

International Forum on Sustainable Coastal Engineering and Environment (SCEE 2024) Second Announcement

March 26, 2024



Forum date: April 8-9, 2024
Macau University of Science and Technology
Macao, China

澳門科技大學
MACAU UNIVERSITY OF SCIENCE AND TECHNOLOGY

<https://www.must.edu.mo/en>

BACKGROUND

Established in 2000, the Macau University of Science and Technology (M.U.S.T.) has rapidly developed into the largest multi-disciplinary university in Macao, with a student enrollment of around 20,000. M.U.S.T. now ranks among the Top 300 Universities in the “World University Rankings 2024”. Internationally recognized research has been carried out in the two State Key Laboratories (SKL) under the Ministry of Science and Technology (MOST): SKL in Quality Research in Chinese Medicines, and SKL in Lunar and Planetary Sciences, Faculty of Innovation Engineering, and a number of research institutes and centers. In March 2022 the National Observation and Research Station of Coastal Ecological Environments in Macao (NORSCEM) under the Ministry of Science and Technology (MOST) has been inaugurated. In collaboration with the China Institute for Water Resources and Hydropower Research (IWHR) in Beijing, a Key Laboratory on Digital Twinning (DT) of River Basins under the Ministry of Water Resources (MWR) has also been inaugurated in 2023.

For historical reasons scientific research on the development of coastal and marine resources in Macao is relatively new; baseline data is scarce relative to the needs to understand issues related to environmental sustainability. In December 2023 the Macao SAR Government has also issued consultation documents on the scientific utilization and planning of the 85 sq.km. of coastal seas under its jurisdiction. The activities of NORSCEM and the DT lab revolve around the advanced scientific monitoring and research to address issues of climate change impacts and coastal hazards and management. Sponsored by China Harbour Engineering Company Ltd. (CHEC), the Macao Marine Engineering and Environment Research Center (MMEERC) has also been established in June 2023 to support focused developments in coastal engineering issues.

OBJECTIVE

The Macao Special Administrative Region (SAR) of China is a world city with over 400 years of cultural heritage and east meeting west – with a world class gaming industry. As an important platform for trade services and culture exchanges between China and Lusophone countries and beyond, Macao has unique advantages in terms of policy, location, economy, culture, history and other aspects. In recent years, since the issue of the national plan to develop the Greater Bay Area into an international innovation and technology hub, and the establishment of the Hengqin (Zhuhai) In-Depth Guangdong-Macao Cooperation Zone, active international exchanges between Macao and the world have been pursued in the area of innovation and technology. The China-Portugal Exchange Forum on Coastal Environment and Innovation Technology for Sustainable Development (CPCET 2023) was organized by M.U.S.T. and NORSCEM to promote the international exchange and cooperation on themes related to the sustainable development of the coastal environment. This forum (SCEE 2024) is a sequel to CPCET 2023. As an inaugural activity of the new marine engineering center, it aims to showcase cutting-edge developments of coastal engineering research and practice in the Greater Bay Area and foster discussion on the latest ideas, research outcomes, and technology transfer experiences among academia, industry, governments, and relevant stakeholders.



The forum promises to connect representatives from leading consultants and government in the Greater Bay Area from mainland China, Hong Kong, and Macao with representative international experts and partners. The focused Forum will be a timely event to gather the latest thinking on climate change induced coastal hazards, design and planning issues, and policy related to the sustainable development of coastal and marine resources of Macao, Hong Kong and the region.

PROGRAMME

The Forum will provide a platform for high level exchange between academics, researchers, entrepreneurs and industry and government on several targeted issues:

Coastal Engineering Innovation and Development

Environmental Monitoring and Protection

Land and Sea Coordination and Sustainable Development

The Forum will consist of 1.5-day lectures on sustainable development of coastal engineering and the environment, and optional activities to visit M.U.S.T.'s state key laboratories and national coastal station, etc.

