

PROGRAM BOOK



City University of Hong Kong, Hong Kong SAR, China 3-6 January, 2024

































3 – 6 January, 2024 Hong Kong

Programme



Organized by

State Key Laboratory of Marine Pollution &

Department of Chemistry

City University of Hong Kong

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Preface

Message from the Organizing Committee

On behalf of the Organizing Committee of the 10th International Conference on Marine Pollution and Ecotoxicology (ICMPE-10), and on behalf of City University of Hong Kong (CityU), may I extend my warmest welcome to all our participants and visitors. The ICMPE-10 is jointly organized by the State Key Laboratory of Marine Pollution (SKLMP) and the Department of Chemistry of CityU, in collaboration with Partnerships in Environmental Management for the Seas of East Asia (PEMSEA) and UNESCO IOC Regional Training and Research Centre on Coastal Contaminant Monitoring and Marine Innovative Technologies.

The ICMPE was initially established by Professor Rudolf Wu and began at City University of Hong Kong in January, 1995 (Figure 1). Building upon its initial success, the ICMPE conference series subsequently flourished and continued to be held in Hong Kong in 1998, 2001, 2004, 2007, 2010, 2013, 2016, and 2019. This conference series has become a distinguished event in the international arena of marine pollution and ecotoxicology research. Over the years, the number of participants has doubled – from 150 in 1995 to 303 in 2019.



Figure 1. Group photo taken at the 1st ICMPE held at CityU during 22-26 January, 1995

The conference proceedings of the ICMPE conferences have significantly influenced our field of research. Thanks to our enduring partnership with Elsevier, all conference proceedings have been published as Special Issues in the international journal *Marine Pollution Bulletin*. These were published in 1995, 1999, 2002, 2005, 2008, 2011, 2014, 2017, and 2021, comprising 51, 55, 52, 57, 83, 75, 68, 66, and 72 articles, respectively. Many of our conference papers have been widely cited, and **Table 1** lists the papers with over 100 citations. The most cited paper (some 591 citations), authored by Professor Rudolf Wu, provides a comprehensive review on the biological

and ecosystem responses to hypoxia. Professor Hua-Sheng Hong of Xiamen University, a strong supporter of ICMPE, appears three times on this highly cited list, having published important research articles revealing contamination of persistent organic pollutants in marine sediments of several coastal cities (**Table 1**). Other authors appearing twice on this list include Professor Michael Depledge, Professor Xin-Hong Wang, and myself. These papers cover topics such as biomonitoring, pollution from mariculture, polycyclic aromatic hydrocarbons (PAHs), oil pollution, and heavy metals in 1995; organochlorinated compounds and endocrine disrupting chemicals (EDCs) in 1999; hypoxia, biomagnification of pollutants in marine systems, models for deriving predicted no effect concentrations, ammonia toxicity, persistent EDCs, and organochlorine pesticides in 2002; perfluorinated compounds and effects of multiple stressors on marine organisms in 2005; PAHs and polybrominated diphenyl ethers in 2011; micro- and nano-plastics, and eutrophication in 2017. These topics continue to remain pertinent to the present day.

Table 1. Twenty-three most cited conference papers with over 100 citations, published in the conference proceedings of ICMPE series as Special Issues of *Marine Pollution Bulletin* (MPB).

Rank	Details of each of the most cited publication	Citations*
1	Wu RSS (2002) Hypoxia: from molecular responses to ecosystem responses. MPB 45: 35-45	591
2	Rainbow PS (1995) Biomonitoring of heavy metal availability in the marine environment. MPB 31: 183-192	550
3	Yamashita N, Kannan K, Taniyasu S, Horii YC, Petrick G, Gamo T (2005) A global survey of perfluorinated acids in oceans. MPB 51: 658-668	478
4	Wu RSS (1995) The environmental impact of marine fish culture: Towards a sustainable future. MPB 31: 159-166	406
5	Chae Y, An YJ (2017) Effects of micro- and nanoplastics on aquatic ecosystems: Current research trends and perspectives. 124: 624-632	356
6	Gray JS (2002) Biomagnification in marine systems: the perspective of an ecologist. 45: 46-52	330
7	Wheeler JR, Grist EPM, Leung KMY, Morritt D, Crane M (2002) Species sensitivity distributions: data and model choice. MPB 45: 192-202	324
8	Gilbert PM (2017) Eutrophication, harmful algae and biodiversity — Challenging paradigms in a world of complex nutrient changes. MPB 124: 591-606	300
9	Hong HS, Xu L, Zhang L, Chen JS, Wong YS, Wan TSM (1995) Environmental fate and chemistry of organic pollutants in the sediment of Xiamen and Victoria Harbours. MPB 31: 229-236	265
10	Witt G (1995) Polycyclic aromatic hydrocarbons in water and sediment of the Baltic Sea. MPB 31: 237-248	260
11	Atlas RM (1995) Petroleum biodegradation and oil spill bioremediation. MPB 31: 178-182	256
12	Randall DJ, Tsui TKN (2002) Ammonia toxicity in fish. MPB 45: 17-23	227

13	Tanabe S (2002) Contamination and toxic effects of persistent endocrine disrupters in marine mammals and birds, MPB 45: 69-77	198
14	Doong RA, Peng CK, Sun YC (2002) Composition and distribution of organochlorine pesticide residues in surface sediments from the Wu-Shi River estuary, Taiwan. MPB 45: 246-253	172
15	Depledge MH, Aagaard A, Györkös P (1995) Assessment of trace metal toxicity using molecular, physiological and behavioural biomarkers. MPB 31: 19-27	164
16	Wiseman SB, Wan Y, Chang H, Zhang XW, Hecker M, Jones PD, Giesy JP (2011) Polybrominated diphenyl ethers and their hydroxylated/ methoxylated analogs: Environmental sources, metabolic relationships, and relative toxicities. MPB 63: 179-188	162
17	Chen CW, Chen CF (2011) Distribution, origin, and potential toxicological significance of polycyclic aromatic hydrocarbons (PAHs) in sediments of Kaohsiung Harbor, Taiwan. MPB 63: 417-423	162
18	Hong HS, Chen WQ, Wang XH, Zhang LP (1999) Distribution and fate of organochlorine pollutants in the Pearl River Estuary. MPB 39: 376-382	162
19	Sericano JL, Wade TL, Jackson TJ, Brooks JM, Tripp BW, Farrington JW, Mee LD, Readmann, Villeneuve JP, Goldberg ED (1995) Trace organic contamination in the Americas: An overview of the US National Status & Trends and the International 'Mussel Watch' programmes. MPB 31: 214-225	162
20	Adam SM (2005) Assessing cause and effect of multiple stressors on marine systems. MPB 51: 649-657	157
21	Depledge MH, Billingburst Z (1999) Ecological significance of endocrine disruption in marine invertebrates. MPB 39: 32-38	162
22	Kwok KWH, Leung KMY (2005) Toxicity of antifouling biocides to the intertidal harpacticoid copepod <i>Tigriopus japonicus</i> (Crustacea, Copepoda): Effects of temperature and salinity. MPB 51: 8-12	140
23	Wu YL, Wang XH, Li YY, Hong HS (2011) Occurrence of polycyclic aromatic hydrocarbons (PAHs) in seawater from the Western Taiwan Strait, China. MPB 63: 459-463	102

^{*}Notes: Total number of citations up to the end of November 2023, based on Web of Science.

The ICMPE conference has progressed in parallel with the growth of CityU's research in marine pollution and ecotoxicology. CityU was officially established in 1994, having been upgraded from the existing City Polytechnic of Hong Kong. This year marks the 30th Anniversary of this young and rapidly growing university, which is globally ranked 70th and 82nd by the QS and Times Higher Education World University Rankings 2024, respectively. In addition to providing high-quality education and conducting fundamental research, CityU places great emphasis on translational research and innovative inventions. Professor Rudolf Wu, the founding Head of CityU's Department of Biology and Chemistry (renamed as Department of Chemistry in 2017), identified marine environmental research as an area of strategic research during the 1990s, due to pressing pollution-related issues not only in Hong Kong, but worldwide. To address such diverse challenges, Professor Wu assembled a

multidisciplinary research team comprising 24 scholars from six local universities, including biologists, chemists, ecologists, oceanographers, engineers, and statisticians. Over the following years, their transdisciplinary research collaboration has demonstrated great synergy in developing novel pollution monitoring and control technologies, elucidating toxic mechanisms of priority pollutants, deriving environmental quality benchmarks for risk assessment and management of priority chemical contaminants and seafood safety, and offering policy and technological solutions to mitigate impacts on marine ecosystems and human health.

In 2004, this multidisciplinary team, led by Professor Wu, secured US\$ 8.7 million from the Research Grants Council of the Hong Kong SAR Government to establish the Area of Excellence (AoE) Centre for Marine Environmental Research and Innovative Technology (MERIT) at CityU. Through remarkable teamwork and long-term partnerships, the MERIT Centre has achieved numerous breakthroughs in research and innovation, consistently providing scientific support to the Hong Kong government in combating pollution and enhancing marine conservation. It has emerged as one of the top AoE centres in Hong Kong. In late 2009, the MERIT Centre, in collaboration with Xiamen University's State Key Laboratory of Marine Environmental Science, was further recognized as the Partner State Key Laboratory in Marine Pollution by the Ministry of Science and Technology (MOST) of China and the Innovation and Technology Commission (ITC) of the Hong Kong SAR Government. This laboratory underwent a rigorous evaluation by MOST and ITC during 2017-2018, eventually earning the rating of an "Outstanding State Key Laboratory" and was subsequently upgraded to an independent State Key Laboratory of Marine Pollution (SKLMP) in 2018.

Over the past three decades, we have witnessed significant improvements in water quality and the recovery of ecosystems in the marine environment of Hong Kong, (especially in Victoria and Tolo Harbours), thanks to the implementation of the Harbour Area Treatment Scheme and the Tolo Harbour Action Plan of the Hong Kong SAR Government. Furthermore, concentrations of many harmful pollutants (including metals, organochlorines and organotin compounds) in local seawater, sediments, and marine biota have declined as a result of improved collection and treatment of wastewater, as well as the enactment of relevant legislation and law enforcement. However, we still face challenges posed by regional eutrophication, hypoxia, plastics pollution, and emerging chemical contaminants, all of which continue to demand our attention.

Our SKLMP has experienced remarkable growth, now boasting over 70 members from eight local universities. Equipped with state-of-the-art laboratories and a wide range of vibrant research programs, we are dedicated to conducting frontier basic research, developing practical innovations to solve real-world problems, and creating positive impacts on a global, national, and local scale. A notable example is our leadership since June 2021 in the Global Estuaries Monitoring (GEM) Programme — a United Nations-endorsed Action Programme under the UN Decade of Ocean Science for Sustainable Development (2021-2030). The GEM, with the participation

of over 100 scientists from six continents, aims to establish a global monitoring network, apply standardized methods to monitor priority chemical contaminants in 100+ estuaries worldwide, identify pollution hotspots and priority contaminants, and collaborate with stakeholders in co-developing solutions. By doing so, we aim to make our estuaries cleaner and safer for all. In July 2022, our efforts were recognized as the SKLMP became the Regional Centre of Excellence (RCOE) in Marine Pollution Research within PEMSEA - an intergovernmental organization with 14 country Additionally, in April 2023, UNESCO's members in the East Asia region. Intergovernmental Oceanography Commission (IOC) entrusted the SKLMP to host the Regional Training and Research Centre on Coastal Contaminant Monitoring and Marine Innovative Technologies (RTRC-Coastal COMMIT) for the Western Pacific region, in collaboration with 22 national partners. Notably, the SKLMP plays a pivotal role in providing training to government officials and researchers, as well as leading and coordinating international research programs in both the East Asia and Western Pacific regions.

