



**SCSAM**

South China Sea Annual Meeting

# The South China Sea Annual Meeting 2023



**XIAMEN UNIVERSITY MALAYSIA**  
**廈門大學馬來西亞分校**

**November 3-5, 2023**

**Xiamen University Malaysia, Malaysia**

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## Introduction

The South China Sea Annual Meeting is a series of international academic conferences that are organized voluntarily by scholars engaged in ocean science research in the South China Sea and its adjacent sea area. The Organizing Committee of SCSAM coordinates the event and selects host institutions. The first conference was hosted by Xiamen University in 2013, and nine successful events have been held since then, hosted by Guangdong Ocean University, the Chinese University of Hong Kong, the First Institute of Oceanography of the Ministry of Natural Resources, Hohai University, the Institute of Deep-Sea Science and Engineering of the Chinese Academy of Sciences, Fudan University, Guangdong Ocean University, and Jiangxi Normal University. The South China Sea Annual Meeting 2023, the 10th annual Meeting, is hosted by the State Key Laboratory of Marine Environmental Science (Xiamen University), the College of Ocean and Earth Sciences (Xiamen University) and China-ASEAN College of Marine Sciences (Xiamen University Malaysia) with the agreement of the Organizing Committee of SCSAM. It aims to foster knowledge and ideas exchanges on the dynamic processes of regional oceanography in the surrounding sea areas of the South China Sea, the dynamic processes of the South China Sea basin and continental shelf, the interaction between the South China Sea and the ocean, climate change, marine biogeochemical processes, marine ecological environment, marine living resources and other related topics. The theme will focus on **the South China Sea under Climate Change: Multi-scale Dynamics and Their Ecological and Environmental Effects**.

### Organizers

[State Key Laboratory of Marine Environmental Science, Xiamen University](#)

[College of Ocean and Earth Sciences, Xiamen University](#)

[China-ASEAN College of Marine Sciences, Xiamen University Malaysia](#)

### Co-sponsors

[Coastal Zones Under Intensifying Human Activities and Changing Climate: A Regional Programme Integrating Science, Management and Society to Support Ocean Sustainability \(COASTAL-SOS\)](#)

### Scientific Advisory Committee

#### Convenors:

ZHENG Quan 'an, University of Maryland

HU Jianyu, Xiamen University

LIN Mingsen, National Satellite Ocean Application Service

QI Yiquan, Hohai University

**Secretary General:** XIE Lingling, Guangdong Ocean University

**Members:** (Alphabetical order by surname)

CHAI Fei, DONG Changming, GAN Jianping, GUAN Yuping, HO Chung-Ru, HU Jianyu, HUANG Ruixin,

JING Zhiyou, LIANG Xiangsan, LIN Mingsen, LIN Xiaopei, LIU Zhiqiang, LIU Zhiyu, PAN Aijun, PAN Jiayi, QI Yiquan, SONG Jun, TIAN Jiwei, WANG Dongxiao, WANG Guihua, WEI Zexun, WU Chau-Ron, XIE Lingling, XU Hongzhou, XU Jie, ZHENG Quan'an

#### **Local Organizing Committee**

**Chair:** LIU Zhiyu, Xiamen University

**Members:**

SHI Dalin	Xiamen University
CHAI Fei	Xiamen University
HU Jianyu	Xiamen University
LIM Phaik Eem	University of Malaya
SHANG Shaoling	Xiamen University
CAO Zhimian	Xiamen University
LUO Yawei	Xiamen University
HAN Lei	Xiamen University Malaysia
LIN Hongyang	Xiamen University

## Logistics Information

### Symposium Venue

Main Conference Hall (114)/215/101, B1 Building, Xiamen University Malaysia (XMUM)

Address: Jalan Sunsuria, Bandar Sunsuria, 43900 Sepang, Malaysia

Tel: +603 8705 5208



It only takes around 5 minutes at most to walk from XMUM hostel area (near the Ling Yun 3 Canteen, circled in yellow) to the B1 building (circled in blue).

Within XMUM, you will find two canteens (circled in yellow) that offer a variety of food options. If you are looking for light delicacies, there are several options conveniently located downstairs of the conference hall and meeting area, the B1 building. Furthermore, you can enjoy a short tea time at the LakeFront Cafe (circled in yellow) or the ZUS Coffee at the ground floor of the A3 building.

### Travel

If you are arriving at Kuala Lumpur International Airport (KLIA), you can use the “GRAB” application to book a taxi. The pick-up point for KLIA is located at Gate 3 and Gate 4 of the Arrival section, level 1.

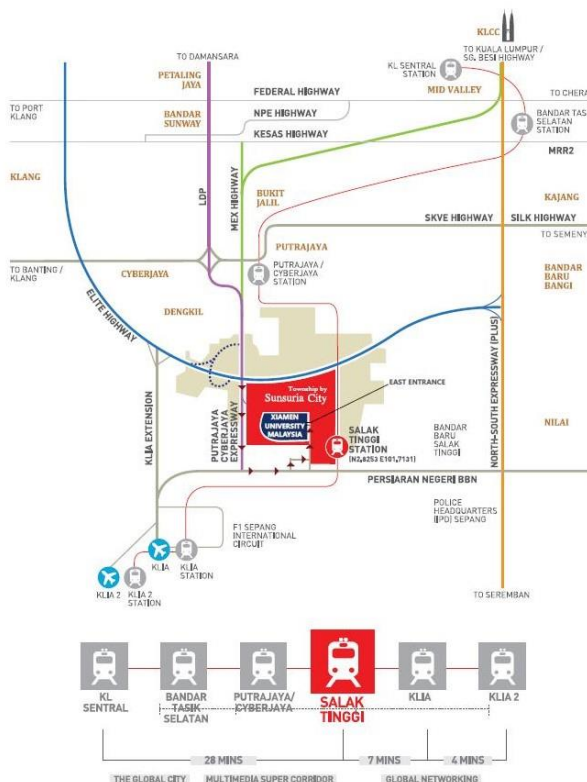
For guests arriving at Kuala Lumpur International Airport 2 (KLIA2), the pick-up point for “GRAB” taxi is at the Transportation Hub, Level 1, gateway@KLIA2.



