Provisional Programme (at 17.06.26)

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** Room: Mātiu	**Advancing Policy Action on Ocean Acidification in the Pacific Island Region** Room: Mākaro	**COBS** Room: Mokopuna
17.30 - 19.30	**Icebreaker** in City Centre at Shed 22 (4 Taranaki 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 A**				
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 Chair: TBC	**1B: Knowledge systems: Understanding a high-CO_2 Arctic: observations, modeling, impacts, and emerging approaches across scientific and Indigenous knowledge systems** Room: Rongomātāne B Chair: TBC	**1C: Ocean Solutions: Global Ocean Acidification Observing Network Perspectives on Ocean Solutions** Room: Rongomātāne C Chair: TBC	**1D: Technological advances: New approaches for quantifying variability and human impacts on ocean biogeochemistry from sparse observational data** Room: Mātiu Chair: TBC	**1E: Global-driven changes in biodiversity: OA in Mediterranean** Room: Mākaro Chair: TBC
11.45 - 12.00	**Molecular basis and behavioral adjustments reveal potential local adaptation to acidifying oceans, a lesson from natural analogues** Timothy Ravasi	**Bringing Together Indigenous Observations and Ocean Modeling to Understand Arctic Extreme Events** Claudine Hauri	**Biological thresholds and monitoring needs for ocean alkalinity enhancement across marine taxa** Nina Bednarsek	**Drivers of Coastal Acidification in the surface and subsurface waters of the Northern California Current Ecosystem** Richard Feely	**Contrasting Buffering Responses to Eutrophication in the Sea of Marmara and Northeastern Mediterranean Revealed by Advanced Indices** Polen Alemdar

12.00 - 12.15	**Temperature structures sea urchin responses to ocean acidification across global CO_2 seeps** Callum Hudson	**Community and Indigenous-led observations are essential for understanding the effects of marine climate change** Donna Hauser	**Addressing the current metrology challenges involved in quantification of baseline conditions for mCDR in coastal and open ocean environments** Peter Croot	**Ocean Carbon Accumulation and Variability Revealed by a High-Resolution Mapped Observational Data Product** Jonathan Sharp	**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
12.15 - 12.30	**The effects of ocean acidification to coral eco-physiology seen from shallow CO_2 vents studies** Sylvain Agostini	**Sensitivity of Arctic Ocean CO_2 Uptake to Carbon Release from Seafloor Sediments** Yuanxin Zhang	**Diel pH and pCO_2 trends in estuarine mariculture sites in Pangasinan, Northwestern Philippines** Jherome Co & Charissa Ferrera	**Machine Learning Constraints on Environmental Controls of Particulate Inorganic and Organic Carbon from Observations** Rui Jin	**Compound emergence of warming, deoxygenation and acidification across western Mediterranean water masses** Susana Flecha
12.30 - 12.45	**Assessment of community photosynthesis of macroalgal beds using volcanic CO_2 seep** Shigeki Wada	**Ocean acidification may increase the biological impact of legacy metal pollution; a study of mine waste deposits in Arctic Norway** Sam Rastrick	**Carbonate chemistry and Ocean Acidification monitoring effort in Cameroon (Gulf of Guinea): current knowledge and perspectives** Ulrich Bilounga	**A novel regression framework for reconstructing the Southern Ocean carbon sink using merged ship and float observations** Sangmin Song	**Seagrass Carbon Sinks in a Changing Ocean: Insights from Multi-Scale Responses to Ocean Acidification** Theodor Kindeberg
12.45 - 13.00	**Limited Adaptation of Crustose Coralline Algae in a Carbon Dioxide Vent** Holly Koch	**Discussion/Speed Talks**	**Dynamic of Benthic Metalbolism and Fluxes in Seagrass Meadows: Implications for Coastal Carbon Storage and Biogeochemical Buffering** Nusrathul Husna Sheikh Hussain	**Spatial variability of seawater pH along the northern Antarctic Peninsula during the austral summer** Thiago Monteiro	**Discussion/Speed Talks**
13.00 - 13.45	**Lunch** in the Exhibition Area				