SCHEDULE

| Time | Activity | location |
|--------|---|-----------------------|
| Apr. 7 | Registration | Outside N101, M.U.S.T |
| Apr. 8 | Opening Ceremony and Section 1: Coastal Engineering Innovation and Development | N101, M.U.S.T |
| | Section 2: Environmental Monitoring and Protection | N101, M.U.S.T |
| Apr. 9 | Section 3: Land and Sea Coordination and Sustainable Development | N101, M.U.S.T |
| | Optional Activities | |

Confirmed Keynote/ Invited Lectures

Coastal Facts and Challenges in Spain, Example Plans and Projects

Ir. Jose Maria Grassa - Director, Centre for Harbours and Coastal Studies, Centro de Estudios y Experimentación de Obras Públicas (CEDEX), Spain

Exploration of Research Methods in Marine Engineering Technology

Lin Ming - Academician of the Chinese Academy of Engineering and Chief Scientist, China Communications Construction Company Limited (CCCC), China

Physics of Environmental Flows Interacting with Obstacles

Michele Mossa - Chairman, IAHR Eco-hydraulics Committee, Technical University of Bari, Italy

Flood Defence Arising from Storm Surge & Sea Level Rise: A Barrage Scheme in Hong Kong

Ir Andy Kwok - Managing Director, Binnies Hong Kong Limited, China

Development of Eco-Friendly Port Protection Structures and Dock Structures

Ir Junbiao He - General Manager of the Ministry of Science and Technology of China Harbour Engineering Co., Ltd., China

Keynote Lecture - Title to be confirmed

Dong-Jiing Doong - Professor/Chairman, Department of Hydraulic and Ocean Engineering, National Cheng Kung University, Taiwan, China

Close-range Remote Sensing of Coastal Environment – Recent Progress

Prof. Law Wing Keung, Adrian - Department of Civil Engineering, National University of Singapore, Singapore

The Potential of Satellite Remote Sensing in the Environmental Monitor and Sustainable Development

Prof. Tang-Huang LIN - Director, Center for Space and Remote Sensing Research, National Central University, Taiwan, China

Digital Twin Three Gorges Project – a Pilot Study and the Way forward (online)

Dr. HUANG Yan - Deputy Chief Engineer, Yangtse Water Resources Commission, China

Hyperspectral Remote Sensing for “Reduction of Pollution and Carbon Emissions”

Prof. Cheng Liu - Department of Precision Machinery and Precision Instrumentation, University of Science and Technology of China

Using On-demand Prediction Services to Build User-tailored Coastal Digital Twins (online)

Anabela Oliveira - Senior Researcher, Head, Information Technology in Water and Environment Research, National Civil Engineering Laboratory (LNEC), Portugal

Flooding of Estuarine Margins: Problems, Processes and Predictions (online)

André Fortunato - Principal Researcher, National Civil Engineering Laboratory (LNEC), Portugal

Challenges and Opportunities of Sponge City Construction in Macao

Nian She - Professor, Tsinghua University Innovation Center in Zhuhai, China

Intelligent Simulation and Dynamic Analysis of Coastal Urban Flooding Disasters

Prof. Jiahong Liu - Deputy Director of Department of Water Resources, China Institute of Water Resources and Hydropower Research, China

Comparative Analysis of Soil Organic Carbon Content and Soil Carbon Storage Characteristics between Natural and Artificial Mangroves

Prof. Junquan Zhan - Chinese Research Academy of Environmental Sciences

Learning from Fish: A Peek into Future Underwater Vehicles

Prof. Dixia Fan - Westlake University, China

Innovation and Practice in Port Structural Engineering and Technology

Ir Jun Xu - CCCC Third Harbor Consultants CO., LTD., China

Research and Application of Core Technology of Super Ecological Seawall against Storm Surge

Ir Chunding Cao - Deputy Director, Comprehensive Design Institute of China Water Resources Pearl River Planning, Surveying and Designing Co., Ltd., China

Confirmed Keynote/ Invited Lectures

Atmospheric Ozone Lidar Monitoring Technology and Regional Networking Application

Prof. Tianshu Zhang - Hefei Institutes of Physical Science, Chinese Academy of Sciences, China

Total Nitrogen Discharging Limit of Wastewater Treatment Plants Based on the Water Quality Targets of Watershed Water Bodies and the Coastal Oceans

Prof. Kun Lei-Chinese Research Academy of Environmental Sciences, China

The Framework of Multiple Oceanic Observations System for GBA: A Preliminary Study in the Hong Kong area

Dr. Xian QIN, State Key Laboratory of Marine Pollution, City University of Hong Kong, China (normal participant)

Poster and Entrepreneurship Exhibition

This section will present the research results of environmental monitoring conducted by the National Observation and Research Station of Coastal Ecological Environments in Macao, as well as the findings from Digital Twins developed by AF Technology, Ltd. The current posters are displayed below. Additionally, this section will feature a relevant entrepreneurship exhibition. The audience engage with the exhibitors if they wish to explore further. Complimentary coffee will be provided.