The cost of travel to XMUM by “GRAB” taxi is approximately RM30.

If you prefer public transportation, please refer to the picture below:

\*KLIA Operating Hours: 5:00am to 12:30am. It takes 20 minutes to walk from the railway station to the hostel of Xiamen University Malaysia.



### Shuttle Service

Date	Stops	Time	Pick-Up Point
Nov. 2	KLIA → Holiday Inn Sepang → XMUM	0100-0130	Gate 3 and Gate 4 of the Arrival section, level 1@KLIA
Nov. 3		0100-0130	Gate 3 and Gate 4 of the Arrival section, level 1@KLIA
Nov. 4		0100-0130	Gate 5 and Gate 6 of the Arrival section, level 3@KLIA
Shuttle Run by Sama Sama Hotel			
Everyday	KLIA → Sama Sama Hotel	Every 5 minutes	Terminal 1@KLIA
Shuttle Run by the Holiday Inn Hotel			
Everyday	KLIA/KLIA2 → Holiday Inn	Hourly shuttle from 0645-2045	Gate 3, Level 1@KLIA Gate 3, Level 2@KLIA2

Nov. 3-5	Sama-Sama Hotel→ Holiday Inn Sepang→XMUM	0815 (Sama-Sama Hotel)	Hotel Lobby
Nov. 3	Sama-Sama Hotel→ Holiday Inn Sepang→XMUM	1700 (Sama-Sama Hotel)	Hotel Lobby
Nov. 3	XMUM→ Holiday Inn Sepang→ Sama-Sama Hotel	2000	B1 Building, XMUM
Nov. 4	XMUM→Holiday Inn Sepang	1800	B1 Building, XMUM
	Holiday Inn Sepang→XMUM→ Sama-Sama Hotel	2000	Lobby, Holiday Inn Sepang
Nov. 5	XMUM→ Holiday Inn Sepang→ Sama-Sama Hotel	1800	B1 Building, XMUM

## Registration

### Nov. 2: 1400-1700

Location: B1-114 Reception, B1 Building, XMUM

### Nov. 3-5: 0830-1700

Location: B1-114 Reception, B1 Building, XMUM

## Organized Events

### Early Career Forum

To encourage greater involvement of young scientists in scientific investigations in the South China Sea and promote international academic exchanges and collaborations, the Early Career Forum of SCSAM 2023 will be held on Nov. 3rd. Through this forum, young scientists will have the opportunity to present their research findings through oral presentations, poster exhibitions, and group discussions, enabling them to engage in in-depth discussions with experts from different fields.

### Best Presentation Award

Best Presentation Award is given in recognition of the best oral presentations presented at Early Career Forum. Best oral presentations will be selected by the review committee from the Early Career Forum. A First Prize winner will receive a prize of 2,000 MYR prize, two Second Prize winners will each receive a prize of 1,200 MYR and three Third Prize winners will each receive a prize of 600 MYR. Results will be announced during the Closing Ceremony on Nov. 5th.

### Meals and Coffee Breaks

Date	Event	Time	Location
Nov. 3	Icebreaker (Buffet)	1800-2000	B1-101, B1 Building, XMUM
Nov. 4	Dinner (Buffet)	1800-2000	Unity Ballroom, 2nd Floor, Holiday Inn Sepang
Nov. 3	Lunch	1230-1345	B1-101, B1 Building, XMUM
Nov. 4-5		1300-1400	
Nov. 3	Coffee Break	1100-1115	
		1530-1545	
Nov. 4		1030-1100	
		1600-1800	
Nov. 5		1030-1100	
		1530-1600	

**For those with specific dietary needs (i.e. allergies, vegetarian, vegan) please inquire at the reception for other options or recommendations on how to order.**

### WIFI

Wi-Fi Username: Student/ Student-5G

Wi-Fi Password: xmustudent

### Electricity

The standard domestic power supply in Malaysia is 240 V AC at 50 Hz. The standard sockets are as such (see image):



### SCSAM Logistics WeChat Group

You are strongly encouraged to join the SCSAM Logistics WeChat Group for updated information.





## Contacts for Logistics

<b>Logistics</b>	<b>Secretary</b>	<b>Cell phone</b>	<b>Email</b>
Coordination & Registration	HUANG Ying	+60143698368	scsam@xmu.edu.cn
Visa & Meals	WANG Guanfei		
Facilities & Posters	ZHU Jia		
Transportation & Housing	ONG Soon How		
XMUM Hostel	Security Team	+60193489999.	

## Program

### Presentation Guidelines

#### Language

- ✧ English is the official language of the meeting. PowerPoint slides and posters should be in English. Oral talks should also be presented in English.

#### Oral Presentation

- ✧ Oral presentations are 15 minutes each, including 3 minutes for discussion. The time limit will be strictly enforced to facilitate flow between sessions.
- ✧ Please upload your presentation to the SCSAM computers, or to the SCSAM system under your account prior to your session. Only PowerPoint and PDF files will be accepted. All files will be erased after the meeting.
- ✧ The aspect ratio of oral presentation should be 16:9.
- ✧ For those attendees arriving on Nov 2, you may upload them directly to our computer at the registration area, or to the SCSAM system.
- ✧ For all others, you must upload your presentations at least one hour before your session, directly onto the computers in your session's conference room. Volunteers will be on hand to assist should you run into difficulties.
- ✧ To ensure the fluency of the symposium, speakers are not allowed to use their own computers.
- ✧ Arrive at the session room 10 minutes before the start of your session and introduce yourself to the session chair(s).
- ✧ No audio or video recording is allowed in any session room during the symposium.