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 Chair: TBC	2B: Knowledge systems (general): The River-Ocean Nexus: Freshwater Acidification in a High-CO_2 World Room: Rongomātāne B Chair: TBC	2C: Ocean Solutions Room: Rongomātāne C Chair: TBC	2D: Multiple stressors Room: Mātiu Chair: TBC	2E: Beyond Tipping Points: Financing Ocean Futures: From OA Research to Coastal Safeguards Room: Mākaro Chair: TBC
16.00 - 16.15	**Invited: Experimental Impacts of Deoxygenation and Acidification on *Acropora Cervicornis* Coral Physiology and Gene Expression** Ariel Pezner		**Effect of marine shells on total alkalinity in CO_2-acidified seawater** Andrea Mora Agustin	**Sponges tolerate projected end-of-century ocean warming, acidification and deoxygenation** Barbara Graham	
16.15 - 16.30			**Channeling Expertise: Capacity-Strengthening Pathways to Bridge Ocean Acidification Science and Marine Carbon Dioxide Removal Research** Meagan Gary	**Oyster Immune Response to Multiple Climate Change Stressors: Synthesising Responses with Experimental Applications** Jasmine Glencross	
16.30 - 16.45	**Take my breath away: effects of hypoxic events on coral photometabolism in a high-temperature environment** Lucia Gastoldi	**The river-ocean nexus in a high-CO_2 world: freshwater acidification, carbonate chemistry, and the missing terrestrial bridge** Adam Hartland	**The local alkalinity enhancement of seawater increases shell biomineralization and growth, buffering the effect of Ocean Acidification on shellfish juveniles** Laura Sordo	**Effects of multiple stressors on the low-pH tolerance of the wrinkled rock-borer, *Hiatella arctica*** Aubrey McDermott	**Quantifying uncertainty in ocean alkalinity enhancement for actionable carbon removal and finance frameworks** Rui Jin
16.45 - 17.00	**Hidden hypoxia contributes to coral bleaching through a mass transport–metabolism tipping point** Tadd Truscott	**He kaakahi whakairoiro, he kaaeo whakahirahira: How will our taonga evolve with the taiao?** Tyla Hill Moana	**Crowding the Coast: Plume Interactions Reduce CO_2 Uptake from Closely Spaced Alkalinity Outfalls** Harris Anderson	**Physiological and biochemical responses of three commercially important juvenile scallops to short-term exposure to ocean acidification conditions** Jeonghee Shim	**Climate modulation of multi-scale hydrographic variability in a major upwelling-driven aquaculture embayment of the Humboldt Current System** Victor Aguilera
17.00 - 17.15	**Oxygen deprivation implicated in rapid coral mortality under acute heating events** Max S. Dhillon	**The impacts of freshwater acidification on microalgal and cyanobacterial communities in Te Awa o Waikato** Victoria Cantalapiedra Mateo	**The effects of moderate and high ocean alkalinity enhancement on phytoplankton growth and photophysiology using a model diatom and coccolithophore** Leah Warlow	**Hot Families: Can We Use Selective Breeding to Produce More Heat-Tolerant Greenshell Mussels?** Jess Ericson	**Scaling Marine Carbon Dioxide Removal through Coastal Ecosystems: A Multisectoral Approach to Nature-Based Coastal Carbon Removal in the 'Global South'** Anwesha Ghosh
17.15 - 17.30	**The future in the past: the response of ocean oxygen to rapid CO_2 release during the Paleocene-Eocene Thermal Maximum (PETM)** Simone Moretti	**Amazon River plume control on carbonate chemistry in the western Tropical Atlantic** Matheus Batista	**Towards constraining the efficiency of ocean alkalinity enhancement: A Canadian Earth System Model study** Krysten Rutherford	**Ocean Acidification Impairs Survival and Biological Integrity in the Green Mussel (*Perna viridis*)** Md. Eyasin Ali	**Discussion/Speed Talks**
17.30 - 17.45	**Coral responses to repeated ocean acidification and deoxygenation depend on exposure frequency and species**	**Freshwater-seawater mixing and major phytoplankton groups modulate CO_2 dynamics in a**	**Planning a Precautionary Small-Scale Field Experiment on Air–Sea Gas Exchange in a Dynamic Sub-**	**Discussion/Speed Talks**	**Discussion/Speed Talks**

