Programme (at 12.10.26)

The Ocean in a High-CO_2 World
Ocean Acidification
6th International Science Symposium
13–16 OCTOBER 2026 • TĀKINA WELLINGTON

MONDAY 12 OCTOBER		
	Pre-Symposium Meetings – by invite only (Level 1, Tākina Wellington Convention & Exhibition Centre)	
09.00 - 17.00	**Building a More Global mCDR Scientific Community** **(The Ocean Foundation's EquiSea's 2026 mCDR Scientific Cohort)** Room: Mātiu	**Advancing Priority Science and Policy Action on Ocean Acidification in the Asia-Pacific Region** Room: Mākaro
09.30 - 17.00	**Changing Ocean Biological Systems** **(SCOR Infrastructural Project)** Room: Mokopuna	
13.00 - 17.00	**GOA-ON Executive Council** Room: Rongomātāne A	
17.30 - 19.30	**Icebreaker** (St Johns Bar and Eatery, 5 Cable Street)	

TUESDAY 13 OCTOBER	
08.00 - 19.30	**Registration & Exhibition Open** (Level 1, Tākina Wellington Convention & Exhibition Centre)
09.00 - 09.50	**Mihi Whakatau & Symposium Open in Rongomātāne**
09.50 - 10.30	**Keynote 1: Nathan Kenny (University of Otago)** Safeguarding Taonga in a Changing World: Leveraging Genomics for Climate-Resilient Kaimoana in Aotearoa New Zealand
10.30 - 11.10	**Keynote 2: Cana Uluak Itchuaqiyaq (Center for Sustainable Engagement in the Arctic | Virginia Tech)** "Our Own Cultural Rules": Indigenous Leadership and the Future of Arctic Ocean Stewardship
11.10 - 11.45	**Morning Tea Break** in the Exhibition area

11.45 - 13.00	**1A: Assessing high-CO_2 and multi-stressor effects on aquatic organisms using natural laboratories of climate change** Room: Rongomātāne A Chairs: Ivan Nagelkerken & Davide Spatafora	**1B: Knowledge systems: Understanding a high-CO_2 Arctic: observations, modeling, impacts, and emerging approaches across scientific and Indigenous knowledge systems** Room: Rongomātāne B Chairs: Kumiko Azetsu-Scott & Kararaina Te Puni	**1C: Ocean Solutions: Global Ocean acidification observing network perspectives on ocean solutions** Room: Rongomātāne C Chairs: Helen Findlay & Treasure Warren	**1D: Technological advances: New approaches for quantifying variability and human impacts on ocean biogeochemistry from sparse observational data** Room: Mātiu Chairs: Neill Mackay & Larissa Dias	**1E: Global-driven changes in biodiversity: OA in Mediterranean** Room: Mākaro Chairs: Iris Hendriks & Leah Warlow
11.45 - 12.00	**Natural analogues of climate change as a tool to study processes from genes to ecosystems** Ivan Nagelkerken	**Bringing Together Indigenous Observations and Ocean Modeling to Understand Arctic Extreme Events** Claudine Hauri	**Addressing the current metrology challenges involved in quantification of baseline conditions for mCDR in coastal and open ocean environments** Peter Croot	**Drivers of Coastal Acidification in the surface and subsurface waters of the Northern California Current Ecosystem** Richard Feely	**Acidification and warming of Atlantic and Mediterranean water masses in the Strait of Gibraltar: insights from a 20-year time series** Emma Huertas & Susana Flecha
12.00 - 12.15	**Molecular basis and behavioral adjustments reveal potential local adaptation to acidifying oceans, a lesson from natural analogues** Timothy Ravasi	**Community and Indigenous-led observations are essential for understanding the effects of marine climate change** Donna Hauser	**Diel pH and pCO_2 trends in estuarine mariculture sites in Pangasinan, Northwestern Philippines** Jherome Co & Charissa Ferrera	**Ocean Carbon Accumulation and Variability Revealed by a High-Resolution Mapped Observational Data Product** Jonathan Sharp	**Compound emergence of warming, deoxygenation and acidification across western Mediterranean water masses** Susana Flecha
12.15 - 12.30	**Temperature structures sea urchin responses to ocean acidification across global CO_2 seeps** Callum Hudson	**Sensitivity of Arctic Ocean CO_2 Uptake to Carbon Release from Seafloor Sediments** Yuanxin Zhang	**Biological thresholds and monitoring needs for ocean alkalinity enhancement across marine taxa** Nina Bednarsek	**Spatial variability of seawater pH along the northern Antarctic Peninsula during the austral summer** Thiago Monteiro	**Seagrass Carbon Sinks in a Changing Ocean: Insights from Multi-Scale Responses to Ocean Acidification** Theodor Kindeberg
12.30 - 12.45	**The effects of ocean acidification to coral eco-physiology seen from shallow CO_2 vents studies** Sylvain Agostini	**Ocean acidification may increase the biological impact of legacy metal pollution; a study of mine waste deposits in Arctic Norway** Sam Rastrick	**Speed Talks:** **Ocean Acidification in Papua New Guinea: Challenges, Opportunities, and Next Steps for Action** Maisy Lus **Pacific Islands Ocean Acidification Centre** Miriama Vuiyasawa **Monitoring of physico-chemical parameters related to ocean acidification: The case of Mauritius** Kishore Boodhoo	**Discussion**	**Discussion**
12.45 - 13.00	**Assessment of community photosynthesis of macroalgal beds using volcanic CO_2 seep** Shigeki Wada	**Discussion**			
13.00 - 13.45	**Lunch** in the Exhibition Area				
13.30 - 15.30	**Field Trip - Zealandia Te Māra a Tāne Day Tour**				

13.45 - 15.45	**Workshops, Discussions & Trainings**					
	Room: Rongomātāne A Time: 13.45 - 15.45	Rongomātāne B Time: 13.45 - 15.45	Room: Rongomātāne C Time: 13.45 - 15.45	Room: Mātiu Time: 13.45 - 15.45	Room: Mākaro Time: 13.45 - 15.45	Room: Mokopuna Time: 13.45 - 15.45
	Ocean Acidification Capacity Sharing - A call for action and implementation	**Future Coastal Food Systems: Methods for catalysing transformation pathways**	**Marine policy engagement 101 for early career scientists**	**Using natural analogues to investigate the effects of climate change and ocean acidification**	**Sharing Experiences from Polar to Tropical seas: Learning across knowledge systems to guide action**	**Designing and analysing multiple driver experiments - Day 1**
15.30 - 16.00	**Afternoon Tea Break** in the Exhibition Area					