***Please be sure to check your presentations for viruses before uploading and presenting at the meeting.***

#### Poster Presentation

- ✧ Nov 4 ONLY. Location: B1-101 Conference Room. Time: 16:00-18:00. The poster presenters should be available onsite during this poster session.
- ✧ Each poster will be assigned an ID corresponding to its location on the display board.
- ✧ Posters marked with "EF" are posters presented by early career scholars.
- ✧ Poster dimensions should not exceed 119 cm (height) and 90 cm (width) and should be in portrait orientation.
- ✧ The text should be readable from five feet away. Use a minimum font size of 20 points.
- ✧ We recommend that poster presenters hang their posters before the afternoon sessions on Nov 4 (UTC+8). They must be removed at the end of the meeting.

#### Presentation Tips

- ✧ Oral presenters may visit the conference room to familiarize themselves with the equipment or ask technical questions.
- ✧ Prepare your presentation in advance so that your ideas are logically organized, and your points are clear.

- ✧ Rehearse your presentation to ensure your presentation runs no longer than the allotted time. We will be strict on time.
- ✧ Use 1 or 2 slides to introduce the background of the study. Speak slowly and clearly. Word choice should be as simple as possible. Use active words and short sentences.
- ✧ Use the microphone and speak to the audience.



## Program Layout

Kuala\_Lumpur, UTC+8

2023/11/2	14:00-17:00	Registration (B1-114 Reception, B1 Building, XMUM)
2023/11/3-5	08:30-17:00	
Friday 2023/11/3 AM	<b>Meeting Room</b>	<b>B1-114</b>
	<b>Time</b>	
	<b>Early Career Forum (1)   Chairs: LIN Wenqiang, YU Xiaolong</b>	
	09:00-09:15	HONG Zhongkun
	09:15-09:30	ZHANG Yalong
	09:30-09:45	KWAN Huifern
	09:45-10:00	TEH Seok Qi
	10:00-10:15	HOU Siyuan
	10:15-10:30	WANG Hongwei
	10:30-10:45	TAY Yii Jing
	10:45-11:00	LEE Xin You
	11:00-11:15	Coffee Break (B1-101)
	11:15-11:30	WU Baolan
	11:30-11:45	FENG Jie
	11:45-12:00	LU Huaihao
	12:00-12:15	LIN Wenqiang
	12:15-12:30	SUN Xue
Friday 2023/11/3 PM	12:30-13:45	Lunch (B1-101)
	<b>Early Career Forum (2)   Chairs: WANG Zhixuan, LIN Wenqiang</b>	
	14:30-14:45	MA Yinxiang
	14:45-15:00	SHI Fei
	15:00-15:15	YUAN Quanmu
	15:15-15:30	SHI Weian
	15:30-15:45	Coffee Break (B1-101)
	15:45-16:00	LIU Yue
	16:00-16:15	EVANS Rhian
	16:15-16:30	ZHANG Min
	16:30-16:45	LI Jialin
	16:45-17:00	CHAN Adrian Wen-Jie
	17:00-17:15	HAN Ming Han
	17:15-17:30	QIAO Peiyang
	17:30-17:45	CHONG Waiwai
	17:45-18:00	QIN Guoming
	18:00-20:00	Icebreaker (B1-101)
20:00-22:00	<b>SCSAM Organizing Committee Meeting</b> (Room 824, F8, A3 Building) <b>(only the SCSAM Organizing Committee members)</b>	
Saturday 2023/11/4 AM	09:00-09:15	<b>Opening Ceremony</b> Address by Local Organization Committee (Prof. Fei Chai) Address by Host Institution (Dr. Ying Zhang, Vice President of Xiamen University Malaysia) Address by Scientific Advisory Committee (Prof. Quan'an Zheng)
	<b>Morning Plenary Session (1)   Chair: WANG Guihua</b>	
	09:15-09:30	ZHENG Quanan <b>(Invited)</b>
	09:30-09:45	GAN Jianping
	09:45-10:00	WANG Guihua
10:00-10:15	SHEN Fang	