On behalf of the Organizing Committee, we are delighted to welcome you to the ICMPE-10 at CityU, especially as this occasion marks the 30th Anniversary of the conference series. After the epidemic subsided during the first quarter of 2023, we made a swift decision to resume the ICMPE meeting in January 2024. **The ICMPE-10** is expected to host approximately 330 participants from 24 countries/regions and will feature 23 keynote lectures, 16 invited talks, 80 regular oral presentations, and 146 poster presentations. Furthermore, a workshop will be organized for participants to meet the editors of key marine science journals, including *Marine Pollution Bulletin*, *Marine Environmental Research*, *Journal of Sea Research*, and *Regional Studies in Marine Science*. This workshop aims to provide insights into the latest developments of these journals, discuss regular paper publication and special issue opportunities, and explore possibilities of serving on editorial boards. Another workshop will focus on the UN-endorsed GEM Programme, providing an opportunity for those interested to join this global effort and potentially lead a part of the program.

We would like to express our sincere gratitude to our sponsors and supporting organizations, whose invaluable contributions have made this conference possible and have enabled us to invite our prominent guests. Firstly, we extend our deepest appreciation to the Croucher Foundation Limited and the Swire Trust for their major sponsorship of this conference. Their generous financial support has allowed us to invite renowned scientists and environmental practitioners from overseas and mainland China to serve as Keynote and Invited Speakers, as well as cover some conference expenses. Secondly, we would like to thank Ecosystems Limited, the Hong Kong Marine Ecological Association, and Elsevier for their sponsorships and provision of scholarships for student participants who receive the best presentation awards. Also, the in-kind support from the Hong Kong Academy of Marine Science and Engineering is highly appreciated. Thirdly, we acknowledge Elsevier and its journal, *Marine Pollution Bulletin*, for their continuous support of the ICMPE conference series. With Elsevier's unwavering support, Ms. Haiyan Sun, the Elsevier Publisher of Oceanography Journals, has agreed to publish selected papers in a Virtual

Special Issue of *Marine Pollution Bulletin*, in collaboration with two other sister journals, *Marine Environmental Research* and *Regional Studies in Marine Science*. Authors will have the opportunity to select the journal in which they wish to publish their papers as part of the ICMPE conference proceedings. Fourthly, we extend our sincere thanks to the staff and students of SKLMP for their exceptional commitment and efforts in organizing this conference within a tight timeframe. We highly appreciate the dedicated colleagues involved, especially Dr. Dan Deng, Dr. Jiajun Wu, Ms. May Ng, Ms. Sora Cheung, and Ms. Josie Yan, for their untiring contributions in preparing and running this conference.

Last but not least, we are extremely grateful to Prof. Freddy Boey, President of CityU; Ms. Diane Wong Shuk Han, JP, Under Secretary for Environment and Ecology of the Hong Kong SAR Government; Mr. Wenxi Zhu, Head of UNESCO/IOC Regional Secretariat for WESTPAC; and Ms. Aimee Gonzales, Executive Director of the PEMSEA Resource Facility, for graciously sparing their valuable time to officiate at the opening ceremony of the ICMPE-10. Other honourable guests including Mr. Bing Ke, Associate Director and Dr. Wentao Wang, Head of Ocean Department of the Administrative Center for China's Agenda 21; Dr. Siu Fai Leung, Director of Agriculture, Fisheries and Conservation Department of the Hong Kong SAR Government and amongst others are greatly appreciated. We would also like to extend our gratitude to all the invited speakers, especially those who have travelled from afar to join us in Hong Kong.

Finally, I would like to express my heartfelt thanks to all of you for your tremendous support of the ICMPE-10 and for celebrating both the 30th Anniversary of CityU and the ICMPE conference series. Let us raise our glasses, capture memorable moments with more photographs, cherish our friendships and fruitful collaborations of the past, and look forward to a splendid future. I am confident that you will find this conference both scientifically productive and enjoyable.

We cordially invite all visitors to explore our vibrant city and the breath-taking countryside of Hong Kong, and to savour the diverse array of delicious food it has to offer. We wish you a pleasant and unforgettable stay in Hong Kong!

Yours sincerely,

Professor Kenneth M. Y. Leung

Gray Leung.

Chairman, Organizing Committee of the ICMPE-10

Director, SKLMP and Chair Professor, Department of Chemistry

City University of Hong Kong

Acknowledgements

The Organizing Committee of ICMPE-10 gratefully acknowledges the following organizations for their generous support and donations to this conference:

Co-organizers:







Sponsors:



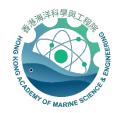


Supporters:











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Prof. Kenneth Mei Yee LEUNG

Director, State Key Laboratory of Marine Pollution Chair Professor, Department of Chemistry City University of Hong Kong

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Prof. Chris Kong Chu WONG

Professor, Department of Biology Hong Kong Baptist University

Dr. Moriaki YASUHARA

Associate Professor, School of Biological Sciences The University of Hong Kong

Information for Oral and Poster Presentations

Plenary Lectures

Each plenary lecture will be 40 minutes including discussion. All plenary lectures will take place at the Joseph Lee Hall, 3/F, Li Dak Sum Yip Yio Chin Academic Building.

Keynote Lectures

Each keynote lecture will be 35 minutes including discussion. All keynote lectures will take place at Lecture Theatre 1 &2 (LT1 &2), 4/F, University Concourse, Yeung Kin Man Academic Building (YEUNG).

Invited Talks and Regular Presentations

Concurrent sessions for invited talks and oral presentations will be held at P4701, P4703, P4704 and P4302, 4/F, University Concourse, Yeung Kin Man Academic Building. Each invited talk will be 30 minutes, and each regular oral presentation will be 20 minutes including discussion. Regular presenters are recommended to limit their presentation to 15 minutes in order to allow time for answering questions from the audience. The schedule will be strictly enforced to ensure smooth transitions between sessions.

Poster presentations

Each poster presentation will be allocated a poster space of 841mm (W) x 1189mm (H). The poster number will be placed in the top corner of the board by the Conference Secretariat. Please be sure to mount your poster to the board with the number assigned to you. Adhesive tape will be provided for mounting posters.

Two separate poster sessions will be held on 3 January 2024 (Day 1, Session A) and 5 January 2024 (Day 3, Session B) at Purple Zone, 4/F, University Concourse, Yeung Kin Man Academic Building (please refer to back of the booklet for location map).

	Poster Session A	Poster Session B
Setup	16:30, 2 January 2024	16:30, 4 January 2024
Removal	12:50, 4 January 2024	12:25, 6 January 2024

Posters must be removed from the display board according to the schedule. Any poster remaining on the board after the designated time will be discarded without any notice.

Student Presentation Awards

Student presentations will be evaluated by session chairs, invited speakers, and committee members. Winners for both oral and poster presentations of the following awards will be announced and presented during the Closing Ceremony on 6 January 2024.

- Professor John Gray Memorial Award for the Best Marine Pollution Study Associated with Benthic Ecology
- Professor Rudolf Wu Award for the Best Student Presentation
- Hong Kong Marine Ecological Association (HKMEA) Award for the Best Study of Hong Kong's Marine Ecology
- Elsevier's Best Student Presentation Award

Submission of Manuscripts for Publication

Submission of manuscripts for publication in the virtual special issue of *Marine Pollution Bulletin* (with an impact factor of 5.8) will be opened in mid-January 2024 and will be closed by the end of March 2024. All submitted manuscripts will be subject to the normal refereeing procedures of the journal. The authors also have options to submit their conference papers to other sister journals, including *Marine Environmental Research* and *Regional Studies in Marine Science* during their submission.

Accepted manuscripts will be first published as a regular paper in a normal issue of *Marine Pollution Bulletin* or the named sister journal, and then will form the virtual special issue when all accepted articles are ready for assemblage. A dedicated website of Elsevier will showcase the virtual special issue. An example of the special issue of the ICEMP-9 can be viewed via this link:

https://www.sciencedirect.com/journal/marine-pollution-bulletin/specialissue/10WX1P290WV

Meeting with the Editors Workshop

Date & Time: 13:30-14:30, 4 January 2024 (Thursday)

Venue: Joseph Lee Hall, 3/F, Li Dak Sum Yip Yio Chin Academic Building

Speakers:

- **Inna Sokolova**, Editor-in-Chief of Journal of Sea Research and Marine Environmental Research, University of Rostock, Rostock, Germany
- **Huahong Shi**, Editor-in-Chief of Regional Studies in Marine Science, East China Normal University, Shanghai, China
- **Francois Galgani**, Editor-in-Chief of Marine Pollution Bulletin, Ifremer Center of the Pacific, 98719, Taravao, Tahiti, French Polynesia

Global Estuaries Monitoring (GEM) Programme Workshop

Date & Time: 13:05-14:00, 5 January 2024 (Friday)

Venue: Lecture Theatre 1, 4/F, Yeung Kin Man Academic Building

Summary: Currently, more than 100,000 chemical substances are used in our daily lives and industries. Many of these chemicals eventually find their way into estuaries through various pathways such as rivers, surface runoff, and partially treated wastewater discharged from treatment plants. There is a lack of information available on the occurrence and environmental risks of various contaminants of emerging concern (CECs) in urbanized estuaries, particularly in Africa, South America, Southeast Asia, and Oceania coastal areas. Hence, the Global Estuaries Monitoring (GEM) Programme has been launched under the UN Decade of Ocean Science for Sustainable Development (2021-2030) with a view to developing a global monitoring network, revealing the pollution status, and co-creating solutions for making our estuaries cleaner and safer. This workshop will provide a platform for participants to bring together action partners, update the progress of GEM, catalyze new partnerships, and deliberate on collaborative projects and action plans for the next phase of GEM.

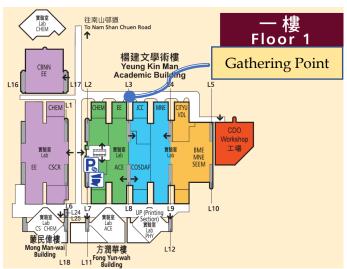
Banquet Information

Date & Time: 19:00, 5 January 2024 (Friday)

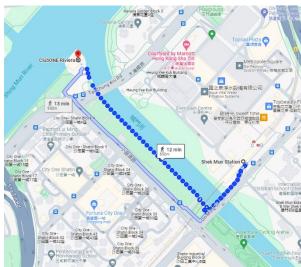
Venue: ClubOne Riviera, Galaxy Ballroom B, 2/F, 55-57 Tai Chung Kiu Road, Sha Tin

Gathering Time & Point: 18:00, In front of Lift 3, 1/F, Yeung Kin Man Academic Building

*Transportation will be provided for attendees from the conference venue to the banquet location. Kindly refer to the conference announcement for further details.



