

## DRAFT PROGRAM

Welcome Reception		
Opening Ceremony		
Keynote Speeches		
Session 1: Climate Change Adaptation		
Innovation and Entrepreneurship Meeting Point		
Dinner		
ion 2: Coastal Environment / Resilience		
ion 3: Coastal Environment / Resilience		
Innovation and Entrepreneurship Meeting Point		
Field Trip to NORSCEM		
Visit to Macao SAR Government		
Field Trip		
<u>e A</u> : Site Visits to Zhuhai / Zhongshan		
<u>e B</u> : Site Visits in Macao		
Trip		
<u>e A</u> : Site Visits to Zhuhai / Zhongshan		
<u>e B</u> : Site Visits in Macao		

March 27 - April 1, 2023

Faculty of Innovation Engineering

Macau University of Science and Technology

Macao, China

March 28	DRAFT PROGRAM			
	Opening Ceremony			
22.22.22.12	Venue: Sicily Meeting Room, Level 1, Cotai Expo, The Venetian Macao			
09:00-09:10	<ul> <li>Welcome Address by Chair Prof. Joseph Hun-wei Lee - President of MUST</li> <li>Opening Remarks by General Vasco Joaquim Rocha Vieira - The 127th Governor of Macao</li> </ul>			
09:10-09:35	<ul> <li>Opening Address by</li> <li>Mr. Wai Nong Lei - Secretary for Economy and Finance, Macao SAR</li> <li>Prof. Fatima Montemor - Vice-president, Instituto Superior Técnico, University of Lisbon</li> <li>Dr. Helena Alegre - Head, National Civil Engineering Laboratory, Portugal (LNEC)</li> <li>Prof. Peter Goodwin - President, University of Maryland Center For Environmental Science</li> </ul>			
09:35-09:50	<ul> <li>Inauguration Ceremony of Key Laboratory of River Basin Digital Twinning of Ministry of Water Resources</li> <li>Prof. Peng Jing – President, China Institute of Water Resources and Hydropower Research (IWHR)</li> <li>Introduction to Key Laboratory of River Basin Digital Twinning of Ministry of Water Resources</li> </ul>			
09:50-10:05	- MOU Signing Ceremony - Coastal Environmental Studies and the National Observation and Research Station of Coastal Ecological Environments in Macao (MUST) and State Key Laboratory of Marine Pollution (CityU HK) Introduction to Coastal Environmental Studies and the National Observation and Research Station of Coastal Ecological Environments in Macao (NORSCEM)			
10:05-10:20	- MOU Signing Ceremony - Macau University of Science and Technology (MUST) and Hohai University			
10:20-10:40	Coffee Break			
	Keynote Lectures			
	Chair: Prof. Joseph Hun-wei Lee			
10:40-11:10	Venue: Sicily Meeting Room, Level 1, Cotai Expo, The Venetian Macao  - Spatio-temporal Prediction of Environmental Data Using Convolutional Sequence-to-sequence			
10.40-11.10	Neural Networks  Prof. Arlindo Oliveira - President of INESC, Past President of Instituto Superior Técnico (IST), University of Lisbon, Portugal			
11:10-11:40	- Constructing a Digital Twin Ocean for the Greater Bay Area Prof. Dake Chen - Academician of CAS, Director of Southern Marine Science and Engineering Guangdong Laboratory			
11:40-12:10	- Water Security in the Pearl River Estuary and Greater Bay Area Prof. Hongwu Tang - Academician of CAE, President and Council Chair, Hohai University, China			
12:10-12:40	- <b>Digital Twin of Proposed Tidal Barrier for Storm Surge Protection in Macao</b> Ms. Jingyu You - <i>Director of AF Technology Ltd, Zhuhai, Guangdong</i>			
12:40-14:00	Lunch Break			
	Session 1: Climate Change Adaptation			
	Keynote Lectures			
	Chair: Dr. Helena Alegre Venue: N101, Macau University of Science and Technology			
14:00-14:30	- Why Should the Business Sector Care about Climate Change? Prof. Johnny Chan - Emeritus Professor at City University of Hong Kong / Director of Shanghai Typhoon Research Institute			
14:30-15:00	- Climate Change Risk Mitigation and Management Along the Coastal Zones from Macau to Portugal Prof. Wing Huen Ip - Academician of Academia Sinica, National Central University, Taiwan China			