	10:15-10:30	XU Zhenhua	
	10:30-11:00	Coffee Break (B1-101) & Group Photo	
	11:00-11:15	CHEN Chen-Tung Arthur ( <b>Invited</b> )	
	11:15-11:30	RUSSELL Bayden D.	
	11:30-11:45	NG Chuck Chuan	
	11:45-12:00	HUANG Bangqin	
	12:00-12:15	CHEN Fajin	
	12:15-13:00	<b>Discussion</b>	
Saturday 2023/11/4 PM	13:00-14:00	Lunch (B1-101)	
	<b>Meeting Room</b>	<b>B1-114</b>	<b>B1-215</b>
	<b>Time</b>	<b>Afternoon Parallel Session 1+2 (1)</b> Chair: HAN Lei	<b>Afternoon Parallel Session 3+5</b> Chairs: WANG Yuntao, CHEAH Wee
	14:00-14:15	LIEW Ju Neng	WANG Yuntao
	14:15-14:30	LU Wenfang	WANG Yan
	14:30-14:45	YANG Yang	YAO Yulong
	14:45-15:00	JIANG Yuwu	LU Zhe
	15:00-15:15	LIN Hongyang	GUO Shaojing
	15:15-15:30	LI Mingting	CHEN Zhiyan
	15:30-15:45	ZHOU Muping	
	15:45-16:00	MEI Huan	
	16:00-18:00	Coffee Break & Poster Session (B1-101)	
	18:00-20:00	Dinner (Unity Ballroom, 2nd Floor, Holiday Inn Sepang)	
	Sunday 2023/11/5 AM	<b>Meeting Room</b>	<b>B1-114</b>
<b>Time</b>		<b>Morning Plenary Session (2)   Chair: SHANG Shaoling</b>	
09:00-09:15		HO Chung-Ru	
09:15-09:30		SHANG Shaoling	
09:30-09:45		DONG Changming	
09:45-10:00		XUE Huijie	
10:00-10:15		CHEN Shuangling	
10:15-10:30		Discussion	
10:30-11:00		Coffee Break (B1-101)	
11:00-11:15		LEE Zhongping	
11:15-11:30		GUAN Yuping	
11:30-11:45		XU Hongzhou	
11:45-11:00		XING Xiaogang	
12:00-12:15		ZHANG Zhiwei	
12:15-13:00	Discussion		
Sunday 2023/11/5 PM	13:00-14:00	Lunch (B1-101)	
	<b>Meeting Room</b>	<b>B1-114</b>	<b>B1-215</b>
	<b>Time</b>	<b>Afternoon Parallel Session 1+2 (2)</b> Chairs: HAN Lei, LIEW Ju Neng	<b>Afternoon Parallel Session 4</b> Chair: LUO Yawei
	14:00-14:15	LI Junyi	CHEN Xi
	14:15-14:30	BAI Xiaolin	CHEN Hongmei
	14:30-14:45	YUAN Chunxin	LAO Qibin
	14:45-15:00	CHEN Zhiwu	XU Wenlong
	15:00-15:15	ZHANG Han	SAGAYANATH Winfred Marshal
	15:15-15:30	GONG Yankun	DU Chuanjun

	15:30-16:00	<b>Coffee Break (B1-101)</b>	
		<b>Afternoon Parallel Session 1+2 (3)</b> Chairs: HAN Lei, LIEW Ju Neng	<b>Afternoon Parallel Session 6</b> Chairs: DONG Changming SHANG Sha- oling
	16:00-16:15	CAO Haijin	LI Yan
	16:15-16:30	JIANG Haoyu	ZHU Qing
	16:30-16:45	CHEN Bicheng	LI Xiaolong
	16:45-17:00	LYU Kewei	DENG Lin
	17:00-17:15	HAN Lei	YU Xiaolong
	17:15-17:45	<b>Closing Ceremony</b>	
<b>Monday 2023/11/6</b>	09:00-17:00	<b>Visit China-ASEAN College of Marine Sciences</b>	



## Program

### Day 1 Thursday 2023-11-02

#### Registration

14:00~17:00

B1-114 Reception, B1 Building, XMUM

### Day 2 Friday 2023-11-03

#### Registration

08:30~17:00

B1-114 Reception, B1 Building, XMUM

### Early Career Forum 1

09:00~12:50

B1-114, B1 Building, XMUM

Chairs: LIN Wenqiang/Xiamen University; YU Xiaolong/Xiamen University

Start	End	Presenter	Title
09:00	09:15	ZHANG Yalong Xiamen University	Evaluation of the semi-analytical algorithms for the remote sensing of inherent optical properties in the Southern Ocean
09:15	09:30	HONG Zhongkun Tsinghua University	Reconstruction of global daily Chlorophyll-a products from multisource information using convolutional neural networks
09:30	09:45	KWAN Huifern Xiamen University Malaysia	Assessment of Water Characteristics in Relation to Phytoplankton Assemblages in Cockle Culture Mudflat Area of Selangor, Malaysia.
09:45	10:00	TEH Seok Qi Xiamen University Malaysia	Assessment on Sediment Characteristics in Cockle Culture Areas along the Mudflats in Klang Straits, Selangor, Malaysia
10:00	10:15	HOU Siyuan Xiamen University	An intercomparison of remote sensing approaches for bathymetry, water's optical properties and benthic types of optically shallow waters based on a co-registered database
10:15	10:30	WANG Hongwei Xiamen University	Stimulated cell growth and physiological response by in-situ DOM, insight from mixotrophic dinoflagellate <i>Prorocentrum donghaiense</i>
10:30	10:45	TAY Yii Jing Xiamen University Malaysia	Community Assemblages and Trophodynamics of Macrobenthos in Blood Cockle Culture Mudflats in the Klang Strait, Selangor, Malaysia
10:45	11:00	LEE Xin You Xiamen University Malaysia	Effectiveness of Photosynthetic Bacteria (PSB) in Reducing Nitrogenous Compounds Within Aquaculture Systems
11:00	11:15	<b>Coffee Break</b>	
11:15	11:30	WU Baolan	Long-term Decreasing of Sea Level along Latitude of the Luzon Strait and its impact on the South China Sea: Surface VS Subsurface Forcing

Start	End	Presenter	Title
		The Hong Kong University of Science and Technology	
11:30	11:45	FENG Jie Ocean University of China	Multi-Scale Factors Contributing to Increased Non-Tropical Cyclone Rainfall in the South China Sea in Autumn under Different ENSO Phases
11:45	12:00	LU Huaihao South China Sea Institute of Oceanology, CAS	Interannual variability of near-inertial energy in the South China Sea and western North Pacific
12:00	12:15	LIN Wenqiang Xiamen University	The influence of tidal currents on the shoreward transmission of open-ocean signals
12:15	12:30	SUN Xue Xiamen University	A Modified Thermal Lag Correction Method for Glider-Based Salinity Measurements
12:30	13:45	<b>Lunch (B1-101)</b>	

