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# COME!

## Coastal and Marine Sustainability Enacted

Universiti Teknologi PETRONAS & Universiti Kuala Lumpur (Malaysia), August 15-28, 2022

*The Summer School is organised under Erasmus+ CBHE projects MARE "Marine Coastal and Delta Sustainability for Southeast Asia" (<https://mare-project.net>)*

### Introduction

The **COME!** summer school will be a vibrant mixture of interactive sessions, field trips, and group work in a unique setting, designed to give participants hands-on project and research experience with a range of issues related to marine, coastal and delta sustainability with a focus on novel and innovative approaches and methodologies. After an introductory day with an overall overview of sustainability challenges and the state of art in marine & coastal science, policy and management, during the week 1 the students will follow plenary sessions or one of parallel sessions normally exploring marine or coastal/delta issues. The second week will focus on interactions with stakeholders – business, public bodies and NGOs engaged in management & governance activities over marine and coastal resources. To support in-class learning, the educational process will include field excursions.

The School will start and finish in Seri Iskandar, the seat of the Universiti Teknologi PETRONAS; most of the stakeholder sessions (as well as supporting sessions by academic faculty) will be hold on the premises of Universiti Kuala Lumpur in Lumut. Bus transfers between Seri Iskandar and Lumut will be arranged by the organisers of the summer school.

We offer two educations tracks. The Track 1 includes the full course of two weeks and successful participants will receive a certificate of completion entailing 3 ECTS. The Track 2 of the **COME!** School includes only the week 1 (August 15-19, 2022); participants attending all the sessions and at least 2 hours of individual consultations with the School faculty will receive a certificate of completion worth 1.5 ECTS.

By the end of the School, all the participants enrolled to the Track 1 (individually or in small groups) will be expected to develop and present proposals for a practical solution for a real-life problem, or detailed paper proposals reflecting on their project experience and learning outcomes of the **COME!** School. Participants and faculty are encouraged to re-develop the final reports into academic papers or project applications.

The **COME!** summer school will be a valuable learning experience for everyone, but having a great time is also a summer essential. All the participants will be students or young experts; therefore we would like everyone to have a memorable time with us in Malaysia!

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August 15-28, UTP & UniKL, Malaysia, <https://mare-project.net/index.php/2022/06/08/mareschool/>



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## Summer school faculty:

Dr. **Holger Auel**, University of Bremen (Germany)  
Dr. **Shamila Azman**, Universiti Teknologi Malaysia  
Dr **Siti Nur Fathiyah**, Universiti Teknologi PETRONAS (Malaysia)  
Dr. **Muhammad Hafeez Jeofry**, Universiti Malaysia Terengganu (Malaysia)  
Prof. Dr. **Mohd. Fadzil Akhir**, Universiti Malaysia Terengganu (Malaysia)  
Dr. **Sandeep Chandola**, PETRONAS Exploration (Malaysia)  
Dr. **Anne Kull**, Estonian University of Life Sciences (Estonia)  
**Siiri Klm**, Estonian University of Life Sciences (Estonia)  
**Lagle Lhmus**, Estonian University of Life Sciences (Estonia)  
Dr. **Vincenzo Maccarrone**, Institute for Marine Biological Resources and Biotechnology of the Italian National Research Council – (IRBIM-CNR) (Italy)  
Dr. **Teh Hee Min**, Universiti Teknologi PETRONAS (Malaysia)  
Dr. **Igor Novopashenny**, University of Bremen (Germany)  
Dr. **Yildiray Ogurol**, University of Bremen (Germany)  
Dr. **Daniele La Rosa**, University of Catania (Italy)  
Dr. **Pietro Scandura**, University of Catania (Italy)  
Prof. **Kalev Sepp**, Estonian University of Life Sciences (Estonia)  
Dr. **Anton Shkaruba**, Estonian University of Life Sciences (Estonia)  
Dr. **Mohd Redzuan Zoolfakar**, Universiti Kuala Lumpur (Malaysia)  
Dr. **Le Anh Tuan**, College of Environmental and Resources (Vietnam)