March 27 to April 1, 2023

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15:00-15:30	- <b>Probabilistic Tsunami Hazard Assessments Incorporating Tide and Sea Level Rise</b> Prof. Philip Liu - <i>Academician of US NAE, Distinguished Professor of National University of Singapore</i>		
15:30-16:00	Coffee Break		
16:00-16:30	- Coastal Water Quality Decline at the Nexus of Climate Change and Eutrophication Prof. Ming Li - Horn Point Laboratory, Center for Environmental Sciences, University of Maryland		
16:30-17:00	- The Hong Kong Kau Yi Chau Artificial Island Project Mr. Terrence Leung – Associate Director, ARUP of Hong Kong		
17:00-17:30	- <b>Urban Flood Risk Evolution and Resilience Strategies in Changing Environment</b> Prof. Xiaotao Cheng - <i>China Institute of Water Resources and Hydropower Research</i>		
	Q&A Session		
17:30-18:00	- Prof. Johnny Chan (Chair) - Director of Shanghai Typhoon Research Institute		
Innovation and Entrepreneurship Meeting Point  Keynote Lectures and Poster Session  Venue: N Block, Macau University of Science and Technology			
14:00-14:30	- Al, Innovation, and Sustainable Development Prof. Paulo Quaresma - Vice President for Innovation, University of Evora		
14:30-15:00	- Fostering the Environment for S&T Exchange and Cooperation between China-PSCs Dr. Alex Che - Head of Technology Department, DSEDT, Macau SAR Government		
15:00-15:30	<ul> <li>Inter-reservoirs Transfer Scheme – Water Tunnel between Kowloon By-wash Reservoir and Lower Shing Mun Reservoir</li> <li>Ms. Esther Yuen and Ms. Sylvia Chan – Chief Engineer, DSD of HKSAR Government and Director of Projects, Binnies HK Limited</li> </ul>		
15:30-16:00	Coffee Break		
16:00-16:30	- Azure OpenAI - Exploring the Future in Partnership with AI  Mr. Fred Sheu - National Technology Officer, Microsoft Hong Kong		
16:30-17:00	- An Eduverse: A Comprehensive Metaverse Platform for Education  Dr. Simon Leung - Vice Chairman and Executive Director, NetDragon Websoft Holdings Limited		
17:00-17:30	- <b>LNEC's Key Innovations on Coastal Engineering</b> Dr. Helena Alegre – <i>Head, Hydraulic and Environment Department, LNEC</i>		
18:30	Gala Dinner		

## March 29 DRAFT PROGRAM

Session 2: Coastal Environment/Resilience			
Keynote Lectures			
	Chair: Prof. Adrian Law		
	Venue: Sicily Meeting Room, Level 1, Cotai Expo, The Venetian Macao		
09:00-09:30	- Coastal Resilience: Shaping the Future for Coastal Communities and Ecosystems		
	Dr. Helena Alegre - Head Hydraulic and Environment Department, LNEC		

	March 27 to April 1, 2023	
09:30-10:00	- Eco-engineered Shoreline Designs for Enhancing Marine Biodiversity and Facilitating Carbon Neutrality	
	Prof. Kenneth Leung - Director of State Key Lab of Marine Pollution and Chair Professor of Environmental Toxicology and Chemistry, City University of Hong Kong	
10:00-10:30	- Coastal Infrastructure: Notes on Methodologies for Quantifying Marine Action - Limitations and next Developments	
	Prof. Rita Carvalho - Center for Marine and Environmental Science, University of Coimbra	
10:30-10:50	Coffee Break	
	Invited Lectures	
	Chair: Prof. Kenneth Leung	
	Venue: Sicily Meeting Room, Level 1, Cotai Expo, The Venetian Macao	
10:50-11:20	- A New Algorithm of Building Block Methodology for Fish Habitats in a Regulated Stream	
	Prof. Sung-Uk Choi - Department of Civil and Environmental Engineering, Yonsei University	
11:20-11:50	- Close-range Remote Sensing of Coastal Environment for Assessment and Long-term Monitoring	
11.20-11.50	Prof. Adrian Law - School of Civil and Environmental Engineering, Nanyang Technological University	
	1101. Adrian Law - School of Civil and Environmental Engineering, Nanyang Technological Oniversity	
11:50-12:20	- Prof. Ramiro Neves - Vice-President of Marine, Environment and Technology Center (MARETEC) at IST,	
	University of Lisbon	
12:30-14:00	Lunch Break	
	Session 3: Coastal Environment/Resilience	
	Keynote Lectures	
	Chair: Prof. Jorge Matos and Prof. Philippe Gourbesville	
	Venue: N101, Macau University of Science and Technology	
14:00-14:30	- Climate Change and the Protection of Urban Coasts. Relevance of the Iribarren Number	
	Prof. Jose Maria Grassa - Director, Ports and Coastal Studies Centre (CEPYC), Deputy General Director, Public Works Studies and Experimentation Centre (CEDEX)	
14:30-15:00	- Air-water flows in hydraulic engineering: some peculiar aspects and current challenges	
14.50-15.00	Prof. Jorge Matos - Department of Civil Engineering, Architecture and Geo-resources, IST, University of	
	Lisbon	
	Invited Lectures	
	Chair: Prof. Jorge Matos and Prof. Philippe Gourbesville	
	Venue: N101, Macau University of Science and Technology	
15:00-15:30	- Challenges of Extreme Convective Rainfall Events – Example of Mediterranean Cases	
	Prof. Philippe Gourbesville – China Institute of Water Resources and Hydropower Research	
15:30-16:00		
	Mr. Yuetao Yi - Deputy Director, Pearl River Water Resources Commission of the Ministry of Water	
	Resources(PRWRC)	
16:00-16:30	Coffee Break	
16:30-16:50	- Integration of Restoration Standards and Guidelines in a Source to Sea Approach for Coastal	