**Early Career Forum 2**  
 14:30~18:00  
 B1-114, B1 Building, XMUM

Chairs: WANG Zhixuan/Xiamen University; LIN Wenqiang/Xiamen University

Start	End	Presenter	Title
14:30	14:45	MA Yinxiang Xiamen University	Richardson Dispersion in the South China Sea via Helmholtz-Hodge decomposition
14:45	15:00	SHI Fei Dalian Ocean University	Contrasting trends in short-lived and long-lived mesoscale eddies in the Southern Ocean since the 1990s
15:00	15:15	YUAN Quanmu Xiamen University	Spatiotemporal Characteristics and Volume Transport of Lagrangian Eddies in the Northwest Pacific
15:15	15:30	SHI Weian Xiamen University	Asymmetry of Submesoscale Instabilities in Anticyclonic and Cyclonic Eddies
15:30	15:45	<b>Coffee Break</b>	
15:45	16:00	LIU Yue Shanghai Jiao Tong University	Impact of Climate Change on the Global Potential for Japanese Kelp ( <i>Saccharina japonica</i> ) Farming Ecosystem Services
16:00	16:15	EVANS Rhian The University of Hong Kong	Predicting the impacts of marine heatwaves on future mariculture production in east and southeast Asia
16:15	16:30	ZHANG Min Xiamen University	Variations of surface water pCO <sub>2</sub> in different seagrass ecosystems, China
16:30	16:45	LI Jialin Xiamen University	Dissolved Organic Carbon in Water Bodies of Typical Seagrass Meadow Ecosystems in China
16:45	17:00	CHAN Adrian Wen-Jie Xiamen University Malaysia	Diversity of Endophytic Fungi in Common Mangrove Species in Peninsular Malaysia

Start	End	Presenter	Title
17:00	17:15	HAN Ming Han Xiamen University Malaysia	Potential bioactivities of the endophytic fungus, <i>Pyrrhoderma noxium</i> isolated from different mangrove species
17:15	17:30	QIAO Peiyang Xiamen University	Rising Sea-Level Reduces CO <sub>2</sub> and N <sub>2</sub> O Flux while promoting CH <sub>4</sub> Emissions from Mangroves: Evidence from Multi-latitudinal Simulations
17:30	17:45	CHONG Waiwai Xiamen University Malaysia	Cytotoxicity of Mangrove Endophytic Fungus against Colorectal Cancer Cell Lines
17:45	18:00	QIN Guoming South China Botanical Garden	Underestimated stem methane emission significantly offsets mangrove blue carbon sequestration
18:00	20:00	<b>Icebreaker (B1-101)</b>	



### Day 3 Saturday 2023-11-04

#### Registration

9:00~17:00

B1-114 Reception, B1 Building, XMUM

#### Opening Ceremony

09:00~09:15

B1-114, B1 Building, XMUM

#### Address by Local Organization Committee

(Prof. Fei Chai)

#### Address by Host Institution

(Dr. Ying Zhang, Vice President of Xiamen University Malaysia)

#### Address by Scientific Advisory Committee

(Prof. Quan'an Zheng)

#### Morning Plenary Session 1

09:15~12:30

B1-114, B1 Building, XMUM

Chairs: WANG Guihua/Fudan University

Start	End	Presenter	Title
09:15	09:30	ZHENG Quanan University of Maryland	Mechanisms of reappeared period shifts of internal solitary waves in the northern South China Sea (Invited)
09:30	09:45	GAN Jianping The Hong Kong University of Science and Technology	Hotspots of the Stokes rotating circulation in a large marginal sea
09:45	10:00	WANG Guihua Fudan University	A revisit of the South China Sea mesoscale eddies
10:00	10:15	SHEN Fang East China Normal University	Remote sensing detection of phytoplankton types assisted by AI technology: cases and thinking
10:15	10:30	XU Zhenhua Institute of Oceanology, CAS	Spontaneous generation mechanism of inertial-gravity wave from mesoscale eddy
10:30	11:00	<b>Coffee Break &amp; Group Photo</b>	
11:00	11:15	CHEN Chen-Tung Arthur Taiwan Sun Yat-sen University	Kuroshio and Hypoxia in the East and South China Seas (Invited)
11:15	11:30	RUSSELL Bayden D. The University of Hong Kong	Physiological and intergenerational carry-over effects of marine heatwaves on an economically and ecologically important sea urchin
11:30	11:45	NG Chuck Chuan Xiamen University Malaysia	Assessment of Heavy Metal Contamination in Commercial Edible Fish Species in Selangor, Malaysia
11:45	12:00	HUANG Bangqin	Biological carbon pump in the contrast ecosystems of

Start	End	Presenter	Title
		Xiamen University	South China Sea
12:00	12:15	CHEN Fajin Guangdong Ocean University	Characteristics and Mechanisms of Typhoon-Induced Decomposition of Organic Matter and Its Implication for Climate Change
12:15	13:00	<b>Discussion</b>	
13:00	14:00	<b>Lunch (B1-101)</b>	

### Afternoon Parallel Session1+2

14:00~16:00

B1-114, B1 Building, XMUM

Chair: HAN Lei/Xiamen University Malaysia

Start	End	Presenter	Title
14:00	14:15	LIEW Ju Neng Universiti Kebangsaan Malaysia	Changes of ENSO-Southeast Asian Rainfall Association Driven by Warmer Climate
14:15	14:30	LU Wenfang Sun Yat-Sen University	The planktonic ecosystem's intraseasonal response to summertime Madden-Julian Oscillation in the South China Sea: A model study
14:30	14:45	YANG Yang Xiamen University	Causality of Air-sea Interaction Inferred from Satellite Observations
14:45	15:00	JIANG Yuwu Xiamen University	Multi-factor governed synoptical winter bloom in the South China Sea
15:00	15:15	LIN Hongyang Xiamen University	Scale-Dependent Temperature-Salinity Compensation in Frontal Regions
15:15	15:30	LI Mingting Sun Yat-sen University	Thermohaline impacts of the South China Sea throughflow on the Indonesian throughflow
15:30	15:45	ZHOU Muping Second Institute of Oceanography, MNR	Interaction between eddy and western boundary current in the deep South China Sea: An inverse reduced-gravity model study
15:45	16:00	MEI Huan Jiangsu University of Science and Technology	Dynamics of the gap-leaping WBC: the Kuroshio and Agulhas Current
16:00	18:00	<b>Coffee Break &amp; Poster Session (B1-101)</b>	