## Application process

Details about the application procedure are available from <https://mare-project.net/index.php/2022/06/08/mareschool/>. The application deadline for those who needs visa in order to enter Malaysia is **June 18, 2022**. The deadline for all other categories of participants is **June 22, 2022**. The eligible applicants need to be students or graduates of degree programs explicitly dealing with the management or governance of marine, coastal or delta environments. Relevant professional experience can be considered as an equivalent of a relevant degree. The language of instruction is English, and therefore all the eligible applicants are required to possess demonstrable English language proficiency. The application form can be accessed from <https://forms.gle/JP4hFqaUGfCoxFSFA>

## Financial information

Accommodation and meals shall be covered by participants; we are working on affordable solutions for the school; local transport will be arranged and covered by the university. All the relevant information will be available soon from the summer school www. The tuition fee won't be charged. Other forms of financial assistance are not available.

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## Contacts

The School's website is <https://mare-project.net/index.php/2022/06/08/mareschool/>. All the inquiries on the matters not covered by the website should be sent to Dr. Siti Nur Fathiyah, [fathiyah.jamaludin@utp.edu.my](mailto:fathiyah.jamaludin@utp.edu.my).

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# Day to day program

Day 1 – Monday, 15<sup>th</sup> August 2022

Summer School Opening Day

UTP Campus			
			 UNIVERSITI TEKNOLOGI PETRONAS
No	Time	Venue:	Event <i>Dress Code: Smart Casual</i>
1.	10.00 – 10.30	Seminar Room 5, Undercroft, UTP	Arrival of all participants. Registration of all participants (Students and Staff).
2.	10.30 – 11.15	Seminar Room 5, Undercroft, UTP	<b>Introduction of Summer School participants (Program and organizational arrangements)</b>  HSE Briefing UTP Montage Briefing of Programme (Ir. Hafizah) Briefing on Field Trip Penang (Dr. Teh) Briefing on Optional Tours (Pn. Khairunnisa)
3.	11.15 – 11.45 11.45 – 12.15	Seminar Room 5, Undercroft, UTP	1. UTP Campus Tour (walking): IRC and Chancellor Hall 2. UTP Laboratory Visit: Civil Engineering Department (Block J) (Wave tank facility)
4.	12.15 – 2.00	Seminar Room 7, Undercroft, UTP	Lunch Welcoming speech – AP Ts Dr Amila (RMC Director, Universiti Teknologi PETRONAS, Malaysia)
5.	14.00 -15.00	Seminar Room 5, Undercroft, UTP	<b>Lecture 1: Prof. Kalev Sepp</b> , Estonian University of Life Sciences Introduction: global and regional sustainability – from policy concepts to the management action (100 pax).
6.	15.00 -17.00	Block 12, UTP	Lab Visit (Petroleum Engineering Department, Block 12) Core Lab and Drilling Lab

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## Day 2 – Tuesday, 16<sup>th</sup> August 2022