	tolerance Kelly Johnson	**subtropical estuary** Matheus Batista	**Arctic Fjord System** Lukas Marx & Audria Dennen		
17.45 - 18.00	**Does heterotrophy confer hypoxia tolerance in scleractinian corals?** Anieka Parry	**Discussion/Speed Talks**	**Influence of suspension-feeding bivalve *Austrovenus stutchburyi* on alkalinity dynamics in a sandy intertidal estuary** Elli Leinikki	**Discussion/Speed Talks**	**Discussion/Speed Talks**
18.00 - 19.30	**Welcome Reception & Poster Session 1** in the Exhibition Area – food & drinks provided				
20.00 - 22.00	**Early Career Research Function** at Shed 22 (4 Taranaki 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)** The evil twins of marine heatwaves coral bleaching and disease case study from One Tree Reef, Southern Great Barrier Reef				
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 Chair: TBC	**3B: Beyond tipping points – translating science to action** Room: Rongomātāne B Chair: TBC	**3C: Ocean Solutions: Alkalinity cycling in a changing ocean** Room: Rongomātāne C Chair: TBC	**3D: Modulating role of time** Room: Mātiu Chair: TBC	**3E: Workshop** Room: Mākaro
11.00 - 11.15	**Shifts in benthic trait diversity and ecosystem functioning at natural CO_2 vents: an ecosystem property perspective** Núria Teixidó	**Advancing Towards Adaptation in the Chesapeake Bay Region: The Trajectory of Three Resiliency and Vulnerability Assessment Projects** Emily Rivest	**Coastal sediment alkalinity fluxes and their implications for mineral-based ocean alkalinity enhancement (OAE)** Tricia Light	**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	**OA on the ground: a virtual tour of NOAA's ocean acidification tools and real-world impact** Elizabeth Perotti & Elizabeth Wright-Fairbanks	**A biophysical modelling framework for evaluating potential OAE in Aoteoroa New Zealand's Exclusive Economic Zone** Charine Collins	**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	**Embedding climate risk modelling in pāua quota valuation to uphold socio ecological and financial values in Aotearoa New Zealand** Katherine Short	**Seasonal variability of pH buffering capacity in a subtropical estuary: insights from alkalinity and carbonate system dynamics** Paco Quintana	**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	**Developing information products to inform ocean change adaptation and resilience planning by tribal and state managers of Washington's Olympic Coast** Jan Newton	**Advancing our understanding of Ocean Alkalinity Enhancement natural analogs in the Gulf of Tehuantepec, Mexico** Cecilia Chapa-Balcorta	**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	**Categorising the Phenotypes of Coral Photosymbiont Cultures Using Novel Technologies** Christopher Brunner	**Natural shelf seafloor feedbacks to changing ocean carbonate chemistry** Sebastiaan Van De Velde	**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	**Integrating Social Science with Natural Science to Inform Society** Erica Ombres	**South Atlantic Ocean surface acidification in a high atmospheric CO_2 world** Raquel Renó De Oliveira	**Transgenerational maternally-provided lipid composition & quantification in early-life stages of Perna canaliculus under differing OA conditions** Jenn Jury		
12.30 - 12.45	**Interconnected Dynamics of Plant Growth and Carbon Dioxide Fluxes in Lake Karāpiro under different physical regimes** Farzaneh Taheri	**Ocean acidification and blue food security: mapping two overlapping regime complexes** Annika Frosch	**Using a natural analogue to assess Ocean Alkalinity Enhancement: An Aotearoa New Zealand case study** Cliff Law	**Changes in energy metabolism in newly hatched small spotted catsharks reared under ocean acidification conditions** Rebecca J. Bridge		
12.45 - 13.00	**Physiological responses of juvenile Dungeness crab (*Metacarcinus magister*) to present-day and projected ocean acidification, hypoxia, and warming** Kristofer Bauer		**Empirical models of total alkalinity in the Southwestern Atlantic: A regional approach to carbonate system estimation** Santiago Basañes	**Both parent exposure to elevated pCO_2 and genetics influence embryo resilience to ocean acidification in the greenlipped mussel, *Perna canaliculus*** Norman Ragg		
13.00 - 13.45	**Lunch** in the Exhibition Area					
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: TBC
	Beyond tipping points: safeguarding biodiversity in a changing ocean	**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 Chair: TBC	4B: Beyond tipping points Room: Rongomātāne B Chair: TBC	4C: Ocean solutions: Understanding ocean-based climate solutions: Ecological implications, monitoring needs, and financing pathways Room: Rongomātāne C Chair: TBC	4D: Modulating role of time Room: Mātiu Chair: TBC	4E: Knowledge systems: Rebuilding coastal ecosystems through transformative change: Coastal people and a changing world Room: Mākaro Chair: TBC
16.00 - 16.15	**Invited: Multiple drivers of change: Simple experimental approaches for a complex problem** Catriona Hurd	**Invited: (TBC)**	**Advancing knowledge of phytoplankton-based mCDR approaches through a coordinated research initiative** Mattias Cape	**Invited: Dynamics of surface CO_2 in the equatorial Pacific from satellite remote sensing: from seasonal to interannual and decadal scales** Shuangling Chen	
16.15 - 16.30			**High Alkalinity Enhancement Suppresses Carbon Fixation while Nitrogen Fixation Shows Variable Responses** Shreya Mehta		
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	**One of natures' great events rises from the ashes of an extinguished tropical cyclone** Peter Russell
16.45 - 17.00	**Does Ocean Acidification Exacerbate Bleaching? Multistressor Insights from Corals and Coralline Algae** Ashtyn Isaak	**The Starving Artist: Translating Climate-Data into Lived Experience and Community Engagement** Ally Zlatar	**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	**Kaimoana and Climate: Mātauranga Māori as a Pathway to Coastal Ecosystem Restoration** Mawera Karetai
17.00 - 17.15	**Multiparameter experiments constrain the sensitivity of coralline algae to environmental change** Robert Eagle	**Identifying priorities of the ocean acidification research community of the Pacific to minimize and address the impacts of ocean acidification** Kim Currie & Alleluia Taise	**Monsoonal and Depth-Resolved Variability of Particulate Organic Carbon in southwest Bay of Bengal waters** Pavithra Balamurugan	**Coastal Processes Amplify Long-term Multi-Stressor Change in an Eastern Boundary Upwelling System** Samantha Siedlecki	**A giant kelp forest on the edge** Ohad Peleg
17.15 - 17.30	**Impacts of multiple stressors on a reef-building coralline alga** Guillermo Diaz-Pulido	**A strategic plan to address and minimize the impacts of ocean acidification in Iceland** Hrönn Egilsdóttir	**Ecological responses of limestone as an ocean alkalinity enhancement feedstock in a temperate seagrass meadow** Marianne Pelletier	**How do nutrient stores and CO_2 levels affect diatom responses to warming?** Emma Forss	**The Pacific-Village NbS Framework: Indigenous-Grounded and Modern Science Supported Adaptation - A Case-Study of Saoluafata, Samoa** Mino Cleverley & Tupu Ioane-Cleverley
17.30 - 17.45	**An integrated framework for evaluating reef persistence under multiple stressors** Ian Enochs	**Time series of carbonate system variable in the coasts of Savaia and Mulinuu, Upolu Island, Samoa** TBC	**Toward robust quantification of carbon uptake and CO_2 removal in seaweed ecosystems** Ju-hyoung Kim	**Evaluation of carbonate chemistry in two stations with contrasting conservation characteristics: First 7 years of measurements** Tatiana Zapata Rey	**The impacts of marine heatwaves and low salinity on blackfoot abalone (pāua) in Aotearoa/New Zealand** Katie Fenton