Confirmed Poster

| | | |
|---|--|---------------------|
| 1 | Causes and Controls of Atmospheric Complex Pollution in Macao | Yan You, M.U.S.T |
| 2 | Digital Twin Platform for Macao coastal Flood Forecasting | Shan Huang, M.U.S.T |
| 3 | Research on Feasibility of Water Quality Buoy in Macau Waters | Kai Zhang, M.U.S.T |
| 4 | Storm Surge Simulation Based on Three-dimensional Model of Tide-surge-wave Coupling and Flooding Simulation in Macao | Jinlan Guo, M.U.S.T |
| 5 | Low-cost AI-based Systems for Real-time Onsite Harmful Algal Bloom (HAB) Management | R. Yuan, M.U.S.T |
| | TBD | |

Confirmed Entrepreneurship Exhibition

| | |
|---|--|
| 1 | China Harbour Engineering Co., Ltd. |
| 2 | China Certification & Inspection Group Macau Co., Ltd. |
| 3 | TBD |

Catering Arrangements

| Time | Catering | Location |
|---------|------------------------------|---|
| April 7 | Welcome dinner (18:00-20:00) | Block N, Seasons-M.U.S.T Training Restaurant |
| April 8 | Lunch (12:30 - 14:00) | |
| | Dinner (18:30-20:00) | Banquet hall on the second floor, Grand Hyatt Macau |
| April 9 | Lunch (12:00-13:30) | Block N, Seasons-M.U.S.T Training Restaurant |

Registration Fees

Last day for registration will be March 31, 2024

Bank transfer can be made to the following account:

- Bank Name: 中國銀行澳門分行 (Bank of China Macau Branch)
- Bank Address: 澳門蘇雅利士大馬路中國銀行大廈地下
(Avenida Doutor Mario Soares, Bank of China Building G/F, Macau)
- Account Holder: 澳門科技大學 (Macau University of Science and Technology)
- Account No.: 180111238474366 (for HKD), 182988100018705 (for CNY)
- BIC/Swift Code: BKCHMOMX



The standard registration fee is MOP1,000 per person. Payment can be made via WeChat, Macau BOC, or MPay by scanning the QR code above, or through bank transfer. Alipay is not supported. Regular participants are required to pay the registration fees, while keynote and invited speakers are exempt from this requirement. When making the payment, please indicate “**SCEE2024-title of receipt**” on your money transfer. Additionally, all bank charges must be covered by the attendee. Please ensure to scan the remittance bill and email it back to us at SCEE2024@must.edu.mo for confirmation of the participant’s name, title of receipt and the payment amount. Upon receiving your payment, an email confirmation will be sent to you. Please note that the registration fee is non-refundable according to our cancellation policy.

Accommodation

Attendees are advised to book hotels near the Macau University of Science and Technology. Please check in at the hotel before proceeding to register for the forum and attend the welcome dinner. Well-regulated hotels are located around the campus. For your personal safety, do not trust any private leasing requests. Upon your arrival at the hotel room, the availability of facilities should be checked. Should any problem arise, the hotel team should be notified immediately for your convenience.

Organizing Committee

Chair Prof. Joseph Hun-wei Lee Vice Chancellor, President of M.U.S.T. (*Honorary Chair*)

Prof. Yibing Ma Director of NORSCHEM / Head of DESE (*Executive Chair*)

Dr. Yanfu Wei DESE, FIE (*Secretary*)

Ir. Wei Wang Executive Deputy Director of Macao Marine Engineering and Environment Research Center

Ir. Hailson Yu Director of Innovation & Entrepreneurship, FIE

Dr. Yang Wu DESE, FIE

Mr. Eric Zhang DES, FIE

For further inquiries, please contact Mr. Eric Zhang at email: SCEE2024@must.edu.mo; tel: (+853) 88971758, (+853) 65595669; or fax: (+853) 28823280