Plenary and parallel sessions

No	Time	Format, Lecture room	Event <b>Dress Code: Smart Casual</b>	
1.	9.00 -11.00	Plenary session  Seminar Room 5, Undercroft, UTP	<b>Lecture: Prof. Kalev Sepp</b> , Estonian University of Life Sciences Ecosystem Service concept. Methods for mapping and assessment of ecosystem services. ES concept in Environmental Policy (implications for coastal spatial planning and management) (100 pax)	
2.	11.00-13.00	Parallel sessions  Seminar Room 3 & 4, Undercroft, UTP	<b>Lecture 1 (11-12pm): Dr Muhammad Hafeez Jefry</b> , Universiti Terengganu Malaysia Title: Ice Sheet & Marine Sustainability: Sea level rise from ice-sheet melting using CMIP6 model  <b>Lecture 2 (12-13pm): Lecture &amp; Practical: Dr Siti Nur Fathiyah</b> , Universiti Teknologi PETRONAS Title: Delta Environment and Hydrocarbon Potential: Present-day Analogue	<b>Lecture: Siiri Klm</b> , Estonian University of Life Sciences Data integration and participatory process in developing integrated coastal zone management (ICZM). Example of the Eastern Baltic Sea
3.	13.00 – 15.00	Lunch		
4.	15.00 – 17.00	Parallel sessions  Seminar Room 3 & 4, Undercroft, UTP	<b>Lecture: Dr Corrienna</b> , Universiti Teknologi Malaysia Title: Environmental Awareness in Conserving Natural Resource	<b>Practical exercise: Siiri Klm, Lagle Lhmus</b> , Mapping Ecosystem Services of Coastal areas. Ecosystem services matrix – expert evaluation. Ecosystem Services hot and cold spots

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### Day 3 – Wednesday, 17<sup>th</sup> August 2022

Educational Trip to UniKL – MIMET, Lumut

Participants to gather in front of Chancellor Complex, UTP at 8.00 a.m.

No	Time	Format, Lecture room	Event
<b>Dress Code: Smart Casual</b>			
1.	09.00 – 10.30	UTP	Journey from UTP to UniKL MIMET
2.	10.45 – 11.00	Dewan Kuliah 1	Safety Briefing
3.	11.00 – 11.30		Introduction about UniKL MIMET by Deputy Dean A&T
4.	11.30 – 12.00		Research and Development Unit
5.	12.00 – 12.30		PostGraduate Unit
6.	12.30 – 14.30	Lunch	Dewan Khatulistiwa
7.	15.00 – 15.30	Shipyards visit	Briefing by URSB
8.	15.30 – 14.30	Workshop visit	Briefing by HoS of respected academic section
9.	16.30 – 17.00		Gathering at UniKL's beach / Photo Session

### Day 4 – Thursday, 18<sup>th</sup> August 2022

Plenary and parallel sessions

No	Time	Lecture room	Event	
<b>Dress Code: Smart Casual</b>				
1.	9.00 -11.00	Plenary session  Seminar Room 5, Undercroft, UTP	<b>Lecture: Dr. Holger Auel</b> , University of Bremen: Marine Productivity, Food Webs, and Strategies for a Sustainable Use of Marine Living Resources (Online)	
2.	11.00-13.00	Parallel Session  Seminar Room 3 & 6, Undercroft, UTP	<b>Lecture &amp; Sharing Session:</b> <b>Mr. Sandeep Chandola</b> <b>Mr. Rahimi Faizal Ibrahim</b> PETRONAS Exploration Marine and Coastal Sustainability Practices in PETRONAS Career Exposure with PETRONAS	<b>Practical exercise: Dr. Anne Kull</b> , Estonian University of Life Sciences Defining Ecosystem services of Coastal areas (carbon storage and sequestration, etc,) using QGIS <i>(beginning)</i>
3.	13.00 – 15.00	Lunch		
4.	15.00 – 17.00	Parallel sessions  Seminar Room 3 & 6, Undercroft, UTP	<b>Practical exercise: Dr. Daniele La Rosa</b> , University of Catania Positive effects of trees on climate regulation, carbon sequestration and noise reduction	<b>Practical exercise: Dr. Anne Kull</b> , Estonian University of Life Sciences Defining Ecosystem services of Coastal areas (carbon storage and sequestration, etc,) using QGIS <i>(continued)</i>

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## Day 5 – Friday, 19<sup>th</sup> August 2022