16.00 - 18.00	**2A: Ocean Deoxygenation: A twin threat to ocean health in a high-CO_2 world** Room: Rongomātāne A Chairs: Ariel Pezner & Max Dhillon	**2B: Knowledge Systems: The River-Ocean Nexus: Freshwater acidification in a high-CO_2 world** Room: Rongomātāne B Chairs: Adam Hartland & Victoria Cantalapiedra Mateo	**2C: Ocean Solutions** Room: Rongomātāne C Chairs: Steeve Comeau & Theodor Kindeberg	**2D: Multiple Stressors** Room: Mātiu Chairs: Norman Ragg & Aubrey McDermott	**2E: Beyond Tipping Points: Financing Ocean Futures: From OA research to coastal safeguards** Room: Mākaro Chairs: Anwesha Ghosh & Alvin Chandra
16.00 - 16.15	**Invited: Hot, Acidic, and Out of Breath: Understanding the Impacts of Ocean Deoxygenation in a Changing Ocean** Ariel Pezner	**The river-ocean nexus in a high-CO_2 world: freshwater acidification, carbonate chemistry, and the missing terrestrial bridge** Adam Hartland	**Effect of marine shells on total alkalinity in CO_2-acidified seawater** Cecilia Chapa Balcorta	**Oyster Immune Response to Multiple Climate Change Stressors: Synthesising Responses with Experimental Applications** Jasmine Glencross	**Scaling Marine Carbon Dioxide Removal through Coastal Ecosystems: A Multisectoral Approach to Nature-Based Coastal Carbon Removal in the 'Global South'** Anwesha Ghosh
16.15 - 16.30		**He kaakahi whakairoiro, he kaaeo whakahirahira: How will our taonga evolve with the taiao?** Tyla Hill Moana	**Channeling Expertise: Capacity-Strengthening Pathways to Bridge Ocean Acidification Science and Marine Carbon Dioxide Removal Research** Meagan Gary	**Effects of multiple stressors on the low-pH tolerance of the wrinkled rock-borer, *Hiatella arctica*** Aubrey McDermott	**Engaging philanthropy, development banks and the UNFCCC on funding ocean acidification science to policy: lessons learned** Jessie Turner
16.30 - 16.45	**Take my breath away: effects of hypoxic events on coral photometabolism in a high-temperature environment** Lucia Gastoldi	**The impacts of freshwater acidification on microalgal and cyanobacterial communities in Te Awa o Waikato** Victoria Cantalapiedra Mateo	**Crowding the Coast: Plume Interactions Reduce CO_2 Uptake from Closely Spaced Alkalinity Outfalls** Harris Anderson	**Hot Families: Can We Use Selective Breeding to Produce More Heat-Tolerant Greenshell Mussels?** Norman Ragg	**Vulnerability Assessment of Ocean Acidification in Papua New Guinea's Coastal and Marine Ecosystems** Alvin Chandra & Maisy Lus
16.45 - 17.00	**Hidden hypoxia contributes to coral bleaching through a mass transport–metabolism tipping point** Max Dhillon	**Freshwater-seawater mixing and major phytoplankton groups modulate CO_2 dynamics in a subtropical estuary** Matheus Batista	**The effects of moderate and high ocean alkalinity enhancement on phytoplankton growth and photophysiology using a model diatom and coccolithophore** Leah Warlow	**Ocean Acidification Impairs Survival and Biological Integrity in the Green Mussel (*Perna viridis*)** Md. Eyasin Ali	**Advancing Priority Science and Policy Action on Ocean Acidification in the Asia-Pacific Region** Jessie Turner

17.00 - 17.15	**Oxygen deprivation implicated in rapid coral mortality under acute heating events** Max S. Dhillon	**Interconnected Dynamics of Plant Growth and Carbon Dioxide Fluxes in Lake Karāpiro under different physical regimes** Farzaneh Taheri	**Towards constraining the efficiency of ocean alkalinity enhancement: A Canadian Earth System Model study** Krysten Rutherford	**Contrasting strategies of cellular pH regulation shape coral calcification responses to ocean warming and acidification** Erik Krieger	**Panel Discussion**
17.15 - 17.30	**Coral responses to repeated ocean acidification and deoxygenation depend on exposure frequency and species tolerance** Verena Schoepf	**Amazon River plume control on carbonate chemistry in the western Tropical Atlantic** Matheus Batista	**Influence of suspension-feeding bivalve *Austrovenus stutchburyi* on alkalinity dynamics in a sandy intertidal estuary** Elli Leinikki	**Using oxidative proteomics to unravel the molecular regulation of coral bleaching in the model organism *Exaiptasia diaphana*** Lénaïc Chagnat	
17.30 - 17.45	**Sponges tolerate projected end-of-century ocean warming, acidification and deoxygenation** Barbara Graham	**Discussion**	**The local alkalinity enhancement of seawater increases shell biomineralization and growth, buffering the effect of Ocean Acidification on shellfish juveniles** Laura Sordo	**Speed Talks:** **Simulated Atmospheric Heatwave Suppresses Immune Function in Sydney Rock Oyster (*Saccostrea glomerata*)** Jasmin Kamarulzaman **Mapping Potential Multi-Stressor Exposure in Marine Systems: A 4D GIS-Based Approach** Virginia Morejón **Key role of heterotrophy in mitigating thermal stress in corals naturally exposed to extremes environmental conditions** Layla Iijima	
17.45 - 18.00	**Hypoxia driven by Caribbean Sargassum accumulation events** Jose Martinez Ortiz		**Discussion**		
18.00 - 19.30	**Welcome Reception & Poster Session 1** in the Exhibition Area – canapes & drinks provided				
19.30 - 22.00	**Early Career Researcher Function** at Garage Project, Leeds Street				

WEDNESDAY 14 OCTOBER

08.00	**Registration & Exhibition Open** (Level 1, Tākina Wellington Convention & Exhibition Centre)
09.00 - 09.10	**Welcome in Rongomātāne A**
09.10 - 09.50	**Keynote 3: Maria Byrne (University of Sydney)** Marine invertebrates are feeling it hot hot hot - multistressor impacts in a heatwave ocean and atmosphere
09.50 - 10.30	**Keynote 4: Ben Harvey (University of Tsukuba, Shimoda Marine Research Center)** From complexity to simplicity: ecosystem reorganisation in a high-CO_2 ocean
10.30 - 11.00	**Morning Tea Break** in the Exhibition area

