

12-17 January 2025 • HONG KONG

The Hong Kong University of Science and Technology 1/F, Acdemic Building **Lecture Theatre A and B (LTA and LTB)**

Organizers



















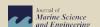




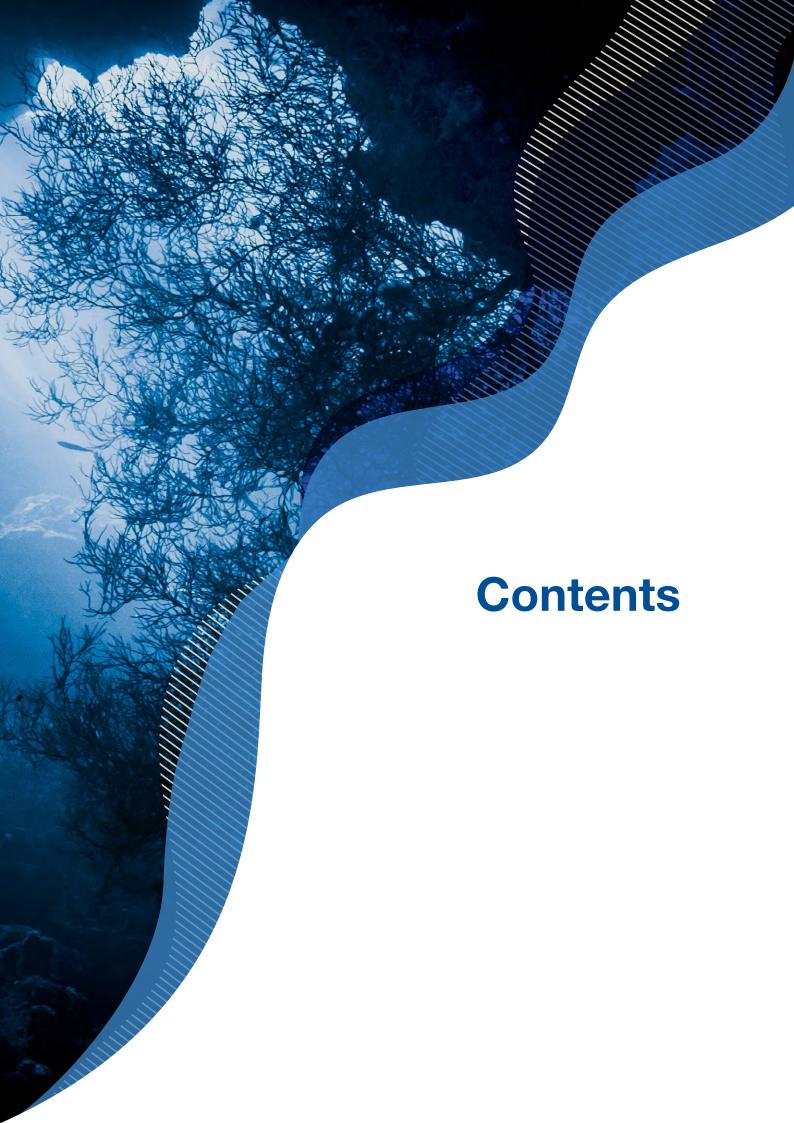




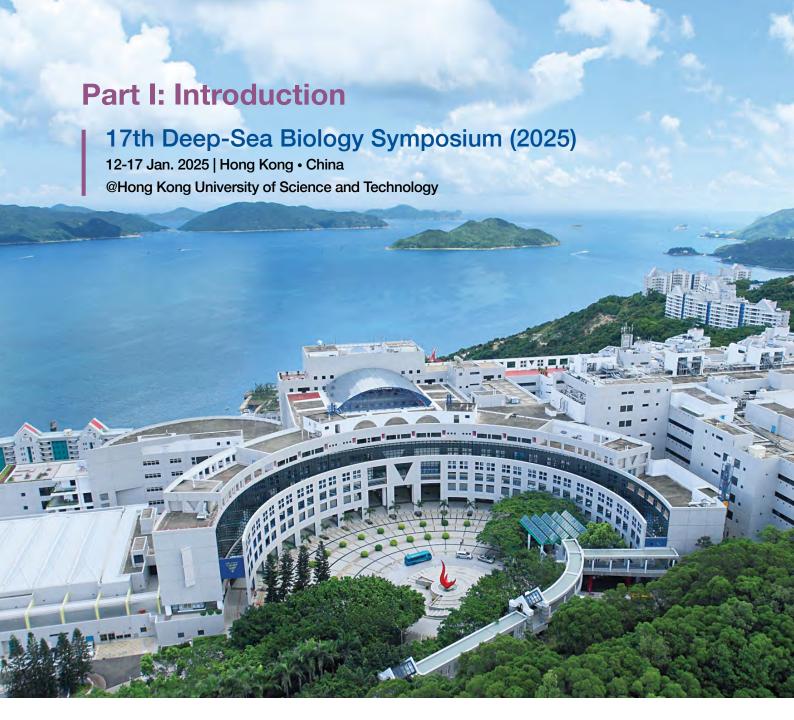








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It is our great honor to hold the 17th Deep-Sea Biology Symposium (17DSBS) at the Hong Kong University of Science and Technology (HKUST), Hong Kong, China in Jan. 2025. This is the first time that the DSBS is held in Asia since 1977, representing a milestone for deep-sea research in the region.

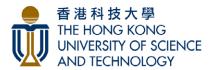
17DSBS has secured 10 keynote speakers and 20 invited speakers, including top-notched marine scientists, as well as early career researchers. To support more young marine talents to participate in this event, the 17DSBS organizer offers multiple and diverse awards and financial aids for the participants. Besides the extensive scientific programme, the 17DSBS also arranges exciting social events as well as field trips for participants to experience the nature beauty of Hong Kong.

In a word, the 17DSBS provides a unique academic exchange platform between deep-sea biologists in Asia-Pacific region and their counterparts in other parts of the world.

Look forward to your active participation in 17DSBS!

Supporting Organizations and Sponsors

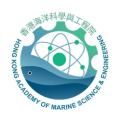
Organizers

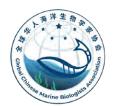






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Welcome Message from the Chairman



Pei-Yuan Qian

Chairman, Organising Committee of 17DSBS

David von Hansemann Professor of Science

Chair Professor, Department of Ocean Science

Director, Hong Kong Branch of Southern Marine Science and Engineering Guangdong Laboratory (Guangzhou)

Deputy Director, Southern Marine Science and Engineering Guangdong Laboratory (Guangzhou), Nansha, Guangzhou

We are honored and excited to welcome you to the Hong Kong University of Science and Technology (HKUST) which will host the 17th Deep-Sea Biology Symposium (17DSBS). This will be the first time that the DSBS is held in Asia. The 17DSBS thus provides a unique opportunity for international participants to meet colleagues in Asia where deep-sea research has been flourishing over the past decade.

Developing from a fishing village over a century ago to a major maritime city nowadays, Hong Kong has a very strong sea heritage. At HKUST, the new Department of Ocean Science aims to establish a solid research and education platform for multi-disciplinary marine science and technology. Together with marine scientists from other local tertiary institutes, we are working hard to organize the 17DSBS as a platform for participants to share their achievements in deep-sea biology, as well as to network and connect with colleagues for future research collaborations. In the 17DSDS program, we will include keynote talks by eminent deep-sea biologists, invited talks for young scientists, enjoyable social events, and excursions to some famous maritime localities in Hong Kong (such as the rhyolitic columnar rock formation in Sai Kung, which has recently been designated as one of the first 100 International Union of Geological Sciences (IUGS) Geological Heritage Sites).

Looking forward to a pleasurable experience with all our participants in Hong Kong in January 2025.

International Academic Committee

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Prof. Malcolm R. Clark

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Prof. Jon Copley



Prof. Roberto Danovaro



Prof. Ronnie N. Glud



Prof. Marcelo Visentini



Prof. Xinzheng Li



Prof. Lauren Kitahara Mullineaux



Prof. Jillian Petersen



Prof. Andrea Quattrini



Prof. Timonthy M. Shank



Prof. Jin Sun



Prof. Andreas Teske



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Prof. Xiao-Hua Zhang

Local Organizing Committee

Chair



Prof. Pei-Yuan Qian

Members



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Prof. Jerome Hui



Prof. Chaolun Li



Prof. Haiwei Luo



Prof. Jian-Wen Qiu



Prof. Zongze Shao



Prof. Fengping Wang



Prof. Hao Wang



Prof. Moriaki Yasuhara



Prof. Rui Zhang



Ms. Emma Zhou

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Ariane Buckenmeyer

Jeremy Horowitz

Lara Maleen Beckmann

Freya Hammar

Delphine Mestdagh

12 Scientific Sessions with 29 Sub-sessions

#	Sessions	Sessions Organizers	Sessions Chairs
1	Biodiversity (6 sub-sessions)	Dewi Langlet Patricia Velez Aguilar	Ka Hou Chu Jon Copley Adrian G. Glover Jerome Hui Dewi Langlet Hidetaka Nomaki Tim O'Hara Julia D. Sigwart Patricia Velez Aguilar
2	Microbiome	Haiwei Luo Xiang Xiao	Haiwei Luo Xiang Xiao
3	Symbiosis	Chaolun Li Hao Wang	Chaolun Li Hao Wang
4	Deep Pelagic Ocean (3 sub-sessions)	Veronique Merten Vanessa I. Stenvers Matthew Woodstock	Henk-Jan Hoving Veronique Merten Vanessa I. Stenvers
5	Sensory Biology	Karen Osborn Vanessa I. Stenvers	Karen Osborn Vanessa I. Stenvers
6	Genomics and Metagenomics of Metazoans (3 sub-sessions)	Holly M. Bik Jian-Wen Qiu	Holly M. Bik Corinna Breusing Yi Lan Jian-Wen Qiu
7	Ecology and Conservation (5 sub-sessions)	Joan M. Alfaro-Lucas Erin Easton Nicola Foster Astrid Leitner Paris Stefanoudis	Joan M. Alfaro-Lucas Payanee Annasawmy Daphne Cuvelier Fanny Girard Andrian Glover Astrid Leitner J Murray Roberts Andrew Sweetman
8	Climate Change and Human Impacts (3 sub-sessions)	Nélia Mestre Moriaki Yasuhara	Daniel O. B. Jones Nélia Mestre Moriaki Yasuhara

#	Sessions	Sessions Organizers	Sessions Chairs
9	Novel Methods and Practices	Adrienne Copeland Stephen Formel Ashley N. Marranzino	Kerry Howel Ashley N. Marranzino
10	Arts and Science in Deep-Sea Environmental Management	Maria Baker Jozée Sarrazin	Maria Baker Jozée Sarrazin
11	Decade of Ocean Science Program Highlights (2 sub-sessions)	Ana Hilario Lisa A. Levin	Ana Hilario Lisa A. Levin
12	Open Session (2 sub-sessions)	Dominique Anderson Maila Guilhon	Dominique Anderson Maila Guilhon

Part II: Scientific Programme Timetable

Time	12 Jan Sunday	Time	13 Jan Monday		Time	14 . Tues	
		08:30	Registration		09:00- 09:25	Keynote Wa	
		0900- 09:30	Opening (Ceremony		Parallel Ora	al Sessions
		09:30- 09:55	Keynote Lecture 1 Clark		09:30- 11:00	6 Genomics & Metagenomics of Metazoans A	7 Ecology & Conservation A
		10:00- 10:30	Group Photo	& Tea Break	11:00- 11:20	Tea E	Break
			Parallel Ora	al Sessions		Parallel Ora	al Sessions
		10:30- 12:30	2 Microbiome	1 Biodiversity A	10:30- 12:30	6 Genomics & Metagenomics of Metazoans B	7 Ecology & Conservation B
		12:40- 14:00	Lur	nch	13:00- 14:00	Lur	nch
		14:15- 14:40	Keynote Lecture 2 Takai		14:15- 14:40	Keynote Col	
			Parallel Ora	al Sessions		Parallel Ora	al Sessions
		14:45- 16:30	11 Decade of Ocean Science Program Highlights A	1 Biodiversity B	14:45- 16:15	6 Genomics & Metagenomics of Metazoans C	7 Ecology & Conservation C
16:30-	Dogiotrotion	16:30- 16:50	Tea E	Break	16:15- 16:35	Tea E	Break
18:30	Registration	16:50- 17:15	Keynote I L				
18:00- 19:30	Welcome Dinner	17:15- 18:45	1 Decade of Oo Program I E	cean Science Highlights	16:35- 18:15	Poster S	Sessions
		19:00- 20:00	Studen	t Mixer	18:15- 19:30	DSBSo	c AGM

Time	15 Jan Wednesday		Time	16 . Thur	Jan sday	Time	17 . Fric					
09:00- 09:25	Keynote Tes	Lecture 6 ske	09:00- 09:25	Keynote Lecture 7 Qiu		09:00- 09:25	Keynote Rob					
	Parallel Ora	al Sessions		Parallel Ora	al Sessions		Parallel Ora	al Sessions				
09:30- 10:45	1 Biodiversity C	7 Ecology & Conservation D	09:30- 11:00	5 Sensory Biology	7 Ecology & Conservation F	09:30- 11:00	10 Arts and Science in Deep-Sea Environmental Management	12 Open Session A				
10:45- 11:05	Tea E	Break	11:00- 11:20	Tea E	Break	11:00- 11:20	Tea E	Break				
	Parallel Ora	al Sessions		Parallel Ora	al Sessions		Parallel Ora	al Sessions				
11:05- 12:35	3 Symbiosis	7 Ecology & Conservation E	11:20- 12:50	4 Deep Pelagic Ocean A	8 Climate Change & Human Impact A	11:20- 12:50	1 Biodiversity D	12 Open Session B				
12:40- 13:50	Lunch 13:00- 14:00			Lunch		Lunch		Lunch		13:00- 14:00	Lur	nch
			14:15- 14:40	Keynote Le		14:15- 14:40	Keynote L Danc					
				Parallel Ora	al Sessions		Parallel Ora	al Sessions				
			14:45- 16:30	4 Deep Pelagic Ocean B	8 Climate Change & Human Impact B	14:45- 16:30	1 Biodiversity E	9 Novel Methods & Practices				
14:00	Field	Trips	16:30- 16:50	Tea E	Break	16:30- 16:50	Tea E	Break				
				Parallel Ora	al Sessions							
		16:35- 18:15	4 Deep Pelagic Ocean C	8 Climate Change & Human Impact C	16:50- 17:30	Closing Ceremony						
			18:45- 20:30	Band	quet							

Rundown

Oral Presentations

Glance of Sessions and Venues:

Venue	13 Jan	14 Jan	15 Jan	16 Jan	17 Jan
LTA	Opening Ceremony Keynote Lecture 1, 2 & 3 Session 11 (A, B)	Keynote Lecture 4 & 5 Session 6 (A, B, C)	Keynote Lecture 6 Session 1C, 3	Keynote Lecture 7, 8 Session 4 (A, B, C), 5	Keynote Lecture 9, 10 Session 1(D,E),10 Closing Ceremony
LTB	Session 1 (A, B)	Session 7 (A, B, C)	Session 7 (D, E)	Session 7 (F), 8 (A, B, C)	Session 9, 12 (A, B)

12 January 2025 (Sunday)

1630- 1830	Registration
1800- 1930	Welcome Dinner

Day 1 13 January 2025 (Monday)

0830- 0900	Registration Registration
0900- 0920	Opening Ceremony (LT-A)
	Opening Address 1: Nancy Ip Hong Kong University of Science and Technology, Hong Kong, China
	Opening Address 2: Si Zhang Southern Marine Science and Engineering Guangdong Lab (Guangzhou), China
	Opening Address 3: Michelle Taylor Deep-Sea Biology Society
0920- 0930	Group Photo
0930- 0955	Keynote Lecture 1 [Croucher Keynote Lecture] (LT-A) Chair: Michelle Taylor Balancing Exploitation and Conservation in the Deep Sea: Challenges for Science Malcolm R. Clark National Institute of Water & Atmospheric Resources, New Zealand
10:00- 10:30	Tea Break