17.45 - 18.00	**Impacts of the sunscreen oxybenzone on the oxidative proteome of the coral model Exaiptasia** Clinton Oakley	**Discussion/Speed Talks**	**Sea urchin larval sensitivity to low pH varies among nearby seagrass meadows, highlighting the need for fine-scale monitoring** Jossias Alberto Duvane	**Discussion/Speed Talks**	**Discussion/Speed Talks**
18.00 - 19.30	**Poster Session 2** in the Exhibition Area				
TBC	**Movie Night** – details to be confirmed				

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				
09.00 - 09.10	**Welcome in Rongomātāne A**				
09.10 - 09.50	**Keynote 5: Nianzhi Jiao (Xiamen University)**				
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 Chair: TBC	**5B: Beyond tipping points – translating science to action** Room: Rongomātāne B Chair: TBC	**5C: Ocean Solutions: Addressing Coastal Acidification and Enhancing Carbon Sinks through Coordinated Management of Wastewater, Nutrients, and Ecosystems** Room: Rongomātāne C Chair: TBC	**5D: Changes in biodiversity. Buffer or Booster? When Primary Producers Mitigate or Amplify Ocean Acidification** Room: Mātiu Chair: TBC	**5E:** Room: Mākaro
11.00 - 11.15	**Beyond winners and losers: the role of the sponge microbiome in climate acclimation** James Bell	**Puget Sound Acidification and Impacts (PSAI): A data product for estimating acidification in Puget Sound and surrounding areas** Larissa Dias	**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** Ilaria D'Aniello	
11.15 - 11.30	**Natural analogues of climate change as a tool to study processes from genes to ecosystems** Ivan Nagelkerken	**Modeling the spatiotemporal effects of ocean acidification and warming on Atlantic sea scallop growth to guide adaptive fisheries management** Halle Berger	**Observed long-term changes in CO_2 sink capacity in the marginal seas of western Pacific Ocean** Kitack Lee	**Physics or Biology: which drives the variability of the carbonate system in a coastal area of the Southwest Atlantic Ocean?** María Del Mar Eivers	
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	**From science to practice: Collaborative carbonate system monitoring for scallop aquaculture decision making in northern Peru** Natalie Bravo Senmache	**Sediment–Seagrass Coupling Enhances Alkalinity-Driven CO_2 Uptake in Seagrass Mesocosms** Mariche Natividad	**Do coccolithophores boost the impact of ocean acidification?** Sarah Cryer	
11.45 - 12.00	**Uncovering cryptic reef biodiversity in coral rubble using eDNA at a natural CO_2 seep** Britta Fiedler	**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	

12.00 - 12.15	**Metagenomics and Cultivation Reveal Microbial Responses to High CO_2 Gradients in Shikinejima** Krista Ryon	**Implications of monitoring and modeling results of acidification in Japan coasts** Masahiko Fujii	**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		
12.15 - 12.30	**Ocean acidification drives negative skeletal responses in sea urchins across experimental and natural systems** Yiyi Li	**Current Science and Future Directions for the Gulf of America Coastal Acidification Network (GCAN)** Natalia Lopez-Figueroa	**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		
12.30 - 12.45	**The brain transcriptional program and behavioural responses of the Pajama cardinalfish under multiple environmental stressors** Davide Spatafora	**Accessible and inclusive outreach campaigns to integrate diverse knowledge systems among persons with disabilities across the Western Indian Ocean Region** Nancy Marangu	**Determining the Variability of Ocean Carbonate Chemistry in Blue Carbon Ecosystems** Katie Pogi	**Discussion**		
12.45 - 13.00	**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	**Localized biogeochemistry and seasonality govern carbonate chemistry in estuarine mangrove ecosystems** Punyasloke Bhadury	**Marine Carbon Dioxide Removal (MCDR) in North Africa to mitigate ocean acidification: A Case Study of Egypt** Nayerah Shaltout	**Discussion**		
13.00 - 13.45	**Lunch** in the Exhibition Area					
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 Chair: TBC	6B: Changes in biodiversity Room: Rongomātāne B Chair: TBC	6C: Ocean solutions: Understanding ocean-based climate solutions: Ecological implications, monitoring needs, and financing pathways Room: Rongomātāne C Chair: TBC	6D: Technological advances (General) Room: Mātiu Chair: TBC	6E: Room: Mākaro
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	**Multi-resolution regional modeling to investigate variability in the carbon uptake efficiency of ocean alkalinity enhancement and implications for prediction** Elizabeth Yankovsky	**Invited: Electrochemical Acid Sequestration to Ease Ocean Acidification (EASE-OA)** Brendan Carter	
16.15 - 16.30	**Ecophysiological responses of the diatom *Pseudo-nitzschia delicatissima* to projected climate-driven pH and temperature shifts** Erin Kathleen Redmond		**Ocean Alkalinity Enhancement as an Ocean-Based Climate Solution: Ecological Implications for Coastal Sediment Biogeochemistry** Michelle Simone		
16.30 - 16.45	**The joint effect of changes in temperature and CO_2 on growth and functional traits in a model diatom** Sinéad Collins	**Trait-based quantification of biological responses to ocean acidification across global marine time series** Natalija Suhareva	**Ocean observing technologies and strategies for Ocean Alkalinity Enhancement Research** Dariia Atamanchuk	**Sequential Treatment Application Robot Version 2: A robotic platform for high-replication, continuous ocean acidification experimentation and monitoring on marine organisms** Richard Karp	
16.45 - 17.00	**Exploring the potential of AI approaches to unravel the effects of complex climate change on marine phytoplankton** Philip Boyd	**Ocean Acidification Biodiversity Task Force** Kirsten Isensee	**Harnessing Blue Carbon Ecosystems and Locally-Developed Nature-Based Technologies for Carbon Sequestration in Africa** Thomas Ofori	**Single-cell measurement of carbon allocation under environmental change** Christina McGraw	
17.00 - 17.15	**Pseudoreplication in experiments is, or is not, a sin: from debate to practical analysis with model averaging tools** Peter Dillingham	**Understanding mollusc host – microbe interactions in a changing ocean** Elliot Scanes	**Biological thresholds for mCDR carbonate chemistry** Paul McElhany	**Developing new features towards an open-source pCO_2 system** Christophe Noisel	
17.15 - 17.30	**A climate change risk assessment for the carbonate counter pump** Benjamin Gustafson	**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	**ESA-funded activities for enhancing satellite-based ocean carbon science** Roberto Sabia	