### Afternoon Parallel Session3+5

14:00~16:00

B1-215, B1 Building, XMUM

Chairs: WANG Yuntao/Second Institute of Oceanography, MNR; CHEAH Wee/University of Malaya

Start	End	Presenter	Title
14:00	14:15	WANG Yuntao	Determination of upper ocean structure on response of sea surface temperature and chlorophyll to typhoons in

Start	End	Presenter	Title
		Second Institute of Oceanography, MNR	the northwestern Pacific Ocean
14:15	14:30	WANG Yan Hainan University	Contrasting population genetic structure and connectivity patterns of the members of the stony coral <i>Galaxea fascicularis</i> species complex: suggesting a complementary environmental adaptation strategy
14:30	14:45	YAO Yulong South China Sea Institute of Oceanology, CAS	Climate Change Increases Global Risk of Coral Bleaching
14:45	15:00	ZHE Lu South China Botanical Garden	Blue carbon sink capacity of mangroves determined by leaves and their associated microbiome
15:00	15:15	GUO Shaojing Sun Yat-sen University	Oceanic and Ecological Response to Native Typhoons Cempaka and Lupit (2021) Along the Northern South China Sea Continental Shelf: Comparison and Evaluation of Regional and Global Operational Oceanography Forecasting Systems
15:15	15:30	CHEN Zhiyan Sun Yat-sen University	Impacts of marine heatwaves on coral reef in the Qilianyu Islets
15:30	18:00	<b>Coffee Break &amp; Poster Session (B1-101)</b>	

### Dinner

18:00~20:00

Unity Ballroom, 2nd Floor, Holiday Inn Sepang

**Day 4 Sunday 2023-11-05**
**Registration**

9:00~17:00

B1-114 Reception, B1 Building, XMUM

**Morning Plenary Session 2**

09:00~12:30

B1-114, B1 Building, XMUM

Chairs: SHANG Shaoling/Xiamen University

Start	End	Presenter	Title
09:00	09:15	HO Chung-Ru Taiwan Ocean University	Kuroshio Cut-off Events East of Taiwan Island Enhancing the Vorticity in the Northern SCS during the 1998-2013 Global Warming Hiatus
09:15	09:30	SHANG Shaoling Xiamen University	Spatial shift of spring harmful algal blooms from 2000 to 2019 in the western Taiwan Strait
09:30	09:45	DONG Changming Nanjing University of Information Science and Technology	The near-global ocean mesoscale eddy atmospheric-oceanic-biological interaction observational dataset
09:45	10:00	XUE Huijie Xiamen University	Vertical Coupling of the Multi-Layer Circulation in the South China Sea
10:00	10:15	CHEN Shuangling Second Institute of Oceanography, MNR	Remote estimation of sea surface nitrate from ocean color
10:15	10:30	<b>Discussion</b>	
10:30	11:00	<b>Coffee Break</b>	
11:00	11:15	LEE Zhongping Xiamen University	Estimation of absorption coefficient of oceanic waters via band difference of remote sensing reflectance and its applications
11:15	11:30	GUAN Yuping South China Sea Institute of Oceanology	Wind energy transfer into the South China Sea
11:30	11:45	XU Hongzhou Institute of Deep-sea Science and Engineering	Typhoon-enhanced near-inertial waves in the north-western South China Sea
11:45	12:00	XING Xiaogang Second Institute of Oceanography, MNR	Typhoon and storm-induced phytoplankton responses revealed by BGC-Argo
12:00	12:15	ZHANG Zhiwei Ocean University of China	A novel parameterization scheme of submesoscale vertical buoyancy flux in the ocean
12:15	13:00	<b>Discussion</b>	
13:00	14:00	<b>Lunch (B1-101)</b>	



**Afternoon Parallel Session1+2**  
 14:00~17:30  
 B1-114, B1 Building, XMUM

Chairs: HAN Lei/Xiamen University Malaysia; LIEW Ju Neng/Universiti Kebangsaan Malaysia

Start	End	Presenter	Title
14:00	14:15	LI Junyi Guangdong Ocean University	Cruise observation of near inertial oscillations trapped at inclined front on continental shelf of the northwestern South China Sea
14:15	14:30	BAI Xiaolin Xiamen University	Intermittent Generation of Internal Solitary-Like Waves on the Northern Shelf of the South China Sea
14:30	14:45	YUAN Chunxin Ocean University of China	Oblique internal solitary wave-wave interactions near the Dongsha Atoll
14:45	15:00	CHEN Zhiwu South China Sea Institute of Oceanology, CAS	Tide-induced near-inertial internal waves (NIWs) and their interaction with wind-induced NIWs
15:00	15:15	ZHANG Han Second Institute of Oceanography, MNR	Effect of Continental Slope on Near-Inertial Response to a Typhoon in the Northern South China Sea
15:15	15:30	GONG Yankun South China Sea Institute of Oceanology, CAS	An internal solitary wave forecasting model in the northern South China Sea (ISWFM-NSCS)
15:30	16:00	<b>Coffee Break</b>	
16:00	16:15	CAO Haijin Hohai University	Energetic Submesoscale Stirring in the Stratified Layer of a Cyclonic Eddy
16:15	16:30	JIANG Haoyu China University of Geosciences	Accurate Mean Wave Period Retrieved from SWIM Instrument On-Board CFOSAT
16:30	16:45	CHEN Bicheng Xiamen University	The role of wind-wave-current coupling on the merge of surface and bottom boundary layers in the coastal ocean
16:45	17:00	LYU Kewei Xiamen University	Regional Sea Level Changes: From the Altimeter-era Observational Record to Future Projection
17:00	17:15	HAN Lei Xiamen University Malaysia	The South China Sea: A "Miniature Wonderland" of the Atlantic and Indian Ocean in the Meridional Overturning Circulations (MOC)