11.00 - 13.00	**3A: Assessing high-CO_2 and multi-stressor effects on aquatic organisms using natural laboratories of climate change** Room: Rongomātāne A Chairs: Sylvain Agostini & Davide Spatafora	**3B: Beyond Tipping Points: From data to decisions, opperationalizing interdisciplinary ocean acidification knowledge** Room: Rongomātāne B Chairs: Erica Ombres & Maurice Oti Edusei	**3C: Ocean Solutions: Alkalinity cycling in a changing ocean** Room: Rongomātāne C Chairs: Michael Ellwood & Elli Leinikki	**3D: Modulating role of time** Room: Mātiu Chairs: Piero Calosi & Denisa Berbece	**3E: Engage, Exchange, Collaborate** Room: Mākaro Chair: The Ocean Foundation
11.00 - 11.15	**Shifts in benthic trait diversity and ecosystem functioning at natural CO_2 vents: an ecosystem property perspective** Núria Teixidó	**Integrating Social Science with Natural Science to Inform Society** Erica Ombres	**Coastal sediment alkalinity fluxes and their implications for mineral-based ocean alkalinity enhancement (OAE)** Grace Andrews	**Adaptive remodelling of cell membranes and energy substrate use under ocean warming and acidification in a ubiquitous marine copepod** Piero Calosi	**Engage, Exchange, Collaborate: The mCDR Networking Event**
11.15 - 11.30	**Ocean Acidification Across Life Stages: Effects on Early Development and Thallus Strength in Fucus vesiculosus** Alexandra Kinnby	**Developing information products to inform ocean change adaptation and resilience planning by tribal and state managers of Washington's Olympic Coast** Jan Newton	**Natural shelf seafloor feedbacks to changing ocean carbonate chemistry** Sebastiaan Van De Velde	**Mesoscale environmental mosaics modulate phenotypic plasticity under multi-scale environmental variability in coastal upwelling systems** Cristian Vargas	
11.30 - 11.45	**Biological response to ocean alkalinity enhancement as a multiple stressors problem** Sam Dupont	**Advancing Towards Adaptation in the Chesapeake Bay Region: The Trajectory of Three Resiliency and Vulnerability Assessment Projects** Emily Rivest	**A biophysical modelling framework for evaluating potential OAE in Aotearoa New Zealand's Exclusive Economic Zone** Charine Collins	**Revisiting the Mechanisms of Adaptation After 200 Generations of Simultaneous Ocean Warming and Acidification in a Widespread Marine Copepod** Victoria Glynn	
11.45 - 12.00	**Are mussel responses to ocean acidification consistent across natural laboratories of elevated CO_2?** Renata Ramos Gomes	**Modeling the spatiotemporal effects of ocean acidification and warming on Atlantic sea scallop growth to guide adaptive fisheries management** Halle Berger	**South Atlantic Ocean surface acidification in a high atmospheric CO_2 world** Raquel Renó De Oliveira	**Cross-generational plasticity and the interaction between environmental stressors** Jennifer Donelson	
12.00 - 12.15	**eDNA and visual transect examinations of benthic communities in Palau's natural laboratory environments** James Reimer	**Ocean acidification and blue food security: mapping two overlapping regime complexes** Annika Frosch	**Advancing our understanding of Ocean Alkalinity Enhancement natural analogs in the Gulf of Tehuantepec, Mexico** Cecilia Chapa-Balcorta	**Transgenerational plasticity responses differ across genetically distinct families in the Sydney rock oyster, Saccostrea glomerata** Laura Parker	
12.15 - 12.30	**Conservation needs for shallow marine vents and seeps?** Marco Milazzo	**Embedding climate risk modelling in pāua quota valuation to uphold socio ecological and financial values in Aotearoa New Zealand** Katherine Short	**Empirical models of total alkalinity in the Southwestern Atlantic: A regional approach to carbonate system estimation** Santiago Basañes	**Transgenerational maternally-provided lipid composition & quantification in early-life stages of Perna canaliculus under differing OA conditions** Jenn Jury	

12.30 - 12.45	**Speed Talks:** **Dietary plasticity allows a dominant herbivore to persist on simplified reefs under ocean warming and acidification** Annie Marek **Temperate coral populations naturally occurring in high pCO_2 environments** Núria Teixidó **From Inventory to Monitoring Readiness: Reassessing Naturally Acidified Marine Sites as High-CO_2 Natural Laboratories** Daniela Andrea Saltos Aguilar **Volcanically driven CO_2 emissions in Antarctic coastal systems: insights from Deception Island** Gabriel Navarro **Engineer of the future: the intertidal mussel *Brachidontes rodriguezii* (Bivalvia: Mytilidae) shows resilience under acidified conditions** María del Mar Eivers	**Speed Talks:** **Defining ecological vulnerability to ocean and coastal acidification in the Mid-Atlantic region of the United States** Emily Rivest **Carbonate Chemistry Variability and Air Sea CO_2 Fluxes on the Ghana Shelf in a Coastal Upwelling System** Maurice Oti Edusei **Real-Time Coastal Ocean Monitoring with Portable Mini-Mooring Network Enabling OA Event Reporting for Southern California** Charles Lindsay **A synthesis of data products for ocean carbonate chemistry** Liqing Jiang **Taking a dive into El Veril: Constraining coastal carbonate system variability through citizen science at a coastal site in Argentina** Carla Berghoff	**Using a natural analogue to assess Ocean Alkalinity Enhancement: An Aotearoa New Zealand case study** Cliff Law	**Genetic variation and phenotypic plasticity in the response to ocean acidification** Timothy Ravasi	
12.45 - 13.00	**Discussion**	**Discussion**	**Discussion**	**Both parent exposure to elevated pCO_2 and genetics influence embryo resilience to ocean acidification in the green-lipped mussel, *Perna canaliculus*** Norman Ragg	
13.00 - 13.45	**Lunch** in the Exhibition Area				
13.30 - 16.00	**Field Trip - Te Whanganui-a-Tara Waka Tour**				
13.45 - 15.45	**Workshops, Discussions & Trainings**				
	Room: Rongomātāne A Time: 13.45 - 15.45	Rongomātāne B Time: 13.45 - 15.45	Room: Rongomātāne C Time: 13.45 - 15.45	Room: Mātiu Time: 13.45 - 15.45	Room: Mākaro Time: 13.45 - 15.45	Room: Mokopuna Time: 13.45 - 15.45
	Beyond Tipping Points: A framework to safeguard biodiversity in a changing ocean in support of the GBF and BBNJ	**Ocean Acidification in Africa's High-CO_2 Future: From Observation to Action**	**Exploring the OA-mCDR Connection: A community discussion for OA Practitioners**		**Speed mentoring with Pier2Peer**	
15.30 - 16.00	**Afternoon Tea Break** in the Exhibition Area					

16.00 - 18.00	4A: Multiple stressors Room: Rongomātāne A Chairs: Catriona Hurd & Holly Koch	4B: Beyond tipping points Room: Rongomātāne B Chairs: Christopher Sabine & Valentine Loiseau	4C: Ocean Solutions: Understanding Ocean-based Climate Solutions: Ecological implications, monitoring needs, and financing pathways Room: Rongomātāne C Chairs: Scott Nodder & Svenja Halfter	4D: Modulating role of time Room: Mātiu Chairs: Piero Calosi & Lily Stokes	4E: Room: Mākaro
16.00 - 16.15 16.15 - 16.30	**Invited: Multiple drivers of change: Simple experimental approaches for a complex problem** Catriona Hurd			**Invited: Dynamics of surface CO_2 in the equatorial Pacific from satellite remote sensing: from seasonal to interannual and decadal scales** Shuangling Chen	
16.30 - 16.45	**Tolerance Throughout Time: Can Coralline Algae Acclimate to Future Ocean Acidification and Ocean Warming?** Denisa Berbece	**Ocean acidification monitoring in Suva harbor, Fiji** Azaria Pickering	**Ocean Alkalinity Enhancement Pelagic Intercomparison Project (OAEPIIP): Results from the New Zealand Experiment** Linn Hoffmann	**Creating evidence for action: bridging knowledge gaps and identifying opportunities for ocean acidification in the United Kingdom** Lily Anna Stokes	
16.45 - 17.00	**An integrated framework for evaluating reef persistence under multiple stressors** Ian Enochs	**Identifying priorities of the ocean acidification research community of the Pacific to minimize and address the impacts of ocean acidification** Kim Currie & Alleluia Taise-uili	**Evaluating the effect of ocean alkalinity enhancement in natural phytoplankton communities of New Zealand** Antonia Cristi	**Decadal Trends in Surface Ocean and Coastal Carbonate Chemistry from Time-Series Data: Insights into Drivers of Change** Treasure Warren	
17.00 - 17.15	**Impacts of the sunscreen oxybenzone on the oxidative proteome of the coral model Exaiptasia** Clinton Oakley	**A strategic plan to address and minimize the impacts of ocean acidification in Iceland** Hrönn Egilsdóttir	**Toward robust quantification of carbon uptake and CO_2 removal in seaweed ecosystems** Ju-hyoung Kim	**How do nutrient stores and CO_2 levels affect diatom responses to warming?** Emma Forss	
17.15 - 17.30	**Impacts of multiple stressors on a reef-building coralline alga** Guillermo Diaz-Pulido	**Time series of carbonate system variable in the coasts of Savaia and Mulinuu, Upolu Island, Samoa** Aleluia Taise-uili	**Sea urchin larval sensitivity to low pH varies among nearby seagrass meadows, highlighting the need for fine-scale monitoring** Jossias Alberto Duvane	**Resilience against the impacts of climate change in an ecologically and economically significant native oyster** Laura Parker	