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** Martina Stiasny	**mCDR Research and Initiatives in Southeast Asia** Aileen Tan	**Progress in Ocean Acidification Observing Capacity in the Argentine Atlantic** Carla Berghoff	
17.45 - 18.00	**Compound Coastal Stress from Marine Heatwaves in a High-CO_2 Gulf of Thailand** Dhrubajyoti Samanta	**Early exposure shapes physiological resilience to chronic ocean acidification in embryonic sharks** Martina Stiasny	**Discussion**		
19.00 – 11.30	**Gala Dinner** at Wellington Foyer, Te Papa				

FRIDAY 16 OCTOBER

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: 10.00 - 11.00	Rongomātāne B Time: 09.00 - 11.00	Room: Rongomātāne C Time: 09.00 - 11.00	Room: Mātiu Time: 09.00 - 11.00	Room: Mākaro Time: 09.00 - 11.00	Room: Mokopuna Time: 09.00 - 11.00
	mCDR: A policy perspective	**Designing and analysing multiple driver experiments - Day 3**	**Integrating Ocean Carbon Observations and Models**	**Elevating coastal monitoring with traditional indicators and community partnerships**	**Ocean Acidification Biodiversity Task Force - Indicators and proxies in support of the GBF and BBNJ**	**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 Chair: TBC	**7B: Changes in biodiversity. Buffer or Booster? When Primary Producers Mitigate or Amplify Ocean Acidification** Room: Rongomātāne B Chair: TBC	**7C: Modulating role of time (General)** Room: Rongomātāne C Chair: TBC	**7D: Technological advances: Charting the Future: Emerging Technologies for Ocean Acidification Monitoring** Room: Mātiu Chair: TBC	**7E: Multiple Stressors: Ocean acidification multiple stressor effects on North American species** Room: Mākaro Chair: TBC	
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	**Differential performance of diploid and triploid Pacific oysters: Insights into impacts of temperature, dissolved oxygen, and pCO_2** Craig Norrie	**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** Melissa Melendez & Christopher Sabine	**Carbonate chemistry as a multiple stressor: experiments on parameters affecting Dungeness crab larvae** Paul McElhany	
12.00 - 12.15	**Repeated acute stressors under chronic warming: seasonal resilience of the green sea urchin across behavioural, reproductive and molecular responses** Valentine Loiseau	**Field based observations to understand ecological interactions with carbonate chemistry between seagrass and coral habitats** Hannah Green	**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	**Differential diet impacts on red abalone growth, grazing rates, and metabolism under ocean acidification** Racine Rangel	
12.15 - 12.30	**Effects of abiotic factors on the behavior and luminescence of the**	**Carbon storage and habitat shifts under ocean acidification: evidence**	**CO_2 Outgassing Mechanisms in the Oxygen Minimum Zone of the**	**Improving Accessibility for Coastal Carbonate Chemistry**	**Can Increased Feeding Mitigate the Adverse Effects of Climate Change**	

	sea pen *Pennatula phosphorea* Laurent Duchatelet	**from natural CO_2 vents** Valentina Costa	**Mexican Tropical Pacific** Asbel Itahi De La Cruz Ruiz & Cecilia Chapa Balcorta	**Measurements: Expansion of Use Cases for the pCO_2 to Go, a Carbon Dioxide Sensor** Kaitlyn Lowder	**in Juveniles of *Atrina maura* and *Panopea globosa*?** Tania Libertad López-Medina
12.30 - 12.45	**Sensitivity of scallop (*Argopecten purpuratus*) larvae to short-term ocean acidification and hypoxia** Kathy Cordova-Rodriguez & Pedro E. Romero	**Florida Gulf Coast Spatio-Temporal Assessment of Acidification Events in Relation to Harmful Algal Blooms** Emily Hall	**A dynamically downscaled regional ensemble projection of future (2015-2100) surface ocean acidification across the Indian Ocean** Kunal Chakraborty	**From tropical shores to extreme winter storms: USV adaptive sampling for ocean carbonate chemistry** Adrienne Sutton	**Comparative stress indicators of juvenile Dungeness crabs (M. magister) exposed to simulated upwelling profiles** Nyazia Sajdah-Bey
12.45 - 13.00	**A framework for exploring the impacts of ocean acidification on food security** Ellycia Harrould-Kolieb	**Discussion**	**Resilience against the impacts of climate change in an ecologically and economically significant native oyster** Pauline Ross	**Discussion**	**Shell shock: Investigating four decades of ocean acidification and warming on Atlantic sea scallop shells** Halle Berger
13.00 - 14.00	**Lunch** in the Exhibition Area				
14.00 - 15.30	**8A: Multiple stressors** Room: Rongomātāne A Chair: TBC	**8B: Changes in biodiversity** Room: Rongomātāne B Chair: TBC	**8C: Modulating role of time** Room: Rongomātāne C Chair: TBC	**8D: Knowledge systems (General)** Room: Mātiu Chair: TBC	**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	**In Situ Measurements of Reef-Scale Hydrodynamics and Chemical Variability at Shusha Island Reef, Red Sea** Sandip Dighe	**Indigenous Knowledge as Living Practice for a Changing Ocean: Experiences from Alaska** Henry Huntington	
15.00 - 15.15	**Rethinking multiple driver effects in warming and ocean acidification research** Emily Donham	**Long-term exposure of Spotted rose snapper (*Lutjanus guttatus*) to low-pH in an aquaculture setting** Celeste Sánchez-Noguera	**Genetic variation and phenotypic plasticity in the response to ocean acidification** Timothy Ravasi	**Direct measurements of CO_2 fluxes over the Arctic Ocean: extreme conditions on gas transfer dynamics** Iwona Niedzwiecka	