	Session 2: Microbiome LT-A Chairs: Haiwei Luo & Xiang Xiao	Session 1: Biodiversity (A) Diversity and Taxonomy I LT-B Chairs: Julia D. Sigwart & Patricia Velez Aguilar
1030- 1045	O2-1 [Invited Talk]: What are the Prevalent Clades Involved in Marine Biogeochemical Processes at Extreme Energy Limitation? Aurèle Vuillemin GFZ German Research Centre for Geosciences, Germany	O1A-1: Deep-Sea Biodiversity in the Aleutian Trench (Aleutbio) Angelika Brandt Senckenberg Research Institute and Natural History Museum, Germany
1045- 1100	O2-2 [Invited Talk] : Distribution and Genomic Variation of Ammonia-Oxidizing Archaea in Abyssal and Hadal Surface Sediments Blandine Trouche University of Southern Denmark, Denmark	O1A-2: Meiofauna Patterns in Three Contrasting Habitats at the Lucky Strike Vent Field: Focus on Nematode Diversity William Johnson da Silva IFREMER, France
1100- 1115	O2-3: Death in The Deep: Microeukaryotes in Hydrothermal Vent Food Webs Sarah K. Hu Texas A&M University, USA	O1A-3: Senckenberg Ocean Species Alliance (SOSA) — Novel Solutions Combining Discovery, Conservation and Fascination of Marine Invertebrates Julia D. Sigwart Senckenberg Research Institute and Natural History Museum, Germany
1115- 1130	O2-4: Prevalent and Active Dehalogenation Metabolism in Microorganisms of the Deepest Oceanic Trench Rulong Liu Shanghai Ocean University, China	O1A-4: Diversity across the Philippine Sea: Benthic Megafauna Community Composition across Four Ridges in Southern Japan Leah A. Bergman Japan Agency for Marine-Earth Science and Technology, Japan
1130- 1145	O2-5 : Crude-Oil Degradation Capabilities by Microscopic Fungi of Deep-Sea Hydrothermal Vents of The Gulf of California Diana L. Salcedo National Autonomous University of Mexico, Mexico	O1A-5: Exploring Deep-Sea Ecosystems in Palau with Baited Cameras and ROVs Harold K. Carlson University of Hawai'i at Mānoa, USA
1145- 1200	O2-6: The Far-Reaching Impacts of Hydrothermal Plumes on Microbial Communities and Biogeochemistry Significance in The Okinawa Trough Min Yu Ocean University of China, China	O1A-6: Faunal Communities of Deep Arctic Methane Seeps are Specialized with Links to Hydrothermal Vents Mari H. Eilertsen University of Bergen, Norway
1200- 1215	O2-7: Novel Insights into Microbial DMSP/DMS Cycling Mechanisms in Deep-sea Environments Xiao-Hua Zhang Ocean University of China, China	O1A-7: Biodiversity of Abyssal Polymetallic Nodule Fields in the Easternmost Region of the Clarion-Clipperton Fracture Zone, Pacific Ocean Chee Kong Chim National University of Singapore, Singapore
1215- 1230	O2-8 : Nitrous Oxide Reduction by Model Deep-Sea Isolates and Susceptibility to Metal Exposure Miguel Semedo University of Porto, Portugal	O1A-8: Revealing Intra- and Inter- Trenches Biodiversity of Hadal Meiofauna Using Molecular Approaches Yick Hang Kwan University of Southern Denmark, Denmark

1240- 1400	Lunch					
1415- 1440	Chair: Yo Microbial Ecosystem in Dee Ken	cture 2 (LT-A) ong Wang p-Sea Hydrothermal Systems Takai Science and Technology, Japan				
	Session 11: Decade of Ocean Science Program Highlights (A) LT-A Chairs: Ana Hilario & Lisa A. Levin	Session 1: Biodiversity (B) Diversity and Taxonomy II LT-B Chairs: Jerome Hui & Patrica Velez Aguilar				
1445- 1500	O11A-1 [Invited Talk]: The African Network of Deepwater Researchers Agnes Muthumbi University of Nairobi, Kenya	O1B-1 [Invited Talk]: Diversity, Ecology and Utilization of Deep-Sea Fungi from the Eastern Pacific and Gulf of Mexico Patricia Velez Aguilar National Autonomous University of Mexico, Mexico				
1500- 1515	O11A-2 [Invited Talk]: Deepening the Decade: Collaborative Action for Advancing Deep Ocean Science and Policy in the United Nations Decade of Ocean Science for Sustainable Development Elizabeth D. Hetherington Scripps Institution of Oceanography, University of California San Diego, USA	O1B-2 : Deep-Sea Fish Biodiversity on A Seamount Protected Area Eva Giacomello University of the Azores, Portugal				
1515- 1530	O11A-3: Prioritisation of Ocean Biodiversity Data Collection to Deliver a Sustainable Ocean Amelia E. H. Bridges University of Plymouth, UK	O1B-3: Diverse and Self-Sustaining Benthos of An Arctic Oil Seep Arunima Sen The University Centre in Svalbard, Norway				
1530- 1545	O11A-4: Deep-Ocean Stewardship Initiative: The Decade that was for the Decade that is Christopher Barrio Froján University of Southampton, UK	O1B-4: From Bubbles to Biology: Macrobenthos Abundance, Diversity, and Assemblage Structure at South Georgia's Methane Seeps Madeline P. B. C. Anderson British Antarctic Survey, UK				
1545- 1600	O11A-5: Climate Change and Deep Ocean Microbiomes and Ecosystems (DOME) Jiasong Fang Shanghai Ocean University, China	O1B-5: Serpentinite-Hosted Alkaline Seep Communities on the Mariana Forearc Show Lasting Impacts from Scientific Drilling Chong Chen Japan Agency for Marine-Earth Science and Technology, Japan				
1600- 1615	O11A-6: UN Ocean Decade Project COESS: Chemistry, Observation, Ecology of Submarine Seeps Glen T. Snyder University of Tokyo, Japan	O1B-6: Biogeography and Biodiversity of Hydrothermal Vent Fauna along the Central Indian Ridge Chailinn Park Korea Institute of Ocean Science & Technology, Busan, Republic of Korea				

1615- 1630	O11A-7: Deep Ocean Discoveries in the UN Ocean Decade: Opportunities for Science, Development and International Cooperation Anna Roik King Abdullah University of Science and Technology, Saudi Arabia O1B-7: Faunal Novelty and Dynamic Controls on the YBW Vent Field, East Pacific Rise Timothy M. Shank Woods Hole Oceanographic Institution, USA				
1630- 1650	Tea Break				
	Keynote Lecture 3 (LT-A) Chair: Pei-Yuan Qian Exploring Deep-sea Typical Habitats for Achieving Sustainable Development Jiabiao Li Second Institute of Oceanography, Ministry of Natural Resource, China				
	Session 11: Decade of Ocean Science Program Highlights (B) LT-A Chairs: Ana Hilario & Lisa A. Levin				
1715- 1730	O11B-1: The Development and Upcoming Challenges of Area-Based Management Tools for the Areas beyond National Jurisdiction Yan Gao China Deep Ocean Affairs Administration, Ministry of Natural Resources, China				
1730- 1745	O11B-2: Population Genetic Structure of the Deep-Sea Ophiuroidea across the North-Western Pacific: Subtle Differentiation within High Connectivity Dongsheng Zhang Second Institute of Oceanography, Ministry of Natural Resources, China				
1745- 1800	O11B-3: Time in the Deep: Insights from the NorthEast Pacific Deep-sea Exploration Project (NEPDEP) Cherisse Du Preez Fisheries and Ocean Canada & the University of Victoria, Canada				
1800- 1815	O11B-4: Searching the One and Finding the Other: A Story of Corals, Hydrothermal Vents and Cold Seeps Saskia Brix University of Hamburg, Germany				
1815- 1830	O11B-5: From Barriers to Biodiversity – Phylogeographic Patterns in Deep-Sea Isopods in Two Major Oceanic Regions Stefanie Kaizer Senckenberg Research Institute and Natural History Museum, Germany				
1830- 1845	Roundtable Discussion				
1900- 2000	Student Mixer (By Invitation) China Garden				

Day 2 14 January 2025 (Tuesday)

0900- 0925	Keynote Lecture 4 (LT-A) Chair: Zongze Shao Global Subseafloor Ecosystem and Sustainability Fengping Wang Shanghai Jiao Tong University, China				
	Session 6: Genomics & Metagenomics of Metazoans (A) LT-A Chairs: Corinna Breusing & Jian-Wen Qiu	Session 7: Ecology & Conservation (A) LT-B Chairs: Joan M. Alfaro-Lucas & Astrid Leitne			
0930- 0945	O6A-1 [Invited Talk]: Patterns of Genetic Diversity in Hydrothermal Vent Populations after the Hunga Tonga-Hunga Haʿapai Eruption Corinna Breusing University of Rhode Island, USA	O7A-1: Living on the Edge: The Mesopelagic Boundary Community of Monterey Submarine Canyon Astrid Leitner Oregon State University, USA			
0945- 1000	O6A-2: Sequencing Ultraconserved Elements (Uces) in Conservation: A Case Study of Deep-Sea Mussel Population Genomics Yi-Xuan Li Hong Kong Baptist University, Hong Kong, China	O7A-2: Abundance, Niche Diversity, and Differential Species Effects Impact Ecosystem Function on the Bottom of the Ocean Craig R. McClain University of Louisiana at Lafayette, USA			
1000- 1015	O6A-3: Genetic Divergence and Migration Dynamics of Co-Occurring Vent and Seep Macrofauna Highlight the Need for Deep-Sea Conservation Ting Xu The Hong Kong University of Science and Technology, Hong Kong, China	O7A-3: Faunal-Mediated Ecosystem Functioning in a Benthic Deep-Sea Canyon Community Recovering from a Severe Seabed Disturbance Rachel Hale National Institute of Water & Atmospheric Research, New Zealand			
1015- 1030	O6A-4 : Reduced Genetic Diversity and Limited Connectivity for Fisheries Impacted Populations of the Precious Coral Hemicorallium laauense Amy R. Baco Florida State University, USA	O7A-4: Revealing the Assembly Rules of Scavenging Fish Faunas in the Deep Western Pacific Aaron B. Judah University of Hawa i'i at Mānoa, USA			
1030- 1045	O6A-5: Life on Fire: Multiple-Omics Analyses Reveal Thermal Adaptations of Hot-Vent Endemic Alvinellid Worms Xing He Ocean University of China, China	O7A-5: The Distribution and Trophic Structure of Gelatinous Zooplankton Across the Deep Pelagic Julia M. Chavarry Scripps Institution of Oceanography, University of California San Diego, USA			
1045- 1100	O6A-6: Convergent Evolution of Distinctive Adaption to Extreme Environment in Deep-sea Organisms Longjun Wu The Hong Kong University of Science and Technology, Hong Kong, China	O7A-6: Squatlantis: Setting Physiological Baselines in the Seamounts of the SEP, Using New Records of Squat Lobsters Rosanne S. Dodde Universidad Católica del Norte, Chile			
1100- 1120	Tea B	Break			

	Session 6: Genomics & Metagenomics of Metazoans (B) LT-A Chairs: Holly M. Bik & Jian-Wen Qiu	Session 7: Ecology & Conservation (B) LT-B Chairs: Joan M. Alfaro-Lucas & Daphne Cuvelier
1120- 1135	O6B-1 [Invited Talk]: Transmission Mode and Stability of the Scaly-Foot Snail Holobiont Yi Lan The Hong Kong University of Science and Technology, Hong Kong, China	O7B-1: Animal Life in the Shallow Subseafloor Crust at Deep-Sea Hydrothermal Vents Sabine Gollner Royal Netherlands Institute for Sea Research, The Netherlands
1135- 1150	O6B-2: Genomics Illuminates the Adaptation to Deep-Sea Chemosymbiosis in a Scallop Yi-Tao Lin Hong Kong Baptist University, Hong Kong, China	O7B-2: Beta-Diversity Along the Hydrothermal Vent Fields of the Mid-Atlantic Ridge Daphne Cuvelier University of the Azores, Portugal
1150- 1205	O6B-3 : Genomic Insights into the Deep-Sea Adaptation and Rapid Colonization of Lindaspio Polybranchiata in a New Cold Seep Yujie Yan Institute of Oceanology, Chinese Academy of Sciences, China	O7B-3: Environmental Drivers and Microbial Mediation of Heterogeneity and Resilience of Carbonate Macrofauna at Methane Seeps Olívia S. Pereira Scripps Institution of Oceanography, University of California San Diego, USA
1205- 1220	O6B-4: Draft Genome of Abyssal Sea Cucumbers from a Region Targeted for Seabed Mining Belen Arias Natural History Museum, UK	O7B-4: Foundational Bathymodioline Mussel Larvae Preferentially Settle on Established Biofilm Surfaces Near Hydrothermal Vents Tanika M. Ladd Western Washington University, USA
1220- 1235	O6B-5 : Prokaryote-Eukaryote Co-Occurrence Predictions Using Multiomics to Link Ecosystem Function and Diversity in Deep-Sea Mining Areas Franck Lejzerowicz University of Oslo, Norway	O7B-5: Potential for Recovery of Deep-Sea Hydrothermal Vents Ecosystems After Burial by the Catastrophic Hunga Volcanic Eruption Shawn M. Arellano Western Washington University, USA
1235- 1250	O6B-6: Characterization of Nuclear and Mitochondrial Genomes of Polynoids (Annelida: Polychaeta) in Deep-Sea Chemosynthetic Ecosystem Won-Kyung Lee Korea Research Institute of Bioscience and Biotechnology, Korea	O7B-6: Gas'tronomy at Methane Seeps: Isotopic Indicators of Eukaryotic Methane Use Lisa A. Levin Scripps Institution of Oceanography, University of California San Diego, USA
1300- 1400	Lur	nch

1415- 1440	Keynote Lecture 5 [Croucher Keynote Lecture] (LT-A) Chair: Hao Wang Vulnerable Marine Ecosystems: Key Players for the Planet Health Ana Colaço University of the Azores, Portugal	
	Session 6: Genomics & Metagenomics of Metazoans (C) LT-A Chairs: Holly M. Bik & Yi Lan	Session 7: Ecology & Conservation (C) LT-B Chairs: Astrid Leitner & Andrew Sweetman
1445- 1500	O6C-1: eDNA Metabarcoding Upholds the Patch- Mosaic Model for Meiofaunal Biodiversity in Deep-Sea Sediments Holly M. Bik University of Georgia, USA	O7C-1: Evidence of Dark Oxygen Production at the Abyssal Seafloor Andrew Sweetman The Scottish Association for Marine Science, UK
1500- 1515	O6C-2: Molecular Assessment of Deep-Sea Bony Fishes: New Findings from the Western South Atlantic Heloísa De Cia Caixeta Universidade de São Paulo, Brazil	O7C-2 : Vulnerability of Tropical Fish Communities across Depth in the Central Indian Ocean Paris V. Stefanoudis University of Oxford, UK
1515- 1530	O6C-3: Vertical Biodiversity Zonation Revealed by Environmental DNA in the Molloy Deep, the Deepest Point in the Arctic Véronique Merten GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany	O7C-3: Habitat Distribution Modelling for the Azooxanthellate Coral Madracis interjecta in the Mesophotic and Deep Red Sea Megan K. B. Nolan King Abdullah University of Science and Technology, Saudi Arabia
1530- 1545	O6C-4: Phylogenomics Shed New Light on the Placement of Siboglinidae Maeva Perez Hong-Kong Baptist University, Hong Kong, China	O7C-4 : Skeletal Growth, Micro-Anatomy and Metabolism of Cold-Water Coral Holobiont of Three Main Reef-Building Species Robbe Joëlle Sorbonne Université, France
1545- 1600	O6C-5: Characterizing the Biodiversity and Bathymetric Distributions of Caribbean Deep-Sea Corals through eDNA Luke J. McCartin Lehigh University, USA	O7C-5 : Cost-Effective Deep-Sea Biodiversity Assessments Can Inform Conservation and Sustainable Management of Deep-Sea Ecosystems Telmo Morato University of the Azores, Portugal
1600- 1615	O6-6: Advancing Deep-Sea Mollusk Shell Genomics: Insights from the Clam Archivesica marissinica Qi Dai Hong Kong Baptist University, Hong Kong, China	O7C-6 : [Invited Talk]: Trait-based Approaches to Inform Conservation in the Deep Sea Neus Campanyà I Llovet University of the Azores, Portugal
1615- 1635	Tea	Break
1635- 1815	Poster Session Hallway Outside LT-A & LT-B	
1815- 1930	Annual General Meeting of the Deep-Sea Biology Society (LT-A)	

Day 3 15 January 2025 (Wednesday)

0900- 0925	Keynote Lecture 6 [Croucher Keynote Lecture] (LT-A) Chair: Fenping Wang From Magma to Microbe: The Subsurface Biosphere of Guaymas Basin Andreas Teske University of North Carolina at Chapel Hill, USA	
	Session 1 Biodiversity (C): Phylogenetics & Systematics LT-A Chairs: Ka Hou Chu & Dewi Langlet	Session 7: Ecology & Conservation (A) LT-B Chairs: Fanny Girard & J Murray Roberts
0930- 0945	O1C-1: Time-Calibrated Phylogenomic Analyses Reveal New Insights into the Evolution of Modern and Deep-Sea Asteroidea Mengjin Zhang The University of Hong Kong, Hong Kong, China	O7D-1 [Invited Talk]: Deep-sea Coral Ecosystem Dynamics through Space and Time: Implications for Conservation Fanny Girard University of Hawai'i at Mānoa, USA
0945- 1000	O1C-2: Clue to the Maze: A History of Phylogenetic Relationships in Deep-Sea Typhlotanaidae (Crustacea: Tanaidacea) Marta Gellert University of Lodz, Poland	O7D-2: Time-Series Analysis of Benthic Megafauna in the Arctic Ocean Lilian Boehringer Alfred-Wegener-Institute, Germany
1000- 1015	O1C-3: Phylogeography and Systematics of the Mesosignidae Schultz, 1969: Survey of Isopod Diversity in North Pacific Trenches Andreas Kelch Senckenberg Research Institute, Germany	O7D-3: Development of a Biologically-Validated, Global-Scale, Benthic Habitat Map for Use in Basin-Scale Marine Spatial Planning and Area Based Management Kerry Howell University of Plymouth, UK
1015- 1030	O1C-4: Analysis of Vesicomyids Clam Shed Light on the Updated Taxonomy and Evolution Kexin Gao Ocean University of China, China	O7D-4: What Is a Biotope? Thoughts From a Classification Methods Comparison Rebecca E. Ross Institute of Marine Research, Norway
1030- 1045	O1C-5: The Distribution of Hadal Snailfishes from the Trenches in the Northwestern Pacific Haruka Kamei University of Tokyo, Japan	O7D-5: Fading to Black: The Ambiguous Journey of Deep-Sea Shark Fisheries in the Philippines Titus Cañete Large Marine Vertebrates Research Institute Philippines, Philippines
1045- 1105	Tea Break	