**Afternoon Parallel Session 4**  
 14:00~15:30 B1-215, B1 Building, XMUM

Chairs: LUO Yawei/Xiamen University

Start	End	Presenter	Title
14:00	14:15	CHEN Xi Xiamen University	Fluorescence Sensing of Ammonium in Water
14:15	14:30	CHEN Hongmei Xiamen University	Re-examining the impact of photochemistry on terrestrial organic matter in global biogeochemical cycles
14:30	14:45	LAO Qibin Guangdong Ocean University	External Dynamic Mechanisms Controlling the Periodic Off-shore Blooms in Beibu Gulf
14:45	15:00	XU Wenlong Jiangsu University of Science and Technology	Mesoscale eddy modulation of subsurface chlorophyll maximum layers in the South China Sea
15:00	15:15	DU Chuanjun Hainan University	Nutricline displacement regulates spatiotemporal carbon export in the South China Sea
15:15	15:30	MARSHAL Winfred Universiti Malaysia Terengganu	ROMS-NPZD Coupled Model Hindcast and CMIP6 Assessment of Biogeochemistry with Climate Change in Southern South China Sea
15:30	16:00	<b>Coffee Break</b>	

**Afternoon Parallel Session 6**  
 16:00~17:30 B1-215, B1 Building, XMUM

Chairs: DONG Changming/Nanjing University of Information Science & Technology; SHANG Shaling/Xiamen University

Start	End	Presenter	Title
16:00	16:15	LI Yan Ocean University of China	Pre-Simulation of the Airborne Experiment Designed for the Chinese Ocean Salinity Mission
16:15	16:30	ZHU Qing Xiamen University	Vertical distribution of phytoplankton functional types in the South China Sea and its adjacent Taiwan Strait based on phytoplankton absorption spectrum and machine learning
16:30	16:45	LI Xiaolong Institute of Oceanology, CAS	A DEEP-LEARNING-BASED MODEL FOR PHYTOPLANKTON PIGMENT ESTIMATION
16:45	17:00	DENG Lin Sun Yat-Sen University	Evaluation of Satellite-Derived Size Fractionated Phytoplankton Primary Production in the South China Sea
17:00	17:15	YU Xiaolong Xiamen University	Global distribution of the spectral power coefficient of particulate backscattering coefficient obtained by a neural network scheme

**Closing Ceremony**  
17:15~17:45  
B1-114, B1 Building, XMUM

## Poster List

Saturday 2023/11/4

16:00~18:00 B1-101, B1 Building, XMUM

**Note: Posters marked with “EF” are presented by graduate students or Postdocs.**

Early Career Forum Poster	No.	Presenter	Title
<b>Session 1</b>			
EF	11	FENG Jie	Multi-Scale Factors Contributing to Increased Non-Tropical Cyclone Rainfall in the South China Sea in Autumn under Different ENSO Phases
	101	LIU Sihai	Impacts of Marine Heatwave Events on Three Distinct Upwelling Systems and its Implication for Marine Ecosystems
EF	12	WU Baolan	Long-term Decreasing of Sea Level along Latitude of the Luzon Strait and its impact on the South China Sea: Surface VS Subsurface Forcing
<b>Session 2</b>			
	87	CHOW Chun Hoe	The condition for the significant upwelling and downwelling at eddy centers in the Northern South China Sea
	130	FU Minghan	Analysis of Mesoscale Eddy Merging in the Ocean Using Satellite Remote Sensing Data
	131	HE Chaochao	Influences of physical processes induced by seamounts on vertical mixing
	83	HU Jianyu	Spatiotemporal Variation of Warm Eddies in the South China Sea during 1993–2019
EF	5	LIN Wenqiang	The influence of tidal currents on the shoreward transmission of open-ocean signals
	86	LI Denghui	Observations of tidal modulation on diurnal vertical displacements of the oceanic transition layer
	78	LI Junde	Interactions between cold cyclonic eddies and a western boundary current modulate marine heatwaves
	80	LI Mingming	Diapycnal mixing observed in an anticyclonic eddy in the northwestern South China Sea
	79	LI Qiang	A seasonal circulation index for the ocean and its application to the South China Sea