Location of gathering point



Location of ClubOne Riviera

Opening Ceremony

Time: 09:00-10:00, 3 January 2024 (Wednesday) Venue: Joseph Lee Hall, 3/F, Li Dak Sum Yip Yio Chin Academic Building

President's Welcoming Remarks

Prof. Chun Sing Lee

The Provost and Deputy President, City University of Hong Kong (CityU), China

Officiating Speeches

Mr. Bing Ke

Deputy Director-General, The Administrative Center for China's Agenda 21 The National Natural Science Foundation of China (NSFC), China

Miss Diane Shuk Han Wong, JP

Under Secretary for the Environment and Ecology The Government of the Hong Kong Special Administrative Region, China

Prof. Wenxi Zhu

Head, IOC Sub-Commission for the Western Pacific Decade Coordination Office for the Western Pacific and Adjacent Areas Intergovernmental Oceanographic Commission, UNESCO

Mr. Thomas Bell

Marine Pollution Programme Manager, Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), representing Ms. Aimee Gonzales, Executive Director of PEMSEA

Opening Address on Behalf of the State Key Laboratory of Marine Pollution (SKLMP), Department of Chemistry of CityU and the Organizing Committee of ICMPE-10

Prof. Kenneth Mei Yee Leung, JP

Chairman, Organizing Committee of ICMPE-10 Director of SKLMP and Chair Professor of Chemistry Department, CityU, China

ICMPE-10 Conference Opening cum Plaque Unveiling Ceremony for the UNESCO-IOC Regional Training and Research Centre on Coastal Contaminant Monitoring and Marine Innovative Technologies (RTRC—Coastal COMMIT)

SKLMP of CityU has been entrusted by the UNESCO-IOC Sub-Commission for the Western Pacific to host the Coastal-COMMIT Centre since April 2023. The Centre aims to strengthen the monitoring capacity for marine pollution in the Western Pacific region, promote the development of marine innovation technologies, and facilitate international research collaboration. The establishment of the Centre will also promote Hong Kong's integration into national development and support Hong Kong's goal of becoming an international innovation and technology hub. More details about the Coastal-COMMIT Centre are available at: https://ioc-westpac.org/regional-pilot-scientific-diving-training-conducted/ and https://shorturl.at/pAVZ6

Conference Schedule

	Day 0: 2 January 2024 (Tuesday)
16:30	Registration (Lecture Theatre 1, 4/F, YEUNG)
18:30	Close

Abstracts of presentations are available at: https://www.icmpe-sklmp.com/abstract



			Invited talks	Student presentations
0.20		Day 1: 3 January 2024	37	
8:30	Registration (Joseph Lee Hall, 3/F, LI)			
9:00		Opening Ceremony &	c Group Photo Taking	
10:00		Tea I	Break	
		Plenary Lect SChr: Kenneth Leung & S		
10:20	PL 1: Prof. Minhan Dai (2) Persistent Eutrophication	Xiamen University, China) and Hypoxia in the Coasta	l Ocean	
11:00		and (Harvard University, US. stand about the Ocean's Rol		anthropogenic Chemicals?
11:40	PL 3: Dr. Wenxi Zhu (Intergovernmental Oceanographic Commission of UNESCO) Advance Marine Science Development and Cooperation for Peace and Sustainable Development			
12:20	Lunch (AC2 C	anteen, 3/F, LI) & Poster Pr	resentation A (Purple zone	, 4/F, YEUNG)
		Oral Present	ation	
	P4701, YEUNG	P4703, YEUNG	P4704, YEUNG	P4302, YEUNG
	Session 1 Plastics (1)	Session 2 Contaminants of Emerging Concern (1)	Session 3 Legacy Pollutants (1)	Session 4 Technology (1)
	SChr: Jinping Cheng	SChr: Henry He	SChr: Patrick Lee	SChr: Benoit Thibodeau
	I1 Youn Joo An	I5 Xinhong Wang	19 Ichiro Takeuchi	I13 Chun Kit Kwok
14:00	Konkuk University, Republic of Korea Effects of irregular and fibril shaped microplastics on Artemia franciscana: size and shape-dependent toxicity	Xiamen University, China Decadal historical changes of legacy and emerging per- and polyfluoroalkyl substances in sediments from the marginal seas of China: growing usage of emerging PFAS	Ehime University, Japan Transcriptome analysis of hermatypic coral Acropora tenuis and its symbiotic dinoflagellates exposed to anthropogenic chemicals	City University of Hong Kong, Hong Kong Development of novel aptasensor for the detection of enrofloxacin

	O1 Yifan Zheng	O21 Chong Chen	O41 Frank Paolo Jay B.	O61 Dokyun Kim
14:30	East China Normal University, China Colonization of organisms on the Styrofoam floats	City University of Hong Kong The latest progress and future prospects of the Global Estuaries Monitoring Programme	Albarico National Kaohsiung University of Science and Technology Seasonal dynamics of PAHs in estuarine microplankton from an anthropic northeastern South China Sea region	Hanyang University, South Korea Integrated approach for trophic position of black- tailed gull (Larus crassirostris) eggs over a decade: Combining stable isotopes of amino acids and fatty acids
	O2 Yingyu Bao	O22 Adam Sokołowski	O42 Yunchi Zhou	O62 Kyu-Young Shim
14:50	City University of Hong Kong, Hong Kong Deciphering the ecological roles of the plastisphere in urban rivers in Hong Kong	University of Gdańsk, Poland Biomagnification of pharmaceuticals in the arctic food web	Beihang University, China Using machine learning to predict adverse effects of metallic nanomaterials to various aquatic organisms	Incheon National University, South Korea Hypoxia-associated seasonal variations of zooplankton community in Jinhae Bay, South Korea: A case study through environmental DNA metabarcoding
15:10	O4 Marie Jean Sylvio Perrine University of Mauritius, Republic of Mauritius Plastics macrolitter litteraround Rodrigues Island, Southwest Indian Ocean: a first assessment	O23 Linjie Jin City University of Hong Kong, Hong Kong Study on enantioselective uptake and purification kinetics of metoprolol and venlafaxine in marine medaka	O43 Matthew Long-Hei Cheng The Chinese University of Hong Kong, Hong Kong From valley to plain: Distribution of mercury along the freshwater to saltwater continuum in a rural area of Hong Kong	O63 Linus Shing Him Lo The Education University of Hong Kong, Hong Kong Monitoring of coastal environment using environmental DNA
		O24 Ying Wang	O44 Martin Tsui	O64 Meihong Zhao
15:30	Cancelled	Beihang University, China Using machine learning to predict adverse effects of pollutants to various aquatic organisms	The Chinese University of Hong Kong, Hong Kong Review of mercury pollution research in Southeast Asia marine environments	Hong Kong Baptist University, Hong Kong Gap analysis of DNA barcoding database of Hong Kong's marine biota
15:50	Tea B	reak and Poster Presentati	on A (Purple zone, 4/F, YE	UNG)
	Ke	eynote Lectures (Lecture Tl SChr: Viet Ha Dao &		
16:30		ng Gan (The Hong Kong Uni Hypoxia off Hong Kong: C		
17:05		2: Prof. Rencheng Yu (<i>Instit</i> and Research Perspectives o	,	,
17:40		ang & Miss Xiaomeng Jie (nces and Prospects of Scienc Marine Environmenta	ce and Technology Innovat	
18:00		Clo	ose	

			Invited talks	Student presentations	
		Day 2: 4 January 202	4 (Thursday)		
8:30		Registration (Lecture 7	Theatre 1, 4/F, YEUNG)		
		Keynote Lec SChr: Jing You &			
9:00	K4: Prof. Nobuyoshi Yamashita (<i>National Institute for Advanced Industrial Science and Technology, Japan</i>) "CAR-PFAS Japan" to Improve PFAS Action Plan in Japan – Regenesis from the Lost Fifteen Years				
9:35			University of Southampton, Utatus of Rocky Shores in 202		
10:10		K6: Prof. Cao Ling (Xi. Blue Food	amen University, China) Assessment		
10:45		Tea I	Break		
		Keynote Lec SChr: Jing You &			
11:05			<i>Iniversity of California, USA</i> ide Toxicity in Coastal Envi		
11:40		`	niversity of Rostock, Germany isms and Effects of Multiple nisms	,	
12:15	K9: Prof. Jae-Seong Lee (<i>Sungkyunkwan University, South Korea</i>) Host-microbiota interaction in microfibers and freshwater acidification-exposed freshwater water flea Daphnia magna				
12:50		Lunch (AC2 C	anteen, 3/F, LI)		
13:30			Editors Workshop h Lee Hall, 3/F, LI)		
		Oral Present	ation		
	P4701, YEUNG	P4703, YEUNG	P4704, YEUNG	P4302, YEUNG	
	Session 5 Plastics (2)	Session 6 Contaminants of Emerging Concern (2)	Session 7 Legacy Pollutants (2)	Session 8 Technology (2)	
	SChr: Chengjun Sun & James Fang	SChr: Xinhong Wang & Yuefei Ruan	SChr: Ichiro Takeuchi & Patrick Lee	SChr: Chun Kit Kwok & Benoit Thibodeau	
	I2 James Fang The Hong Kong Polytechnic University, Hong Kong	I6 Yuefei Ruan City University of Hong Kong, Hong Kong	I10 Patrick Lee City University of Hong Kong, Hong Kong	I14 Benoit Thibodeau The Chinese University of Hong Kong, Hong Kong	
14:40	Impact of microplastics on growth and behaviour of the juvenile tri-spine horseshoe crab <i>Tachypleus</i> tridentatus	Temporal trends and suspect screening of halogenated flame retardants and their metabolites in blubbers of cetaceans stranded in Hong Kong waters	A metagenomics-based microbial surveillance framework for assessing cumulative anthropogenic impacts on estuarine benthic ecosystems	Unraveling the nexus of carbon, oxygen, and nutrients dynamics under anthropogenic pressure in Hong Kong and the Greater Bay Area	