17.30 - 17.45	**Multiparameter experiments constrain the sensitivity of coralline algae to environmental change** Robert Eagle	**Speed Talks:** **One coast, two stories? pH trends and dynamics in an urbanized bay and a pristine seagrass habitat** Iris Eline Hendriks **Tipping points beyond single stressors: spring floods advance hypo-salinity vulnerability thresholds in subarctic estuarine molluscs** Valentine Loiseau **The OA2O Project: Integrating Short-Term Ocean Acidification into NOAA's Operational Ocean and Weather Forecasting Systems** Jose-henrique Alves **A risk-based assessment of biodiversity changes from ocean acidification along the UAE's east coast** Silvana Birchenough **Toward Informed Action: A Systematic Review of Ocean Acidification Research in India** Amit Kumar	**Speed Talks:** **Buffering capacity of Ulva sp. on oyster larval survival and development under enhanced alkalinity and elevated CO_2 conditions** Laura Sordo **Spatial distribution of seawater pH and alkalinity across five sites on the North coast of Upolu, Samoa** Tina Taitaifono Mareko **Monitoring carbonate chemistry in coral restoration projects in Costa Rica** Celeste Sánchez-Noguera	**Speed Talks:** **Physical-biological processes regulating summer sea-air CO_2 exchanges and marine carbonate system along the Drake Passage and northern Antarctic Peninsula** Matheus Batista **One year of continuous pCO_2 measurements at the Antarctic glacier front: addressing a critical gap in Southern Ocean carbon budgets** Susana Flecha **Reconstructing the ocean carbon budget from observations with machine learning and an inverse method** Neill Mackay **Seasonal Variability Dominates Spatial Patterns of Particulate Organic Carbon Export in the Southern Ocean** Luisa Garcia	
17.45 - 18.00	**Does Ocean Acidification Exacerbate Bleaching? Multistressor Insights from Corals and Coralline Algae** Ashtyn Isaak			**Discussion**	
18.00 - 19.30	**Poster Session 2** in the Exhibition Area - canapes & drinks provided *Supported by Antarctic Science Platform*				
19.20 - 21.30	**Movie Night** at Soundings Theatre, Te Papa The Ocean Acidification Alliance presents "CHANGING WATERS: Time for action on ocean acidification" with panel discussion				

THURSDAY 15 OCTOBER

08.00 - 18.00	**Registration & Exhibition Open** (Level 1, Tākina Wellington Convention & Exhibition Centre)
07.30 - 09.00	**Workshop:** OARS Framework for Action: An Introduction to Co-Designing Ocean Acidification Research for Decision Making (Room: Mākaro)
09.00 - 09.10	**Welcome in Rongomātāne A**
09.10 - 09.50	**Keynote 5: Nianzhi Jiao (Xiamen University)** A BBNJ Compliant Roadmap for Ocean Negative Carbon Emissions in a High-CO_2 World
09.50 - 10.30	**Keynote 6: Helen Findlay (Plymouth Marine Laboratory)** From Bays to Boundaries: A Journey Across Scales in a High CO_2 Ocean
10.30 - 11.00	**Morning Tea Break** in the Exhibition area

11.00 - 13.00	5A: Multiple Stressors: Assessing high-CO_2 and multi-stressor effects on aquatic organisms using natural laboratories of climate change Room: Rongomātāne A Chairs: Riccardo Rodolfo-Metalpa & Davide Spatafora	5B: Beyond Tipping Points: Actionable Oceans: Putting ocean acidification science and information into the right hands Room: Rongomātāne B Chairs: Liz Perotti & Larissa Dias	5C: Ocean Solutions: Addressing coastal acidification and enhancing carbon sinks through coordinated management of wastewater, nutrients, and ecosystems Room: Rongomātāne C Chairs: Chuanlun Zhang & Imke M Böök	5D: Changes in biodiversity. Buffer or Booster? When primary producers mitigate or amplify ocean acidification Room: Mātiu Chairs: Marco Munari & Carla Edworthy	5E: Technological Advances: Certified reference materials (CRMs) for seawater carbonate chemistry measurements Room: Mākaro Chairs: Dwight Gledhill & Madison Wood
11.00 - 11.15	**Beyond winners and losers: the role of the sponge microbiome in climate acclimation** James Bell	**OA on the ground: a virtual tour of NOAA's ocean acidification tools and real-world impact** Elizabeth Perotti & Elizabeth Wright-Fairbanks	**Moving from monitoring to action in the north-east Atlantic** Helen Findlay	**AEOLUS: studying AEOLian macroalgal forests structure and functioning to Support biodiversity under ocean acidification** Marco Munari	**Ensuring robust and resilient certification and production of reference materials for CO_2-in-seawater measurements** Madison Wood & Dwight Gledhill, NOAA 11.00 - 11.10 Madison Wood 11.10 - 11.20 Dwight Gledhill 11.20 - 11.30 Denis Pierrot 11.30 - 11.40 Peter Croot 11.40 - 11.50 Hiroshi Uchida 11.50 - 12.00 Q&A 12.00 - 13.00 Breakout Group Discussions
11.15 - 11.30	**Limited Adaptation of Crustose Coralline Algae in a Carbon Dioxide Vent** Holly Koch	**Puget Sound Acidification and Impacts (PSAI): A data product for estimating acidification in Puget Sound and surrounding areas** Larissa Dias	**Sediment–Seagrass Coupling Enhances Alkalinity-Driven CO_2 Uptake in Seagrass Mesocosms** Wen-Chen Chou	**Do coccolithophores boost the impact of ocean acidification?** Sarah Cryer	
11.30 - 11.45	**Physiological and cellular mechanisms of multi-stressor resilience in reef fishes from a natural climate change analogue in New Caledonia** Hayley Kennedy	**Love Rimurimu: Turning Kelp Restoration into Community Action in Te Whanganui-a-Tara** Hayley Stent	**Development of a biogeochemical modeling approach to investigate present and project future states of ocean acidification in Tokyo Bay, Japan** Lawrence Patrick Bernardo	**Sediment-water fluxes of DIC and alcalinity in intertidal salt marshes: Blue C storage and acidification mitigation** Lionel Denis	
11.45 - 12.00	**Uncovering cryptic reef biodiversity in coral rubble using eDNA at a natural CO_2 seep** Britta Fiedler	**From science to practice: Collaborative carbonate system monitoring for scallop aquaculture decision making in northern Peru** Natalie Bravo Senmache	**Wastewater treatment plants as hubs for marine carbon dioxide removal: Insights from a cleantech startup** Simon Reid	**Phytoplankton community response under coastal acidification scenarios within an estuarine mangrove ecosystem** Anwesha Ghosh	
12.00 - 12.15	**Ocean acidification drives negative skeletal responses in sea urchins across experimental and natural systems** Yiyi Li	**Implications of monitoring and modeling results of acidification in Japan coasts** Masahiko Fujii	**Carbon Capture and Ecosystem Effects of Okinawan Seaweed farms** Cheyenne Bridge	**Dynamics of the marine carbonate system under the influence of Sargassum in the Mexican Caribbean** Cecilia Chapa-Balcorta	
12.15 - 12.30	**The brain transcriptional program and behavioural responses of the Pajama cardinalfish under multiple environmental stressors** Davide Spatafora	**Localized biogeochemistry and seasonality govern carbonate chemistry in estuarine mangrove ecosystems** Punyasloke Bhadury	**Discussion**	**Physics or Biology: which drives the variability of the carbonate system in a coastal area of the Southwest Atlantic Ocean?** María Del Mar Eivers	

