



# China-Portugal Forum on Coastal Environment and Innovative Technology for Sustainable Development (CPCET 2023)

## DRAFT PROGRAM

### March 27

18:00-20:30 Welcome Reception

### March 28

09:00-10:30 Opening Ceremony

10:40-12:40 Keynote Speeches

14:00-18:00 Session 1: Climate Change Adaptation  
Innovation and Entrepreneurship Meeting Point

18:30 Gala Dinner

### March 29

09:00-12:30 Session 2: Coastal Environment / Resilience

14:00-18:00 Session 3: Coastal Environment / Resilience  
Innovation and Entrepreneurship Meeting Point

### March 30

08:30-10:00 Field Trip to NORSCEM

10:30-11:30 Visit to Macao SAR Government

14:00-18:00 Field Trip  
Route A: Site Visits to Zhuhai / Zhongshan  
Route B: Site Visits in Macao

### March 31

09:00-18:00 Field Trip  
Route A: Site Visits to Zhuhai / Zhongshan  
Route B: Site Visits in Macao

**March 27 - April 1, 2023**

**Faculty of Innovation Engineering**  
**Macau University of Science and Technology**  
MACAU UNIVERSITY OF SCIENCE AND TECHNOLOGY  
**Macao, China**

March 28 DRAFT PROGRAM

<b>Opening Ceremony</b>	
<i>Venue: Sicily Meeting Room, Level 1, Cotai Expo, The Venetian Macao</i>	
09:00-09:10	<ul style="list-style-type: none"> <li>- Welcome Address by Chair Prof. Joseph Hun-wei Lee - <i>President of MUST</i></li> <li>- Opening Remarks by General Vasco Joaquim Rocha Vieira - <i>The 127th Governor of Macao</i></li> </ul>
09:10-09:35	<ul style="list-style-type: none"> <li>- Opening Address by Mr. Tai Kin Ip –<i>Director of the Economic and Technological Development Bureau, Macao SAR</i> Prof. Fatima Montemor - <i>Vice-president, Instituto Superior Técnico, University of Lisbon</i> Dr. Helena Alegre - <i>Head, National Civil Engineering Laboratory, Portugal (LNEC)</i> Prof. Peter Goodwin – <i>President, University of Maryland Center For Environmental Science</i></li> </ul>
09:35-09:50	<ul style="list-style-type: none"> <li>- Inauguration Ceremony of Key Laboratory of River Basin Digital Twinning of Ministry of Water Resources Prof. Peng Jing – <i>President, China Institute of Water Resources and Hydropower Research (IWHR)</i> Introduction to Key Laboratory of River Basin Digital Twinning of Ministry of Water Resources</li> </ul>
09:50-10:05	<ul style="list-style-type: none"> <li>- 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)</li> </ul>
10:05-10:20	<ul style="list-style-type: none"> <li>- MOU Signing Ceremony - Macau University of Science and Technology (MUST) and Hohai University</li> </ul>
10:20-10:40	Coffee Break
<b>Keynote Lectures</b>	
<i>Chair: Prof. Joseph Hun-wei Lee</i>	
<i>Venue: Sicily Meeting Room, Level 1, Cotai Expo, The Venetian Macao</i>	
10:40-11:10	<ul style="list-style-type: none"> <li>- <b>Spatio-temporal Prediction of Environmental Data Using Convolutional Sequence-to-sequence Neural Networks</b> Prof. Arlindo Oliveira - <i>President of INESC, Past President of Instituto Superior Técnico (IST), University of Lisbon, Portugal</i></li> </ul>
11:10-11:40	<ul style="list-style-type: none"> <li>- <b>Constructing a Digital Twin Ocean for the Greater Bay Area</b> Prof. Dake Chen - <i>Academician of CAS, Director of Southern Marine Science and Engineering Guangdong Laboratory</i></li> </ul>
11:40-12:10	<ul style="list-style-type: none"> <li>- <b>Systematic Management of Coastal Zone: Thoughts &amp; Practice</b> Prof. Hongwu Tang - <i>Academician of CAE, President and Council Chair, Hohai University, China</i></li> </ul>
12:10-12:40	<ul style="list-style-type: none"> <li>- <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></li> </ul>
12:40-14:00	Lunch Break
<b>Session 1: Climate Change Adaptation</b>	
<b>Keynote Lectures</b>	
<i>Chair: Dr. Helena Alegre</i>	
<i>Venue: N101, Macau University of Science and Technology</i>	
14:00-14:30	<ul style="list-style-type: none"> <li>- <b>Why Should the Business Sector Care about Climate Change?</b> Prof. Johnny Chan - <i>Emeritus Professor at City University of Hong Kong / Director of Shanghai Typhoon Research Institute</i></li> </ul>
14:30-15:00	<ul style="list-style-type: none"> <li>- <b>Climate Change Risk Mitigation and Management Along the Coastal Zones from Macau to Portugal</b> Prof. Wing Huen Ip - <i>Academician of Academia Sinica, National Central University, Taiwan China</i></li> </ul>

