17DSBS – List of Poster Presentations

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

Erika Gress | *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*

P1-35: 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*

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

Changyu Zhu | *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

Nis Hansen | *GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany*

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 *Rim*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 and Association of Deep-Sea Invertebrates with Cold-Water Coral Species in the Phoenix Islands Marine Preserve

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: The First Complete Mitogenome of *Acharax* (Protobranchia, Solemyida, Solemyidae): Comparisons with Other Solemyidae Bivalves and Deep-Sea Adaptive Characteristics

Xinzheng Li | *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

Yan Sun | *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: First Insights on the Spatial Ecology of Greenland Sharks in the Skagerrak Deep Sea **Petter Lundberg** | *Swedish University of Agricultural Sciences, Sweden*
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 **Yiqiao Cao** | *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

Rachel Hale | *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: Fathomverse: 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 Authors'

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: Systematics of Deep-Sea Starfish Order Brisingida (Echinodermata: Asteroidea), with A Revised Classification and Assessments of Morphological Characters

Ruiyan Zhang | *Second Institute of Oceanography, Ministry of Natural Resources, China*

P11-8: Crust-Mantle Structure Characteristics of Ultraslow Mid-Ocean Ridge

Xinran Li | *Shanghai Jiao Tong University, China*

P11-9: Capacity Building for Ocean Literacy Training on Marine Biodiversity in the Deep Sea

Qiuci Sun | *Second Institute of Oceanography, Ministry of Natural Resources, China*

P11-10: Accounting and System Construction for Resource Assets of Uninhabited Islands **Rui Zhao** | *National Marine Data and Information Service, China*
P11-11: Megabenthic Diversity Patterns on a Seamount in the Philippine Sea: Implications for Conservation Planning on the Kyushu-Palau Ridge **Dong 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 **Ziqiu Lin** | *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 **Muyang Xue** | *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 **Simin Chai** | *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 **Hao Li** | *The Hong Kong University of Science and Technology, Hong Kong, China*