12.30 - 12.45	**Roca Redonda, Galápagos: Baseline evidence supporting the need for sustained monitoring of a tropical natural CO_2 laboratory** Daniela Andrea Saltos Aguilar & Mario Armando Hurtado Domínguez	**Discussion**		**Discussion**		
12.45 - 13.00	**Discussion**					
13.00 - 13.45	**Lunch** in the Exhibition Area					
13.15 - 14.30	**Field Trip - Te Whanganui-a-Tara Harbour Tour**					
13.30 - 16.00	**Field Trip - Te Whanganui-a-Tara Waka Tour**					
13.45 - 15.45	**Workshops, Discussions & Trainings**					
	Room: Rongomātāne A Time: 13.45 - 15.45	Rongomātāne B Time: 13.45 - 15.45	Room: Rongomātāne C Time: 13.45 - 15.45	Room: Mātiu Time: 13.45 - 14.45	Room: Mākaro Time: 13.45 - 15.45	Room: Mokopuna Time: 13.45 - 15.45
	GOA-ON Workshop: Building on our strengths and looking forward		**Ocean acidification as a collective action problem**	**Blue carbon ecosystems and innovative technologies for enhancing carbon sequestration**	**Pacific Islands and Territories ocean acidification network country planning workshop**	**Designing and analysing multiple driver experiments - Day 2**
15.30 - 16.00	**Afternoon Tea Break** in the Exhibition Area					
16.00 - 18.00	**6A: Multiple stressors** Room: Rongomātāne A Chairs: Philip Boyd & Barbara Graham	**6B: Changes in biodiversity** Room: Rongomātāne B Chairs: Ben Harvey & Callum Hudson	**6C: Ocean Solutions: Understanding Ocean-based Climate Solutions: Ecological implications, monitoring needs, and financing pathways** Room: Rongomātāne C Chairs: Svenja Halfter & Michelle Simone	**6D: Technological advances (General)** Room: Mātiu Chairs: Carla Berghoff & Richard Karp	**6E: Knowledge systems: Rebuilding Coastal Ecosystems Through Transformative Change: Coastal people and a changing world** Room: Mākaro Chairs: Ohad Peleg & Namrata Chand	
16.00 - 16.15	**The diatom shuffle: how a greenhouse ocean is selecting diatom species of the future** Katherina Petrou	**Invited: Multiple stressors, shifting biodiversity, and the reorganization of ecosystem functioning** Steeve Comeau		**Invited: Electrochemical Acid Sequestration to Ease Ocean Acidification (EASE-OA)** Brendan Carter	**One of natures' great events rises from the ashes of an extinguished tropical cyclone** Peter Russell	
16.15 - 16.30	**Compound Coastal Stress from Marine Heatwaves in a High-CO_2 Gulf of Thailand** Dhrubajyoti Samanta				**Kaimoana and Climate: Mātauranga Māori as a Pathway to Coastal Ecosystem Restoration** Mawera Karetai	

16.30 - 16.45	**Exploring the potential of AI approaches to unravel the effects of complex climate change on marine phytoplankton** Philip Boyd	**Trait-based quantification of biological responses to ocean acidification across global marine time series** Natalija Suhareva	**Ocean Alkalinity Enhancement as an Ocean-Based Climate Solution: Ecological Implications for Coastal Sediment Biogeochemistry** Michelle Simone	**Sequential Treatment Application Robot Version 2: A robotic platform for high-replication, continuous ocean acidification experimentation and monitoring on marine organisms** Richard Karp	**The Pacific-Village NbS Framework: Indigenous-Grounded and Modern Science Supported Adaptation - A Case-Study of Saoluafata, Samoa** Mino Cleverley & Tupu Ioane-Cleverley
16.45 - 17.00	**The joint effect of changes in temperature and CO_2 on growth and functional traits in a model diatom** Sinéad Collins	**Ocean Acidification Biodiversity Task Force** Kirsten Isensee	**Ocean observing technologies and strategies for Ocean Alkalinity Enhancement Research** Dariia Atamanchuk	**ESA-funded activities for enhancing satellite-based ocean carbon science** Roberto Sabia	**A giant kelp forest on the edge** Ohad Peleg
17.00 - 17.15	**A climate change risk assessment for the carbonate counter pump** Benjamin Gustafson	**Understanding mollusc host – microbe interactions in a changing ocean** Elliot Scanes	**Biological thresholds for mCDR carbonate chemistry** Paul McElhany	**Single-cell measurement of carbon allocation under environmental change** Christina McGraw	**The impacts of marine heatwaves and low salinity on blackfoot abalone (pāua) in Aotearoa/New Zealand** Katie Fenton
17.15 - 17.30	**Pseudoreplication in experiments is, or is not, a sin: from debate to practical analysis with model averaging tools** Peter Dillingham	**Projecting the multi-stressor at regional scale for conservation and restoration of marine ecosystems** Yuri Artioli	**Linking Ocean Acidification to the Spatial Distribution of *Rochia niloticus* in Tiaro Bay, Guadalcanal, Solomon Islands** Lindon Havimana & Wycliff Tupiti	**Progress in Ocean Acidification Observing Capacity in the Argentine Atlantic** Carla Berghoff	**Panel Discussion**
17.30 - 17.45	**Cellular and Molecular Impacts of Ocean Acidification on Fish Brain Function at Single-Nuclei Resolution** Celia Schunter	**Ocean Acidification Effects on Reproduction and Early Life Stages of Marine Teleost Fishes: A Synthesis** Silvana Birchenough	**mCDR Research and Initiatives in Southeast Asia** Aileen Tan		
17.45 - 18.00	**Discussion**	**Early exposure shapes physiological resilience to chronic ocean acidification in embryonic sharks** Rebecca Bridge	**Discussion**	**Discussion**	
19.00 - 23.30	**Gala Dinner** at Wellington Foyer, Te Papa Celebrate in style at our Gala Dinner, an evening of great food, entertainment, and connection. This is not a traditional seated dinner. Instead, guests will enjoy a relaxed social dining experience featuring a buffet dinner and seafood station, with a combination of seating and bar leaners available throughout the venue. The format is designed to encourage delegates to mix, mingle, and connect with colleagues and friends from across the global OA community while enjoying excellent food and refreshments. Arrival drinks in Te Papa entrance from 7.00-7.30pm, with guests moving into Wellington Foyer at 7.30pm. ***Tickets inclusive of full registrations but a RSVP is required to attend. Your ticket is on your name badge.***				