	Session 3: Symbiosis LT-A Chairs: Chaolun Li & Hao Wang	Session 7: Ecology & Conservation (E) LT-B Chairs: Pavanee A. Annasawmy & Fanny Girard
1105- 1120	O3-1 [Invited Talk]: The Ins and Outs of Associations Between Beneficial and Pathogenic Bacteria of Deep-Sea Mussels Nicole Dubilier Max Planck Institute for Marine Microbiology, Germany	O7E-1 [Invited Talk]: Seamounts and Pinnacles of the Global Ocean Pavanee A. Annasawmy Fondation pour la Recherche sur la Biodiversité, France
1120- 1135	O3-2: Exploring the Depths: Insights into Symbiosis-Driven Biodiversity in Cold Seeps Minxiao Wang Institute of Oceanology, Chinese Academy of Sciences, China	O7E-2: Comparing Megabenthic Communities of Cobalt-Rich Manganese Seamounts of the Mid-Pacific Mountains, Necker Ridge, and Hawaiian Ridge Sierra Landreth Florida State University, USA
1135- 1150	O3-3: An Evolutionary Perspective on Symbioses of Alvinocaridid Shrimps Pierre Methou IFREMER, France	O7E-3: Diverse Megabenthic Communities Revealed by Video Surveys Along Boyd Seamount (Arctic Mid-Ocean Ridge), Norwegian Mineral-Exploration Area Irina Zhulay University of Bergen, Norway
1150- 1205	O3-4: Host-symbiont Interactions in the Deep-sea Tubeworm Lamellibrachia columna Fan Hui Hong Kong Baptist University, Hong Kong, China	O7E-4: Vulnerable Marine Ecosystem Patch Distribution and Abundance Hotspots on Seamounts of the Hawaiian-Emperor Seamount Chain Virginia Biede Florida State University, USA
1205- 1220	O3-5: Novel Structural Integration of Chemosymbionts in A Giant Deep-Sea Caudofoveate Worm-Mollusc from Cold Seeps Yunlong L Ocean University of China, China	O7E-5: Cold-Water Coral Distribution Across Oxygen Minimum Zones in the Galapagos Islands and Isla Del Coco, Eastern Tropical Pacific Ana Belén Yánez-Suárez Memorial University of Newfoundland and Labrador, Canada
1220- 1235	O3-6: Abyssal Deposit Feeder Utilization of Gut Microbiota is Reflective of Feeding Ecology Lee C. Miller University of Hawai'i at Mānoa, USA	O7E-6: Investigating Environmental Controls on Cold-Water Coral Distributions Using a Combined 3D Photogrammetric and Benthic Monitoring Approach Corie M. Boolukos University College Cork, Ireland
1240- 1350	Lu	nch
1400	Field Trips (Registrants only)	

Day 4 16 January 2025 (Thursday)

0930- 0925	Keynote Lecture 7 (LT-A) Chair: Ka Hou Chu Cold-Seep Fauna in the South China Sea: Composition and Biogeography Jian-Wen Qiu Hong Kong Baptist University, Hong Kong, China	
	Session 5: Sensory Biology LT-A Chairs: Karen Osborn & Vanessa I. Stenvers	Session 7: Ecology & Conservation (F) LT-B Chairs: Pavanee A. Annasawmy & Adrian G. Glover
0930- 0945	O5-1 [Invited Talk]: Vision in the Deep – an Overview of Adaptations to Dim Light and Bioluminescence Tamara Frank Nova Southeastern University, USA	O7F-1: Bioturbation is a Key Function for the Preservation of the Abyssal Nodule Field Habitat Loïc Van Audenhaege National Oceanography Centre, UK
0945- 1000	O5-2: Shrimp Glow, Did Ya Know? Understanding Bioluminescence in Deep-Sea Decapods Heather Bracken-Grissom Florida International University, USA	O7F-2: Marked Variability in Distance-Decay Patterns Suggests Contrasting Dispersal Ability in Abyssal Taxa Erik Simon-Lledó National Oceanography Centre, UK
1000- 1015	O5-3: Bioluminescence and Environmental Light Drive Visual Evolution in the Deep Sea Danielle M. DeLeo Florida International University, USA	O7F-3: Feeding Niche Varies with Organismal Body Size in Abyssal Deposit Feeders Lucy V. M. Goodwin University of Liverpool, UK
1015- 1030	O5-4 : Ontogenetic Variation in Sensory Detection in Hydrothermal Shrimp Alvinocarididae Adrien Mathou Sorbonne Université, France	O7F-4: Disparity of Dominant Species Across Three New Hydrothermal Vent Fields in the Mid- Atlantic Ridge Joan M. Alfaro-Lucas University of Victoria, Canada
1030- 1045	O5-5: Bioluminescence in Deep-Sea Dragonfishes: Photophore Morphology and Proposed Functionality Ashley N. Marranzino NOAA Ocean Exploration Affiliate, USA	O7F-5: Abyssal Megafauna Communities and the Potential Influence of Sargassum Sedimentation – A Qualitative and Quantitative Assessment Dominik Scepanski University of Cologne, Germany
1045- 1100	O5-6: Evolutionary Drivers of Eye Complexity and Transparency in Hyperiid Amphipods Vanessa I. Stenvers Smithsonian Institution, USA	O7F-6: Exploring the Growth of Deep-Sea Bivalves in Areas of Potential Seafloor Mining: Methods in Sclerochronology Lauren Geiser University of Leeds, UK
1100- 1120	Tea	Break

	Session 4: Deep Pelagic Ocean (A) LT-A Chairs: Henk-Jan Hoving & Véronique Merten	Session 8: Climate Change & Human Impact (A) LT-B Chairs: Daniel O. B. Jones & Nelia Mestre
1100- 1115	O4A-1 [Invited Talk]: Exploring Deep Sea Biodiversity with Environmental DNA Annette F. Govindarajan Woods Hole Oceanographic Institution, USA	O8A-1: Long-Term Impact and Biological Recovery in a Deep-Sea Mining Track after 44 Years Daniel O. B. Jones National Oceanography Centre, UK
1135- 1150	O4A-2: Multi-Marker eDNA Metabarcoding Reveals Patterns of Multi-Trophic Interactions and Ecological Connectivity in the Mesopelagic Nina Yang Woods Hole Oceanographic Institution, USA	O8A-2: Long-Term Impacts of Deep-Sea Mining on Benthic Macrofaunal Communities Regan Drennan Natural History Museum, UK
1150- 1205	O4A-3: Move Over Medusae: Trophic Ecology of Biomass-Dominant Gelatinous Zooplankton (Siphonophores and Pyrosomes) in the California Current Ecosystem Elizabeth D. Hetherington Scripps Institution of Oceanography, University of California San Diego, USA	O8A-3: Impacts of an Industrial Deep-Sea Mining Trial on Seafloor Biodiversity Eva C. D. Stewart Natural History Museum, UK
1205- 1220	O4A-4 :: First Investigations of Dietary and Habitat Overlap in Three New Zealand Deep-Sea Squid Species Samuel Clough Auckland University of Technology, New Zealand	O8A-4: The Environmental Impacts of Deep-Sea Mining Adrian G. Glover Natural History Museum, UK
1220- 1235	O4A-5: Examining the Diets of Deep-Sea Cephalopods from the Northern Gulf of Mexico Using a Metabarcoding Approach Heather Judkins University of South Florida St. Petersburg, USA	O8A-5: The Persistent Impact of Abyssal Seafloor Disturbance Andrew R. Gates National Oceanography Centre, UK
1235- 1250		O8A-6: Environmental Challenges of a Green Energy Transition in the Offshore Energy Sector: A Review to Guide Global Marine Planning in a Green Future Lucy Harris National Oceanography Centre, UK
1300- 1400	Lu	ınch

Deep Sea Biodiversity Under Climate Change: Contributions, Vulnerabilities and Conservation Lisa A. Levin Scripps Institution of Oceanography, University of California San Diego, USA	
Session 4: Deep Pelagic Ocean (B) LT-A Chairs: Véronique Merten & Vanessa I. Stenvers O4B-1: The Hidden Diversity, Behaviour and Life Histories of Atlantic Deep-Sea Cephalopods Henk-Jan Hoving GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany O4B-2: In Situ Observations of Deep-Sea Cephalopods in Beaked Whale Predator's Foraging Habitat Session 8: Climate Change & Human Impact (E LT-B Chairs: Nelia Mestre & Moriaki Yasuhara O8B-1: Marine Litter in Brazilian Deep-Sea Fis Gastrointestinal Contents Flávia T. Masumoto Universidade de São Paulo/Instituto Oceanográfico, Brazil O8B-2: Long-Term Ecotoxicological Effects of Sediment Plumes on Deep-Sea Invertebrates Following a Polymetallic Nodules Collection Te	
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Histories of Atlantic Deep-Sea Cephalopods Henk-Jan Hoving GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany O4B-2: In Situ Observations of Deep-Sea Cephalopods in Beaked Whale Predator's Foraging Habitat Gastrointestinal Contents Flávia T. Masumoto Universidade de São Paulo/Instituto Oceanográfico, Brazil O8B-2: Long-Term Ecotoxicological Effects of Sediment Plumes on Deep-Sea Invertebrates Following a Polymetallic Nodules Collection Trees.	h
Cephalopods in Beaked Whale Predator's Sediment Plumes on Deep-Sea Invertebrates Following a Polymetallic Nodules Collection To	
Julia Stefanschitz GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany Pasqualina Gaetano University of Algarve, Portugal	ial
O4B-3 : Accidental in Situ Observations Reveal Previously Unknown Behaviour Type in Cephalopods, Relevant to Bentho-Pelagic Coupling Alexey V. Golikov GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany O8B-3: Ecotoxicological Effects in Hydrotherm Vent Shrimp and Polychaetes Exposed in Situ Sulphide Particles Santiago Correia University of Algarve, Portugal	
O4B-4 : Trophic and Functional Specialization in Deep-Pelagic Fish Along the Depth Gradient in the Bay of Biscay Liz Loutrage La Rochelle University, France O8B-4: Are Sea Anemones Useful Tools for Assessing the Ecotoxicological Impact of Dee Sea Sediments and Manganese Exposure? Juliano M. Vilke University of Algarve, Portugal	p -
O4B-5: From the Deep-Sea and Beyond: How Patagonian Toothfish, a Megafauna, May Connect Distant Biomes Chi Hin Lam Large Pelagics Research Center, USA O8B-5: Metal Impacts on Deep-Sea Microbial Diversity and N Cycling Potential Leonor Pizarro University of Porto, Portugal	
O4B-6: The Success of Spiny-Rayed Fishes in the Deep-Pelagic Ocean Discovered Using a Large Midwater Trawl April Cook Nova Southeastern University, USA O8B-6: Ecotoxicological Response to in situ Exposure to Sulphides in Bathymodiolus azorical Exposure to Sulphides in	JS
O4B-7: To Brood or Not to Brood: Predicting Larval Strategies in the Asteroidea Hugh Carter Natural History Museum, UK O8B-7: In situ Disturbance Effects on the Proteome of the Hydrothermal Vent Mussel Bathymodiolus azoricus Cármen S. V. Sousa University of Algarve, Portugal	
1630- 1650 Tea Break	

	Session 4: Deep Pelagic Ocean (C) LT-A Chairs: Henk-Jan Hoving & Vanessa I. Stenvers	Session 8: Climate Change & Human Impact (C) LT-B Chairs: Daniel O. B. Jones & Moriaki Yasuhara
1650- 1705	O4C-1 [Invited Talk]: Non-invasive Methods for Studying Midwater Jellyfish Gerlien Verhaegen University of Greifswald, Germany	O8C-1: Deep Pelagic Micronekton Reflect Differences in Mercury Bioavailability Within the Southern California Current Ecosystem Rachel S. Chen Scripps Institution of Oceanography, University of California San Diego, USA
1705- 1720	O4C-2: Deep-Pelagic Nekton Research in the Gulf of Mexico: A 14-Year Synopsis and Future Directions Tracey Sutton Nova Southeastern University, USA	O8C-2: Maternal Transfer of Polycyclic Aromatic Hydrocarbons in Mesopelagic Fauna from the Northern Gulf of Mexico Isabel C. Romero University of South Carolina, USA
1720- 1735	O4C-3: The Bathy and Abyssopelagic Micronekton Communities in the Eastern Pacific Clarion Clipperton Mining Zone Jeffrey C. Drazen University of Hawai'i at Mānoa, USA	O8C-3: Zooplankton Community Structure in The Abyssal Benthic Boundary Layer Varies Over Time with Organic Matter Flux Gabrielle N. Ellis University of Hawai'i at Mānoa, USA
1735- 1750	O4C-4: Micronekton Community Assessment in A Deep-Sea Mining Site: Vertical Community Structuring and Biodiversity in an OMZ Victoria E. Assad University of Hawai'i at Mānoa, USA	O8C-4: Predicting Habitat Suitability Changes for Vulnerable Marine Ecosystems in the Northeast Atlantic under Future Climate Scenarios Jonatan F. Marquez Institute of Marine Research, Norway
1750- 1805	O4C-5: Distinct Horizontal and Vertical Communities of Micronekton Across the Southern California Current Deep-Pelagic Ecosystem Elan J. Portner Scripps Institution of Oceanography, University of California San Diego, USA	O8C-5: Testing the Deep-Sea Glacial Disturbance Hypothesis of Norwegian Sea Diversity, Using Fossil Records Moriaki Yasuhara The University of Hong Kong, Hong Kong, China
1805- 1820	O4C-6: Biological Traits Influence Contemporary and Historical Temporal Genomics of Pelagic Deep-Sea Species from The Gulf of Mexico Pedro A. Peres Florida International University, USA	O8C-6 : Lipid Dynamics in the Cold-Water Coral Dentomuricea aff. meteor: Effects of Ocean Warming and Reproductive Condition Anaïs Sire de Vilar University of the Azores, Portugal
1820- 1835	O4C-7: Hepatic Steatosis in Hadal Snailfish as an Adaptation to Extreme Environment Guoyong Yan The Hong Kong University of Science and Technology, Hong Kong, China	
1845- 2030	Bar	nquet

Day 5 17 January 2025 (Friday)

0900- 0925	Keynote Lecture 9 [Croucher Keynote Lecture] (LT-A) Chair: Xiao-Hua Zhang Cold-Water Corals in a Changing Ocean J. Murray Roberts University of Edinburgh, UK	
	Session 10: Arts and Science in Deep-Sea Environmental Management LT-A Chairs: Maria Baker & Jozée Sarrazin	Session 12: Open Session (A) LT-B Chairs: Dominique Anderson & Maila Guilhon
0930- 0945	O10-1 [Invited Talk]: Broadening Our Views on Common Heritage: Factoring in Art, Science and all Forms of Knowledge in the Politics and Regulatory Framing of the Deep Sea Pradeep A. Singh Research Institute for Sustainability, Germany	O12A-1 [Invited Talk]: Thinking Deeply: Reflections on Experiences, Practices and Values in Deep-Sea Science Diva Amon University of California Santa Barbara, USA
0945- 1000	O10-2: Measuring the Success of the Kunming- Montreal Global Biodiversity Framework in the Deep Sea Anna Metaxas Dalhousie University, Canada	O12A-2 [Invited Talk]: Democratising the Deep Sea Sheena Talma University of Oxford, UK
1000- 1015	O10-3 : Communicating Azores Deep-Sea Benthic Communities through Scientific Illustrations Inês Carneiro University of the Azores, Portugal	O12A-3: "Costa Rica Desconocida" - A Campaign for Awareness and Cultural Integration of Deep- Sea Environments Beatriz Naranjo-Elizondo Universidad de Costa Rica, Costa Rica
1015- 1030	O10-4: Tracking Bottom-Fishing Activities of the European Union's Deep-Sea Fishing Fleet in Vulnerable Marine Ecosystem Areas Lissette Victorero Deep Sea Conservation Coalition, Netherlands	O12A-4: 'Dos' in Deep-Sea Research: The Case Study of the Octopus Odyssey Maila Guilhon University of Edinburgh Ocean Voices Programme, UK
1030- 1045	O10-5 : One Thousand Reasons – an Inspiring Step towards the Protection and Sustainable Use of the Deep-sea Luciana Genio International Seabed Authority, Jamaica	O12A-5: Understanding Human Values and Risk Perceptions in Deep-Ocean Stewardship Laura Kaikkonen Finnish Environment Institute, Finland
1045- 1100	O10-6: Coupling "Arts & Sciences": Inspiration and Innovation to Increase Ocean Literacy Jozée Sarrazin IFREMER, France	O12A-6: Enhancing the Voices of Deep-Sea Early Career Ocean Professionals – a Framework Vanessa Lopes University of Edinburgh,UK
1100- 1120	Tea	Break