Location and Guidance



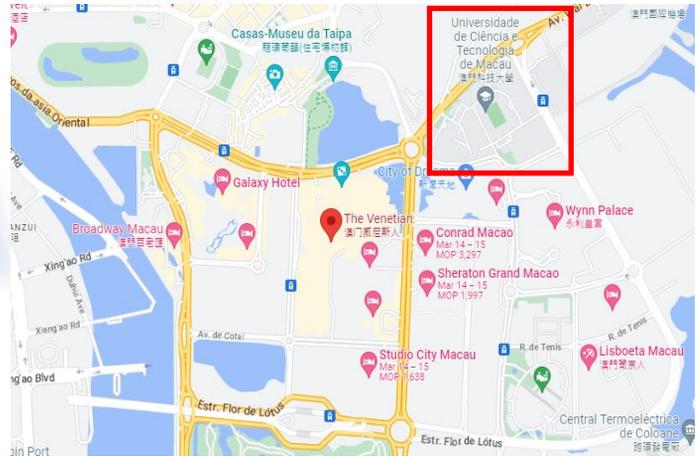
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|---|---|---|---|
| <p>A 行政大樓 Administration Building</p> <hr/> <p>B 教學大樓 Academic Building</p> <hr/> <p>C 教學大樓 Academic Building</p> <p>學生便利店 Convenience Store</p> <p>電腦店 Computer Shop</p> <p>咖啡室 Coffee Corner</p> <hr/> <p>D 會議廳 Conference Hall</p> <p>"世外陶坊" - 陶藝實驗室 Ceramics Studio</p> <p>廚藝學教學實驗室 Culinary Laboratory</p> | <p>E 活動中心 Recreational Complex</p> <p>點餐 Food Connection</p> <p>實驗室 Laboratory</p> <hr/> <p>F 宿舍 Dormitory</p> <p>印務中心 Printing Centre</p> <hr/> <p>G 宿舍 Dormitory</p> <hr/> <p>H 科技大樓 Science and Technology Building</p> <p>科大醫院 University Hospital</p> <p>中藥質量研究國家重點實驗室 State Key Laboratory for Quality Research in Chinese Medicines</p> <p>澳門藥物及健康應用研究院 Macao Institute for Applied Research in Medicine and Health</p> <p>仁伯爵綜合醫院 - 離島急診站 CHKSJ - Posto de Urgência das Ilhas</p> <p>仁伯爵綜合醫院 - 社區綜合病區 CHKSJ - Unidade Associada de Cuidados Continuados</p> | <p>I 足球/田徑運動場 Athletic Field / Stadium</p> <p>金木工設計實驗室 Metal & Wood Arts Design Lab</p> <hr/> <p>J 室內體育館 Gymnasium</p> <hr/> <p>KQ 澳門國際學校 The International School of Macao (TIS)</p> <hr/> <p>LM 宿舍 Dormitory</p> <hr/> <p>N 圖書館大樓 Library Building</p> <p>圖書館 Library</p> <p>季節 The Seasons</p> <p>咖啡館 Coffee Corner</p> <p>銀行 Bank</p> <p>郵局 Post Box</p> | <p>O 教學大樓 Academic Building</p> <p>廚藝天地 Food Studio</p> <hr/> <p>P 宿舍 Dormitory</p> <p>學生便利店 Convenience store</p> <p>生活百貨店 Mini shop</p> <p>餐廳 Restaurant</p> <p>銀行 Bank</p> <p>科大點成 - 體驗學習部 MOST LIKE - A Hub for Experiential Learning</p> <p>藝術廣場 Art Square</p> <hr/> <p>R 綜合教學大樓 Academic Complex</p> <p>影視廳 Movie Hall</p> <p>新藝廳 Grand Auditorium</p> <p>咖啡廳 Coffee Corner</p> |
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Forum Venue: N Block, Macau University of Science and Technology

Location and Guidance

Getting to the Conference venue

M.U.S.T, located approximately three kilometers from the Taipa Temporary Ferry Terminal. The campus is easily accessible to and from Macau International Airport, Taipa Ferry Terminal and Border Gate. Whether you arrive by land, air, or sea, you can easily reach M.U.S.T by car, taxi, public transportation, or our convenient shuttle service.



This is the lovely Macau. On our left and upper side, they are Zhuhai City. Over the South China Sea, the right side, it is Hong Kong.

Hengqin Island, Zhuhai City.



Getting to and around Macau

Macau International Airport (MFM) is an international airport located 5 km north of the city, exactly on the island of Taipa. It has rapidly established itself as a vital link between the Pearl River Delta, the fastest growing economic region in the world, and the rest of the world. Macau's hinterland is Zhuhai, one of China's Special Economic Zones, and a regional manufacturing powerhouse. With well-established and efficient direct land and sea links to neighboring regions, Macau International Airport is ideally positioned as a hub for freight and express cargo in the Asia-Pacific.