	OF Vocces I co	OSE OF Marine	O45 Hoghers Ma	Off How Chara Min -
15:10	O5 Yoseop Lee Sungkyunkwan University, South Korea Combined exposure to hypoxia and nanoplastics leads to oxidative stress- mediated synergistic effects in the water flea Daphnia magna	O25 Qi Wang City University of Hong Kong, Hong Kong Legacy and emerging perand polyfluoroalkyl substances from eight main outlets of the Pearl River Delta, China: Phase distribution, temporal variation, and environmental stress	O45 Jiezhang Mo Shantou University, China Environmental benzo[a]pyrene induces multigenerational osteotoxicity in medaka fish	O65 How Chun Ming City University of Hong Kong, Hong Kong Optimization of environmental DNA methods for fish diversity assessment in estuarine and oceanic water: Primers, volumes, and replicates
15:30	O6 Gopi Narayanan Koilpitchai Indian Institute of Science Education and Research Kolkata, India Influence of surface- modified nanoplastics on accumulation and toxicity of tetracycline in freshwater microalgae (Chlorella vulgaris) in the presence of humic acid	O26 Xiaoyu Xu City University of Hong Kong, Hong Kong Acute toxicity and risk assessment of common tire compounds, 6PPD and 6PPD-Q, in the marine environment	O46 Shaoyi Wang The Chinese University of Hong Kong, Hong Kong Variations of methylmercury in a mangrove wetland sediments: Insights from subtropical ecosystems in Hong Kong	O66 Jack Chi-Ho Ip Lingnan University, Hong Kong Bottom trawling and multi-marker eDNA metabarcoding surveys reveal high diversity of vertebrate and crustacean communities in an urbanized subtropical estuary
15:50	O7 Yao Li Beihang University, China Aging effects of titanium dioxide on Cu toxicity to Daphnia magna: exploring molecular docking and significance of surface properties	O27 Mungi Kim Chungnam National University, South Korea Distribution and bioaccumulation characteristics of lipophilic marine biotoxins and associated microalgae in South Sea Coast of Korea	O47 Ong Meng Chuan Universiti Malaysia Terengganu, Malaysia Level of heavy metals in marine stingrays (Chondrichthyes: Dasyatidae) landed from Johor Waters	O67 Rongjie Zhao City University of Hong Kong, Hong Kong Environmental DNA reveal conservation effects upon fish communities of marine protected areas in Hong Kong
16:10	O8 Emmanuel Charles Partheeban Bharathidasan University, India Elucidating microplastic ingestion and risks in marine biota from anthropogenically- degraded coastal habitats in Tamil Nadu, Southern India	O28 Paulina Gozdzik Medical University of Gdansk, Poland Exposure to norfluoxetine, an endocrine disrupting compound, leads to alterations in several genes expression and transcriptomic profiles in the Baltic blue mussel Mytilus trossulus	O48 Eunjin Byeon Sungkyunkwan University, South Korea Toxicity, speciation of inorganic arsenics and its adverse effects on in vivo endpoints and oxidative stress in the marine medaka Oryzias melastigma	O68 Xiaohao Sun The Hong Kong Polytechnic University, China Biomineralization to prevent microbially induced corrosion on concrete for sustainable marine infrastructure
16:30		Tea I	Break	
16:50	O9 Julie Mondon Deakin University, Australia Quantifying the efficacy of microplastics capture in physically-screened treated wastewater	O29 Yichi Chen National University of Tainan, Taiwan Toxicokinetics of oseltamivir ethylester and oseltamivir carboxylate in Daphnia magna	O49 Rui Wang Tongji University, China Transportation, transformation and bioaccumulation of mercury in the Yangtze River estuary and the adjacent East China Sea	O69 Zhiyuan Zeng City University of Hong Kong, Hong Kong Simultaneous electrochemical exfoliation and covalent functionalization of MoS ₂ membrane for water purification
L				

	O10 Sushma Mattan	O30 Sori Mok	O50 Ziwei Yao	O70 Wing Yin Mo
17:10	Moorgawa (University of Mauritius, Mauritius) A first report of meso-litter abundance, density, composition, type, and colour along sandy beaches: the case of Rodrigues Island, South- West Indian Ocean	Severe contamination and time trend of neutral perand polyfluoroalkyl substances (n-PFAS) in sediments from Lake Shihwa, Korea: source and effectiveness of regulatory action	Ministry of Ecology and Environment, China Occurrence of antibiotics and antibiotic resistance genes in water and sediment of the lower reaches of typical rivers in Bohai Rim Basin	Hong Kong Metropolitan University, Hong Kong Municipal sewage treatment by a salt pan colonized mangrove
17:30	O11 Changchao Li The Hong Kong Polytechnic University, Hong Kong Ecology and risks of the global plastisphere as a newly expanding microbial habitat	O31 Yingying Qian Xiamen University of Technology, China Pollution characteristics and source analysis of perfluoroalkyl compounds in typical estuary areas of Fujian Province	O51 Shaopeng Xu City University of Hong Kong, Hong Kong Environmental behavior and pollution status of tire additives in surface water	O71 Larsen Alessandro UCSI University, Malaysia Absorb + degrade: A novel oil spill mitigation method using Acinetobacter venetianus immobilized on PVDF membranes incorporated with cellulose triacetate
17:50	O12 Yan Zhang Nanjing University, China Research on the environmental behaviour and ecotoxicology of microplastics based on data-driven methods	O32 Chang He The Hong Kong Polytechnic University, Hong Kong Risk assessment of e-waste contaminants - liquid crystal monomers released by dredging sediment plumes in PRE	O52 Alex Chow The Chinese University of Hong Kong, Hong Kong Unique biogeochemical characteristics in ghost forests: Influences of sea level rise on coastal ecosystems	O72 Yuen Ken Chue Ho The Hong Kong Polytechnic University, Hong Kong Assessing the biology of coral polyps using 3D visualization techniques
18:10		Clo	ose	

			Invited talks	Student presentations
		Day 3: 5 January 20	024 (Friday)	
8:30		Registration (Lecture 7	Theatre 1, 4/F, YEUNG)	
		Keynote Lec SChr: Inna Sokolova		
9:00	K10: Prof. Jongseong Khim (Seoul National University, Korea) Overview of Korean Tidal Flats: Biodiversity and Ecosystem Services			
9:35	Holistic Impact Evaluation	K11: Prof. Xiaowei Zhang on of Human Activities on Enviro	the Coastal Fish Biodiversit	y in the Chinese Coastal
10:10		Tea I	Break	
		Keynote Lec SChr: Inna Sokolova		
10:40	K12:	Prof. Chengjun Sun (Min Indicators of Marine I	istry of Natural Resources, Ch Microplastic Pollution	tina)
11:15	K13: Prof. Wenxiong Wang (<i>City University of Hong Kong, Hong Kong</i>) Microplastic (Eco)Toxicology in Marine Environment: Where Are We Now?			C
11:50	K14: Prof. Huahong Shi (<i>East China Normal University, China</i>) Mechanisms and Control Measures for the Release of Microplastics from Mariculture			
12:25	Lunch (AC2 C	anteen, 3/F, LI) & Poster P	resentation B (Purple zone	, 4/F, YEUNG)
13:05	Glo	bal Estuaries Monitoring (13:05-14:00, Lecture T	(GEM) Programme Worksl heatre 1, 4/F, YEUNG)	пор
		Oral Present	ation	
	P4701, YEUNG	P4703, YEUNG	P4704, YEUNG	P4302, YEUNG
	Session 9 Plastics (3)	Session 10 Contaminants of Emerging Concern (3)	Session 11 Ecotoxicology (1)	Session 12 Restoration (1)
	SChr: Huahong Shi	SChr: Yuefei Ruan	SChr: Zhang Xiaowei	SChr: Apple Chui
14:00	I3 Jinping Cheng The Education University of Hong Kong, Hong Kong Selective enrichment of bacterial pathogens within plastisphere biofilms	17 Henry He City University of Hong Kong, Hong Kong Liquid crystal monomers: From indoor to marine environments	I11 Lianguo Chen Institute of <i>Hydrobiology, Chinese Academy of Sciences, Wuhan, China</i> A new mechanism of reproductive endocrine disruption based on isothiazolinones	I15 Jianwen Qiu Hong Kong Baptist University, Hong Kong Community baseline, threats, winners, and losers of Hong Kong's urban corals