	Session 1: Biodiversity (D): Ecology LT-A Chairs: Adrian G. Glover & Hidetaka Nomaki	Session 12: Open Session (B) LT-B Chairs: Dominique Anderson & Maila Guilhon
1120- 1135	O1D-1 [Invited Talk]: Ecology of Deep-Sea Protistan and Metazoan Meiofauna: Experimental Approaches Hidetaka Nomaki Japan Agency for Marine-Earth Science and Technology, Japan	O12B-1 Blue (un)certainties: Deep-Sea Mining Policy Process in the Arctic Mid-Ocean Ridge, Norway Aistė Klimašauskaitė University of Bergen, Norway
1135- 1150	O1D-2 : A Deep-Sea Isopod That Consumes Sargassum Sinking from the Ocean's Surface Mackenzie Gerringer State University of New York at Geneseo, USA	O12B-2: Perspectives on Part II: Science-Policy Engagement, Challenges, and Opportunities for the Marine Genetic Resource Provisions of the BBNJ Agreement Muriel Rabone Natural History Museum, UK
1150- 1205	O1D-3: Rocky Seafloor — Underestimated Driver for Habitat Heterogeneity and Benthic Biodiversity (RUBBLE) Torben Riehl Senckenberg Research Institute and Natural History Museum Frankfurt, Germany	O12B-3: The Ghost Net Movement Raises Awareness on the Vulnerability of Deep Sea Habitats Lynette Griffiths &Virginie Tilot Ghost NET Collective, Australia; Muséum National d'Histoire Naturelle, France
1205- 1220	O1D-4: Illuminating the Diversity of Deep-Sea Anthozoans Found in Selected Sites of the Northwestern Pacific Kurt Bryant B. Bacharo University of the Ryukyus, Japan	O12B-4: A Different Approach to The Research Internship George Matsumoto Monterey Bay Aquarium Research Institute, USA
1220- 1235	O1D-5: Calcareous Tubeworms (Serpulidae, Annelida) of the Abyss Revisited: Mystery of Elusive and Mysterious Mollusk-Like Worms Solved Elena Kupriyanova Australian Museum Research Institute, Australia	O12B-5: A Streamlined Data Pipeline for Image Contribution and Archiving in FathomNet Brian Schlining Monterey Bay Aquarium Research Institute, USA
1235- 1250	O1D-6: A Pioneering Long-Term Experiment: Mesophotic Macrofouling Communities in the North Atlantic João Canning-Clode Agência Regional para o Desenvolvimento da Investigação Tecnologia e Inovação, Portugal	O12B-6: Sustainability and the Common Heritage of Humankind: What It Means to Safeguard the Area for Current and Future Generations Tajra Smajic The Chinese University of Hong Kong, Hong Kong, China
1300- 1400	Lu	nch

1415- 1440	Keynote Lecture 10 [Croucher Keynote Lecture] (LT-A) Chair: Rui Zhang New Frontiers in Deep-Sea Biological Research Roberto Danovaro Polytechnic University of Marche, Italy	
	Session 1: Biodiversity (E) Biogeography LT-A Chairs: Dewi Langlet & Tim O'Hara	Session 9: Novel Methods & Practices LT-B Chairs: Adrienne Copeland & Ashley N. Marranzino
1445- 1500	O1E-1 : Biogeography of Arctic Vents and Seeps: How and Why does it Differ as a Province? Jon Copley University of Southampton, UK	O9-1 [Invited Talk]: Progress in the Development of Standards and Best Practice in Benthic Imagery Annotation and Onward Data Use in Al Applications Kerry Howell Plymouth Marine Laboratory, UK
1500- 1515	O1E-2: Across Trenches, Plains and Ridges – Distribution and Differentiation Patterns of Deep- Sea Isopods in the North Pacific Ocean Henry Knauber Senckenberg Research Institute and Natural History Museum Frankfurt, Germany	O9-2 [Invited Talk] : Towards Fully Open and FAIR Deep Sea Biology Data Karen I. Stocks Scripps Institution of Oceanography, University of California San Diego, USA
1515- 1530	O1E-3: Global Evolutionary Biogeography of the Ophiuroidea Tim O'Hara Museums Victoria, Australia	O9-3: Capture by Hybridization, State of the Art Tool for Unravelling the Biodiversity of the Deep Babett Günther GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany
1530- 1545	O1E-4 : Exploring the Unknown: NOAA Okeanos Expeditions Reveal Alaska's Hidden Deep-Sea Sponge and Coral Communities Lara M. Beckmann University of Gothenburg, Sweden	O9-4: Mapping Tetractinellid Sponge Abundance and Sizes with Instance Segmentation: Exploring the Potential of New Technologies for Understanding Deep-Sea Ecosystems Nils Piechaud Institute of Marine Research, Norway
1545- 1600	O1E-5: Inventory of Bathyal Holothurian Species in New Caledonia EEZ Over Half a Century Claire Laguionie Museum National d'Histoire Naturelle, France	O9-5: Deep-Sea Neoichnology: New Lebensspuren Classification Scheme and Applicabilit Olmo Miguez-Salas University of Barcelona, Spain
1600- 1615	O1E-6: Spatial and Bathymetric Diversity of Tanaidacea (Crustacea) Assemblages in the Bering Sea and Aleutian Trench Kamila Głuchowska University of Łódź, Poland	O9-6: Computer Vision to Unravel Biotic and Abiotic Factors Explaining the Fine-Scale Distribution of Cold-Water Corals Marin Marcillat Institut Français de Recherche pour l'Exploitation de la Mer, France
1615- 1630	O1E-7: The Phylogeography of the Cumacean Eudorella Emarginata Kai Okamoto The University of Tokyo, Japan	O9-7: Application and Transferability of Object Detection Models to Support the Identification of Benthic Epifauna from Imagery Kyran P. Graves University of Plymouth, UK
1630- 1650	Tea	Break
1650- 1730	50- Closing Ceremony (LT.A)	

Poster Presentations

Venue: Hall Outside of LTA and LTB

Session 1: Biodiversity

P1-1: Integrative Taxonomy of the Southwest Atlantic Dragonfishes and Their Allies (Stomiiformes), Revealing of a New Species

Marcelo R. S. de Melo

Universidade de São Paulo, Brazil

P1-2: Characterization of Biofluorescence in Deep-Sea Fishes Collected off Southern Brazil

Marcelo R. S. de Melo

Universidade de São Paulo, Brazil

P1-3: Rissoid Snails (Gastropoda: Rissoidae) From Arctic Chemosynthesis-Based Ecosystems

Brenda Lizbeth Esteban-Vazquez

University of Bergen, Norway

P1-4: Three New Species of Deep-Sea Wood-Associated Sea Stars (Asteroidea: Caymanostellidae) from the Eastern Pacific

Zihui Shen

Scripps Institution of Oceanography, University of California San Diego, USA

P1-5: Southwest Indian Ocean Ridge Seamounts: What Influences Changes in Diversity

Narayanaswamy BE

Scottish Association for Marine Science, UK

P1-6: Newly Discovered High Diversity of Cold-Water Corals along the Continental Shelf Margin of Northwestern South China Sea

Meixia Zhao

South China Sea Institute of Oceanology, Chinese Academy of Sciences, China

P1-7: A New Genus of Ectoparasitic Myzostomida from the Pacific Abyss

Eva C. D. Stewart

Natural History Museum, UK

P1-8: Bathymetric Zonation and Speciation in Ocean Trenches: the Case of Northwestern Pacific Bivalves

Yo Asada

The University of Tokyo, Japan

P1-9: An Investigation into the Biodiversity of Deep-Sea Wood Falls in Montserrat

Eugenia Thomas

The University of the West Indies, St. Augustine, Trinidad and Tobago

P1-10: Geographical Subdivision of the Hydrothermal Vent Bythograeid Crabs in the Indian Ocean

Sook-Jin Jang

Korea Institute of Ocean Science & Technology, Republic of Korea

P1-11: Filling in the Missing Pieces of the Global Phylogenetic and Biogeographic Puzzle of Deep-Sea *Amphisamytha* (Annelida, Ampharetidae): Insights from the Northwest Pacific

Yanan Sun

Institute of Oceanology, Chinese Academy of Sciences, China

P1-12: Deep Pacific Relations: Towards a Phylogenetic Revision of the Isopod Genus Nannoniscus G.O Sars, 1870 Linking Morphology and Genetics

Klüh Dennis

University of Rostock, Germany

P1-13: Seafloor Observation Using Underwater Drone in Torigakubi Spur, Japan Sea

Yoshinori Ono

Chiba University, Japan

P1-14: Diversity of Demosponge Fauna in the Abyssal Nodule Fields of the Eastern Clarion-Clipperton Zone, Pacific Ocean

Swee-Cheng Lim

National University of Singapore, Singapore

P1-15: Assessing the State of Knowledge and Charting a Path for Deep-Sea Scientific Research in Barbados

Kyle Foster

University of the West Indies, St. Augustine, Trinidad and Tobago

P1-16: Remarkable New Findings of Deep-Sea Bivalve Diversity in the Abyssal Pacific Ocean

Thomas G. Dahlgren

University of Gothenburg, Sweden

P1-17: Molecular Diversity and Distribution of Tube-Dwelling Serpulid Worms in the Abyss

Helena Wiklund

University of Gothenburg, Sweden

P1-18: Shape Matters: Application of Geometric Morphometric Techniques in Deep-Sea Isopod Taxonomy (Asellota: Macrostylidae)

Anchita Casaubon

Senckenberg Institute and Natural History Museum Frankfurt, Germany

P1-19: Delving into the Depths: Investigating the Deep-Sea Biodiversity of the **Tubbataha Reefs Natural Park, Philippines**

Titus Cañete

Large Marine Vertebrates Research Institute Philippines, Philippines

P1-20: The Biodiversity of Hadal Holothurians in the Japan Trench and the Southern **Kuril-Kamchatka Trench**

Akito Ogawa

National Museum of Nature and Science, Japan

P1-21: A Biogeographical Inventory of Benthic Macrofauna Based on Long-Term Observations in the Arctic Ocean

Carolin Uhlir

Alfred Wegener Institute Helmholtz Center for Polar and Marine Research, Germany

P1-22: Cold-Water Corals from the 2024 Western Pacific International Cruise for **Digital DEPTH - Preliminary Findings and Research Visions**

James Cook University Australia, Australia

P1-23: A New Species of the Subgenus *Stephanocyathus* (*Stephanocyathus*) (Scleractinia: Stephanocyathidae): Morphology, Mitochondrial Genome, and Phylogenetic Relationship

Bonnie Yuen Wai Heung

Hong Kong Baptist University, China

P1-24 🗔 : Genomics Reveal Evolutionary Surprises in Planktonic Ctenophores

Shannon B. Johnson

Monterey Bay Aquarium Research Institute, USA

P1-25: Meiobenthos Contribution to Bioturbation

Dewi Langlet

IFREMER, France

P1-26: Remarkable Diversity in a Polychaete Genus *Anguillosyllis* Day, 1963 (Annelida, Syllidae) from Polymetallic Nodule Exploration Areas, Eastern Clarion-Clipperton Zone, Abyssal NE Pacific

Regan Drennan

Natural History Museum, UK

P1-27: Application of FAIR Data Principles to a Multidecadal Benthic Invertebrate Time Series

Andrew R. Gates

National Oceanography Centre, UK

P1-28: Description of a New Genus and Species of Deep-Sea Mysids (Malacostraca, Peracarida, Mysida) from the Caroline Ridge, Northwest Pacific, with a Systematic Analysis of the Order

Xinzheng Li

Institute of Oceanology, Chinese Academy of Sciences, China

P1-29: The Paradox of Sameness: Morphological Variation in a Genetically Uniform Southern Ocean Isopod

Andreas Kelch

Senckenberg Research Institute, Germany

P1-30: Home Sweet Home: Coral-Associated Fauna in *Chrysogorgia* Duchassaing & Michelotti, 1864 Species

Saskia Brix

University of Hamburg, Germany

P1-31: Same (Sea) Bed Different Dreams: Biological Community Structure of the Haima Seep Reveals Distinct Biogeographic Affinities

Xing He

Ocean University of China, China

P1-32: New Records and DNA Barcoding of the Deep-Sea Cusk Eels (Teleostei: Ophidiiformes) from the Brazilian Continental Slope (24°-27°S)

Marcos R. dos Reis Junior

University of São Paulo, Brazil

P1-33: Consistency or Change in the Benthic Deep-Sea Macrofauna: An Update from the Central Arctic Ocean

Katharina Kohlenbach

Alfred Wegener Institute Helmholtz Center for Polar and Marine Research, Germany

P1-34: Ribbon Worms from Hydrothermal Vent Fields and Seamounts

Natsumi Hookabe

Japan Agency for Marine-Earth Science and Technology, Japan

Session 2: Microbiome

P2-1: Rapid Emergence and Evolution of Cold Seep Ecosystem at The Hydrate-Bearing Seafloor

Longhui Deng

Shanghai Jiao Tong University, China

P2-2: Adaptation to the Cold Seep: Sulfide Induces the Different Distribution of Squat Lobsters

Wenze Feng

South China Sea Institute of Oceanology, Chinese Academy of Sciences, China

P2-3: Variation of Microbial Nitrate Reduction Processes Across a Wide Range of Benthic Habitats in Continental Margins

Weikang Sui

Shanghai Jiao Tong University, China

P2-4: Biotransformations of Arsenic in Marine Sediments Across Marginal Slope to Hadal Zone

Zhuobo Li

Shenzhen International Graduate School, Tsinghua University, China

P2-5: In Situ Sampling Uncovers Seasonal Variability in Community Structure and Metabolism of Deep-Sea Microbes

Yinghui He

Shenzhen International Graduate School, Tsinghua University, China

P2-6: Bioluminescence in Mesopelagic Fish: The Microbiome Connection

Cinzia Corinaldesi

Polytechnic University of Marche, Italy

P2-7: Genetic Arsenal of a Coral Endosymbiotic Ruegeria Lineage Being Targeted as the Next-Generation Coral Probiotics

Mei Xie

The Chinese University of Hong Kong, Hong Kong, China

P2-8: Microbial Communities and Metagenomes in Methane-rich Deep Coastal Sediments

Binghe Zhao

Shenzhen International Graduate School, Tsinghua University, China

P2-9: Impact of Funnel Accumulation on the Community Structure and Ecological Functions of Hadal Microorganisms

Jiwen Liu

Ocean University of China, China

P2-10: Functional and Adaptive Study of the Sulfurovaceae Bacteria in the Gut of Polychaetes from Hydrothermal Vents and Whale Falls

Lisheng He

Institute of Deepsea Science and Engineering, Chinese Academy of Sciences, China

P2-11: The Co-Occurrence Patterns and Assembly Mechanisms of Microbial **Communities in Haima Cold Seep**

Southern Marine Science and Engineering Guangdong Laboratory (Guangzhou), China

P2-12: Diet and Gut Microbiome of Parrotfish in the South China Sea

Lan Qiu

The Hong Kong University of Science and Technology, Hong Kong, China

P2-13: Microbial Biodiversity and Their Metabolic Potential in Marine Sediments

Xianzhe Gong

Southern Marine Science and Engineering Guangdong Laboratory (Guangzhou), China

P2-14: Unlocking Virus Diversity and Virus-mediated Microbial Mortality in Atlantis II **Deep Brine Pool in Red Sea**

Kevin Xu Zhong

The University of British Columbia, Canada

Session 3: Symbiosis

P3-1: A Transition from Generalist to Specialist Denitrifying *Ruegeria* in Corals Along Elevated Nitrate Gradients In Hong Kong Reefs

Nan Xiang

The Chinese University of Hong Kong, Hong Kong, China

P3-2: Insight into the Adaptation Mechanisms of High Hydrostatic Pressure in Physiology and Metabolism of Hadal Fungi from the Deepest Ocean Sediment

Xi Yu

Shanghai Ocean University, China

P3-3: DeepSeaDB: An Integrated Functional and Evolutionary Genomic Database for Deep-Sea Organisms

Jiajie She

Southern Marine Science and Engineering Guangdong Laboratory (Guangzhou), China

P3-4: Metabolic Constraints on Symbiotic Relationships in the Abyss

Jennifer M. Durden

National Oceanography Centre, UK

P3-5: 3D Analysis of Bacteriocytes in the Deep-sea Mussel Gigantidas platifrons

Zhaoshan Zhong

Institute of Oceanology, Chinese Academy of Sciences, China

P3-6: Cooperation Between Bacteriocytes and Endosymbionts Drives Function and Development of Symbiotic Cells in Mussel Holobionts

Hao Chen

Institute of Oceanology, Chinese Academy of Sciences, China

P3-7: Insights into Symbiotic Interactions and Adaptation of a Deep-sea Seep Mussel through In-Situ Transplant Experiments and Omics Analyses

Tong Wei

The Hong Kong University of Science and Technology, Hong Kong, China

P3-8: Molecular Adaptation of Two Hot-Vent Chemosymbiotic *Alviniconcha* Snails Revealed by Multiple-Omics Analyses

Hui Wang

Ocean University of China, China

P3-9: Evolutionary Dynamics Exist Between Deep-Sea Mussels and Their Chemosynthetic Symbionts in Global Hydrothermal Vents

Yao Xiao

The Hong Kong University of Science and Technology, Hong Kong, China

P3-10: The Origin and Evolution of Host Association of Bdellovibrionota in Marine Ecosystems

Shan Zhang

The Hong Kong University of Science and Technology, Hong Kong, China

Session 4: Deep Pelagic Ocean

P4-1 🗖 : New Pacific Records of the Abyssopelagic Annelid Buskiella abyssorum (Flabelligeridae) and Synonymy of B. flabelligera

Charlotte A. Seid

Scripps Institution of Oceanography, University of California San Diego, USA

P4-2: Examination of an Ecological Triple Junction: Mesopelagic Interactions with Surface and Bottom Faunas at the Oceanic Rim

Tracey Sutton

Nova Southeastern University, USA

P4-3: Interannual Variability of Local Cephalopod Community off Terceira Island Using Environmental DNA

Ina Vornsand

GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany

P4-4: Investigating Evolutionary Adaptation and Metabolic Interaction Between Deep-sea Host and Their Symbionts Through Genome-Scaled Metabolic Modelling