EF	6	LU Huaihao	Interannual variability of near-inertial energy in the South China Sea and western North Pacific
EF	10	MA Yinxiang	Richardson Dispersion in the South China Sea via Helmholtz-Hodge decomposition
	81	NIU Pengchao	Near-surface dynamic structure in the northern South China Sea and Northwest Pacific revealed using Lagrangian data
	1	QIN Guojin	Response of the West Pacific Ocean Current to Changes in Bathymetry and Coastline - A Study Based on the Regional Ocean Model (ROMS)
EF	14	SHI Fei	Contrasting trends in short-lived and long-lived mesoscale eddies in the Southern Ocean since the 1990s
EF	3	SHI Weian	Asymmetry of Submesoscale Instabilities in Anticyclonic and Cyclonic Eddies
EF	4	SUN Xue	A Modified Thermal Lag Correction Method for Glider-Based Salinity Measurements
	128	WANG Qingyue	Seasonality of submesoscale processes-induced vertical heat transport modulated by oceanic mesoscale eddies in the Kuroshio Extension
	129	WANG Ziyun	Simulation and Analysis of Typhoon Waves along the Jiangsu Coast in the Last 70 Years
	74	WU Kaimin	Submesoscale processes in the western boundary current of South China Sea
	69	XIE Lingling	Vertical circulation of coastal front observed in the northwestern South China Sea
EF	9	YUAN Quanmu	Spatiotemporal Characteristics and Volume Transport of Lagrangian Eddies in the Northwest Pacifics
	85	ZHU Junying	Interannual variation of coastal upwelling around Hainan Island
	144	ZHU Jia	An overview on water masses of the china seas
<b>Session 3</b>			
EF	35	LIU Yue	Impact of Climate Change on the Global Potential for Japanese Kelp ( <i>Saccharina japonica</i> ) Farming Ecosystem Services
	138	TANG Haibo	Spatial Distribution of Submesoscale Instability within an Anticyclonic Eddy during Tropical Cyclone "Haitang" from Glider Array Observations

EF	123	WANG Hongwei	Stimulated cell growth and physiological response by in-situ DOM, insight from mixotrophic dinoflagellate <i>Procentrum donghaiense</i>
	126	YANG Jun	Evaluation of seagrass bed carbon reserves in the Changshan Islands
<b>Session 4</b>			
EF	120	KWAN Huifern	Assessment of Water Characteristics in Relation to Phytoplankton Assemblages in Cockle Culture Mudflat Area of Selangor, Malaysia.
EF	38	LEE Xin You	Effectiveness of Photosynthetic Bacteria (PSB) in Reducing Nitrogenous Compounds Within Aquaculture Systems
	45	LI Xiaolin	Sources and Dynamic Cycling of Dissolved Organic Carbon in the South China Sea
	52	LUO Ya-Wei	Elevated estimation for global marine N <sub>2</sub> fixation based on new measurements in the past decade
EF	122	TAY Yii Jing	Community Assemblages and Trophodynamics of Macrobenthos in Blood Cockle Culture Mudflats in the Klang Strait, Selangor, Malaysia
EF	109	TEH Seok Qi	Assessment on Sediment Characteristics in Cockle Culture Areas along the Mudflats in Klang Straits, Selangor, Malaysia
	50	ZHANG Wen-Zhou	Physical drivers of chlorophyll variability in the open South China Sea
<b>Session 5</b>			
	37	BOON Ful Ng	Chemotaxonomic Classification of Mangrove Endophytic Fungi via Metabolomics Approach
EF	40	CHAN Adrian Wen-Jie	Diversity of Endophytic Fungi in Common Mangrove Species in Peninsular Malaysia
	124	CHEN Luzhen	Diversity of Endophytic Fungi in Common Mangrove Species in Peninsular Malaysia
	16	CHEN Weifang	Carbon stocks and sequestration rate in seagrass meadows along the coast of China
EF	121	CHONG Waiwai	Cytotoxicity of Mangrove Endophytic Fungus against Colorectal Cancer Cell Lines
EF	39	HAN Ming Han	Potential bioactivities of the endophytic fungus, <i>Pyrrhoderma noxium</i> isolated from different mangrove species

EF	21	HOU Siyuan	An intercomparison of remote sensing approaches for bathymetry, water's optical properties and benthic types of optically shallow waters based on a co-registered database
EF	20	LI Jialin	Dissolved Organic Carbon in Water Bodies of Typical Seagrass Meadow Ecosystems in China
EF	24	QIAO Peiyang	Rising Sea-Level Reduces CO <sub>2</sub> and N <sub>2</sub> O Flux while promoting CH <sub>4</sub> Emissions from Mangroves: Evidence from Multi-latitudinal Simulations
EF	127	QIN Guoming	Underestimated stem methane emission significantly offsets mangrove blue carbon sequestration
EF	41	ZHANG Min	Variations of surface water pCO <sub>2</sub> in different seagrass ecosystems, China
	108	ZHOU Qianqing	A Numerical Study on the Larval Dispersal Pathways and Potential Connectivity of Coral Reefs around the Coast of Hainan Island
<b>Session 6</b>			
EF	119	HONG Zhongkun	Reconstruction of global daily Chlorophyll-a products from multisource information using convolutional neural networks
	107	HU Minghao	Application of deep-learning parameterization of turbulent mixing in the upwelling region east of Hainan Island
	48	LIM Jing Tian	Estimation of oceanic chlorophyll-a concentration using SAR imagery
	142	SUN Congrong	Sea Surface Temperature Retrieval Method of China Ocean Color and Temperature Scanner (COCTS) on the HY-1C and HY-1D satellites
	133	XIE Huarong	Deep Learning Based Oceanic Mesoscale Eddy Detection in the South China Sea
	143	XU Ying	Statistical comparison of ocean wave directional spectra Derived from SWIM/CFOSAT satellite observations and from buoy observations
EF	22	ZHANG Yalong	Evaluation of the semi-analytical algorithms for the remote sensing of inherent optical properties in the Southern Ocean
	56	ZHANG Caiyun	Harmful algal bloom operational forecasting system in Fujian Province, China: Development and skill assessment





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厦门大学海洋与地球学院  
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CHINA-ASEAN COLLEGE  
OF MARINE SCIENCES  
中国-东盟海洋学院



融通科学、管理和社会参与：助力海岸带可持续发展  
Coastal Zones Under Intensifying Human Activities and Changing Climate:  
A Regional Programme Integrating Science, Management and Society to  
Support Ocean Sustainability (COASTAL-SOS)

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