15.15 - 15.30	**Multiple climate change stressors on coral reefs: potential for interactions between acidification, hypoxia and heat, and implications for reef resilience** Verena Schoepf	**Impact of climate change on primary production in the Coral Sea** Inès Mangolte	**CDOM-Driven Light Attenuation Modulates Productivity and Hypoxia in an Estuarine System** Rui Jin	**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	
15.30 - 15.45	**Afternoon Tea Break** in the Exhibition Area				
15.45 - 16.00	**Closing and Student Prizes**				
16.00 - 18.00	**Farewell Function** – a festive goodbye with food and drinks at Tākina				

POSTERS

(Poster Numbers & Session TBA)

POSTER SESSION 1

TUESDAY 13 OCTOBER, 18.00 - 19.30

POSTER SESSION 2

WEDNESDAY 14 OCTOBER, 18.00 - 19.30

POSTER TITLE	PRESENTERS
1. 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
A risk-based assessment of biodiversity changes from ocean acidification along the UAE's east coast	Silvana Birchenough
The Oleander Transect: A Ship-of-Opportunity Platform for High-Frequency Ocean Carbon Observations	Matt Enright
Localized acidification in a giant clam ocean nursery highlights the immediate need for carrying capacity studies	Charissa Ferrera
Strategy for establishment and consolidation of National Observatory for the Study of Ocean Acidification in Cuba	Miguel Gómez Batista
One coast, two stories? pH trends and dynamics in an urbanized bay and a pristine seagrass habitat	Iris Eline Hendriks
A synthesis of data products for ocean carbonate chemistry	Liqing Jiang
Toward Informed Action: A Systematic Review of Ocean Acidification Research in India	Amit Kumar
Tipping points beyond single stressors: spring floods advance hypo-salinity vulnerability thresholds in subarctic estuarine molluscs	Valentine Loiseau
The making of marine climate knowledge in New Caledonia	Marie-eve Perrin
Defining ecological vulnerability to ocean and coastal acidification in the Mid-Atlantic region of the United States	Emily Rivest
Assessing changes in the west Florida shelf seawater inorganic carbon system	Katelyn Schockman
Projecting resilience for sea scallops along the Northwest Atlantic shelf to multiple stressors - a Climate services story	Samantha Siedlecki
An initial assessment of marine Carbon Dioxide Removal for Sāmoa	Ryan Taei
2. Global-driven changes in biodiversity and ecosystem resilience	
Irradiance-dependent oxidative mechanisms of *Breviolum minutum* and *Durusdinium trenchii*	Chiara de Jong
Impact of algal deposition (Vaucheria sp.) on DIC and alkalinity fluxes of an intertidal salt-marsh colonized by Spartina Anglica	Lionel Denis
Living in different tidal niches: acute metabolic response of Adriatic gastropods to low pH	Sanja Grđan
Coastal Resilience in the Honduran Caribbean under Land-Based Pollution and Climate-Driven Stressors	Joel Güity Zapata
Can seagrass meadows buffer climate change related stressors? Species-specific responses of coastal calcifiers to ocean warming and acidification	Pol Hernández-Gatell
Thermal resilience of *Antipathella fiordensis*: mechanisms of cold-water coral response to marine heatwaves	Amber Kirk
Temperate sponge microbiomes as drivers of holobiont resilience to marine heatwaves	Usangi Maldeniya
Spatial distribution of seawater pH and alkalinity across five sites on the North coast of Upolu, Samoa	Tina Taitaifono Mareko
A decade-long reconstructed pH time series at the Strait of Gibraltar: gap-filling strategies for continuous ocean acidification monitoring	Alejandro Roman
3. Multiple stressors' effects on marine organisms	