Jiajie She

Southern Marine Science and Engineering Guangdong Laboratory (Guangzhou), China

P4-5: Using Low Volume eDNA Methods to Sample Pelagic and Deep-Pelagic **Marine Animal Assemblages**

C. Anela Choy

Scripps Institution of Oceanography, University of California San Diego, USA

P4-6: Quantification of Gelatinous Zooplankton Community Structures in Two **Contrasting Ocean Regions**

GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany

P4-7: Trait Based Biodiversity Patterns in India's Deep Sea

Ramesh Chatragadda

CSIR-National Institute of Oceanography, India

Session 5: Sensory Biology

P5-1: Glowing in the Depths: Unraveling the Bioluminescent Origins of Deep-Sea Shrimps (Dendrobranchiata, Caridea)

Stormie B. Collins

Florida International University, USA

P5-2 : Ontogenetic Variation in Sensory Detection in Hydrothermal Shrimp Alvinocarididae

Adrien Mathou

Sorbonne Université, France

Session 6: Genomics and Metagenomics of Metazoans

P6-1: A Tale of Two Shrimp - Speciation and Demography of Two Sympatric *Rimicaris* Species from Vents of the Izu-Bonin-Mariana Volcanic Arcs

Pierre Methou

IFREMER. France

P6-2: Trophic Support in The High Antarctic Megafauna at Methane Seeps: Uncovering the Role of Chemosynthetic Production

Paola S. Padua

University of California Santa Barbara, USA

P6-3: Using eDNA to Map the Distribution of Deep-Sea Coral Epifaunal Associates on Seamounts in the Phoenix Islands Protected Area

Ryan McMullen

University of Miami, USA

P6-4: The Biomineralization Toolkit as Revealed by Genomic and Shell Matrix Proteomic Analyses of a Deep-Sea Vesicomyid Clam

Kexin Gao

Ocean University of China, China

P6-5: Environmental DNA Metabarcoding Reveals Spatial Variation in Eukaryotic Communities at Hydrothermal Vents of the Central Indian Ridge

Eun-Bi Kim

Korea Institute of Ocean Science and Technology, Republic of Korea

P6-6: Water Volume, Biological and PCR Replicates Influence the Environmental DNA (eDNA) Characterization of Deep-sea Pelagic Fish Communities

Pedro A. Peres

Florida International University, USA

P6-7: Proteomic Analyses Reveal the Key Role of Gene Co-Option in the Evolution of the Scaly-Foot Snail Scleritome

Wai Chuen Wong

The Hong Kong University of Science and Technology, Hong Kong, China

P6-8: A New Species of *Acharax* (Bivalvia, Solemyida, Solemyidae) from the Haima Cold Seep, with New Insights into the Mitogenome Characteristics of Solemyidae Bivalves

Mei Yang

Institute of Oceanology, Chinese Academy of Sciences, China

P6-9: Population Genetic Structure and Diversity of the Sharpchin Slickhead, Bajacalifornia burragei

Jacob W. Church

The Evergreen State College, USA

P6-10: Population Structure of Deep-Sea Octocoral Acanella Arbuscula (Isididae) Across the North Atlantic, Using Snps Generated from UCE Sequencing

Jessica D. Gordon

University of Essex, UK

P6-11: Metagenomic Analysis of Deep-sea Mussels Revealed a Mosaic Evolution Pattern of Endosymbionts Driven by Heterogeneous Environments

Institute of Oceanology, Chinese Academy of Sciences, China

P6-12: Genomic Features and Distribution Patterns of Viruses That Infect Cyanobacteria in the Deep Dark Ocean

Can Ni

The Hong Kong University of Science and Technology, Hong Kong, China

P6-13: Comparative Transcriptomics for Mollusc Neuron Cell Type Identification

Rory Q. Houghton

The Hong Kong University of Science and Technology, Hong Kong, China

Session 7: Ecology and Conservation

P7-1: A Species Trait-Based Database for the Entire Offshore Pacific Bioregion, Canada

Joan M. Alfaro-Lucas

University of Victoria, Canada

P7-2: Baseline Assessment of Deep-Sea Biodiversity in Trinidad and Tobago: Implications for Conservation and Resource Management

Jaime-Leigh Lue Chin

The University of the West Indies at St. Augustine, Trinidad and Tobago

P7-3: Variation and Diversity of Deep Seabed Macrofaunal Communities in the Rockall Trough

Kate Fraser

The Scottish Association for Marine Science, Scotland

P7-4: Benthic Habitat Distribution and Diversity on the Slopes of Madeira

Julian B. Stauffer

GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany

P7-5: Examining Abundance and Condition Changes in Northeast Pacific Seamount Foundation Species Using High-Resolution Photogrammetry Mosaics

Lindsay Clark

University of Victoria, Canada

P7-6: Expanding the Red List for Global Hydrothermal Vent Endemic Species

Anne H. S. Tandberg

Senckenberg Research Institute and Museum, Frankfurt am Main, Germany

P7-7: Macroinvertebrate Communities Inhabiting Hard Substrates at Southern California Methane Seeps

Kendra Lee

Scripps Institution of Oceanography, University of California San Diego, USA

P7-8 : Restoring Deep-Sea Habitats to Rebuild European Seas: the REDRESS project

Cristina Gambi

Polytechnic University of Marche, Italy

P7-9: Does Larval Behaviour Affect Dispersal? Using Larval Dispersal Modelling to Investigate Deep Sea Coral Connectivity in the Scotia Sea, Southern Ocean

Oenone Scott

University of Essex, UK

P7-10: Science-Policy Gap Analysis for Mesopelagic Fishes, Fisheries and Ecosystems

Ilysa Iglesias

Scripps Institution of Oceanography, University of California San Diego, USA

P7-11: Subseafloor Life at Hydrothermal Vents: Macrofauna Diversity and Trait-Analyses

Lara Baptista

Royal Netherlands Institute for Sea Research, Netherlands

P7-12: Microplastic Concentration in Mussels and Snails Living in Deep-Sea **Hydrothermal Vents of the Southwest Pacific and Indian Oceans**

Se-Joo Kim

University of Science & Technology, Korea

P7-13: The Natural History Museum Deep-Sea Research Lab: Advancing Knowledge in Biodiversity, Taxonomy, Ecology and Evolution

Georgina Glaser

Natural History Museum, UK

P7-14: Seabed Heterogeneity Regulates Megabenthic Community Patterns in Abyssal **Nodule Fields**

Bethany Fleming

University of Southampton, UK

P7-15: MEER: Extraordinary Flourishing Ecosystem in the Deep Ocean

Shanghai Jiao Tong University, China

P7-16: A Hidden Skatepark: Discovery of a Skate Egg-Case Nursery on a Costa Rican Seamount

Beatriz Naranjo-Elizondo

Universidad de Costa Rica, Costa Rica

P7-17: Widespread Chemosynthesis in Seeps and Background Communities Through the Lens of Infauna in McMurdo Sound, Antarctica

Dexter Davis

Oregon State University, USA

P7-18: Understanding a Unique Larval Form: A Study of the Warén's Larva

Shawn M. Arellano

Western Washington University, USA

P7-19: Population Connectivity of Corals

The Hong Kong University of Science and Technology, Hong Kong, China

P7-20: Vertical Reefs of the GalÁPagos: Preliminary Results from the Fkt230918 Expedition

Katleen Robert

Memorial University, Canada

P7-21: Possible Effects of Deposition from Deep-Sea Sulfide Mining on Benthic **Microbial Communities**

Travis Washburn

Texas A&M University - Corpus Christi, USA

P7-22: Marine Mammal Communities and Human Activities Including DSM in the North-Eastern Tropical Pacific: Conservation and Management Strategies

Virginie Tilot

Muséum National d'Histoire Naturelle, France

P7-23: Biodiversity and Community Structure of Benthic and Demersal Scavengers at Inactive and Active Hydrothermal Areas on the Central and Southeastern Indian Ridge

Andrew Sweetman

The Scottish Association for Marine Science, UK

P7-24 : Re-visiting 1994-1997 Megafauna Data from IOM BIE Site (CCFZ, NE Pacific): A Work in Progress

Teresa Radziejewska

University of Szczecin, Poland

P7-25: Deep Sea Biotic Responses to the Neogene Indonesian Throughflow Dynamics

Jingwen Zhang

The University of Hong Kong, Hong Kong, China

P7-26: The Potential Mechanisms of the Slowdown of Host Cell Lysis after Prochlorococcus is Infected by Cyanopodoviruses

Tengjiao Li

The Hong Kong University of Science and Technology, Hong Kong, China

P7-27: Chemosynthetic Alphaproteobacterial Diazotrophs Reside in Deep-Sea Cold-Seep Bottom Waters

Jiawei Chen

The Hong Kong University of Science and Technology, Hong Kong, China

Session 8: Climate Change and Human Impacts

P8-1: Biomarkers Discovery for Risk Assessment in the Deep Sea

Nélia C. Mestre

University of Algarve, Portugal

P8-2: Effects of Long-Term Disturbance on Food Quality and Fauna in the Clarion Clipperton Zone

Rachel M. Jeffreys

University of Liverpool, UK

P8-3: Long-term Impacts of a Mining Disturbance Event on Abyssal Megafauna

Bethany Fleming

University of Southampton, UK

P8-4: Body Size-feeding Niche Relationships Vary Temporally in the Abyss

Lucy V. M. Goodwin

University of Liverpool, UK

P8-5: Deep-Sea Mining Disturbance Effects on Benthic Ecosystem Function and Macro-Infaunal Community Structure on The Chatham Rise, Southwest Pacific

National Institute of Water & Atmospheric Research, New Zealand

P8-6: Natural vs. Anthropogenic: Variability of Benthic Megafauna Communities in the Clarion-Clipperton Zone, Pacific Ocean

Lilian Boehringer

University Bremen, Germany

P8-7: A Retrospective Analysis of Microplastic Pollution Using Deep-Sea Natural **History Collection Holothurians Specimens of the Indo-Pacific**

Claire Laguionie

Sorbonne Université, France

P8-8: Economic Cost-Benefit Analysis Incorporating Environmental Impacts for Polymetallic Nodule Extraction in the Clarion-Clipperton Zone

Jon Copley

University of Southampton, UK

P8-9: Probabilistic Tools to Improve Environmental Risk Assessments for Human **Activities in the Deep Sea**

Laura Kaikkonen

University of Helsinki, Finland

P8-10: Deep-Sea Benthic Biodiversity and Function in a Changing Arctic Ocean

Christina Bienhold

Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Germany

P8-11: DEEP REST: A Trans-Disciplinary European Project About the Conservation and Restoration of Marine Ecosystems in the Context of Deep-Sea Mining

Jozée Sarrazin

IFREMER, France

P8-12: Methane Use by Macrofauna at Methane Seeps off the Aleutian Margin of Alaska

Stefani Z. Martinez

University of Alaska Anchorage, USA

P8-13 : Ocean Warming Effects across Life History Stages of the Cold-Water Octocoral *Dentomuricea* aff. *meteor*: from Parental Spawning Time to Embryonic, Larval Development and Settlement

Anaïs S. de Vilar

University of the Azores, Portugal

P8-14: Adaptive Governance for Intertidal Sustainability Under Climate Change

Fortunatus Masanja

Guangdong Ocean University, China

P8-15: Sea Surface Salinity Change Since 1950: Internal Variability Versus Anthropogenic Forcing

Qiwei Sun

The Hong Kong University of Science and Technology, Hong Kong, China

P8-16: Juvenile Apple Snails as New Biomonitors: Insight into Copper and Lead Toxicity and Underlying Molecular Mechanisms

Yufei Zhou

Lingnan University, Hong Kong, China

P8-17: Epigenetic-Assisted Rapid Adaptation of Oysters in Response to Ocean Acidification

Xin Dang

The University of Hong Kong, Hong Kong, China

P8-18: Deep-sea Ostracods Faunal Turnover in the Southern Ocean During the Eocene-Oligocene Transition

Yumeng Wei

The University of Hong Kong, Hong Kong, China

P8-19: The impacts of Aluminum on Marine Diatoms: Structural Al in Biogenic Silica Quantified Using Advanced Nanomaterial Characterization Techniques

Ziheng Wang

The Hong Kong University of Science and Technology, Hong Kong, China

P8-20: Assessing the Response of Marine Fish Community to Climate Change and Fishing

Yiting Chen

The Hong Kong University of Science and Technology, Hong Kong, China

Session 9: Novel Methods and Practices

P9-1: Developing Automated Multi-Modal Monitoring Strategies of Vulnerable Marine **Ecosystems (Vmes)**

Chloe Game

University of Bergen, Norway

P9-2: Vehop: A Versatile, Easy-To-Use, and Homology-Based Phylogenomic Pipeline **Accommodating Diverse Sequences**

Yunlong Li

Ocean University of China, China

P9-3: VARS + AI: Can We Train a Machine to Annotate Midwater Animals?

Kyra Schlining

Monterey Bay Aquarium Research Institute, USA

P9-4: High-Resolution 2D Elemental Mapping of Desmophyllum Dianthus Cold-Water Corals in Comau Fjord, Chile

Adrian Castillo

SUNY College of Environmental Sciences & Forestry, USA

P9-5: Exploring the Growth of Deep-Sea Bivalves in Areas of Potential Seafloor Mining: Methods in Sclerochronology

Lauren Geiser

University of Leeds, UK

P9-6: DNA Barcoding: Comparing the Efficiency and Accuracy of Third Generation Sequencing Oxford Nanopore as A Tool for Species Identification of Deep-Sea Marine **Invertebrates**

Belen Arias

Natural History Museum, UK

P9-7: Defining the Target Population to Make Marine Image-Based Biological Data Fair

Jennifer M. Durden

National Oceanography Centre, UK

P9-8: A New Framework for Assessing Hydrodynamic Model Suitability for Biological and Ecological Studies

Oenone Scott

University of Essex, UK

P9-9: Cultivation of Novel Marine Bacteria from Deep Ocean Sediment Using Spent Culture of Ca. Bathyarchaeia Enrichment

Sidra Erum Ishaq

Shanghai Jiao Tong University, China

P9-10: Past, Present and Future of In-Situ Deep-Sea Experiments Using Ocean **Networks Canada's Cabled Observatories**

Fabio Cabrera De Leo

University of Victoria, Canada

P9-11: Madeira Island: A Natural Deep-Sea Research Vessel in the Atlantic

Diane Esson

University of Madeira, Portugal

P9-12: A Diffusion-Based Integrative Approach Toward the Cultivation of Previously Uncultured Bacteria in Marine Sediment

Tariq Ahmad

Shanghai Jiao Tong University, China

P9-13: Using Deep Learning in The Deep Sea: Using AI To Elucidate Biogeochemical Impact of Unknown Genes

Jacob H. Wynne

University of California Santa Barbara, USA

P9-14: Mussel Adhesion and Fatty Acids – A New Approach to Look into Adaptation of Mussel to the Environment

Chengjun Sun

First Institute of Oceanography, Ministry of Natural Resources, China

P9-15: Fathomyerse: Where Gaming Meets Community Science to Explore Our Ocean

Giovanna Sainz

Monterey Bay Aquarium Research Institute, USA

P9-16: Seawater Nitrate Assessment Using a Correction Algorithm of Temperature and Pressure up to 10000 Meters

Xingyue Zhu

The Hong Kong University of Science and Technology, Hong Kong, China

P9-17: High-Precision Deep-Sea Pressure Sensor Based on Fast Wavelength Scanning of DFB Lasers

Zhenghao Zhang

The Hong Kong University of Science and Technology, Hong Kong, China

P9-18: The Development and Applications of a Controllable Lander for in situ, Long Term Observation of Deep-sea Chemosynthetic Communities

Zhendong Luan

Institute of Oceanology, Chinese Academy of Sciences, China

Session 10: Arts and Science in Deep-Sea Environmental Management

P10-1: "Hoshizuna: The Floating Star-Sand" Art Installation

Dewi Langlet IFREMER, France

P10-2: Depicting the Deep: The Art of Illustrating Science

Christopher B. Froján University of Southampton, UK

P10-3: REV Ocean: Bridging Science and Solutions for Ocean Health

Eva Ramirez-Llodra REV Ocean, Norway

Session 11: Decade of Ocean Science Program Highlights

P11-1: Offshore Industry and Research Community Collaboration to Enable Greater Access to the Deep Ocean for Scientific Research

Lucy Harris

University of Southampton, UK

P11-2: Fluid and Heat Exchange Between Seamounts and the Phenomenal Ecological Effects

Heidi Gartner

Institute of Ocean Sciences, Canada

P11-3 : The Deep Ocean Observing Strategy: Identifying Collective Solutions for Global Challenges

Leslie M. Smith

Your Ocean Consulting, USA

P11-4: Application of UN Decade Endorsed Deep-Sea Typical Habitats Programme on Deep-Sea Governance

Yinxia Fang

Second Institute of Oceanography, Ministry of Natural Resources, China

P11-5: New Discoveries in Deep-Sea Seamount Habitats

Xuewei Xu

National Deep Sea Center, Ministry of Natural Resources, China

P11-6: Digital Representative of Deep-Sea Habitats Towards an Increased Oceanic Resilience

Yuntao Wang

Second Institute of Oceanography, Ministry of Natural Resources, China

P11-7: Capacity Building for Ocean Literacy Training on Marine Biodiversity in the Deep Sea

Qiuci Sun

Second Institute of Oceanography, Ministry of Natural Resources, China

Session 12: Open Session

P12-1: Navigating Gender at Sea: Recommendations for Making Seagoing Fieldwork Safer for Transgender and Gender Diverse Scientists

Lee C. Miller

University of Hawai'i at Mānoa, USA

P12-2: Brazilian Women in Deep-Sea Biology: Representativeness, Challenges, and **Prospects**

Heloísa De Cia Caixeta

Universidade de São Paulo, Brazil

P12-3: Deep-Sea Ecosystems of the Indian Ocean > 1,000 M

Elin A. Thomas

The University of Western Australia, Australia

P12-4: Biodiversity and Nitrogen Metabolism in the Plastisphere impacted by Urban Nitrogen Loading from a Coastal Mega-City

The Hong Kong University of Science and Technology, Hong Kong, China

P12-5: Corrosion Inhibition of Marine Streptomyces on Sulfate-Reducing Bacteria

Jian Wang

The Hong Kong University of Science and Technology, Hong Kong, China

P12-6: Novel Natural Product Discovery from Red Sea Bacteria

The Hong Kong University of Science and Technology, Hong Kong, China

P12-7: Coevolution and Adaptation of TNPs and PRMs in Natural Ascrotal Mammals Support the Black Queen Hypothesis

The Hong Kong University of Science and Technology, Hong Kong, China

P12-8: Exploration of Proteomic Diversity and Cardiovascular Toxicity Mechanism of Stonefish (Synanceia verrucosa) Venom

The Hong Kong University of Science and Technology, Hong Kong, China

P12-9: Global Distribution of Bioactive Compounds from Deep-sea Organisms: **Exploring the Influence of Phylogeny and Environment**

Adrian Glover

Natural History Museum, UK

Abstracts

The detailed abstracts are listed in the appendix.