	March 27 to April 1, 2023	
	Ecosystem Security Prof. Ana Mendes - Institute of Mediterranean Agricultural and Environmental Sciences, University of Evora	
16:50-17:10	- Advances in Coastal Resilience Projects in Brazil	
10.30 17.10	Dr. Eduardo Yassuda - President of Tetra Tech South America, Brazil	
17:10-17:30	<ul> <li>Risk Management and Implementation of Remediation Techniques at Contaminated Sediment Sites in Coastal Environment</li> <li>Dr. Rita Fonseca - Associate Professor, Institute of Earth Sciences, University of Evora</li> </ul>	
17:30-17:50	- Marine Renewable Energy and Coastal Engineering in a Changing Climate: Examples from Portugal  Dr. Paulo Santos - Associate Professor, Faculty of Engineering, University of Porto	
17:50-18:10	- Flood Risk & Resilience Improvement-Case Study of Beijing City and Daxing International Airport Dr. Jiahong Liu - Deputy Director, Key Laboratory of River Basin Digital Twinning of Ministry of Water Resources	
	Innovation and Entrepreneurship Meeting Point	
	Keynote Lectures & Poster Session	
	Venue: N Block, Macau University of Science and Technology	
14:00-14:30	- Interfacing with Society for Impact: the Case of Técnico Lisboa  Prof. Pedro Amaral - Vice President for Operations and Corporate Relationships of IST, University of Lisbon	
14:30-15:00	- Advanced Algorithm for Epidemic Prediction; Human and Robotic Interaction for In-car Robot Prof. C.T. Hon - Director of Research Centre for Epidemic Prediction System, MUST	
15:00-15:30	- Accelerating Technological Innovation and Commercial Value Translation: Industry-University Collaboration on Unmanned Surface Vessels (USV)  Mr. Liang Cheng – Co-Founder and General Manager, Zhuhai Yunzhou Intelligence Technology Limited	
15:30-16:00	- Lamp Posts for Smart City Applications  Mr. Paul Wang - Chief Executive Officer, AllMighty Limited	
16:00-16:30	Coffee Break	
16:30-17:00	- Innovative Technologies for Enabling the Development of the Society  Mr. Simon Wong - Chief Executive Office, Logistics and Supply Chain MultiTech R&D Centre, Hong Kong  SAR Government	
17:00-17:30	- The Ocean as a Strategic Vision of the University of Coimbra	
27.00	Dr Ana Garcia – Laboratory and Science Manager, University of Coimbra	
17:30-18:00	- Advances in Coastal Resilience Projects in Brazil	
	Dr. Eduardo Yassuda - President of Tetra Tech South America, Brazil	
18:00	End of the Day	

## March 30 DRAFT PROGRAM

Field Trip to NORSCEM			
08:30-08:40	- Opening remark by Chair Prof. Joseph Hun-wei Lee - President of MUST		
08:40-09:00	- Introduction to National Observation and Research Station of Coastal Ecological Environments in		
	Macao (NORSCEM) by Prof. Yibing Ma - Director of NORSCEM		
09:00-09:30	- Site Tour and Discussion		
09:30-10:00	- Visit to Hac Sa Beach		
10:00-10:30	Transportation		
Visit to Macao Government			
10:30-11:30	- Science and Technology Development Fund (FDCT), Macao SAR		
Field Trip			
	Route A	Route B	
	Site Visits to Zhuhai / Zhongshan	Site Visits in Macao	
	Lunch in Zhuhai	Lunch in Macao	
	(13:00-14:30)	(12:30-14:30)	
14:30-18:00	- Hengqin New Area Exhibition Hall in Zhuhai	- Pavilion of China-Portuguese-speaking Countries	
	City - MUST R&D Institute	Commercial and Trade Service Platform	
	- Guangdong AF Technology Limited		
19:00	Welcome Dinner at Zhongshan		
21:00	End of the Day		
21.00	Life Day		

## March 31 DRAFT PROGRAM

Field Trip			
	Route A	Route B	
	Site Visits to Zhuhai / Zhongshan	Site Visits in Macao	
10:00-18:30	- Zhongshan National Health Technology Park	<ul><li>HK-Zhuhai-Macao Bridge</li><li>Guided Cultural Heritage Tour</li></ul>	
	- Zhongshan Cuiheng New Area Planning Hall	- Guided Cultural Heritage Tour	
	- The Shenzhen-Zhongshan Bridge Project		
19:00	End of the Day		

Special hotel rate will be offered by Sands Macao. Please contact our staff, Ms. Amy Chu (omchu@must.edu.mo) for further information.

Host:



Co-organizer:



Sponsor:



澳門特別行政區政府 Governo da Região Administrativa Especial de Macau 教育基金 Fundo Educativo

Supporting Organizations:



經濟及科技發展局 Direcção dos Serviços de Economia e Desenvolvimento Tecnológico







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