	O13 Lixia Deng	O33 Yi Yang	O53 Hyeong-Gi Kim	O73 Chun Ching Wong
	Hong Kong University of	City University of Hong	Chungnam National	The Hong Kong Polytechnic
	Science and Technology,	Kong, Hong Kong	University, South Korea	University, Hong Kong
	Hong Kong			y 0 0
14:30		Addressing an imminent	Spatiotemporal variability	Effects of surface
14:30	Nanoplastics impair	problem presented by a	on local-regional scale in	topography and surface
	growth and nitrogen	new class of pollutants:	subtidal meiofaunal and	material on coral
	fixation of marine	Chemicals with epigenetic	macrofaunal assemblages	settlement success
	nitrogen-fixing	and transgenerational effects	along the southern coast of	
	cyanobacteria	O34 Celia Schunter	Korea	O74 Pills CT Character
	O14 Mengyang Liu City University of Hong	The University of Hong	O54 Jian Han Institute of Hydrobiology,	O74 Billy C.T. Cheung Chinese University of Hong
	Kong, Hong Kong	Kong, Hong Kong	CAS, China	Kong, Hong Kong
			·	0, 0
14.50	Weathering of	Transgenerational	Lipid metabolic disruption	Acquisition of
14:50	microplastics revealed by	plasticity and inheritance	of a new brominated flame	symbiodiniaceae in
	the traditional and novel	to emerging contaminants	retardant TBPH in	Acropora tumida juveniles
	spectroscopy approaches	and environmental change	zebrafish	under future warming
				scenarios
	O15 Valle - Com	O2F I :1 V	OFF Vin - NAT	O75 Charlete -1 - Mini
	O15 Yejiao Sun (Hainan University, China)	O35 Lihua Yang Institute of Hydrobiology,	O55 Ying Wang Ministry of Ecology and	O75 Christophe Minier Normandie University,
	(Human amoersity, China)	CAS, China	Environment, China	France
	Polystyrene micro-/nano-	·	,	
15.10	plastics affected the	Multi- and	Toxic effects of single and	Deriving environmental
15:10	nutritional quality of	transgenerational toxicity	combined exposures to	quality standard
	Chlamys farreri through	in zebrafish upon life cycle	nanoplasitcs and bisphenol	considering endocrine
	disturbing the function of	exposure to	a in developing medaka	disruption
	gills and physiological metabolism	decabromodiphenyl ethane	Oyrzias melastigma	
	metabonsm	entane		
		O36 Vetong Shao	O56 Duck Hyun Kim	O76 Thomas Bell
	O16 Yi Cong	O36 Yetong Shao City University of Hong	O56 Duck Hyun Kim Sungkyunkwan University,	O76 Thomas Bell Partnerships in
		O36 Yetong Shao City University of Hong Kong, Hong Kong	O56 Duck Hyun Kim Sungkyunkwan University, South Korea	O76 Thomas Bell Partnerships in Environmental Management
	O16 Yi Cong Ministry of Ecology and Environment, China	City University of Hong Kong, Hong Kong	Sungkyunkwan University, South Korea	Partnerships in
	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and	City University of Hong Kong, Hong Kong Temporal variations of	Sungkyunkwan University, South Korea The 22 chromosome-level	Partnerships in Environmental Management for the Seas of East Asia
15.20	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of
15:30	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of long-term monitoring of
15:30	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter bioavailability and toxicity	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the Pearl River Estuary and	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea Diaphanosoma celebensis:	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of
15:30	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter bioavailability and toxicity of cadmium in the	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea Diaphanosoma celebensis: comparative genome	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of long-term monitoring of
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	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter bioavailability and toxicity of cadmium in the polychaete Perinereis aibuhitensis	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the Pearl River Estuary and Hong Kong	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea Diaphanosoma celebensis: comparative genome analysis and their global methylation patterns for epigenetic study	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of long-term monitoring of marine plastic pollution
15:30 15:50	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter bioavailability and toxicity of cadmium in the polychaete Perinereis aibuhitensis	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the Pearl River Estuary and Hong Kong	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea Diaphanosoma celebensis: comparative genome analysis and their global methylation patterns for	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of long-term monitoring of marine plastic pollution
	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter bioavailability and toxicity of cadmium in the polychaete Perinereis aibuhitensis	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the Pearl River Estuary and Hong Kong	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea Diaphanosoma celebensis: comparative genome analysis and their global methylation patterns for epigenetic study on B (Purple zone, 4/F, YEU)	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of long-term monitoring of marine plastic pollution
	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter bioavailability and toxicity of cadmium in the polychaete Perinereis aibuhitensis	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the Pearl River Estuary and Hong Kong	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea Diaphanosoma celebensis: comparative genome analysis and their global methylation patterns for epigenetic study on B (Purple zone, 4/F, YEUNG)	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of long-term monitoring of marine plastic pollution
	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter bioavailability and toxicity of cadmium in the polychaete Perinereis aibuhitensis Tea	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the Pearl River Estuary and Hong Kong Break & Poster Presentation eynote Lectures (Lecture Ti SChr: Daniel Schlen)	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea Diaphanosoma celebensis: comparative genome analysis and their global methylation patterns for epigenetic study on B (Purple zone, 4/F, YEUNG) the Eleo Chan	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of long-term monitoring of marine plastic pollution
	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter bioavailability and toxicity of cadmium in the polychaete Perinereis aibuhitensis Tea	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the Pearl River Estuary and Hong Kong Break & Poster Presentation eynote Lectures (Lecture Till SChr.: Daniel Schlen) 5: Prof. Dongyan Liu (East	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea Diaphanosoma celebensis: comparative genome analysis and their global methylation patterns for epigenetic study on B (Purple zone, 4/F, YEUNG) to B Leo Chan China Normal University, Ch	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of long-term monitoring of marine plastic pollution (NG)
15:50	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter bioavailability and toxicity of cadmium in the polychaete Perinereis aibuhitensis Tea	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the Pearl River Estuary and Hong Kong Break & Poster Presentation eynote Lectures (Lecture Till SChr.: Daniel Schlen) 5: Prof. Dongyan Liu (East	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea Diaphanosoma celebensis: comparative genome analysis and their global methylation patterns for epigenetic study on B (Purple zone, 4/F, YEUNG) the Eleo Chan	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of long-term monitoring of marine plastic pollution (NG)
15:50 16:30	O16 Yi Cong Ministry of Ecology and Environment, China Polystyrene and polyethylene terephthalate microplastics alter bioavailability and toxicity of cadmium in the polychaete Perinereis aibuhitensis Tea K6 K15 The Ca	City University of Hong Kong, Hong Kong Temporal variations of chlorinated paraffins in the sediment cores from the Pearl River Estuary and Hong Kong Break & Poster Presentation Eynote Lectures (Lecture Ti SChr. Daniel Schlen) E: Prof. Dongyan Liu (East of the paraffic trust) G: Prof. Viet Ha Dao (Institute)	Sungkyunkwan University, South Korea The 22 chromosome-level genome assembly of the brackish water flea Diaphanosoma celebensis: comparative genome analysis and their global methylation patterns for epigenetic study on B (Purple zone, 4/F, YEUNG) & & Leo Chan China Normal University, Chion of Green Tide in the Yell of Oceanography, VAST, Viet	Partnerships in Environmental Management for the Seas of East Asia Citizen science as part of long-term monitoring of marine plastic pollution ING) ina) llow Sea
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			Invited talks	Student presentations
		<mark>0ay 4:</mark> 6 January 2024 (Sa		
		ectures (Lecture Theatre er: Francois Galgani & Yo		
9:00	K17: Prof. Grant Hose (<i>Macquarie University, Australia</i>) How and Why Groundwater Matters for the Marine Environment			
9:35	K18: Prof. Hyo-Bang Moon (<i>Hanyang University, South Korea</i>) A Paradigm Shift in Environmental Monitoring and Assessment of Organic Contaminants: Organophosphate Flame Retardants			
10:10	Tea Break			
	SCh	Keynote Lectures er: Francois Galgani & Yo		
10:40	K19: Prof. Bryan Brooks (<i>Baylor University, USA</i>) Towards Precision Ecotoxicology: Integrating One Health during Study of Urbanizing Aquasitans Systems			of Urbanizing Aquatic
11:15	K20: Prof. Jing You (<i>Jinan University, China</i>) Event Driven Taxonomy: AI in Identifying Causative Contaminants in Chemical Mixtures			
11:50	K21: Prof. Jinhee Choi (<i>University of Seoul, South Korea</i>) Artificial Intelligence - Based Toxicity Prediction of Environmental Chemicals and Their Application to Adverse Outcome Pathway Development			
12:25		Lunch (AC2 Ca	anteen, 3/F, LI)	
		Oral Presentation	Į.	
	P4701, YEUNG	P4703, YEUNG	P4704, YEUNG	P4302, YEUNG
	Session 13 Harmful Algae Blooms	Session 14 Climate Changes	Session 15 Ecotoxicology (2)	Session 16 Restoration (2)
	SChr: Yan Meng	SChr: Stephen Hawkins	SChr: You Jing	SChr: Jianwen Qiu
14:00	I4 Fred Wang Fat Lee Hong Kong Metropolitan University, Hong Kong Possible role of marine bacteria in modulating harmful algal blooms of Karenia mikimotoi	I8 Moriaki Yasuhara The University of Hong Kong, Hong Kong Past and future tropical marine biodiversity hotspots	I12 Ling Jin The Hong Kong Polytechnic University, Hong Kong Anthropogenic impacts on coastal bacteriome and antibiotic resistome	I16 Apple PY Chui The Chinese University of Hong Kong, Hong Kong Restoration of degraded Hong Kong coral habitats using multiple active coral restoration approaches
14:30	O17 Liu Xintong The Hong Kong Polytechnic University, Hong Kong How much do commonly monitored organic contaminants explain species-specific in vitro cytotoxicity of seawater?	O37 Xue Wang City University of Hong Kong, Hong Kong Efficient E-fuel electrosynthesis from carbon dioxide	O57 Chenyang Ji Zhejiang Shuren University, China Identification of dioxin- like effects of polyhalogenated carbazoles (PHCZs) and potential toxic mechanisms	O77 Bayden Russell The University of Hong Kong, Hong Kong Oyster habitats enhance denitrification in a heavily degraded and polluted marine system

	O18 Veronica T.T. Lam	O38 Min-Sub Kim	O58 Yide He	O78 Yali Huang
	City University of Hong	Sungkyukwan University,	Nanjing Tech University,	City University of Hong
	Kong, Hong Kong	South Korea	China	Kong, Hong Kong
	Diversity of benthic	Epigentic plasticity	Development and	Can money make
	dinoflagellates in Hong	enables copepods to	application of fast	ghosts grind? The long-
14:50	Kong waters and the	cope with ocean	thyroid disrupting	term effectiveness of
	impact of environmental	acidification	screen assay	payment for ecosystem
	changes on growth and			services
	toxicity of local			
	dinoflagellate species			
	O19 Meng Yan	O39 Linxuan Ma	O59 Euihyeon Lee	O79 Yaqin Liao
	City University of Hong	Ocean University of	Korea Institute of Ocean	Ministry of Ecology and
	Kong, Hong Kong	China, China	Science and Technology,	Environment, China
	Temperature effects on	Trends in projected	South Korea	Study on effectiveness
	physiology,	body temperature of	An integrated	evaluation of
15:10	transcription, and toxin	intertidal species in East	transcriptome-	restoration damaged
13.10	production of the	Asia	microbiome host	coastal shoreline: Cases
	benthic dinoflagellate		relationship associated	study of Riyue Bay and
	Gambierdiscus belizeanus		with paraben toxicity in	Kaozhouyang
			the brackish water flea	
			Diaphanosoma celebensis	
	O20 Xitong Fu	O40 Bandita	O60 You Zhang	O80 Stan Shea
	City University of Hong	Badakumar	Beihang University, China	Hong Kong Marine
	Kong, Hong Kong	Bhabha Atomic Research		Protection Alliance,
	Exploration of iron	Centre, India	Mechanism of hydrogen nanobubbles to alleviate	Hong Kong
	addition as a mitigation	Efficacy of active	the oxidative stress of	Spokesperson of the
15:30	measure for the	bromide as targeted	copper on Tetrahymena	Hong Kong Marine
10.00	detrimental effects of	supplementary biocide	thermophila	Protection Alliance
	sargassum blooms on	for combating green		
	red mangroves wetlands	mussels fouling in		
	(Rhizophora mangle) in a	cooling water system of		
	lab environment	a tropical power station		
15:50	Tea Break			
		ectures (Lecture Theatre		
	SCh	r: Bruce Richardson & G	rant Hose	
	Kaa- I	Prof François C. Calgan	i (IFREMER, French Polys	10cia)
16:20	N22, 1	Marine Litter, from		iesiu)
		marine Litter, mont	Defence to 1 oncies	
	K22. Drof Kon	noth Mai Van Launa (Ci	ty University of Hong Kon	a Hona Kona)
16:55		• • • • • • • • • • • • • • • • • • • •	ysis, Assessment, and Re	0 0,
10:55	0	s in Environmental Anal Pollution: Navigating To	2	mediation of Chemical
			warus a Cicarier Future	
17.20	0	budont Arizand Discourt C	ion & Clasina Comm	
17:30	Student Award Presentation & Closing Ceremony			
18:00		Clo	ose	



Who We Are?

Launched in 2022, HKMPA is the first collective in Hong Kong focusing on marine conservation and sustainability.

HKMPA's Mission:

The HKMPA is committed to:

- Preserve Hong Kong Waters To widen the coverage of MPAs by influencing local marine policy planning.
- Enhance Public Awareness To arouse public awareness on marine sustainability and promote marine conservation.

Our Members:



And Dr. Andy Cornish, Ms. Angel Lam, Dr. Apple Chui, Mr. Charles Goddard, Mr. Harry Chan Tin-Ming, Mr. Joshua Wong, Prof. Ka Hou Chu, Ms. Lindsay Porter, Ms. Marcy Trent Long, Miss. Natalie Chung, Ms. Smriti Safaya, Ms. Suzanne Gendron, Dr. Yannick Kuehl, Dr. Yvonne Sadovy

Our 3 Key Asks:

- Immediately gazetting of 10% local waters as MPAs;
- 2) Gazetting 30% of local waters as MPAs by 2030;
- 3) Increasing the percentage of no-take zones to 20% within all designated MPAs.

These requests have been submitted to the HKSAR government right after we launched.

