrusion, numerical modelling  
E-mail: clu@hhu.edu.cn

Dr. Napayalage Nandasena, The University of Auckland  
Research areas: boulder transport by tsunami (paleo tsunami construction, tsunamiite), impact force by tsunami-driven debris  
E-mail: n.nandasena@auckland.ac.nz



Prof. Yi Li, Hohai University  
Research areas: water quality, environmental impact assessment, water microbiology, polluted water treatment  
E-mail: envly@hhu.edu.cn

Prof. Chi Zhang, Hohai University  
Research areas: coastal restoration, beach nourishment, sediment transport, nearshore hydrodynamics and morphodynamics  
E-mail: zhangchi@hhu.edu.cn



A/Prof. Gang Wang, Hohai University  
Research areas: harbor oscillations, edge waves, Boussinesq model, wave motion  
E-mail: gangwang@hhu.edu.cn

A/Prof. Lihua Chen, Hohai University.  
Research areas: coastal resources and environment, agricultural and water conservation  
E-mail: chenlihua2001@163.com



Dr. Jian Shi, Hohai University  
Research areas: wave modelling, CFD simulation, saltwater-freshwater mixing  
E-mail: jianshi@hhu.edu.cn

Dr. Dawei Guan, Hohai University  
Research areas: sediment transport, local scour, experimental fluid mechanics  
E-mail: david.guan@hhu.edu.cn