Keynote Speakers



Prof. Malcolm R. Clark

National Institute of Water & Atmospheric Research, New Zealand

Keynote Lecture* 1:

Balancing Exploitation and Conservation in the Deep Sea: Challenges for Science

Prof. Malcolm R. Clark is a Principal Scientist with NIWA in Wellington, New Zealand. He worked extensively on stock assessment of deepwater fisheries in the 1980s and 1990s before broadening research to more general ecology of deepsea ecosystems, especially seamounts, leading the Census of Marine Life programme on seamounts in the early 2000s. His current research work focusses on evaluating environmental effects of human activities (such as commercial fishing and potential seabed mining), and the application of ecological risk and impact assessments to inform management options in the deep sea.

His studies have involved a lot of time at sea; with over 80 research surveys from the Antarctic to the North Sea. Malcolm has published widely, with 160 journal papers and book chapters, and a similar number of technical reports and articles.



Dr. Ken Takai

Japan Agency for Marine-Earth Science and Technology, Japan

Keynote Lecture 2:

Microbial Ecosystem in Deep-Sea Hydrothermal Systems

Dr. Takai received a Ph.D. in fisheries science from Kyoto University in 1997. He worked as a research fellow at the Japan Society for the Promotion of Science and the Japan Science and Technology Agency, and in 2009 became the program director of the Extremobiosphere Research Program at the Institute of Biogeosciences, and the unit leader of the Precambrian Ecosystem Laboratory at JAMSTEC. Since September 2012, he has also served as a visiting professor at JAXA's Institute of Space and Astronautical Science. He specializes in the physiology and ecology of microorganisms and organisms that live in extreme conditions on Earth, such as the deep sea or the crust interior, as well as explaining the formation and structure of their ecosystems. He is an astrobiologist and geobiologist.



Prof. Jiabiao Li Second Institute of Oceanography, Ministry of Natural Resource, China

Keynote Lecture 3: Exploring Deep-sea Typical Habitats for achieving sustainable development

Prof. Jiabiao Li, a marine geologist and Academician of Chinese Academy of Engineering. He once served as the Director General and Secretary of the Party Committee of the Second Institute of Oceanography, Ministry of Natural Resources of China, the Founding Chair of the ISO/TC8/SC13 Marine Technology. Currently, he is the Vice Chairman of the Chinese Society for Oceanography, the Vice Chairman of the Zhejiang Association for Science & Technology, the Chairman of the Innovation China Green Low Carbon Innovation Consortium, the Vice Chairman of the Chinese Society of Oceanology and Limnology, the Deputy Director of the Special Committee on Atmosphere and Oceanography of the Chinese Academy of Sciences, and the Leader of the Overall Expert Group for Deep-Sea and Polar Key Technologies and Equipment of the Ministry of Science and Technology. He has been working on the research of seabed science and seabed exploration engineering and has made important achievements and contributions in the delimitation of continental shelf and the demarcation of international seabed sulphide. He is the Chief Scientist of China's Marginal Sea Two-Phase 973 Programs, CNSF major basic research projects of the China's Marginal Seas and Southeast Asian Ring Subduction System, National Key R&D Program of China Sinking and floating intelligent acoustic detection technology, and UN ocean decade Program of the Digital DEPTH.



Prof. Fengping Wang Shanghai Jiao Tong University, China

Keynote Lecture 4: Global subseafloor ecosystem and sustainability (GSES)

Prof. Fengping Wang is a distinguished professor of School of Oceanography, Shanghai Jiao Tong University, and executive director of the International Center for Deep Life Investigation (IC-DLI). She was funded by National Science Foundation of China for Distinguished Young Scholars, and awarded the Outstanding Scientist medal by Chinese Association of Microbial Ecology. Prof. Wang focuses on study of marine deep biosphere. She has participated deep ocean expeditions with Human Operated Vehicle (HOV) four times, diving >5000m deep into the ocean. She sailed two times for subseafloor life exploration with the International Ocean Discovery Program (IODP). She is a world renown deep-sea microbiologist, leading the research on the diversity, evolution, and ecological/geochemical functions of deep ocean microorganisms. Currently, Prof. Wang serves as Advisory Board member of Deep-Ocean Stewardship Initiative (DOSI), International Board member and ambassador of the International Society for Microbial Ecology (ISME), Scientific Committee member of IODP-China, vice chairman of the Geobiology Branch of the Chinese Paleontological Society, and deputy director of China Geomicrobiology Science Committee. She also serves as associate editor and editor of several international academic journals such as "Frontiers in Marine Sciences", "Environmental Microbiology", "mLife", and "Applied and Environmental Microbiology".



Prof. Ana Colaço

University of the Azores, Portugal

Keynote Lecture* 5:

Vulnerable Marine Ecosystems: Key Players for the Planet Health

Prof. Ana Colaço is a researcher at the University of the Azores for more than 20 years. She specializes in Vunerable marine Ecosystems, namely in hydrothermal vent and sponge aggregations. She studies trophic ecology of deepsea systems, benthic ecology, ecosystem functioning and conservation. She has large experience in international cooperation participating in several projects as the institutional PI dedicated to observatories and tools for extreme environments (ESONET; EXOCET/D; FIXO3), and ecology and impact on the Deep-sea (CHEMECO; DeepFun-FCT MIDAS, JPIO MiningImpact I & II, Sponges-H2020; FunAzores-Açores2020, DeepRest). She participated on the Second and Thirds World Ocean Assessment of the United Nations and contributed to The Portuguese Agenda for the Ocean promoted by the Portuguese Science Foundation. She was involved as an expert in several science-policy panels of the European Commission, International Seabed Authority, and the Portuguese government, and as nominee in CBD processes such as EBSA and the post 2020 GBF. She is presently co-chair of the Working Group Deepsea ecology (WGDEC) from the International council for the exploitation of the Sea. She participated to over 40 oceanographic cruises with submersibles (including 12 as a PI) and to five manned submersible dives (Alvin, Nautile and Lula1000). She is Commissaire of the Sargasso Sea Commission and member of the Advisory Boad of DOSI.



Prof. Andreas Teske

University of North Carolina at Chapel Hill, USA

Keynote Lecture* 6:

From Magma to Microbe: The Subsurface Biosphere of Guaymas Basin

Prof. Andreas Teske is a professor in the Department of Earth, Marine and Environmental Sciences at the University of North Carolina at Chapel Hill. His expertise focuses on microbial ecology of extreme marine habitats, especially hydrothermal vents and the deep marine biosphere, to which he was introduced at the Woods Hole Oceanographic Institution. After joining UNC Chapel Hill in 2002, Dr. Teske continued to work on the microbial ecology of the sulfur and methane cycle in hydrothermal vents, methane seeps and the deep sedimentary subsurface where he is interested in the natural diversity of the indigenous microbial communities as well as their environmental tolerances and physiological adaptations. He has been working for many years in cold and hot seeps involved in the rapid microbial and abiotic hydrocarbon production and consumption, in the Gulf of Mexico and in Guaymas Basin in the Gulf of California, and has led multiple expeditions with research ship Atlantis and deep-sea submersible Alvin. His current work focuses on deep subsurface drilling across Guaymas Basin where bacteria and archaea cope with distinct temperature and redox gradients that impose strong selective pressures of the subsurface biosphere. Since 2010, Dr. Teske serves as chief specialty editor for Extreme Microbiology in Frontiers of Microbiology.



Prof. Jian-Wen Qiu

Hong Kong Baptist University, Hong Kong, China

Keynote Lecture 7:

Cold-Seep Fauna in the South China Sea: Composition and Biogeography

Prof. Jian-Wen Qiu is a Professor at Hong Kong Baptist University. He is a member of the Hong Kong government's Advisory Council on Environment and serves as the chairman of the Marine Parks Board. Additionally, he serves as a member of WWF's Advisory Committee for the Mai Po and Inner Deep Bay Ramsar Site, as well as the Scientific Committee for the Ocean Park Conservation Fund. His research focuses on marine biodiversity, ecology, and genomics. Currently, he investigates deep-sea biodiversity, genetic connectivity, and genome-level adaptations to extreme environmental conditions. He also studies shallow-water benthic ecology and coral reef ecology, aiming to document changes in these ecosystems in response to environmental and anthropogenic stressors, utilizing both conventional and environmental DNA approaches.



Prof. Lisa A. Levin

Scripps Institution of Oceanography, USA

Keynote Lecture* 8:

Deep Sea Biodiversity Under Climate Change: Contributions, Vulnerabilities and Conservation

Prof. Lisa A. Levin is a Distinguished Professor Emerita at the Scripps Institution of Oceanography, University of California, San Diego and former Director of the Center for Marine Biodiversity and Conservation at Scripps. Her research examines the biodiversity of deep continental margin ecosystems, the effects of climate change (especially ocean deoxygenation) and human impacts on the deep ocean, with over 50 research cruises and 70 submersible dives in the Pacific, Indian and Atlantic Oceans. She is a co-founder of the Deep-Ocean Stewardship Initiative, which seeks to advise on ecosystem-based management of resource use in the deep ocean and strategies to maintain the integrity of deep-ocean ecosystems within and beyond national jurisdictions. She also represents the Deep Ocean Observing Strategy (a program within GOOS) to the Decade for Ocean Science. Dr. Levin is active in bringing climate science to policy and has contributed to multiple IPCC reports, UNFCCC Ocean Dialogues, World Ocean Assessments, the BBNJ Agreement and International Seabed Authority. She is a new member of the US National Academy of Sciences, has lifetime achievement awards from the Am. Soc. Limnology and Oceanography and Western Society of Naturalists, and has been awarded the Prince Albert I Medal of Science.



Prof. J. Murray Roberts

University of Edinburgh, UK

Keynote Lecture* 9:

Cold-Water Corals in a Changing Ocean

Prof. J. Murray Roberts is Professor of Applied Marine Biology & Ecology at the University of Edinburgh. He founded Edinburgh's Changing Oceans research group, chairs the Joint Working Group between St Abbs Marine Station and the University and led the EU Atlantic research programmes ATLAS (2016-20) and iAtlantic (2019-24). In 2022 was appointed a Sargasso Sea Commissioner and member of the Scottish Science Advisory Council to government. He studies marine ecosystems in a changing ocean focussing upon structural habitats such as cold-water corals in the deep ocean. He has published over 100 peer reviewed publications, is senior author of the textbook 'Cold-water Corals', a contributing author to the 2014 and 2019 Intergovernmental Panel on Climate Change Reports and consultant to the United Nations Convention on Biological Diversity, amongst others. His fieldwork has taken him to sites off the UK, Norway, Ireland, the SE United States, Cape Verde off West Africa and the Pitcairn islands in the South Pacific.



Prof. Roberto Danovaro

Polytechnic University of Marche, Italy

Keynote Lecture* 10:

New Frontiers in Deep-Sea Biological Research

Prof. Roberto Danovaro is an ecologist and professor of marine biology at the Polytechnic University of Marche. Scientist and explorer, he conducted expeditions in all continents, from Antarctica to the northern Atlantic, from the Indian to the Pacific Ocean, from the coral triangle to the Mediterranean and Black Sea with an interdisciplinary approach exploring the ecological interactions from viruses to whales. Specialized in deep-sea ecology he explored several world trenches down to 11000-m depth. He is currently investigating in the impact of global climate change on abyssal life.

^{*} Croucher Keynote Lectures, supported by the Croucher Foundation

Invited Speakers



Dr. Diva Amon

University of California at Santa Barbara, USA

O12A-1 Invited Talk:

Thinking Deeply: Reflections on **Experiences, Practices and Values in Deep-Sea Science**

Dr. Diva Amon is a Caribbean marine biologist focused on the little-known habitats and animals of the deep ocean, and how our actions are impacting them. She works at the nexus of science, policy and communication and has a deep desire to see stewardship measures applied to the deep ocean as well as the engagement of a broader group of global stakeholders towards this effort. Diva has participated in research cruises around the world, produced over 75 peerreviewed papers, and delivered numerous presentations to decision-makers. Amon is a science advisor to the Benioff Ocean Science Laboratory at the University of California, Santa Barbara, and a founder and director of SpeSeas, an organization dedicated to marine science, education, and advocacy in her home country, Trinidad and Tobago. She is also a 2020 National Geographic Emerging Explorer and a World Economic Forum Friend of Ocean Action. Amon gained a PhD from the University of Southampton, and did postdoctoral research at the University of Hawaii at Manoa and the Natural History Museum, London. Amon has also received several awards, including the International Seabed Authority Secretary-General's Award for Excellence in Deep-Sea Research, and the ASLO's Yentsch-Schindler Early Career Award.



Dr. Pavanee A. Annasawmy

Fondation pour la Recherche sur la Biodiversité, France

O7E-1 Invited Talk:

Seamounts and Pinnacles of the Global Ocean

Dr. Pavanee A. Annasawmy is a biological oceanographer, originally from Mauritius Island, but currently living and working in France. She has spent the last ten years working on the fishes, crustaceans and cephalopods, so called micronekton, inhabiting the twilight zone. She started working on seamounts during her PhD whereby she investigated the community composition, migration, distribution and trophic position of micronekton at two shallow seamounts of the Indian Ocean. Since 2023, she was nominated by the United Nations as the coordinating author for the subchapter on seamounts and pinnacles for the third World Ocean Assessment. She has convened a team of experts from 4 continents to collaborate in the writing of this subchapter. The subchapter on seamounts will describe the changes in our knowledge between 2018 to 2023, the pressures that these ecosystems are facing, and the remaining knowledge gaps. Since the beginning of this year, she has embarked on an ambitious scientific project called MAGMA which aims at characterizing the global bathymetry and assessing the impact of the habitat types and the environment on the biomass and aggregation of micronekton so as to identify areas requiring special protection.



Dr. Corinna Breusing

University of Rhode Island, USA

O6A-1 Invited Talk:

Pattern of Genetic Diversity in Hydrothermal Vent Populations after the Hunga Tonga-Hunga Ha'apai Eruption

Dr. Corinna Breusing is a marine research associate at the University of Rhode Island (RI, USA), where she originally started as a postdoc in 2018. Prior to joining URI, she completed a postdoctoral program at the Monterey Bay Aquarium Research Institute (CA, USA). Corinna received her Ph.D. degree in Biological Oceanography from the University of Kiel in collaboration with the Helmholtz Center for Ocean Research Kiel, Germany, in 2016. She further holds a Master's degree in Biological Oceanography (2012) and a Bachelor's degree in Biology (2010), both from the University of Kiel, Germany. Corinna's work primarily focuses on the evolutionary biology of marine microbial symbioses, including the role of symbionts in driving ecological partitioning, adaptation and speciation of host organisms at deep-sea hydrothermal vents. Her research relies heavily on molecular biological, bioinformatic and modelling techniques. In addition to her research, Corinna is strongly committed to increasing diversity, equity, inclusion and social justice in the marine sciences.



Dr. Nicole Dubilier

University of Bremen, Germany

O3-1 _Invited Talk:

The Ins and Outs of Associations Between Beneficial and Pathogenic Bacteria of Deep-Sea Mussels

Dr. Nicole Dubilier is a Director at the Max Planck Institute for Marine Microbiology in Bremen, Germany where she heads the Symbiosis Department. Her lab studies the diversity, ecology and evolution of symbioses between microorganisms and marine invertebrates from environments such as deep-sea hydrothermal vents and cold seeps, as well as shallow-water coral reefs and seagrass meadows. Using a wide array of methods ranging from single gene analyses to omics, whole organism physiology and in-situ experimental work, Dubilier and her team have revealed how beneficial interactions with microorganisms allow animals to thrive in nutrient poor environments.