Evaluating the Influence of Ocean Acidification on Marine Fisheries and Food Security in West Africa	William Antwi Yeboah
Recent environmental dynamics and vertical carbon flux in two contrasting fjords in Auyuittuq National Park, Baffin Island	Élodie Boies
Transcriptomic responses of a bioeroding sponge to interacting ocean change drivers	Christopher Edward Cornwall
Low oxygen increases top-down pressures in Caribbean reef fish communities	Jonathan Burnap
Identifying Temperature-Dependent Hypoxia Tolerances of Caribbean Reef Fish Communities	Jonathan Burnap
Red Seaweed Aquaculture in a Changing Ocean: Growth and Biochemical Responses to Ocean Acidification	Gunnar Cervin, Alexandra Kinnby
Beyond Heatwaves: Deoxygenation is an Overlooked Threat to *Orbicella faveolata*	Carolina César-Ávila
Assessing microbial community shifts at the shallow hydrothermal field of Vulcano Island (Italy): a multidisciplinary approach	Valentina Costa
Bayesian modelling of growth phase transitions in phytoplankton cultures	Madusha Dilshani
The energetic cost of long-term exposure to ocean acidification in the commercial scallop *Zygochlamys patagonica*	María del Mar Eivers
Early life-stage responses to ocean acidification in the invasive estuarine shrimp *Palaemon macrodactylus*	María del Mar Eivers
Engineer of the future: the intertidal mussel *Brachidontes rodriguezii* (Bivalvia: Mytilidae) shows resilience under acidified conditions	María del Mar Eivers
Genetics and ontogeny are key factors influencing thermal resilience in a culturally and economically important bivalve	Jess Ericson
Breaking Bad Curves: ocean acidification shifts multiomics dose responses to a pollutant in an Arctic copepod	Lauric Feugere
Relating subsurface burrow structures and the associated microbial community to seafloor sediment biogeochemistry in a changing world	Rachel Hale
Key role of heterotrophy in mitigating thermal stress in corals naturally exposed to extremes environmental conditions	Layla Iijima
Simulated Atmospheric Heatwave Suppresses Immune Function in Sydney Rock Oyster (*Saccostrea glomerata*)	Jasmin Kamarulzaman
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
The effect of fish feed on the water quality and dissolved CO_2 system in seawater: A mesocosm experiment	John Darryl Lagdameo
Differential ocean acidification effects on two economically important clams from southern South America	Maria Eugenia Lattuca
Fatty acid response of Antarctic ascidia *Cnemidocarpa verrucosa* to ocean warming and acidification	Maria Eugenia Lattuca
Effects of ocean warming and acidification on an ecologically important echinoderm in its southernmost distribution limit	Maria Eugenia Lattuca
Dietary plasticity allows a dominant herbivore to persist on simplified reefs under ocean warming and acidification	Annie Marek
Environmental variability in pH and temperature drives reef carbonate dynamics in the Mexican Caribbean	Francisco Medellín Maldonado
Mapping Potential Multi-Stressor Exposure in Marine Systems: A 4D GIS-Based Approach	Virginia Morejón
Pharmacontamination: A Neglected and not Researched Pollutant of the Ocean	Albertina Onsea, Giovanni Damiani
The involvement between seafloor CO_2 eruptions in the Tachibana Bay and the marine environment and organisms	Kiminori Shitashima
Temperate coral populations naturally occurring in high pCO_2 environments	Núria Teixidó
The effect of changing light and nutrient on lipid production in subantarctic centric diatoms	Andrea Wauthier
4. Ocean-based solutions	
Bass Strait Ocean Alkalinity Enhancement Scenarios Reveal the Fate of Potential Carbon Uptake	Harris Anderson
Can Surface Salinity Predict Alkalinity For Tropical, Data Scarce, Shelf Regions? A Case Study from the Western South Atlantic	Manoela Barbosa
Nutrient-Activated Biochar Cultch: Improving Shellfish Larval Settlement and Habitat Resilience in British Columbia Under Combined Climate Stressors	Bruce Bradley
Incubation-derived Biogeochemical Fluxes of Macrophytes: Implications for Seaweed Aquaculture Carbon Sequestration	Cheyenne Bridge
Innovative mCDR Strategies: Biomass Sinking and Their Impacts on Carbon Removal and Fisheries in West Africa	Christian Brown
Survival and lipid content of Calanus pacificus under dynamic Ocean Alkalinity Enhancement exposure scenarios	Georgina Cepeda