FRIDAY 16 OCTOBER

06.30 - 09.30	**Field Trip - Zealandia Te Māra a Tāne Dawn Tour**					
08.00 - 16.00	**Registration & Exhibition Open** (Level 1, Tākina Wellington Convention & Exhibition Centre)					
09.00 - 11.00	**Workshops, Discussions & Trainings**					
	Room: Rongomātāne A Time: 09.00 - 11.00	Rongomātāne B Time: 09.00 - 11.00	Room: Rongomātāne C Time: 09.00 - 11.00	Room: Mātiu Time: 10.00 - 11.00	Room: Mākaro Time: 09.00 - 11.00	Room: Mokopuna Time: 09.00 - 11.00
	Elevating coastal monitoring with traditional indicators and community partnerships	**Designing and analysing multiple driver experiments - Day 3**	**Integrating ocean carbon observations and models**	**mCDR: A policy perspective**	**Measuring Dissolved CO_2 Across the Ocean Water Column: Technologies, applications and emerging developments**	
11.00 - 11.30	**Morning Tea Break** in the Exhibition area					
11.30 - 13.00	**7A: Multiple stressors** Room: Rongomātāne A Chairs: Francis Chan & Katie Fenton	**7B: Changes in biodiversity. Buffer or Booster? When primary producers mitigate or amplify ocean acidification** Room: Rongomātāne B Chairs: Sam Rastrick & Ashtyn Isaak	**7C: Modulating role of time (General)** Room: Rongomātāne C Chairs: Carla Berghoff & Lisandro Ariel Arbilla	**7D: Technological advances: Charting the Future: Emerging technologies for ocean acidification monitoring** Room: Mātiu Chairs: Kaity Goldsmith & Liza Wright-Fairbanks	**7E: Multiple Stressors: Ocean acidification multiple stressor effects on North American species** Room: Mākaro Chairs: Helen Gurney-Smith & Kristina Barclay	
11.30 - 11.45	**Ocean deoxygenation and marine heatwaves: scaling interacting stressors from organisms to ecosystems** Francis Chan	**Towards understanding the role of coastal habitats as ocean acidification refugia within a seascape context** Carla Edworthy	**Interannual and Seasonal Variability of CO_2 Parameters in the Tropical Atlantic Ocean** Frederic Bonou	**Sustained pH Observations from Underwater Glider Networks in the US** Elizabeth Wright-Fairbanks	**Embracing the Complexity of Life: investigating intraspecific variation across multiple levels of biological organisation within a multistressor context** Lauric Feugere	
11.45 - 12.00	**Repeated acute stressors under chronic warming: seasonal resilience of the green sea urchin across behavioural, reproductive and molecular responses** Valentine Loiseau	**Can integrated multi-trophic aquaculture help reduce the effects of ocean acidification on economically important filter feeders** Sam Rastrick	**Two decades of sea-air CO_2 exchanges in the northern Antarctic Peninsula (1999-2019): Spatiotemporal variability and pCO_2 drivers** Thiago Monteiro	**Advancing Autonomous Total Alkalinity Measurements for Ocean Acidification Monitoring and Ocean Alkalinity Enhancement Applications** Christopher Sabine	**Carbonate chemistry as a multiple stressor: experiments on parameters affecting Dungeness crab larvae** Paul McElhany	
12.00 - 12.15	**A framework for exploring the impacts of ocean acidification on food security** Ellycia Harrould-Kolieb	**Field based observations to understand ecological interactions with carbonate chemistry between seagrass and coral habitats** Helen Findlay	**Seasonal variability of air-sea CO_2 fluxes in the Northern Patagonian Shelf** Lisandro Ariel Arbilla & Carla Florencia Berghoff	**Development of high-frequency dissolved inorganic carbon and pH sensors to study in-situ effects of ocean acidification on fisheries** Zhaohui Aleck Wang	**Can increased feeding mitigate the adverse effects of climate change in juveniles of *Atrina maura*?** Tania Libertad López-Medina	

12.15 - 12.30	**Effects of abiotic factors on the behavior and luminescence of the sea pen *Pennatula phosphorea*** Laurent Duchatelet	**Florida Gulf Coast Spatio-Temporal Assessment of Acidification Events in Relation to Harmful Algal Blooms** Emily Hall	**CO_2 Outgassing Mechanisms in the Oxygen Minimum Zone of the Mexican Tropical Pacific** Asbel Itahi De La Cruz Ruiz & Cecilia Chapa Balcorta	**Improving Accessibility for Coastal Carbonate Chemistry Measurements: Expansion of Use Cases for the pCO_2 to Go, a Carbon Dioxide Sensor** Kaitlyn Lowder	**Comparative stress indicators of juvenile Dungeness crabs (M. magister) exposed to simulated upwelling profiles** Nyazia Sajdah-Bey
12.30 - 12.45	**Discussion**	**Discussion**	**CDOM-Driven Light Attenuation Modulates Productivity and Hypoxia in an Estuarine System** Rui Jin	**From tropical shores to extreme winter storms: USV adaptive sampling for ocean carbonate chemistry** Adrienne Sutton	**Shell shock: Investigating four decades of ocean acidification and warming on Atlantic sea scallop shells** Halle Berger
12.45 - 13.00			**Discussion**	**Discussion**	**Discussion**
13.00 - 14.00	**Lunch** in the Exhibition Area				
14.00 - 15.30	**8A: Multiple stressors** Room: Rongomātāne A Chairs: Christina Frieder & Gabriela Wood	**8B: Changes in biodiversity** Room: Rongomātāne B Chairs: Chris Harley & Ying Long	**8C: Modulating role of time** Room: Rongomātāne C Chairs: Michael Ellwood & Andreas Eich	**8D: Knowledge systems (General)** Room: Mātiu Chairs: Claudine Hauri & Miriama Vuiyasawa	**8E:** Room: Mākaro
14.00 - 14.30	**Invited: The UN-endorsed Global Estuaries Monitoring (GEM) Programme: A Collaborative Effort to Assess and Mitigate Anthropogenic Pollution in Urban Estuaries Worldwide** Kenneth Leung	**Invited: Effects of ocean acidification on shellfish growth and vulnerability to thermal stress, hypoxia, and predators** Christopher Harley	**Invited: Understanding the role of crustose coralline algae in buffering the carbonate system in shallow reef environments** Michael Ellwood	**Invited: Turning Ocean Acidification Monitoring into Action: Lessons from the Pacific Islands Ocean Acidification Centre** Katy Soapi	
14.30 - 14.45	**Quantifying the impact of ocean acidification on the aerobic habitat of marine organisms** Christina Frieder	**Energy reallocation and biomineralization responses of coastal marine calcifiers under future ocean acidification scenarios** Ying Long	**Legacy effects of marine heatwaves: Impacts of recurring bleaching events on microbiome and genomic signatures of *Acropora hyacinthus*** Andreas Eich	**Mātauranga Hapū Navigating High-Carbon Dioxide (CO_2) in Te Takutai Moana** Tumanako McLeod	
14.45 - 15.00	**Membrane remodeling mediates differential acclimation and resilience to marine heatwaves in temperate sponges** Gabriela Wood	**Ocean Acidification Depresses Skeletal Mineralisation in a Temperate Neonatal Shark** Oscar Speed		**Indigenous Knowledge as Living Practice for a Changing Ocean: Experiences from Alaska** Henry Huntington	
15.00 - 15.15	**Multiple climate change stressors on coral reefs: potential for interactions between acidification, hypoxia and heat, and implications for reef resilience** Verena Schoepf	**Long-term exposure of Spotted rose snapper (*Lutjanus guttatus*) to low-pH in an aquaculture setting** Celeste Sánchez-Noguera	**Changes in energy metabolism in newly hatched small spotted catsharks reared under ocean acidification conditions** Rebecca J. Bridge	**Influence of submarine groundwater discharge on carbonate chemistry dynamics of a coastal coral reef system in East Portland, Jamaica** Debbie-Ann D S Gordon-Smith	