HKMPA, in order to make our requests feasible and achievable, we have prioritised 3 sites of the suggested Marine Protected Area:

- 1) Shui Hau (Marine Park);
- Pak Nai and nearby sites (Coastal Protection Zone);
- 3) Port Shelter (Fisheries Protection Area)



Shui Hau, a large expanse of sheltered, intertidal sandy-mudflat, which is rare in Hong Kong, it nurtures juvenile horseshoe crabs before they migrate to the sea. It is also an important stopover site for the survival of over 20 species of migratory shorebirds.



Pak Nai, a famous tourist spot with diverse types of coastal habitats and endangered species, is an essential feeding ground for horseshoe crabs, black-faced spoonbills, and other waterbirds. A total of 238 bird species visiting Pak Nai over the years demonstrates high bio-diversity of the site.



Port Shelter, as one of the best dive sites in Hong Kong, is famous for its high diversity of coral and marine fish species. It holds significant recreational and ecological values, providing important habitat for the ecosystem in Hong Kong.

Student presentations

Poster Presentation A, Purple zone, 4/F, YEUNG (3 January 2024)				
Poster No.	Author	Title		
	Plastics			
P1	Lei Li	Size-dependent deleterious effects on sperm motility by microplastics of different sizes		
P2	Ming-Yih Leu	Evaluation of the microplastic ingestion in larval fish in the coastal waters of Taiwan: field and laboratory studies		
Р3	Young-Mi Lee	Isolation and identification of putative expanded polystyrene-degrading bacteria from the gut of <i>Ligia cinerascens</i> (<i>Isopoda</i> : <i>Ligiidae</i>)		
P4	Young-Mi Lee	Size-dependent toxic effects of polypropylene microplastics on reproduction, antioxidant system, and metabolomic perturbation of monogonont rotifer <i>Brachionus koreanus</i>		
P5	Young-Mi Lee	Effects of foods on size- and shape-dependent toxicity of microplastics on two marine zooplanktons: Ingestion of plastics and acute toxicity		
P6	Young-Mi Lee	Metagenomic analysis of sea slater <i>Ligia</i> gut microbiome collected from the coastal region in South Korea		
P7	Long Chun Mou	Enhancing beach litter surveillance in Hong Kong waters through aerial drone monitoring		
P8	Mengyang Liu	Establishing baselines and assessing risk: Documenting the composition of microplastics in Indian Ocean pygmy blue whale faecal samples		
P9	Xiaoyu Xu	Comparisons between the ingestion and rejection of microplastic beads by burrowing clams, Meretrix meretrix and Paphia undulata		
P10	Te Hao Chen	Effects of surgical masks with different weathering conditions on behavior and growth of white leg shrimp (<i>Litopenaeus vannamei</i>)		
P11	Hoi Man Liu	Daily tidal influence on microplastic distribution in typical tidal river		
P12	Hoi Man Liu	PFASs absorption on the microplastic particles in the Tolo Harbor region		
P13	Hoi Man Liu	The influence of rainfall events on microplastic pollution in tidal and non-tidal rivers in Hong Kong		
P14	In-Cheol Yeo	Insights into tissue-specific bioaccumulation of nanoplastics in marine medaka as revealed by a stable carbon isotopic approach		
P15	Shengnan Gao	Bioaccumulation and toxicity of nanoplastics to fish medaka under the context of global warming		
P16	Tae Lim Kima	Effect of marine debris on the intertidal benthic assemblages on the southern coast of Korea		
P17	Karen Tagulao	Abundance and distribution of microplastics in the coastal environments of Macao: analysis of mangrove and non-mangrove areas		
P18	Yixuan Wang	Ingestion of microplastics in barnacle <i>Amphibalanus amphitrite</i> varied with concentration, size and form of microplastics but not the presence of biofilm		
P19	Ziyi Lin	Microplastics from face mask impairs sperm motility		
P20	Jeong-In Park	Ecotoxicological assessment of biodegradable plastics: effects on <i>Skeletonema costatum</i> and <i>Vibrio fischeri</i>		
		Contaminants of emerging concern		
P21	Anna Hallmann	Norfluoxetine, a new EDC (endocrine-disrupting chemical) in the marine environment, disrupts the reproductive physiology of Baltic mussels		

P22	Hyo-Bang Moon	Contamination of legacy and alternative plasticizers in sediments from artificial lakes and coastal waters near high-tech industrial complexes: occurrence, dilution effect, and ecological risk
P23	Jeong-Hwa Kim	In vitro impacts of bisphenol a on immune functions of primary cultured hemocyte of Pacific abalone (<i>Haliotis discus hannai</i>)
P24	Ying Wang	Preliminary results for the toxicity of artificial turf infill materials to marine species
P25	Huiju Lin	Retrospective identification of hydrophobic organic compounds in suspended particles of flowback and produced waters using gas chromatography high-resolution mass spectrometry
P26	Qianqian Jin	Liquid crystal monomers in ventilation and air conditioning dust: indoor characteristics, sources analysis and toxicity assessment
P27	Xuemei Mao	Discharge of antibiotic resistance genes (ARGs) from wastewater treatment plants
P28	Ying Wang	Promising potential of the scyphozoan jellyfish Aurelia aurita as a new ecotoxicological model
P29	Veronica T.T. Lam	Effects of pharmaceutical antibiotic macrolide clarithromycin on cosmopolitan benthic dinoflagellate <i>Amphidinium carterae</i> (genotype 2)
P30	Fei Li	Combinatorial immune and stress response, cytoskeleton and signal transduction effects of graphene and triphenyl phosphate (TPP) in mussels
P31	Ganxing Liu	The dynamic variation of microbial community composition and HG-related gene abundance in the complex mangrove ecosystem
P32	Eun-Ji Won	Bioaccumulation of siloxane and the effects on amino acid metabolism of plankton, rotifer, and fish: an investigation into feeding relationship
P32S	Jae-Seong Lee	Effects of bisphenol a on reproduction, behavior, and acyltransferase gene expression in the rotifer <i>Brachionus plicatilis</i>
P33	Evonne Tan	Biogeochemical and optical properties of coastal waters of the Northern Malacca Straits
P34	Vincent Ho Yin Lai	Preliminary study on urban coastal areas: a final reservoir for antibiotic resistance genes
P35	Chung-Hung Chen	Removal efficiency of anti-tuberculosis drugs in primary wastewater treatment plant
P36	Nim Tung Calista Yuen	Oxidative conversion as tool to reveal unknown extractable organofluorine in complex matrices
P37	Xiang-Rong Huang	Fates of anti-tuberculosis drugs in municipal wastewater and receiving water: occurrence and removal
P38	Demilade T. Adedipe	Occurrence of pharmaceutical contamination in global estuaries
P39	Danyang Tao	Target and suspect screening and temporal trends of liquid crystal monomers in marine mammals from the South China Sea
P40	Pengchen Zheng	Impact of metabolic disruptor perfluorooctane sulfonate on the apoptosis and secretion of rat pancreatic islet cells
P41	Tzu-Hsuan Huang	Effects of anti-tuberculosis drug rifampin on reproductive toxicity of Daphnia magna
P42	Zi-Huai Lin	Reproductive effects of chronic exposure to anti-tuberculosis ethambutol on Daphnia magna
P43	Yuting Zhan	Occurrence, behavior and fate of liquid crystal monomers in municipal wastewater
P44	Qiong Luo	A robust approach to quantify 65 pharmaceuticals in a large-scale monitoring campaign
P45	Shuxian Li	Longitudinal ARGs profiles in wastewater treatment plant influent revealed by metagenomic analysis
P46	Yichun Lu	Identification of transformation products of organic UV filters by photooxidation and their differential estrogenicity assessment
P47	Jiaji Sun	Concise review on degradation of organic UV filters in the water environmentin

P48	Daeho Kang	Target and non-target analysis of organic pollutants in sewage effluent and receiving seawater in the Arctic region of Kongsfjorden
P49	Lianwei Ye	Studying the gut microbiome, resistome, and human pathogenic bacteria in marine fish of Hong Kong Marine Park
P50	Lai Wei	Organophosphate esters in seawater and sediments from the Yangtze River estuary (YRE) and East China Sea (ECS)
		Legacy pollution issues
P51	Ran Bi	Arsenic species and their health risks in edible seaweeds collected along the Chinese coastline
P52	Fung-Chi Ko	Bioaccumulation and trophic transfer of anthropogenic persistent organic chemicals in marine coastal plankton
P53	Chih-Feng Chen	Effects of terrestrial organic matter on metal contamination and ecological risks in port sediments
P54	Kendric Aaron Tee	Application of physiologically based toxicokinetic (PBTK) modeling for assessing exposure and tissue distribution of BDE-47 in <i>Neophocaena phocaenoides</i>
P55	Yee Cheng Lim	Assessment of bioaccumulation and ecological risk of potentially toxic metals in benthic ecosystem along coastal zone of industrialized city, southwestern Taiwan
P56	Jia-Jang Hung	Quantifying natural and anthropogenic fluxes of trace metals from a small mountainous river and estuary (Kaoping) in Southwestern Taiwan
P57	Jong-Seop Shin	Sublethal impacts of <i>Hebei spirit</i> oil spill on the reproductive physiology of Pacific oyster <i>Crassostrea gigas</i> at Taean on the west coast of Korea
P58	Julie Mondon	Bioaccumulation of trace metal elements in the critically endangered Maughan skate (Zearaja maugeana)
P59	Mengyi Xie	Insufficient evidence to link human exposure to heavy metals with biomarkers of glioma in coastal populations
P60	Shao-Hung Peng	The potential influence of submarine hydrothermal discharge on bioaccumulation of trace metals in zooplanktons
P61	Jin Young Choi	Distribution of tire and road wear particles (TRWP)-related potentially toxic elements (PTEs) with particle size in the port of Busan: a potential contributor of port sediment pollution
P62	Jin Young Choi	Road dust and traffic-derived non-exhaust particles: a preliminary study for the chemical characterization and marine environmental effects
P63	Taewoo Kim	Spatial distribution and source identification of persistent toxic substances in seawater and sediment of Gyeonggi Bay, South Korea
P64	Tse Fang	Cadmium concentration and C, N stable isotope analysis of finless porpoises (<i>Neophocaena</i> spp.) from Matsu
P65	Yu-Ru Tien	Concentrations of five heavy metals and C, N stable isotopes in the tissues of four cetacean around Taiwan
P66	Sori Mok	Accumulation levels and profiles of persistent organic pollutants (POPs) in blubber and fur of spotted seal (<i>Phoca largha</i>) from Peter the great bay, Sea of Japan/east sea
P67	Fu Wei Chang	The accumulation of mercury in different sizes of phytoplankton in the eutrophic estuary, Northern Taiwan
P68	Xing-Chen Chen	Phosphorus fractionations and their transformations in sediment cores of the eutrophic estuary, Northern Taiwan
P69	Yuichiro Osaka	Changes in the concentration of polycyclic aromatic hydrocarbons in fecal pellts of <i>Marphysa</i> sp. e and reduced mud in the Yoro tidal flat, Japan
P70	Yan Jiang	Occurrence and ecological risk of organotins in the marine environment of Hong Kong
P71	Hyojun Lee	Saemangeum Lake sediment ecotoxicity assessment using benthic amphipods, polycyclic aromatic hydrocarbons (PAHs) and heavy metal analysis, and total organic carbon analysis