Plenary and parallel sessions

No	Time	Lecture room	Event
			<b>Dress Code: Smart Casual</b>
1.	9.00 - 11.00	Plenary session  Seminar Room 5, Undercroft, UTP	<b>Lecture: Dr. Vincenzo Maccarrone</b> , Institute for Marine Biological Resources and Biotechnology of the Italian National Research Council – (IRBIM-CNR)  Anthropocene speaks: impact on the coastal areas
2.	11.00 - 13.00	Parallel sessions Seminar Room 3 & 4, Undercroft, UTP	<p><b>Lecture: Dr Teh Hee Min</b>, Universiti Teknologi PETRONAS Title: Coastal protection structures and restoration</p> <p><b>11.00-11.30am</b> <b>Lecture: Dr. Le Anh Tuan, Vietnam</b> Impacts and responses of climate change to the coastal areas of the Mekong River Delta in Vietnam</p> <p><b>11.30-12.30pm Prof. Dr. Mohd Fadzil Akhir</b>, Universiti Malaysia Terengganu Title: Impact of sea level to coastal dynamic for marine sustainable (case study)</p>
3.	13.00 – 15.00	Lunch (and Friday prayer for Muslims)	
4.	15.00 – 17.00	Plenary session  Seminar Room 5, Undercroft, UTP	<b>Lecture: Dr. Pietro Scandura</b> , University of Catania Hydromorphodynamics of the coastal area

## Day 6 – Saturday, 20<sup>th</sup> August 2022

Educational Fieldwork & Site visits to Seri Tanjung Pinang 2, Tg. Tokong, Penang.

Aims: Familiarize with the construction technologies used for coastal reclamation and determine the environmental impacts caused by the reclamation operations and the control measures (a dedicated leaflet for the trip)

7.00 am – Depart from UTP (Chancellor Complex).

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### Day 7 – Sunday, 21<sup>st</sup> August 2022

Presentation of tasks given during the fieldwork (in-class activities in UTP)

**Free and easy**

### Day 8 – Monday, 22<sup>nd</sup> August 2022 at UniKL

No	Time	Format, room	Lecture	Event
				<b>Dress Code: Smart Casual</b>
1.	09.00 – 10.30			Departure to UniKL
2.	10.30 – 13.00	Dewan Kuliah 1		Welcoming Speech 1. Assoc. Prof. Ts. Cmdr (Rtd) Dr. Aminuddin Md Arof  Keynote Speaker 1. Prof Dr Md Redzuan Zoolfakar 2. YBhg Dato' Capt Ahmad Sufian bin Abdul Rashid 3. To be appointed (offer to ITL)
			Sustainability Effort in <b>Marine and Maritime Technology Symposium (SEMMarTS)</b>	
3.	13.00 – 15.00		Lunch	
4.	15.00 – 15.30	Dewan Kuliah 1		Presenter 1 UniKL MIMET
5.	15.30 – 16.00			Presenter 2 UniKL MIMET
6.	16.00 – 16.30			Presenter 1 ITL
7.	16.30 – 17.00			Presenter 2 ITL
			Sustainability Effort in <b>Marine and Maritime Technology Symposium (SEMMarTS)</b>	
8.	17.00		End	Travelling to hotel/accommodation

### Day 9 -Tuesday, 23<sup>rd</sup> August 2022 at UniKL

No	Time	Format, room	Lecture	Event
				<b>Dress Code: Smart Casual</b>
1.	09.00 – 10.30			Departure to UniKL
2.	10.30 – 13.00	Lecture Vale		VALE Mineral Malaysia S/B 1. Socio-economy vs Sustainability Plan 2. Remain sustainable yet dear to community's heart
3.	13.00 – 14.30		Lunch	
4.	14.30 – 16.30	Visit		VALE Mineral Malaysia S/B Site Visit
5.	17.00			Travelling to hotel/accommodation

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**Day 10 – Wednesday, 24<sup>th</sup> August 2022 at UniKL**