15.15 - 15.30	**Discussion**	**Impact of climate change on primary production in the Coral Sea** Inès Mangolte	**Discussion**	**Discussion**	
15.30 - 16.00	**Closing and Student Prizes** in the Exhibition Area				
16.00 - 18.00	**Farewell Function** – a festive goodbye with a meal and drinks in the Exhibition Area				

SATURDAY 17 OCTOBER	
11.00 - 13.30	**Field Trip - Love Rimurimu Guided Scorching Bay Snorkel Tour (AM group)**
13.00 - 15.30	**Field Trip - Love Rimurimu Guided Scorching Bay Snorkel Tour (PM group)**

POSTERS

POSTER SESSION 1

TUESDAY 13 OCTOBER, 18.00 - 19.30

POSTER SESSION 2 – *Supported by Antarctic Science Platform*

WEDNESDAY 14 OCTOBER, 18.00 - 19.30

POSTER TITLE	PRESENTERS	POSTER SESSION	POSTER NUMBER
Beyond tipping points – translating science to action			
The OA2O project: Integrating short-term ocean acidification into NOAA's operational ocean and weather forecasting systems	Jose-henrique Alves	Wednesday*	P2.01
A risk-based assessment of biodiversity changes from ocean acidification along the UAE's east coast	Silvana Birchenough	Wednesday*	P2.02
The Oleander transect: A ship-of-opportunity platform for high-frequency ocean carbon observations	Matt Enright	Tuesday	P1.01
Localized acidification in a giant clam ocean nursery highlights the immediate need for carrying capacity studies	Charissa Ferrera	Tuesday	P1.02
One coast, two stories? pH trends and dynamics in an urbanized bay and a pristine seagrass habitat	Iris Eline Hendriks	Wednesday*	P2.03
A synthesis of data products for ocean carbonate chemistry	Liqing Jiang	Wednesday*	P2.04
Toward informed action: A systematic review of ocean acidification research in India	Amit Kumar	Wednesday*	P2.05
Tipping points beyond single stressors: Spring floods advance hypo-salinity vulnerability thresholds in subarctic estuarine molluscs	Valentine Loiseau	Wednesday*	P2.06
Defining ecological vulnerability to ocean and coastal acidification in the Mid-Atlantic region of the United States	Emily Rivest	Wednesday*	P2.07
An initial assessment of marine carbon dioxide removal for Sāmoa	Ryan Taei	Tuesday	P1.03
Global-driven changes in biodiversity and ecosystem resilience			
Impact of algal deposition (*Vaucheria* sp.) on DIC and alkalinity fluxes of an intertidal salt-marsh colonized by *Spartina anglica*	Lionel Denis	Tuesday	P1.04
Living in different tidal niches: Acute metabolic response of Adriatic gastropods to low pH	Sanja Grđan	Tuesday	P1.05
Effects of Prolonged Warming on Macroinvertebrates Assemblages in Mesocosms in Sydney, Australia	Nate Howarth	Tuesday	P1.06
Temperate sponge microbiomes as drivers of holobiont resilience to marine heatwaves	Usangi Maldeniya	Tuesday	P1.08
Spatial distribution of seawater pH and alkalinity across five sites on the north coast of Upolu, Samoa	Tina Taitaifono Mareko	Wednesday*	P2.08
A decade-long reconstructed pH time series at the Strait of Gibraltar: Gap-filling strategies for continuous ocean acidification monitoring	Alejandro Roman	Wednesday	P2.09
Long-Term pH Trends and Spatiotemporal Variability of the Carbonate System in Jakarta Bay	Camellia Tito	Wednesday	P2.10
Multiple stressors' effects on marine organisms			
Red seaweed aquaculture in a changing ocean: Growth and biochemical responses to ocean acidification	Gunnar Cervin, Alexandra Kinnby	Wednesday	P2.11
Transcriptomic responses of a bioeroding sponge to interacting ocean change drivers	Christopher Edward Cornwall	Tuesday	P1.09
Bayesian modelling of growth phase transitions in phytoplankton cultures	Madusha Dilshani	Wednesday	P2.12
The energetic cost of long-term exposure to ocean acidification in the commercial scallop *Zygochlamys patagonica*	María del Mar Eivers	Tuesday	P1.10
Early life-stage responses to ocean acidification in the invasive estuarine shrimp *Palaemon macrodactylus*	María del Mar Eivers	Tuesday	P1.11

Engineer of the future: The intertidal mussel *Brachidontes rodriguezii* (Bivalvia: Mytilidae) shows resilience under acidified conditions	María del Mar Eivers	Wednesday*	P2.13
Genetics and ontogeny are key factors influencing thermal resilience in a culturally and economically important bivalve	Norman Ragg	Wednesday	P2.14
Nitrogen-driven changes in internal C:N stoichiometry influence organic carbon release and ocean acidification responses in the giant kelp *Macrocystis pyrifera*	Pamela Fernandez	Wednesday	P2.15
Breaking bad curves: Ocean acidification shifts multiomics dose responses to a pollutant in an Arctic copepod	Lauric Feugere	Wednesday	P2.16
Relating subsurface burrow structures and the associated microbial community to seafloor sediment biogeochemistry in a changing world	Rachel Hale	Tuesday	P1.12
Key role of heterotrophy in mitigating thermal stress in corals naturally exposed to extreme environmental conditions	Layla Iijima	Tuesday*	P1.13
Simulated atmospheric heatwave suppresses immune function in Sydney rock oyster (*Saccostrea glomerata*)	Jasmin Kamarulzaman	Tuesday*	P1.14
Ocean acidification offsets heatwave-driven recruitment failure and reshapes projected range shifts in the canopy-forming alga *Sargassum macrocarpum*	Yeo Jin Yoon, Ju-hyoung Kim	Tuesday	P1.15
Differential ocean acidification effects on two economically important clams from southern South America	Maria Eugenia Lattuca	Tuesday	P1.16
Fatty acid response of Antarctic ascidia *Cnemidocarpa verrucosa* to ocean warming and acidification	Maria Eugenia Lattuca	Tuesday	P1.17
Effects of ocean warming and acidification on an ecologically important echinoderm at its southernmost distribution limit	Maria Eugenia Lattuca	Wednesday	P2.17
Dietary plasticity allows a dominant herbivore to persist on simplified reefs under ocean warming and acidification	Annie Marek	Wednesday*	P2.18
Environmental variability in pH and temperature drives reef carbonate dynamics in the Mexican Caribbean	Francisco Medellín Maldonado	Wednesday	P2.19
Mapping potential multi-stressor exposure in marine systems: A 4D GIS-based approach	Virginia Morejón	Tuesday*	P1.18
The involvement between seafloor CO_2 eruptions in the Tachibana Bay and the marine environment and organisms	Kiminori Shitashima	Tuesday	P1.19
Fluorescence and polarised-light microscopy of Xenia spp. sclerites reveal resilient biomineralisation under ocean acidification, nitrate enrichment and competitive stress	Susana Marcela Simancas Giraldo	Tuesday	P1.20
Temperate coral populations naturally occurring in high pCO_2 environments	Núria Teixidó	Wednesday*	P2.20
New Caledonian Large Benthic Foraminiferal S/Ca signatures as sulfate seawater proxies: Results from controlled growth experiments	Tobias Walla	Wednesday	P2.21
Ocean-based solutions			
Bass Strait ocean alkalinity enhancement scenarios reveal the fate of potential carbon uptake	Harris Anderson	Wednesday	P2.22
The third decadal U.S. carbon cycle science plan	Leticia Barbero	Wednesday	P2.23
Can surface salinity predict alkalinity for tropical, data-scarce, shelf regions? A case study from the western South Atlantic	Manoela Barbosa	Wednesday	P2.24
Nutrient-activated biochar cultch: Improving shellfish larval settlement and habitat resilience in British Columbia under combined climate stressors	Bruce Bradley	Wednesday	P2.25
Incubation-derived biogeochemical fluxes of macrophytes: Implications for seaweed aquaculture carbon sequestration	Cheyenne Bridge	Wednesday	P2.26
Survival and lipid content of *Calanus pacificus* under dynamic ocean alkalinity enhancement exposure scenarios	Georgina Cepeda	Wednesday	P2.27
Seagrass-derived DOC enhances bacterial growth and reveals a potential RDOC carbon sink	Tzong-yueh Chen	Wednesday	P2.28
Riverine flood pulses restructure estuarine pico-sized chlorophyte communities through salinity shifts at a subtropical river–sea interface	Kuo-Ping Chiang	Tuesday	P1.21
Sedimentary alkalinity production sustains low pCO_2 in seagrass meadows: Evidence from a semi-enclosed lagoon	Wen-Chen Chou	Tuesday	P1.22
Does alkalinity enhancement affect survival and shell integrity of Aotearoa New Zealand mussels?	Vonda Cummings	Tuesday	P1.23
Bioturbation is a key driver influencing alkalinity release from coastal and shelf sediments	Astrid Hylén	Wednesday	P2.29
Quantifying farmed kelp atmospheric carbon dioxide uptake and release through localized air-sea flux measurements in the northern Gulf of Alaska	A Kelley, Cale Miller	Wednesday	P2.30