Seagrass-Derived DOC Enhances Bacterial Growth and Reveals a Potential RDOC Carbon Sink	Tzong-yueh Chen
Riverine flood pulses restructure estuarine pico-sized chlorophyte communities through salinity shifts at a subtropical river–sea interface	Kuo-Ping Chiang
Sedimentary Alkalinity Production Sustains Low pCO_2 in Seagrass Meadows: Evidence from a Semi-Enclosed Lagoon	Wen-Chen Chou
Back from the dead: Spongia populations have recovered in Puerto Rico	Mariela Cortes
Does alkalinity enhancement affect survival and shell integrity of Aotearoa New Zealand mussels?	Vonda Cummings
Ground-Truthing Autonomous Monitoring for Ocean-Based Climate Solutions: Lessons from USV Field Performance In an Icelandic Fjord	Audria Dennen
Harnessing Blue Carbon Ecosystems and Digital Innovations for Climate Resilience in Africa.	Mavis Adwoa Essilfie
CDR Forecasting Stack: Leveraging AI to Accurately and Rapidly Predict Responses to Open-System Geochemical Climate Interventions	Lucas Gloege
The influence of marine carbon dioxide removal methods on the Biological Carbon Pump	Svenja Halfter
Bioturbation is a key driver influencing alkalinity release from coastal and shelf sediments	Astrid Hylén
Model-dependent responses of marine calcification to alkalinity perturbations: Implications for ocean carbon cycling and OAE	Rui Jin
Biotic calcification feedbacks constrain the effectiveness of ocean alkalinity enhancement in a high-CO_2 ocean	Rui Jin
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
Ocean Acidification in Papua New Guinea: Challenges, Opportunities, and Next Steps for Action	Maisy Lus
Contrasting metabolic coupling and diel variability of carbon cycling in rhodoliths, corals, and colonized artificial substrates	Dairo Humberto Marin Casas
The effects of marine carbon dioxide removal (mCDR) carbonate chemistry conditions on zoea stage Dungeness crab (*Metacarcinus magister*)	Paul McElhany
Advancing Climate Action through Emerging Ocean Alkalinity Enhancement Methods: Pilot Studies on Carbon Removal Efficiency in Ghana and Nigeria	Doris Odai
Present and future alkalinity cycling in the east Otago coastal zone	Sebastiaan van de Velde
Characterization of Settling and Dissolution Dynamics of Alkaline Minerals for Ocean Alkalinity Enhancement	Sugata (Jonty) Paul
Coordinated temporal specialization, not functional redundancy, drives the coastal microbial carbon pump	Olivier Pereira
Impact of improved Marine Atmospheric Boundary CO_2 measurement on regional sea-air CO_2 fluxes	Denis Pierrot
Ocean acidification in Samoa	Katie Pogi
The Third Decadal U.S. Carbon Cycle Science Plan	Brooklyn Poutra, Leticia Barbero, Maria Tzortziou
Natural alkalinity generation through beach sand weathering and potential feedbacks of olivine addition	Mikayla Robson
Establishing and Strengthening Ocean Acidification Monitoring program and Nature-Based Solutions in Kiribati	Manibua Rota
Monitoring carbonate chemistry in coral restoration projects in Costa Rica	Celeste Sánchez-Noguera
Tracing submarine groundwater derived alkalinity and carbon cycle budget in Elbe estuary	Nusrathul Husna Sheikh Hussain
Surface pCO_2 distribution and related environmental factors in the southwestern part of the East Sea, Korea, in 2023-2025	Jeonghee Shim
Buffering capacity of Ulva sp. on oyster larval survival and development under enhanced alkalinity and elevated CO_2 conditions	Laura Sordo
Navigating Financial and Governance Frameworks for Scaling Ocean-Based Climate Solutions in Africa	Kwasi Wiafe
5. 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
Using oxidative proteomics to unravel the molecular regulation of coral bleaching in the model organism *Exaiptasia diaphana*	Lénaïc Chagnat
Satellite kelp canopy monitoring and Lagrangian spore dispersal modeling along Baja California's Pacific coast	José Manuel Echevarría Rubio
Carbonate Chemistry Variability and Air Sea CO_2 Fluxes on the Ghana Shelf in a Coastal Upwelling System	Maurice Edusei

Metabolic Dynamics of an Offshore Coral Reef in the Central Red Sea: Observations from Autonomous Sensors	Emily Hammermeister
Real-Time Coastal Ocean Monitoring with Portable Mini-Mooring Network Enabling OA Event Reporting for Southern California	Charles Lindsay
Reconstructing the ocean carbon budget from observations with machine learning and an inverse method	Neill Mackay
A sensor-informed fluid model for mapping reef ventilation and potential deoxygenation	Mourad Oulghelou
From Inventory to Monitoring Readiness: Reassessing Naturally Acidified Marine Sites as High-CO_2 Natural Laboratories	Daniela Andrea Saltos Aguilar, Mario Armando Hurtado Domínguez
Carbonate chemistry insights from a deep-sea octopus nursery	Celeste Sánchez-Noguera
Emerging Technologies for Ocean Acidification Monitoring: Advancements in Sensors, Autonomous Systems, and Data Integration	Salman Tariq
Automating Marine Conservation: In-Situ eDNA Sequencing via Autonomous Gliders for the Implementation of Dynamic Marine Protected Areas (dMPAs)	Maryam Umar
6. The modulating role of time – from short-term variability to evolution	
Study of the relationship between parameters that characterize ocean acidification in surface waters in La Libertad Port, El Salvador	Daniela Méndez
7. Working across knowledge systems in a high-CO_2 world	
Carbonate Chemistry at the Top of the World: Observations from a 90°N Trans-Arctic Ship of Opportunity Transit	Leticia Barbero
Physical-biological processes regulating summer sea-air CO2 exchanges and marine carbonate system along the Drake Passage and northern Antarctic Peninsula	Matheus Batista
Taking a dive into El Veril: Constraining coastal carbonate system variability through citizen science at a coastal site in Argentina	Carla Berghoff
Carbonate system observations during a capacity-building expedition across the Tropical Atlantic (March 2025)	Carla Berghoff
Monitoring of physico-chemical parameters related to ocean acidification: The case of Mauritius	Kishore Boodhoo
One year of continuous pCO_2 measurements at the Antarctic glacier front: addressing a critical gap in Southern Ocean carbon budgets	Susana Flecha
Seasonal Variability Dominates Spatial Patterns of Particulate Organic Carbon Export in the Southern Ocean	Luisa Garcia
Regional scale climatology of global change CO_2 flux on the ocean surface flux for North Atlantic and the Arctic	Małgorzata Kitowska, Iwona Niedźwiecka
Volcanically driven CO_2 emissions in Antarctic coastal systems: insights from Deception Island	Gabriel Navarro
Integrating Eddy Covariance and Carbonate Chemistry to Constrain CO_2 Fluxes in a Large Shallow Lake	Rahul Peethambaran, Mark Fenwick
Perception and Livelihood Vulnerability of Coastal Communities to Changes in Reef Resource Stressors. A Case of Mafia Island	Julius Salema
Pacific Islands Ocean Acidification Centre	Miriama Vuiyasawa, Azaria Pickering, Katy Soapi