<i>No</i>	<i>Time</i>	<i>Format, room</i>	<i>Lecture</i>	<i>Event</i> <b><i>Dress Code: Smart Casual</i></b>
1.	09.00 – 10.30			Departure to UniKL
2.	10.30 – 13.00	Lecture Dewan Kuliah 1 UniKL MIMET		Lumut Port 1. Facing the future 2. Green Port
3.	13.00 – 15.00	Lunch		
4.	15.15 – 16.45	Visit		Lumut Port Site Visit
5.	17.00			Travelling to hotel/accommodation

**Day 11 – Thursday, 25<sup>th</sup> August 2022 at UniKL**

<i>No</i>	<i>Time</i>	<i>Format, room</i>	<i>Lecture</i>	<i>Event</i> <b><i>Dress Code: Smart Casual</i></b>
1.	09.00 – 10.30			Departure to UniKL
2.	10.00 – 13.00	Lecture		MTU Power System Green Marine Engine
3.	13.00 – 14.00	Lunch		
4.	14.00 – 17.00	Lecture		Lecture: UniKL MICET Sustaining coastal environment ecosystem
5.	17.00			Travelling to hotel/accommodation

**Day 12 – Friday, 26<sup>th</sup> August 2022 at UniKL**

<i>No</i>	<i>Time</i>	<i>Lecture room</i>	<i>Event</i> <b><i>Dress Code: Smart Casual</i></b>
1.	09.00 – 10.30		Departure to UniKL
2.	10.00 -13.00	Lecture Dewan Kuliah 1 UniKL MIMET	Educational talk by local authorities / NGO (TBC)
3.	13.00 – 15.00	Lunch	
4.	15.00 - 17.00	Closing ceremony Dewan Kuliah 1 UniKL MIMET	Important Invitee UniKL 1. Director UIO 2. Dean 3. Deputy Dean IIIP  UTP 1. TBC  MARE Committee 1. TBC
5.	17.00		Travelling to hotel/accommodation

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### **Day 13 – Saturday, 27<sup>th</sup> August 2022**

Educational Visit to Tin Mine Cavern (Gua Tempurung) (OPTIONAL)

**Aim:** Exposing students to the marine environment (shallow water) that was formed thousands of years ago and has been now exposed inshore.

**Note:** Entrance ticket and bus fare from UTP to Gua Tempurung (return) need to be covered by the participants. Organizer will advise on the cost for this half-day trip soonest, meanwhile, you may check the website for overview of the cave [http://www.ipoh-city.com/attraction/Gua\\_Tempurung/](http://www.ipoh-city.com/attraction/Gua_Tempurung/)

PIC: Pn Khairunnisa / CSD / Student volunteers

### **Day 14 – Sunday, 28<sup>th</sup> August 2022**

Educational Visit to TT5: Tin Dredge Mining (OPTIONAL)

**Aim:** Exposing students on management of tin mines within Malaysia: impact to delta sustainability

**Note:** Entrance ticket and bus fare from UTP to TT5 (return) need to be covered by the participants. Organizer will advise on the cost for this half-day trip soonest, meanwhile, you may check the website for overview of the tin dredge area here <https://tt5perak.com/>

PIC: Pn Khairunnisa / CSD / Student volunteers

### **Day 15 – Monday, 29<sup>th</sup> August 2022)**

#### **Day of Departure**

PIC: Pn Khairunnisa / CSD / Student volunteers

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# Information about School organisers

The School **COME! COSTAL AND MARINE SUSTAINABILITY ENACTED** is co-organised and co-funded by a consortium of international partners financed by the **CBHE projects MARE - Marine Coastal and Delta Sustainability for Southeast Asia** by the EU Erasmus+ programme (<https://mare-project.net>): Universiti Teknologi PETRONAS & Universiti Kuala Lumpur (Malaysia). The organization is supported by Erda RTE CV (the Netherlands, <http://erda-rte.eu/>), Estonian University of Life Sciences (Estonia), University of Catania (Italy), IRBIM-CNR (Italy), and University of Bremen (Germany).

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