Dubilier moved from the USA to Germany as a teenager and gained her PhD in Marine Zoology at the University of Hamburg, Germany. After a two-year postdoctoral fellowship at Harvard University, she joined the Max Planck Institute for Marine Microbiology in 1997. Dubilier's awards and honors include the Leibniz Prize (Germany's most prestigious research prize), a Gordon and Betty Moore Marine Microbial Initiative Investigator Award, and a European Research Council Advanced Grant. She is an elected Fellow of the German National Academy of Sciences (Leopoldina), the European Molecular Biology Organization (EMBO), the American Academy of Microbiology, the European Academy of Microbiology, and the Academy of Sciences and Humanities Hamburg, and was the President of the International Society of Microbial Ecology (2020-2022). She serves on many national and international advisory boards, scientific councils and other commissions of trust, and is engaged in advancing gender equity in science.



Dr. Tamara Frank

Nova Southeastern University, USA

O5-1 Invited Talk:

Vision in the Deep - an Overview of Adaptations to Dim Light and **Bioluminescence**

Dr. Tamara Frank is a professor at the Guy Harvey Oceanographic Center at Nova Southeastern University in Dania Beach, Florida where she is the head of the Deep-sea Biology lab. She has been exploring the deep ocean for 30 years and is a veteran of over 100 research expeditions. Her main areas of research are 1) vision and bioluminescence in deep-sea crustaceans and 2) vertical and horizontal distribution patterns of deep-sea crustaceans in the Gulf of Mexico. Current research includes 1) analyzing changes in the micronektonic crustacean assemblage in the Gulf of Mexico since the 2010 DeepWater Horizon oil spill using traditional trawling techniques and 2) determining photosensitivty of both photophores and photoreceptors using special temperature insulated, light-tight collectors deployed from opening/ closing Tucker Trawls and ROVs, together with a shipboard electrophysiological recording system.



Dr. Fanny Girard

University of Hawaii at Manoa, USA

O7D-1 Invited Talk:

Deep-sea Coral Ecosystem Dynamics through Space and Time: Implications for Conservation

Dr. Fanny Girard is an Assistant Professor in the Department of Oceanography at the University of Hawai'i at Mānoa. She earned a PhD in Marine Biology from the Pennsylvania State University, a MSc in Marine Ecology from the University of Western Brittany (France) and BS in Biology from Sorbonne University (France). Fanny did a first postdoc at Ifremer, studying hydrothermal vents. She then moved to California for a postdoctoral fellowship at the Monterey Bay Aquarium Research Institute.

Her research mainly focuses on the ecology of deep-sea vulnerable marine ecosystems, including chemosynthetic and deep-sea coral ecosystems, and particularly on how these ecosystems respond to environmental change and anthropogenic disturbance. Relying on non-invasive methods such as imagery, her goals have been to advance our knowledge of the basic biology and ecology of poorly known systems and fill crucial knowledge gaps on the spatial and temporal dynamics of benthic ecosystems in relation to environmental change. She aims to use this newly acquired knowledge to inform management and conservation strategies to protect these ecosystems.



Dr. Annette F. Govindarajan

Woods Hole Oceanographic Institution, USA

O4A-1_Invited Talk:

Exploring Deep Sea Biodiversity with Environmental DNA

Dr. Annette F. Govindarajan studies the diversity, ecology, and evolution of marine animals, with an emphasis on developing and applying new approaches and technologies to enable her science aims. She received a PhD from the MIT/Woods Hole Oceanographic Institution (WHOI) in 2004, where she studied the evolution of hydrozoan life cycle stages. Her postdoctoral research, also at WHOI, examined evolutionary relationships within the Thaliacea (salps, pyrosomes, and doliolids). Dr. Govindarajan now leads a laboratory in WHOI's Biology Department where she is focused on elucidating deep sea animal biodiversity using environmental DNA (eDNA) analyses. As the lead in the Biodiversity component of WHOI's Ocean Twilight Zone Program and through participation in NOAA's Ocean Exploration Cooperative Institute, she develops and applies eDNA approaches to study animal distributions, diel vertical migration, and food webs. Research in her laboratory includes studies on animal distributions, the ecology of eDNA (shedding, transport, and decay), the development and use of autonomous sampling technology, platforms, and experimental approaches, and reference barcode library generation. Dr. Govindarajan is a co-inventor of the midwater AUV Mesobot as well as a large-volume autonomous sampler targeting deep sea applications.



Dr. Elizabeth D. Hetherington

Scripps Institution of Oceanography, USA

O11A-2 Invited Talk:

Deepening the Decade: Collaborative
Action for Advancing Deep Ocean
Science and Policy in the United Nations
Decade of Ocean Science for Sustainable
Development

Elizabeth D. Hetherington is a marine ecologist specializing in pelagic food webs and the science-policy interface. She earned her Ph.D. in Biology from UC San Diego in 2018. Following this, she conducted postdoctoral research in Anela Choy's lab at the Scripps Institution of Oceanography, focusing on gelatinous zooplankton in the California Current Ecosystem. Liz is currently a teaching professor at Scripps and an early-career researcher with the Deep Ocean Observing Strategy. She co-leads the science-to-policy working group and serves as a liaison to the UN Ocean Decade.



Dr. Kerry Howell

University of Plymouth, UK

O9-1 Invited Talk:

Progress in the Development of Standards and Best Practice in Benthic Imagery Annotation and Onward Data Use in Al **Applications**

Dr. Kerry Howell is Professor of deep-sea ecology at the Plymouth Marine Laboratory and the University of Plymouth. She has expertise in use of ROVs and AUVs, seafloor imagery acquisition and analysis, predictive modelling of species distributions, and the application of deep-learning to image analysis. Throughout her career Kerry's research has been focused on sustainable management of the deep-sea ecosystem. Her research has supported the design of national and international marine protected area networks, including the creation of reliable habitat maps, and models of population connectivity that under-pin the design. Her current research is focused on the automation of biological observations using image-based methods to generate the big data needed to construct more reliable models of biodiversity distributions in time and space. She has published >70 peer reviewed publications, and > 20 advisory reports. She is co-lead of the UN Ocean Decade Programme Challenger 150, a global initiative to map life in the deep ocean in support of UN Sustainable Development Goals. In this role, Kerry is working with the global deep-sea research community in efforts to standardise data collection, processing, and management, which includes the development of Al approaches to image-based data analysis.



Dr. Yi Lan

Hong Kong University of Science and Technology, Hong Kong, China

O6B-1 Invited Talk:

Transmission Mode and Stability of the **Scaly-Foot Snail Holobiont**

Dr. Yi Lan completed her PhD from the Division of Life Science at the Hong Kong University of Science and Technology. Following her graduation, she commenced her Postdoctoral training and later assumed the role of Research Assistant Professor in the Department of Ocean Science at the same university. Throughout her career, she has dedicated many years to deep-sea biology, specializing in symbiosis through the application of omics and molecular biology techniques



Dr. Neus Campanyà I Llovet

University of Azores, Portugal

O7C-6 Invited Talk:

Trait-based Approaches to Inform Conservation in the Deep Sea

Dr. Neus Campanyà I Llovet started her journey as a deep-sea ecologist at the University of Southampton, UK, studying long-term changes in the life-history biology of holothurians from the Porcupine Abyssal Plain (NE Atlantic) for her MSc degree. She further worked on the trophic ecology of benthic communities from a highly heterogenous submarine canyon (Barkley Canyon, NE Pacific) during her PhD at Memorial University of Newfoundland, in Canada. She started her work on trait-based ecology during her postdoctoral and junior researcher positions at IMAR and IICM-OKEANOS at the University of the Azores where she published "FUN Azores", a trait-database from the Azores Marine Park, one of the largest Marine Protected Areas Networks in Europe that includes areas Beyond National Jurisdiction and is geographically dominated by seamounts. This database was built through a collaborative approach with various taxonomists and ecologists, and therefore, includes a variety of taxa from all sizes (meio-, macro-, and megafauna) from the benthic, benthopelagic, and pelagic environments. She expanded her research to polar and subpolar environments during her post-doctoral research at the Ocean Frontiers Institute in Canada and BSc degree at the University of Barcelona. She is open for collaborations on trait-based ecology in the deep sea.



Dr. Agnes Muthumbi

University of Nairobi, Kenya

O11A-1_Invited Talk:

African Network of Deep Water Researchers

Profile

Professor, Department of Biology, Faculty of Science and Technology, University of Nairobi, Kenya

Working Experience

- Over 30 years' experience as a researcher in marine biology and lecturer at the University of Nairobi
- · Head of Marine & Freshwater Science thematic group in the Department of Biology, Focal Point for Kenya to the Indian
- · Ocean Rim Academic Group (IORAG), Indian Ocean Rim Association (IORA).
- · Member of the Forum for Academic and Research Institutes (FARI), a Nairobi Convention Initiative
- Member of the Advisory committee of Deep Ocean Stewardship Initiative (DOSI)
- Senior editor of Cambridge Prisms: Plastics Journal
- Member and one of the coordinators of the African Network of Deepwater Researchers (ANDR) (together with McQuaid K, and Elegbede I. and supported by Howell K)



Dr. Hidetaka Nomaki

Japan Agency for Marine-Earth Science and Technology, Japan

O1D-1 Invited Talk:

Ecology of Deep-sea Protistan and Metazoan Meiofauna: Experimental **Approaches**

Dr. Hidetaka Nomaki is a principal scientist of X-star, Japan Agency for Marine-Earth Science and Technology (JAMSTEC). He received a PhD at the university of Tokyo in 2005 and start working at JAMSTEC as a postdoctoral researcher. His main research interests are deep-sea ecology and relevant biogeochemical cycles, particularly at the bathyal to abyssal muddy sediment habitats. He carries out in situ incubation/experimental techniques on the deep-sea floor using ROVs or HOV and investigates feeding ecology, metabolic activities, carbon and nitrogen budgets. Recently he also starts working on the plastic pollution issue and a development of novel biodegradable plastics that can be degraded on the abyssal seafloor.



Dr. Pradeep Singh

Research Institute for Sustainability, Germany

O10-1 Invited Talk:

Broadening Our Views on Common Heritage: Factoring in Art, Science and all Forms of Knowledge in the Politics and Regulatory Framing of the Deep Sea

Dr. Pradeep A. Singh is a Fellow at the Research Institute for Sustainability - Helmholtz Centre Potsdam (RIFS), Germany. He advises several governments, the International Union for Conservation of Nature (IUCN), and other actors on the legal and regulatory aspects of deep seabed mining. An up-and-coming expert on the topics of ocean governance and the international law of the sea, Pradeep has been following multilateral negotiations at the International Seabed Authority and other multilateral ocean fora for nearly a decade. He holds degrees from Harvard Law School, the University of Edinburgh and the University of Malaya.



Dr. Karen I. Stocks

Scripps Institution of Oceanography, USA

O9-2 Invited Talk:

Towards Fully Open and FAIR Deep Sea Biology Data

Dr. Karen I. Stocks is the Director of the Geological Data Center at Scripps Institution of Oceanography, where she specializes in the curation and dissemination of oceanographic data. After a PhD in Biological Oceanography at Rutgers University and postdoctoral research jointly hosted between Scripps Institution of Oceanography and the San Diego Supercomputer Center on the biodiversity and biogeography of seamounts, the deep sea still holds a special place in her heart. She currently leads the SeaFAIRer team at the Deep Ocean Observing Strategy, working to make deep ocean data more Findable, Accessible, Interoperable, and Reusable.

She is also a member of the DeCODER project, working towards global discoverability of geosciences data; the Director of the CCHDO global database of hydrographic measurements; and the Scripps lead for Rolling Deck to Repository, a multi-institution collaboration managing data from the US Academic Research Fleet.



Ms. Sheena Talma

Oxford University, UK

O12A-2 Invited Talk:

Democratising the Deep Sea

Ms. Sheena Talma is a marine biologist, her work focuses on deep-sea ecosystems, fisheries, and genetics. As a freelance consultant, she works with several organizations both within her home country and internationally. Sheena is a NatGeo Explorer, an Ocean Voices Fellow, and also serves as a part-time lecturer at the University of Seychelles. Sheena finds the most joy in working within the science-to-policy nexus and highlighting the relationship between nature and humans. She aspires to work with collaborators to garner more deep-sea scientists within the Western Indian Ocean Region and to further highlight the need for science to be led by a diverse group of partners.



Dr. Blandine Trouche

University of Southern Denmark, Demark

O2-2 Invited Talk:

Distribution and Genomic Variation of Ammonia-oxidizing Archaea in Abyssal and **Hadal Surface Sediments**

Dr. Blandine Trouche earned her PhD in microbiology from the University of Western Brittany (UBO) in Brest, France in 2021. Her thesis research, under the direction of Dr Sophie Arnaud-Haond (MARBEC, Ifremer) and Dr Loïs Maignien (UBO), focused on the ecogenomics of deep-sea sediments, with a particular focus on archaeal communities of South Pacific marine trench systems. She is currently a post-doc in Julie Reveillaud's team at MIVEGEC (INRAE) in Montpellier, France, studying the microbiome of Culex mosquitos.



Dr. Patricia Velez Aguilar

National Autonomous University of Mexico, Mexico

O1B-1 Invited Talk:

Diversity, Ecology and Utilization of **Deep-sea Fungi from the Eastern Pacific** and Gulf of Mexico

Dr. Velez earned her B.S. (2008), M.S. (2010), and Ph.D. (2014) degrees in Biological Sciences from the National Autonomous University of Mexico (UNAM) for her work on marine fungi. Next, she performed two postdoctoral stays at the UNAM and the CICESE studying molecular ecology of freshwater and deep-sea fungi respectively. Now, she is a faculty member (Research Professor) at the Institute of Biology, UNAM where her work aims to explore the diversity, ecology and potential utilization of fungal communities, particularly in marine ecosystems. She teaches courses on Molecular Ecology of Microbial Communities and Taxonomy and Conservation in the Graduate School of Biological Sciences at the UNAM, and has mentored more than 20 graduate and undergraduate students in diverse topics of mycology.



Dr. Gerlien Verhaegen

Alfred Wegener Institute, Germany

O4C-1 Invited Talk:

Non-invasive Methods for Studying Midwater Jellyfish

Dr. Gerlien Verhaegen is a postdoctoral researcher working on the ecology and evolution of deep-sea and/or polar jellyfish at the University of Greifswald and the Alfred Wegener Institute, in Germany. She graduated her PhD in 2018 at the University of Greifswald, working on the adaptation and phenotypic plasticity of a worlwide invasive freshwater snail. She then transition her focus to deeper and saltier waters for her first postdoc, discovering a passion for midwater jellyfish at the Japan Agency for Marine- Earth Science and Technology. Her current project focuses on studying the diversity, distribution, ecology, and genetic connectivity of Southern Ocean gelatinous zooplankton. For this she is applying a broad range of techniques, from ecological niche modelling, population genetics, to environmental DNA.



Dr. Aurèle Vuillemin

Helmholtz Centre Potsdam, Germany

O2-1 Invited Talk:

What Are the Prevalent Clades Involved in Marine Biogeochemical Processes at Extreme Energy Limitation?

Dr. Aurèle Vuillemin studied Earth and Environmental Sciences and completed a PhD in limnogeology at the University of Geneva. Since then he has spent over ten years as a researcher at the GFZ Potsdam and the LMU Munich, Germany working on geomicrobiology and microbial ecology. In parallel to geochemistry and mineralogy, he applies metagenomics and metatranscriptomics to environmental studies of aquatic sedimentary environments. As manager of the EU-funded project PROSPECTOMICS, he focuses on the development of meta-omics tools for minimally invasive hydrocarbon prospection in marine sediments.

His investigations have focused on geochemically diverse systems, such as the abyssal plains of the North Atlantic, the Namibian coastal oxygen minimum zone, and various lakes as recorders of Quaternary climate evolution. By tracing microbial redox processes and organic matter remineralization in the sedimentary subsurface, he unravels microbial biogeochemical cycles in terms of environmental records and bioavailable substrates. He asserts that "all sediments are buried alive" and that the metabolic activity of the subsurface microbial biosphere modifies the geological signal.

In his talk he will present results on microbial activity in organic-lean sediments of the North Atlantic and Barents Sea, wherein specific microbial clades take advantage of energy limitation, outcompeting sulfate reduction.

Part III: Symposium Information

Symposium Venue



Lecture Theatre A and B, The Hong Kong University of Science and Technology, Hong Kong, China

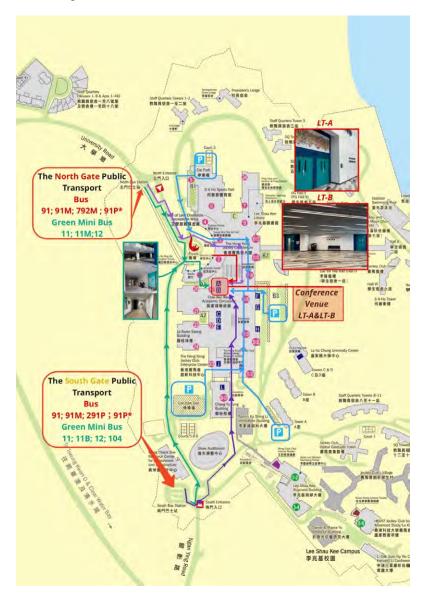
Lecture Theatre A and B (LTA and LTB) have the capacity of 400 or 300ppl, respectively. The opening/closing ceremony and keynote lectures will be in the LTA and two parallel sessions will be in LTA and LTB.