The Surface Ocean-Lower Atmosphere Study (SOLAS) 3.0: from science towards solutions	Li Li	Wednesday	P2.31
Ocean acidification in Papua New Guinea: Challenges, opportunities, and next steps for action	Maisy Lus	Tuesday*	P1.24
The effects of marine carbon dioxide removal (mCDR) carbonate chemistry conditions on zoea stage Dungeness crab (*Metacarcinus magister*)	Paul McElhany	Wednesday	P2.32
Impact of improved marine atmospheric boundary CO_2 measurement on regional sea-air CO_2 fluxes	Denis Pierrot	Wednesday	P2.33
The response of giant kelp, *Macrocystis pyrifera*, to simulated ocean alkalinity enhancement (OAE)	Katherine Rivers	Tuesday	P1.25
Natural alkalinity generation through beach sand weathering and potential feedbacks of olivine addition	Mikayla Robson	Tuesday	P1.26
Establishing and strengthening ocean acidification monitoring program and nature-based solutions in Kiribati	Manibua Rota	Tuesday	P1.27
Monitoring carbonate chemistry in coral restoration projects in Costa Rica	Celeste Sánchez-Noguera	Wednesday*	P2.34
Buffering capacity of *Ulva* sp. on oyster larval survival and development under enhanced alkalinity and elevated CO_2 conditions	Laura Sordo	Wednesday*	P2.35
Present and future alkalinity cycling in the east Otago coastal zone	Sebastiaan van de Velde	Tuesday	P1.28
Technological advances in marine climate change research			
BGC-Argo floats and SOCAT as a pCO_2 observing system in the Southern Ocean: A multi-model subsampling assessment	Lisandro Ariel Arbilla	Tuesday	P1.29
Metabolic dynamics of an offshore coral reef in the central Red Sea: Observations from autonomous sensors	Sarah E. Cryer	Wednesday	P2.36
Carbonate chemistry variability and air-sea CO_2 fluxes on the Ghana shelf in a coastal upwelling system	Maurice Oti Edusei	Wednesday*	P2.37
Real-time coastal ocean monitoring with portable mini-mooring network enabling OA event reporting for southern California	Charles Lindsay	Wednesday*	P2.38
Reconstructing the ocean carbon budget from observations with machine learning and an inverse method	Neill Mackay	Wednesday*	P2.39
From inventory to monitoring readiness: Reassessing naturally acidified marine sites as high-CO_2 natural laboratories	Daniela Andrea Saltos Aguilar, Mario Armando Hurtado Domínguez	Wednesday*	P2.40
Carbonate chemistry insights from a deep-sea octopus nursery	Celeste Sánchez-Noguera	Tuesday	P1.30
How can we notice high CO_2 in the ocean? – A proper indicator for detecting high CO_2 concentration	Toru Sato	Tuesday	P1.31
Working across knowledge systems in a high-CO_2 world			
Knowing the Ocean: Pacific Traditional Knowledge and Coastal Monitoring	Adi Bunonitokalau Baledrokadroka	Tuesday	P1.32
Carbonate chemistry at the top of the world: Observations from a 90°N trans-Arctic ship of opportunity transit	Leticia Barbero	Tuesday	P1.33
Physical-biological processes regulating summer sea-air CO_2 exchanges and marine carbonate system along the Drake Passage and northern Antarctic Peninsula	Matheus Batista	Wednesday*	P2.41
Carbonate system observations during a capacity-building expedition across the tropical Atlantic (March 2025)	Carla Berghoff	Tuesday	P1.34
Taking a dive into El Veril: Constraining coastal carbonate system variability through citizen science at a coastal site in Argentina	Carla Berghoff	Wednesday*	P2.42
Monitoring of physico-chemical parameters related to ocean acidification: The case of Mauritius	Kishore Boodhoo	Tuesday*	P1.35
Integrating eddy covariance and carbonate chemistry to constrain CO_2 fluxes in a large shallow lake	Mark Fenwick	Tuesday	P1.36
One year of continuous pCO_2 measurements at the Antarctic glacier front: Addressing a critical gap in Southern Ocean carbon budgets	Susana Flecha	Wednesday*	P2.43
Seasonal variability dominates spatial patterns of particulate organic carbon export in the Southern Ocean	Luisa Garcia	Wednesday*	P2.44
Integrating te ao Māori into the regeneration of kelp forests within Te Whanganui a Tara, Aotearoa	Māia-te-oho Holman-Wharehoka	Tuesday	P1.37

Regional-scale climatology of global change CO_2 flux on the ocean surface for the North Atlantic and the Arctic	Małgorzata Kitowska, Iwona Niedźwiecka	Tuesday	P1.38
Direct measurements of CO_2 fluxes over the Arctic Ocean: extreme conditions on gas transfer dynamics	Iwona Niedźwiecka	Tuesday	P1.39
Volcanically driven CO_2 emissions in Antarctic coastal systems: Insights from Deception Island	Gabriel Navarro	Wednesday*	P2.45
Pacific Islands ocean acidification centre	Miriama Vuiyasawa, Azaria Pickering, Katy Soapi	Tuesday*	P1.40

**Speed Talk*