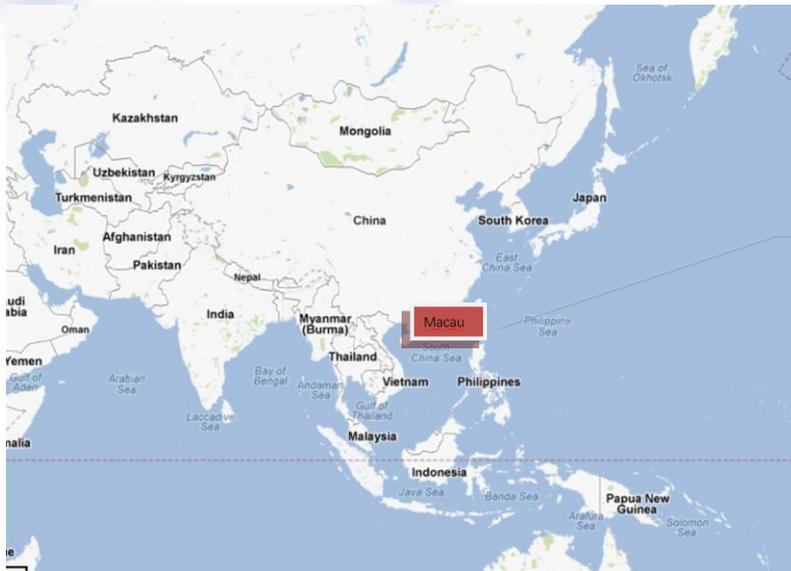
From here there are several bus lines of the Transport Macau company that allow you to reach different destinations, including the Chinese border. There are also intercity lines directed to various cities in China, including Guangzhou and Dongguan.

Location and Guidance

Hosting City: MACAU

Macau, located on the southeast coast of China, is a special administrative region of the country. Being Asia's well-known gambling Mecca, it is a place to find the traditional Chinese culture while enjoying the exotic Portuguese buildings. Most visitors who have been there conclude that it is a location suited to both tourism and living as it is a beautiful city with clean streets, gardens, and picturesque hilly landscapes. Sunshine, clear air, green lands and all sorts of delicious food contribute to its attractions.

If you visit Macau without experiencing gaming entertainment, you can't say that you have been to this place which is known as China's "Las-Vegas".



Macau, We are in the center of our world map and like all other cities centered in their world map.



We are proximity to Hong Kong, Guangdong Province. Actually, we have shared land border with Zhuhai City of Guangdong Province. You can but not necessarily to take seaway to Macau from Zhuhai. From Hong Kong, you are better to take ferry to Macau. It will take you one hour.

Local Information



Currency

The Pataca (MOP\$) is divided into 100 avos and it is Macau's official currency.

Roughly 8 Patacas is equivalent to 1 US Dollar.

Roughly 115.97 Patacas is equivalent to 100 Chinese Yuan.

Roughly 103.20 Patacas is equivalent to 100 Hong Kong Dollars.

Foreign currency or travelers' cheques can be changed in hotels, banks and authorized exchange dealers located all around the city.

There are no restrictions on the amount of currency, which can be brought in or taken out of the territory; while most credit cards are accepted in many hotels, shops and restaurants.

Note: Most restaurants and stores do not accept 10 HK Dollars. Changes may be difficult for notes of large values. It is suggested a certain number of small changes be kept. Currency exchange service is available in major tourist spots and casinos.



Electricity

Electricity in Macau is at 220V, 50Hz. The power plugs used in Macau are of the three-pin, square-shaped or round-shaped type. It is suggested to check before using an electrical appliance.



Telephone

If you would like to use your mobile phone while in Macau, please contact the information services below: 1000 (CTM) 1118 (Hutchison Telecom) 1628 (SmarTone) 1888 (China Telecom (Macau) Co., Ltd.). Besides, Hutchison Telecom Network is now providing the Mobile Tour Guide Service. Visitors can listen to the voice information service by dialing the Spot Code #83.

Useful Numbers:

- 24-hour Emergency: 999
- Tourist Information: (853) 2833 3000
- Consumer Council: (853) 8988 9315
- Telephone Inquiry: 181

Local calls in Macau are free of charge when made from a private phone. When using a public phone, they cost MOP\$1.00. Phone cards can be purchased for MOP\$50.00, MOP\$100.00 or MOP\$150.00 and they can be used as well as coins in public phones located all around the city and the islands. In the busiest areas there are also credit card phones.



Internet Access

M.U.S.T has provided visitors with free wireless Internet access - "MUST-guest" available daily. You can freely access the internet after receiving the verification code by entering a Macau, mainland China, Hong Kong, or Taiwan mobile phone number.

Internet facilities are available at Information Counter at Senado Square, public libraries and major hotels. You may also find several cyber-café's all over the city. For address and opening hours of public libraries, please visit the following websites: <http://www.library.gov.mo>; <http://library.iacm.gov.mo>