Poster Presentation B, Purple zone, 4/F, YEUNG (5 January 2024)				
	Advanced ecotoxicology			
P72	Young-Mi Lee	Toxicity of polyethylene terephthalate microfragments on the monogonont rotifer <i>Brachionus Koreanus</i> : ingestion, acute and chronic toxicity, and transcriptomic and metabolomic modulation		
P73	Duck Hyun Kim	A chromosome-level genome assembly of the marine medaka <i>Oryzias melastigma</i> : genome-wide identification of 778 G protein-coupled receptor genes for a fully annotated fish GPCR repertorie for ecophysiology		
P74	Eunjin Byeon	Crispr/cas9-mediated gene targeting of two desaturase genes in the water flea <i>Daphnia magna</i> : implication to fatty acid and expression profiles		
P75	Wei-Yu Chen	Insights into the effects of anti-tuberculosis compounds at gene expression level in <i>Daphnia magna</i>		
P76	Jong-Seop Shin	Unveiling the gill symbiotic community in <i>Thyasira tokunagai</i> Kuroda & Habe and insights into sulfide detoxification in the East Sea-Byeong waste dumping site, Korea		
P77	Aoxue Wang	Tebuconazole induces reproductive toxicity via Foxl2-mediated phosphorylation signaling in ZF4 cells of zebrafish		
P78	Siyu Yang	Waterborne tebuconazole exposure induces male-biased sex differentiation in zebrafish (<i>Danio rerio</i>) larvae via aromatase inhibition		
P79	Mengzhen Li	Immunotoxicity of BPA and its replacement chemicals		
	Е	Biological responses to chemical mixtures and/or multiple stressors		
P80	Yueling Zhang	Penaeid shrimp counteract high ammonia stress by generating and using functional peptides from hemocyanin, such as HMCS27		
P81	Yueling Zhang	Ammonia stress affects the structure and function of hemocyanin in <i>Penaeus vannamei</i>		
P82	Young-Mi Lee	Single and combined effects of mercury and polystyrene beads on multixenobiotic resistance (MXR) in the brackish water flea <i>Diaphanosoma celebensis</i>		
P83	Junghyun Lee	Methodological advances and future directions of microalgal bioassays for environmental risk assessments		
P84	Tzu-Chun Chen	Thermal effluent reduction effects on the plankton composition and levels in a tropical nuclear power plant		
P85	Bohra Varsha	Metagenomics surveillance reveals different structure and function of prokaryotic microbial community associated with mangrove pneumatophores		
P86	Kit Ling Lam	Habitat variation of prokaryotic communities and their connection with environmental factors in Mai Po Ramsar sediments		
P87	Tingting Tian	Compare exotic and native mangrove plant species on composition and function of soil microbial community in Futian, Shenzhen, China		
P88	Huilan Zhu	Comparison of free-living marine nematode community in interspersed habitats of mangroves and <i>Sporobolus alterniflorus</i> in Zhanjiang, China		
P89	Eunjin Byeon	Physiological effects and molecular response in the marine rotifer <i>Brachionus plicatilis</i> after combined exposure to nanoplastics and copper		
P90	Eunjin Byeon	Effects of nano- and microplastics with the combined exposure of zinc oxide nanoparticles on toxicity, oxidative stress, and energy metabolism in the marine rotifer <i>Brachionus koreanus</i>		
P91	Taihun Kim	Subtropical coral expansion within high-latitude marginal coral communities in Jeju		
P92	In Ok Lee	Influence of temperature on reproduction, and growth of the brown shrimp, <i>Crangon hakodatei</i> (Caridea, Crangonidae) in the East Sea of Korea		
P93	Jin Zhou	Symbiotic bacterial communities and carbon metabolic profiles of coral <i>Acropora</i> at different health status response to heatwave		
P94	Chung-Chi Chen	Effect of trace metal enrichment and thermal stress on the physiology of the Scleractinia coral		
P95	Chi-Ying Hsieh	The sublethal effects of trace metals combined with various sediment particle size groups on the salt-tolerant chironomid larvae of <i>Kiefferulus longilobus</i>		

P96	Gopi Narayanan Koilpitchai	Influence of salinity on the biochemical and physiological response in <i>Trachinotus blochii</i> exposed to selenium	
P96S	Jae-Seong Lee	Synergistic effects of temperature, salinity, and nanoplastic beads on the life history traits of the marine rotifer <i>Brachionus plicatilis</i>	
P97	Bandita Badakumar	Antifouling efficacy of chlorine dioxide on the physiological and cellular response in adult green mussel <i>Perna viridis</i> : a multimarker study	
P98	Qianhe Liu	Natural organic matter enhanced natural transformation of extracellular antibiotic resistance genes in sunlit water	
P99	King Yip Lai	Exploring factors shaping the microalgal community structure on pneumatophores	
P100	Min-Sub Kim	Multigenerational effects of elevated temperature on host-microbiota interactions in the marine water flea <i>Diaphanosoma celebensis</i> exposed to micro- and nanoplastics	
P101	Yuxuan Zhang	Identification of SNPs associated with salmon lice (<i>Lepeophtheirus salmonis</i>) resistance in Atlantic salmon (<i>Salmo salar</i>) using genome-wide association analysis (GWAS)	
P102	Justin C.H. Leong	The effects of titanium dioxide nanoparticles (nano-TiO ₂) UV filter on fertilization rate and larval survival of Scleractinia coral <i>Acropora tumida</i>	
P103	Taison Ka Tai Chang	Synergistic effect of salinity and suspended sediment on fertilisation success and embryonic development of <i>Acropora tumida</i> and <i>Platygyra carnosa</i> in a marginal coral environment, Hong Kong	
P104	Elvis L.C.Wong	Coral chimerism: strategy to boost field survivorship in early outplants of sexually-reared <i>Acropora tumida</i> in Hong Kong	
P105	Alice S.U. Lau	Environmental tolerance of gorgonian coral Guaiagorgia sp.	
P106	Jeong-In Park	Transcriptome analysis and identification of potential biomarkers in human cell lines exposed to jellyfish SHK-like peptide	
P106S	Alissa Victoria Bass	Marine heatwaves and light limitation independently alter the growth and productivity of the tropical seagrass <i>Halophila ovalis</i>	
		Biodiversity	
P107	Meng-Hsien Chen	Seasonal variation in fish assemblages and habitat utilization in Chiku Lagoon, Taiwan	
P108	Chien-Cheng Lai	Seasonal variation of benthic fish assemblages in Changhua's offshore wind farm area, Central Western Taiwan	
		Cephalopod assemblages in relation to the environmental factors in the coastal waters off	
P109	Yi-Ling Wu	Western Taiwan	
P109 P110	Yi-Ling Wu Michelle H.C. Chan		
	Michelle H.C.	Western Taiwan Feasibility study of detecting local seahorse and pipefish species in the coastal area of Hong	
P110	Michelle H.C. Chan	Western Taiwan Feasibility study of detecting local seahorse and pipefish species in the coastal area of Hong Kong by environmental DNA (eDNA)	
P110 P111	Michelle H.C. Chan Yuen Wai Heung	Western Taiwan Feasibility study of detecting local seahorse and pipefish species in the coastal area of Hong Kong by environmental DNA (eDNA) Diversity of Pennatuloidea around Lantau Island, Hong Kong An integrated morphological and molecular study clarifies the identities of two species of	
P110 P111 P112	Michelle H.C. Chan Yuen Wai Heung Hai Xin Loke	Western Taiwan Feasibility study of detecting local seahorse and pipefish species in the coastal area of Hong Kong by environmental DNA (eDNA) Diversity of Pennatuloidea around Lantau Island, Hong Kong An integrated morphological and molecular study clarifies the identities of two species of porcelain crabs in the genus <i>Porcellanella</i> (Anomura: Porcellanidae) The influence of ocean warming on the biofiltration function of the reef-building mussels and	
P110 P111 P112 P113	Michelle H.C. Chan Yuen Wai Heung Hai Xin Loke Chi Chiu Lo	Western Taiwan Feasibility study of detecting local seahorse and pipefish species in the coastal area of Hong Kong by environmental DNA (eDNA) Diversity of Pennatuloidea around Lantau Island, Hong Kong An integrated morphological and molecular study clarifies the identities of two species of porcelain crabs in the genus <i>Porcellanella</i> (Anomura: Porcellanidae) The influence of ocean warming on the biofiltration function of the reef-building mussels and oysters (Bivalvia, Mytilidae and Ostreidae): A meta-analysis	
P110 P111 P112 P113 P114	Michelle H.C. Chan Yuen Wai Heung Hai Xin Loke Chi Chiu Lo Jiamian Hu	Western Taiwan Feasibility study of detecting local seahorse and pipefish species in the coastal area of Hong Kong by environmental DNA (eDNA) Diversity of Pennatuloidea around Lantau Island, Hong Kong An integrated morphological and molecular study clarifies the identities of two species of porcelain crabs in the genus <i>Porcellanella</i> (Anomura: Porcellanidae) The influence of ocean warming on the biofiltration function of the reef-building mussels and oysters (Bivalvia, Mytilidae and Ostreidae): A meta-analysis Automatic detecting, identifying and measuring ostracods with deep learning	
P110 P111 P112 P113 P114 P115	Michelle H.C. Chan Yuen Wai Heung Hai Xin Loke Chi Chiu Lo Jiamian Hu Jialu Huang	Western Taiwan Feasibility study of detecting local seahorse and pipefish species in the coastal area of Hong Kong by environmental DNA (eDNA) Diversity of Pennatuloidea around Lantau Island, Hong Kong An integrated morphological and molecular study clarifies the identities of two species of porcelain crabs in the genus <i>Porcellanella</i> (Anomura: Porcellanidae) The influence of ocean warming on the biofiltration function of the reef-building mussels and oysters (Bivalvia, Mytilidae and Ostreidae): A meta-analysis Automatic detecting, identifying and measuring ostracods with deep learning Benthic ostracod diversity and biogeography in Deep Bay, Hong Kong Restoring degraded artificial shorelines in a polluted environment with eco-engineering: a case	
P110 P111 P112 P113 P114 P115 P116	Michelle H.C. Chan Yuen Wai Heung Hai Xin Loke Chi Chiu Lo Jiamian Hu Jialu Huang Thea E. Bradford Rainbow W.S. Leung	Western Taiwan Feasibility study of detecting local seahorse and pipefish species in the coastal area of Hong Kong by environmental DNA (eDNA) Diversity of Pennatuloidea around Lantau Island, Hong Kong An integrated morphological and molecular study clarifies the identities of two species of porcelain crabs in the genus Porcellanella (Anomura: Porcellanidae) The influence of ocean warming on the biofiltration function of the reef-building mussels and oysters (Bivalvia, Mytilidae and Ostreidae): A meta-analysis Automatic detecting, identifying and measuring ostracods with deep learning Benthic ostracod diversity and biogeography in Deep Bay, Hong Kong Restoring degraded artificial shorelines in a polluted environment with eco-engineering: a case study from Hong Kong Assessing biodiversity post-artificial beach construction at Lung Mei, Tolo Harbour	
P110 P111 P112 P113 P114 P115 P116	Michelle H.C. Chan Yuen Wai Heung Hai Xin Loke Chi Chiu Lo Jiamian Hu Jialu Huang Thea E. Bradford Rainbow W.S. Leung	Western Taiwan Feasibility study of detecting local seahorse and pipefish species in the coastal area of Hong Kong by environmental DNA (eDNA) Diversity of Pennatuloidea around Lantau Island, Hong Kong An integrated morphological and molecular study clarifies the identities of two species of porcelain crabs in the genus <i>Porcellanella</i> (Anomura: Porcellanidae) The influence of ocean warming on the biofiltration function of the reef-building mussels and oysters (Bivalvia, Mytilidae and Ostreidae): A meta-analysis Automatic detecting, identifying and measuring ostracods with deep learning Benthic ostracod diversity and biogeography in Deep Bay, Hong Kong Restoring degraded artificial shorelines in a polluted environment with eco-engineering: a case study from Hong Kong	