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	- <b>Coastal Water Quality Decline at the Nexus of Climate Change and Eutrophication</b> Prof. Ming Li - <i>Horn Point Laboratory, Center for Environmental Sciences, University of Maryland</i>
16:30-17:00	- <b>The Hong Kong Kau Yi Chau Artificial Island Project</b> Mr. Terence Leung – <i>Associate Director, ARUP of Hong Kong</i>
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>
<b>Q&amp;A Session</b>	
17:30-18:00	- Prof. Johnny Chan (Chair) - <i>Director of Shanghai Typhoon Research Institute</i>
<b>Innovation and Entrepreneurship Meeting Point</b> <b>Keynote Lectures and Poster Session</b> <i>Venue: N Block, Macau University of Science and Technology</i>	
14:00-14:30	- <b>Fostering the Environment for S&amp;T Exchange and Cooperation between China-PSCs</b> Dr. Alex Che - <i>Head of Technology Department, DSED, Macau SAR Government</i>
14:30-15:00	- <b>AI, Innovation, and Sustainable Development</b> Prof. Paulo Quaresma - <i>Vice President for Innovation, University of Evora</i>
15:00-15:30	- <b>Inter-reservoirs Transfer Scheme – Water Tunnel between Kowloon By-wash Reservoir and Lower Shing Mun Reservoir</b> Ms. Esther Yuen and Ms. Sylvia Chan – <i>Chief Engineer, DSD of HKSAR Government and Director of Projects, Binnies HK Limited</i>
15:30-16:00	Coffee Break
16:00-16:30	- <b>Azure OpenAI – Exploring the Future in Partnership with AI</b> Mr. Fred Sheu - <i>National Technology Officer, Microsoft Hong Kong</i>
16:30-17:00	- <b>An Eduverse: A Comprehensive Metaverse Platform for Education</b> Dr. Simon Leung - <i>Vice Chairman and Executive Director, NetDragon Websoft Holdings Limited</i>
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**

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

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

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

**March 30 DRAFT PROGRAM**

<i>Field Trip to NORSCEM</i>									
08:30-08:40	- Opening remark by Chair Prof. Joseph Hun-wei Lee - <i>President of MUST</i>								
08:40-09:00	- Introduction to National Observation and Research Station of Coastal Ecological Environments in Macao (NORSCEM) by Prof. Yibing Ma - <i>Director of NORSCEM</i>								
09:00-09:30	- Site Tour and Discussion								
09:30-10:00	- Visit to Hac Sa Beach								
10:00-10:30	Transportation								
<b>Visit to Macao Government</b>									
10:30-11:30	- Science and Technology Development Fund (FDCT), Macao SAR								
<i>Field Trip</i>									
	<table border="1"> <thead> <tr> <th>Route A</th> <th>Route B</th> </tr> </thead> <tbody> <tr> <td>Site Visits to Zhuhai / Zhongshan</td> <td>Site Visits in Macao</td> </tr> <tr> <td>Lunch in Zhuhai</td> <td>Lunch in Macao</td> </tr> <tr> <td>(13:00-14:30)</td> <td>(12:30-14:30)</td> </tr> </tbody> </table>	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)
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 City - MUST R&D Institute - Guangdong AF Technology Limited								
19:00	Welcome Dinner at Zhongshan								
21:00	End of the Day								

**March 31 DRAFT PROGRAM**

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



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



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



科學技術發展基金  
F | D | C | T