The ways to the Venue

1) By public transportation to get to North Gare or South Gate: follow the GREEN or PURPLE lines

North Gate	South Gate
From Choi Hung MTR station: • 91 or 91M bus (use Exit C2) • 11 minibus (use Exit C1)	From Choi Hung MTR station: • 91M bus (use Exit B2) • 11 minibus (use Exit B1)
From Hang Hau MTR station: • 11M minibus (use Exit B1)	From Po Lam MTR station: • 91M bus (use Exit A2) • 12 minibus (use Exit B1)
From Tiu Keng Leng MTR station: • 792M bus (use Exit A1)	From Ngau Tau Kok MTR station: • 104 minibus (use Exit A)
From Sai Kung bus terminus: • 792M bus; 12 minibus	From Ngau Tau Kok MTR station: • 104 minibus (use Exit A)

- 2) By Private Cars: refer to the parking lot and follow the **BLUE** lines
- 3) By free shuttle bus from Tseung Kwan O MTR Station: follow the RED line



Tseung Kwan O <----> HKUST Shuttle Bus Route and Timetable

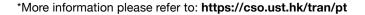
Date	Time	Route	HKB Staff
12 Jan. 2025	20:00	HKUST Red Bird > Tseung Kwan O	Esme & Lori Deng Ziyin: 86 15529344565 Jiang Dianhang: 86 13045026201
13 Jan. 2025	8:10	Tseung Kwan O > HKUST Red Bird	Esme & Lori Ma Haiying: 852 61538410 Liu Ling li: 86 15902940417
	19:00	HKUST Red Bird > Tseung Kwan O	Deng Ziyin: 86 15529344565 Jiang Dianhang: 86 13045026201
	20:15 Student Mixer	HKUST Red Bird > Tseung Kwan O	Ma Haiying: 852 61538410 Liu Ling li: 86 15902940417
14 Jan. 2025	8:20	Tseung Kwan O > HKUST Red Bird	Deng Ziyin: 86 15529344565 Jiang Dianhang: 86 13045026201 Xiao Yao: 86 18571402818
	18:30	HKUST Red Bird > Tseung Kwan O	Li Pei Meng :86 19806247801 Ma Haiying: 852 61538410 Liu Ling li: 86 15902940417
	19:45 AGM	HKUST Red Bird > Tseung Kwan O	Deng Ziyin: 86 15529344565 Jiang Dianhang: 86 13045026201 Xiao Yao:86 18571402818
15 Jan. 2025	8:20	Tseung Kwan O > HKUST Red Bird	Deng Ziyin: 86 15529344565 Jiang Dianhang: 86 13045026201 Xiao Yao: 86 18571402818 Li Pei Meng :86 19806247801
	14:10	HKUST Red Bird > Tseung Kwan O	Deng Ziyin: 86 15529344565 Jiang Dianhang: 86 13045026201 Xiao Yao: 86 18571402818 Li Pei Meng : 86 19806247801
16 Jan. 2025	8:20	Tseung Kwan O > HKUST Red Bird	Deng Ziyin: 86 15529344565 Jiang Dianhang: 86 13045026201 Xiao Yao:86 18571402818
	20:45	HKUST Red Bird > Tseung Kwan O	Li Pei Meng :86 19806247801 Ma Haiying: 852 61538410 Liu Ling li: 86 15902940417
17 Jan. 2025	8:20	Tseung Kwan O > HKUST Red Bird	Li Pei Meng :86 19806247801 Ma Haiying: 852 61538410 Liu Ling li: 86 15902940417
	18:05	HKUST Red Bird > Tseung Kwan O	Deng Ziyin: 86 15529344565 Jiang Dianhang: 86 13045026201 Xiao Yao:86 18571402818



4) Barrier-Free Route to the Venue Site: follow the GREEN Line



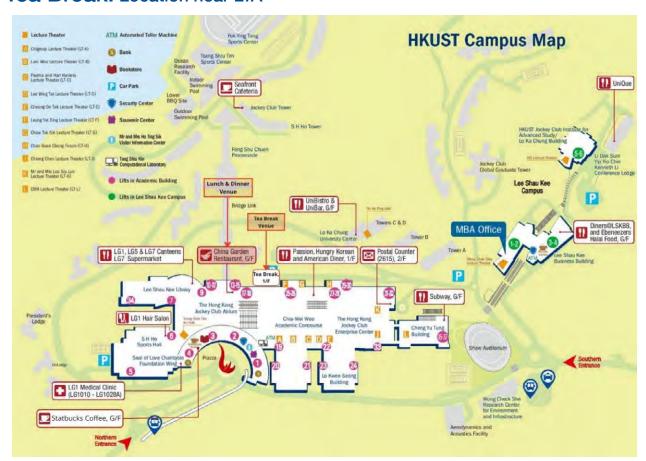
- 1. From Red Bird, go toward the Visitor Centre.
- 2. Locate the entrance next to the Visitor Centre
- 3. Go through the entrance with an automatic door.
- 4. Go down the corridor and you will find the second set of lecture theatre (RM1106) entrance doors with an automatic door.
- 5. Toilets for wheelchair users are available in the corridor.





Dining Arrangement

Lunch, Cocktail Reception, Student Mixer, Banquet: China Garden Tea Break: Location near LTA



Lunch

Time: 13th January 2025 12:40 - 14:00

14th January 2025 13:00 - 14:00 15th January 2025 12:40 - 13:50 16th January 2025 13:00 - 14:00

17th January 2025 13:00 - 14:00

Welcome Dinner

Time: 12th January 2025 18:00 - 19:30

Student Mixer

Time: 13th January 2025 19:00 – 20:00

Banquet

Time: 16th January 2025 18:15 - 20:15

Tea Breaks

Venue: Near LTA

13th January 2025 10:00 - 10:30; 16:30 - 1650

14th January 2025 11:00 - 11:20; 1615 - 1635;

1745 -1815

15th January 2025 10:45 - 11:05

16th January 2025 11:00 - 11:20; 1630 - 1650

17th January 2025 11:00 - 11:20; 1630 - 1650

Please refer to the map and link below for other dining options and coffee shops on campus: https://cso.ust.hk/locations/restaurants





Field Trips

Hong Kong has remarkably rich biodiversity and a natural terrain with diverse habitats. The 17DSBS has arranged three guided field trips in the afternoon of 15 January for the 17DSBS participants to appreciate the natural beauty of the city. These include the Hong Kong UNESCO Global Geopark, the Hoi Ha Wan Marine Park, and the Hong Kong Wetland Park.

Field Trips Shuttle Bus Timetable and Contact Staff

Time	Route	HKB Staff
14:00	HKUST Red Bird > Hong Kong Geopark	Rong: (852) 5338 3292 Tong Wei: (852) 6475 7645
17:45	Hong Kong Geopark > HKUST	Rong: (852) 5338 3292 Tong Wei: (852) 6475 7645
14:00	HKUST Red Bird > Hoi Ha Wan Marine Park	Prof. KH Chu: (852) 9383 0460 Tang Jianwei: (852) 9485 2058 Qin Dapeng: (852) 6342 2114
17:00	Hoi Ha Wan Marine Park > Sai Kung > HKUST > Tseung Kwan O	Prof. KH Chu: (852) 9383 0460 Tang Jianwei: (852) 9485 2058 Qin Dapeng: (852) 6342 2114
14:00	HKUST Red Bird > HK Wetland Park	Lori : (852) 6708 6647 Lin Ziqiu: (852) 9427 7059 Sun Qiwei: (852) 5642 4104
16:45	Hong Kong Wetland Park > Tseung Kwan O > HKUST > Sai Kung	Lori: (852) 6708 6647 Lin Ziqiu: (852) 9427 7059 Sun Qiwei: (852) 5642 4104



Code of Conduct

Wear Masks If Necessary:

If there are health concerns or if someone in the room is unwell, consider wearing a mask to protect yourself and others. If you are feeling unwell, it is best to avoid attending in person to prevent spreading illness.

Limit Food and Drinks:

NO food or drinks at the conference venue (LT-A&B). Please enjoy tea breaks outside of the conference venue.

Mute Your Phone:

Ensure your phone is silent or in vibrate mode to avoid interruptions.

Arrive on Time:

Punctuality shows respect for everyone's time. Aim to arrive a few minutes early.

Be Mindful of Noise:

Keep conversations to a minimum when others are speaking. Avoid making unnecessary noise, such as tapping on laptops or shuffling papers.

Part IV: General Information

You may arrive in Hong Kong from different borders. Please refer to the brief transportation information at the bottom of the map. For those from the Hong Kong International Airport and West Kowloon Train Station, please refer to more details below.



From Hong Kong International Airport

 Red taxi (Hong Kong International Airport -> HKUST)

Estimated travel time: 45 minutes

Estimated cost: HK\$360

 Airport Express (Hong Kong International Airport -> Kowloon Station) + Red taxi (Kowloon Station -> HKUST)

Estimated travel time: 25 + 30 minutes Estimated cost: HK\$100 + HK\$140

 Bus A29 (Hong Kong International Airport -> Po Lam) + Taxi (Red or Green) or Bus 91M (Po Lam -> HKUST)

Estimated travel time: 100 + 15 minutes Estimated cost: HK\$44 + HK\$70/HK\$4.8

Information on getting to HKUST: https://newstaffguide.hkust.edu.hk/about-hkust/getting-to-hkust

From West Kowloon Train Station To HKUST

Red taxi (West Kowloon Train Station -> HKUST)

Estimated travel time: 30 minutes

Estimated cost: HK\$170

 MTR (West Kowloon Station -> Hong Kong -> North Point -> Hang Hau) + Bus 91M or 11M (Hang Hau -> HKUST) or Taxi (Red or Green)

Estimated travel time: 41 + 15 minutes

Estimated cost: HK\$11 + HK\$4.8 or HK\$6.8/HK\$47



Wi-Fi Access

For Wi-Fi Connection for HKUST Guests, please refer to: https://itsc.hkust.edu.hk/services/general-it-services/wifi



On-campus Medical and Dental Services





On-campus Medical Clinic

Appointments can be made at +852 2358-6670.

The opening hours are as follows:

Monday - Friday: 0900 - 1645 (lunch: 1230 - 1330)

Saturday: 0900 - 1145

Sunday & Public Holidays: Closed

Location: At LG1 (take lift no. 3 next to the Starbucks).

Dental Clinic

Appointments for consultation should be made in advance by calling +852 2358-8747 or in person.

The opening hours are as follows:

Monday - Saturday except Thursday: 0900 - 1700 (lunch: 1230 - 1330)

Thursday: 0900 - 1230

Sunday & Public Holidays: Closed

Location: At LG1 (next to the Medical Clinic)

Currency and Financial Considerations

Official Currency:

The official currency in Hong Kong is the Hong Kong Dollar (HKD). Familiarize yourself with its symbol (HK\$) and exchange rates.

Currency Exchange:

Currency exchange services are widely available at airports, banks, and exchange bureaus. Compare rates to ensure you get a fair deal.

Payments:

Mobile payment platforms like Alipay and WeChat Pay are popular in Hong Kong. If you have these Apps set up, they can be convenient for transactions. Most establishments accept major credit and debit cards (Visa, MasterCard, American Express). Notify your bank of your travel plans to avoid any issues with transactions. While cards are widely accepted, it is advisable to carry some cash for small purchases, transportation, and local markets.

Tax Refunds for Tourists:

Tourists may be eligible for tax refunds on certain purchases. Keep receipts and inquire about the process if you make significant purchases.

Visa and Travel

Visa

Before your travel to Hong Kong, please check if visit visa or entry permit is required.

Travel in Hong Kong

An ideal destination to meet, explore opportunities, and exchange ideas. As a reputable international business hub, the city's solid fundamentals, unique position, and authentic experiences enrich world-class business events set to make connections and inspire in every way. For more options, please refer the website: https://17dsbs.hkust.edu.hk/visa

- · Victoria Harbour in Hong Kong
- The Peak Hong Kong
- · Ngong Ping 360 Cable Car
- Wong Tai Sin Temple
- · Hong Kong Palace Museum
- · Ocean Park Hong Kong
- Hong Kong Disneyland Park

Weather

In January, Hong Kong experiences cool and mild winter weather. The average temperature during this month ranges from around 14 to 19 degrees Celsius (57 to 66 degrees Fahrenheit). However, it is important to note that temperatures can fluctuate, and occasional cold fronts can bring cooler temperatures. January is also one of the driest months in Hong Kong, with relatively low rainfall. While the weather is generally comfortable, it is advisable to pack light layers and a jacket or sweater for cooler evenings. Overall, January offers pleasant conditions for exploring the city and enjoying outdoor activities in Hong Kong.

Usually, the severe weather (e.g. rainstorm and typhoon) happens in summer. In case of Black Rainstorm Signal or Typhoon No. 8 Signal or above during the symposium period, the event will be suspended. We will announce the information on the website. Stay tuned!

For more details regarding warnings for severe weather, please refer to the Hong Kong Observatory. For tropical cyclone and rainstorm warning arrangements, please refer to:

- · Tropical Cyclone
- · Amber or Red Rainstorm Warning
- · Black Rainstorm Warning
- · Catering Arrangements

Check-in and check-out procedure in Crown Plaza Kowloon East and Vega Suites

Check-In Process	Check-Out Process
Arrival Time: Please arrange your arrival time. The check-in time is 3PM. This will help us manage the flow of guests and ensure that your accommodation is ready.	Check-Out Time: The check-out time is before 12AM. We kindly ask that you adhere to this time to allow the hotel staff to prepare for incoming guests.
Required Documents: Upon arrival, please have the following documents ready: A valid government-issued ID Confirmation email or booking reference number Payment method (if not already settled)	Room Inspection: Prior to check-out, please ensure that all personal belongings have been removed from the room. The hotel staff will conduct a brief inspection.
Check-In Location: Check-in will take place at [insert location, e.g., the front desk or designated area]. The front desk staff will be available to assist you with the process.	Payment Settlement: If there are any additional charges (e.g., mini-bar, room service), these will be settled at the time of check-out. Please ensure your payment method is available.
Key Collection: After completing the check-in paperwork, you will receive your room key. Please let us know if you have any special requests or requirements.	Return of Keys: Please return your room key to the front desk upon check-out.

Part V: Accessibility, Inclusion, Support and Safety at 17DSBS

The 17DSBS local organizing team will provide sorts of supports to enhance the accessibility to the symposium at Hong Kong. The brief information is shared below and for more details, please refer to the full document (https://dsbsoc.org/wp-content/uploads/2023/08/General_Accessibilty_v3_UpdatedAug23.docx.pdf).

Financial Support

Several financial supports are provided and please check "Awards & Financial Aides" section for more details. Students, early career scientists, female scientists are welcome to apply for the financial support.

Presentation Support

Visual Support: to enhance the visual appearance of oral and poster presentations, the Deep-Sea Biology Society provides a detailed guideline for the preparation of oral presentation PPT and poster. For more details, please refer to guideline under Abstract section.

Audio support: Immersive reader function is available for all digital content on the 17DSBS website. Please select the digital content, right click and choose "Open in reading mode" to enjoy customized font type and size, as well as the background colour.

Support for presenters: wireless microphone, microphone with height-adjustable stand, and laser pointers will be available in the meeting rooms for speakers.

Safety Support

Mental health support: one or two support personnel will stand by at the registration desk and ready to provide immediate assistance for those who need help.

Hygiene support: Hand sanitizers will be available on the registration desk and room entrance desks. All common areas in the symposium room will be cleaned every day.

Covid-19: To prepare for the worst case (covid-19 pandemic), the 17DSBS local organizing team has the following arrangements. 1) Online login information will be shared to all participants and onsite ones can switch to online mode if they feel uncomfortable. 2) Face masks and Covid-19 virus testing kits are available from the registration desk. Participants can seek assistance if they need help.

Food safety support: To ensure food safety for those who suffer food allergies, the 17DSBS LOC will conduct a survey through Google form to collect the case of allergies. All food/drink served in tea breaks, reception and banquet will be labeled with dietary/intolerance information. Conference lunch will be provided by different restaurants on university campus. Participants have the responsibility to check with the restaurant staff for suspected allergens.

Campus safety support: campus security staff is on duty 24 hours. For emergency, please contact 2358 8999 for reporting top emergencies, or 2358 6565 for request of assistance or enquires. For ambulance service, please call 2358 8999 for cases within the campus, or 999 for cases outside the campus.

Venue management support: Conduct code is defined by the Deep-sea Biology Society. Any unacceptable behaviour will be stopped immediately and the responsible attendee(s) will be removed from the symposium venue without warning and without refund. Please download the conduct code here

On-site accessibility Support

Transportation to HKUST: private and public transportation information is shared on the 17DSBS website and this booklet. Please refer to "Transportation" section for more details. Parking areas are labelled on the UST campus map.

Path suggestion to the venue site: a detailed campus map and floorplan is shared on the "Venue" section on the 17DSBS website.

Other Support

Religious and baby nursing support: to enhance inclusion, we encourage scientists of different religions as well as female scientists to attend the symposium. The 17DSBS LOC will provide quiet rooms for the purpose of praying or baby nursing/baby changing.

Social activity support: The 17DSBS LOC organizes field trips for participants to join as a group. Three options are available and please reserve your field trip through registration. The field trips are optional and on a first-come first-serve basis. Other options for individual visits are listed on the "Visa and Travel" section.

Local language support: to facilitate the quick adaptation of overseas participants, LOC prepared a short audio to introduce the pronunciation of some basic Cantonese. Please click here to listen.

Part VI: Contact Us



Address:

Hong Kong Branch of the Southern Marine Science and Engineering Guangdong Laboratory (Guangzhou)

Room 3641 - 3649, 3/F, Lifts 31-32

The Hong Kong University of Science and Technology Clear Water Bay, Kowloon, Hong Kong

General Enquiries:

Phone: (852) 3469 2857 Fax: (852) 2495 7851 Email: 17dsbs@ust.hk