P120	Feng-Lan Li	Phytoplankton community in an estuary during <i>Karenia mikimotoi</i> bloom at low and high tides — A case study in a man-made channel in Shenzhen, China		
P121	Xiaohong Sun	Temporal and spatial changes of dinoflagellates and their sporocysts in the north Yellow Sea in summer 2019		
P122	Sea-Yong Kim	Occurrence and seasonal distribution of the neurotoxin β -n-methylamino-l-alanine in mussels in the South Sea coast of Korea		
P123	Meng Yan	Toxicity effects of hydrophilic algal lysates from <i>Coolia tropicalis</i> on marine medaka larvae (<i>Oryzias melastigma</i>)		
P124	Dechen Lu	Epiphytic common core bacteria in the microbiomes of co-located green (Ulva), brown (Saccharina) and red (Grateloupia, Gelidium) macroalgae		
P125	Winnie Lam	Modulation of ichthyotoxicity of Karenia mikimotoi by its co-culturing associated bacteria		
P126	Chun Hung Lee	Proteomic insights of interaction between ichthyotoxic dinoflagellate <i>Karenia mikimotoi</i> and algicidal bacteria <i>Maribacter dokdonensis</i>		
P127	Jun Kim	A study on the detection of saxitoxin (STX) in real seafood using neuro-2a assay		
P128	Nobuhisa Kajino	Detection of tetrodotoxin (TTX) and its analogues in mud snails <i>Nassarius livescens</i> occurring on a sandy beach in Jeju Island, Korea using a liquid chromatography-tandem mass spectrometry (LC-MS/MS)		
P129	Nobuhisa Kajino	Quantification of tetrodotoxin (TTX) and its analogue in the blue-lined octopus <i>Hapalochlaena fasciata</i> (Hoyle, 1886) from Jeju Island, Korea		
P130	Won Bae Joh	Okadaic acid-induced cell cycle inhibition in EA.HY926 human vascular endothelial cells		
P131	Zixuan Ding	Feeding behviors responses of two copepods-Paracalanus parvus and Calanus sinicus to three typical red tide algae with different concentrations		
P132	Yoseop Lee	Differential susceptibility to hypoxia in hypoxia-inducible factor 1-alpha (HIF-1α)-targeted freshwater water flea <i>Daphnia magna</i> mutants		
P133	Yoseop Lee	Oxidative stress-mediated deleterious effects of hypoxia in the brackish water flea <i>Diaphanosoma</i> celebensis		
P134	Jingyi Zhu	Investigation of dinoflagellate Gambierdiscus and coral reef fish of the Republic of Kiribati		
P135	Li Zhang	Spatiotemporal distribution and driving mechanisms of algal toxins and their producers in Hong Kong coastal waters		
P136	Xiaowan Liu	Investigation of the effects of 44-methylgambierone on marine medaka (Oryzias melastigma)		
P137	Eun-Ji Won	Anthropogenic alteration in artificial seawater lake water quality and planktonic ecosystem		
P138	Yongzhi Chen	Polymorphic change in microalgae and its associated environmental factors in Khao Chau Ocean, Huizhou		
		Technology		
P139	Ming Liu	Advanced oxidation technology for efficient treatment of emerging pollutants		
P140	Lin Lin	Lithium recovery from saline water through $H_3 \text{LiTi}_5 \text{O}_{12}\text{-based}$ capacitive deionization technology		
P141	Meng Yan	Development of a platform for rapid identification of microalgae and microplastics in seawater		
P142	Xian Qin	Ocean mapping technology promoting carbon neutrality - A case study in Tung Ping Chau, Hong Kong		
P143	Hong Zhou	Meio- and macrofauna as indicators in the ecological monitoring program, do they behave the same?		
P144	Dagmara Leszczyńska	Solid-phase microextraction as a novel technique to extract carbamazepine and its metabolites from <i>Chlamys islandica</i> after experimental exposure		
		Environmental policy		
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P145	Chang Keun Lee	Nationwide evaluation of purification capacity for waterborn nitrogen and phosphorous in coastal sediments of South Korea		

P147 Min-Sub Kim In silico identification and characterization of microRNAs from four aquatic invertebrate species

General Information

Internet access

Free Wi-Fi service is provided to visitors on campus and the SSID used is "Wi-Fi.HK via CityU". Upon connection, a web browser will be opened and you will be prompted to the welcome page of the Wi-Fi.HK via CityU. You will be required to read and accept the Conditions of Use and Disclaimers before Internet connection is granted.

Canteen

Participants can enjoy lunch using the lunch coupon included in the registration package. The lunch coupons can <u>only</u> be used at:

AC2 Canteen

Location: Level 3 Li Dak Sum Yip Yio Chin Academic Building

Opening Hours: Monday to Sunday 07:30 - 21:00

Phone: 2338 0883

Map: Please refer to the CityU Map at the back of this booklet cover

Participants are also welcome to visit other catering outlets in CityU for lunch at their own expenses, as the conference lunch coupon is only accepted in the AC2 Canteen. All catering outlets in CityU can be viewed via the link below: https://www.cityu.edu.hk/directories/catering.

Banking Facilities on Campus

1. Hang Seng Bank - City University Branch

Location: Level 3 Yeung Kin Man Academic Building

(Next to the Run Run Shaw Library)

Opening hours: Monday to Friday 09:00 –17:00

Phone: 2198 5825

2. The Bank of China-City University Branch

Location: Level 3 Yeung Kin Man Academic Building

(Next to the CityU Bookshop)

Opening hours: Monday to Friday 09:00 –17:00

Phone: 3988 2388

Business Facilities

Facilities such as fax, photocopying, etc., will be available at nominal charges. Please contact the Conference Secretariat at the reception desk.

University Bookstore and Souvenir Shop

1. CityU Bookshop: Level 3 Yeung Kin Man Academic Building; Opening hours: Monday to Friday 10:00 - 18:00; Phone: 3442 2290

2. Visitor Centre: Level 3 Lau Ming Wai Academic Building; Opening hours: Monday to Friday 10:00 - 17:00; Phone: 3442 6296

Security Control Centre

In case of lost and found, please contact the conference secretariat or visit the security office at Room R4051, 4/F., Bank of China (Hong Kong) Complex. All loss reports must be made in person at the security office.

Health Services

Young Chung Yee Health Centre

Location: Level 4 Amenities Building

Opening hours: Monday to Friday: 09:00 - 13:00, 13:30 - 18:00

Saturday: 09:00 - 12:15

Phone: 3442 6066

For urgent medical attention, please go straight to the Accident & Emergency Department of any major hospital in Hong Kong. All regional hospitals offer 24-hour emergency service for acute illnesses or injuries. The nearest hospital with an A&E Department: 111 Wing Hong Street, Sham Shui Po, Kowloon (Caritas Medical Centre; Phone: 3408 7911).

Programme Changes

Any necessary changes to the programme will be notified on the conference noticeboard near the reception desk. The confirmed programme for each session will also be posted on the door of presentation venues.

Special arrangements during typhoon, rainstorms, or other adverse weather conditions

If a No. 8 or 10 typhoon signal or a Black rainstorm signal warning remains hoisted <u>at or after</u> <u>7:00 AM</u> on a day during the conference period, all presentations scheduled for the morning sessions will be conducted online via Zoom according to the schedule.

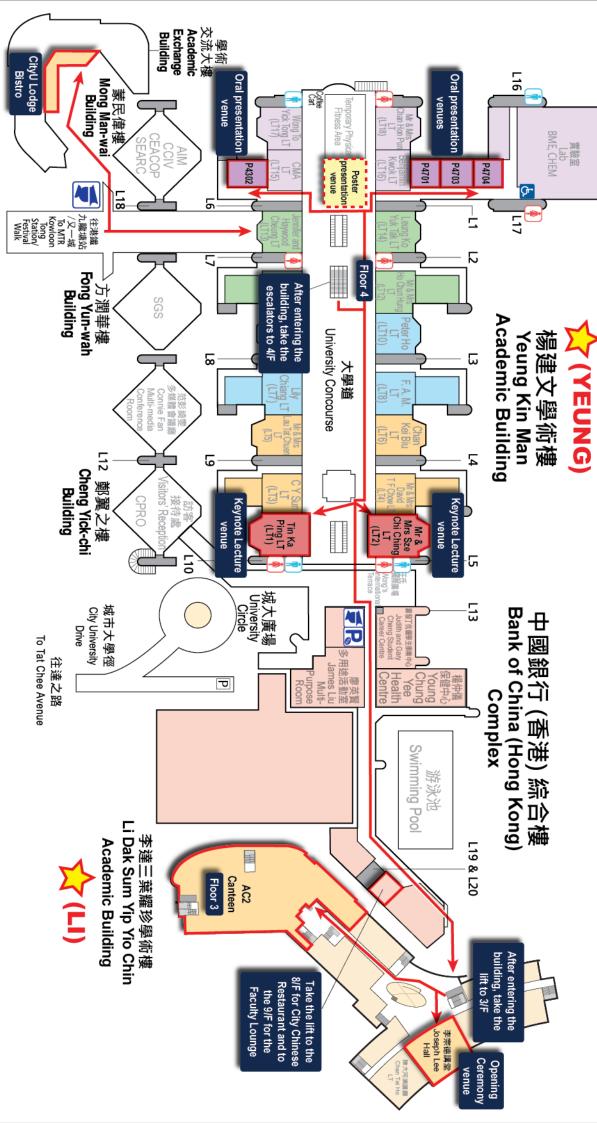
Presentations in the afternoon sessions will resume after 1:30 PM if the signal is lowered (i.e., Typhoon signal no. 1 or 3; Amber or Red rainstorm signal); while all presentations scheduled for the afternoon sessions will be conducted online via Zoom according to the schedule if No. 8 or 10 typhoon signals, or a Black rainstorm signal <u>remains hoisted at or after 12:00 PM</u>. In the event of adverse weather conditions, participants are advised to check out the latest arrangement on the conference webpage, https://www.icmpe-sklmp.com/. A notice board at the reception desk will also provide all details of any re-scheduled events. Please note that no other notification will be issued.

Conference Secretariat

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