



The 3rd Global Ocean Acidification Observing Network (GOA-ON) International Workshop will be held in Hobart, Australia, following the 4th International Symposium on the Oceans in a High CO<sub>2</sub> World (3-6 May 2016).

GOA-ON is guiding the development of an integrated network for the detection and attribution of ocean acidification and ecosystem response, and has engaged with over one hundred participants from 30 nations to formulate its Requirements and Governance Plan. GOA-ON has also served to focus funding bodies and international research programs to integrate within a shared vision that extends from the coastal to open ocean domains.

The 3rd GOA-ON workshop aims to further the development of the network. Goals are to:

- Update the GOA-ON community on GOA-ON status and linkages to other global programs
- Build communities to develop regional hubs that will facilitate capacity building
- Update requirements for biology and ecosystem response measurements
- Discuss modeling connections, observational challenges and opportunities
- Present advances in technologies, data management and products
- Gain input on data products and information needs
- Gain input on regional implementation needs
- Launch the GOA-ON Mentorship Program

More details will be posted on <http://www.goa-on.org/>

## Day 1 Sunday 08 May 2016

0830-0900	<b>Workshop welcome:</b> introductions, workshop goals <i>Bronte Tilbrook</i> , CSIRO and GOA-ON co-chair
0900-0930	<b>Opening address</b> <i>David Osborn</i> , Director, IAEA Environmental Laboratories
<b>GOA-ON implementation and importance</b>	
0930-1000	<b>OA and GOA-ON in international and intergovernmental context:</b> Updates from linked programs including GOOS (IOC-UNESCO), Framework for Ocean Observing, IAEA OA International Coordination Centre, Blue Planet, United Nations COP21, and IPCC <i>Libby Jewett</i> , NOAA and GOA-ON co-chair
1000-1100	<b>GOA-ON vision and progress:</b> Goals, variables, data quality objectives: <i>Workshop 1 outcomes</i> <i>Jan Newton</i> , University of Washington (20 min); Biological variables for regional ecosystems: <i>Workshop 2 outcomes</i> <i>Phil Williamson</i> , University of East Anglia (20 min) Discussion (20 min)
1100-1130	Morning Tea & Coffee
1130-1230	<b>Policy overview on significance of GOA-ON:</b> Policy development from local to global scales, communication and interaction with stakeholders (e.g., industry, governments). 1) <b>Local scale:</b> Impact of OA on the US shellfish industry; resulting legislation and actions taken, from the Washington state example <i>Samantha Siedlecki</i> , University of Washington (20 min) 2) <b>Global scale:</b> International treaties – Prospects to improve OA observation within UNFCCC, Sustainable Development Goals, Convention on Biological Diversity, etc. <i>Carol Turley</i> , Plymouth Marine Laboratory (20 min) Discussion (20 min)
1230-1330	Lunch
<b>Regional implementation of GOA-ON, opportunities for coordination, and needs for GOA-ON data and products</b>	
1330-1350	<b>Case study:</b> Latin America Ocean Acidification (LAOCA); issues relevant to the Latin American countries, proposed effort, regional coordination <i>Cristian Vargas</i> , University of Concepción
1350-1410	<b>Regional implementation:</b> concept of regional hubs and current components <b>Breakout #1 charge:</b> Identify OA observing efforts within regions and potential for coordination; define region's science and policy needs for GOA-ON data and products. <i>Jan Newton</i> , University of Washington
1410-1430	Afternoon Tea & Coffee, move to breakout rooms
1430-1700	Breakout #1: Discussion by breakout groups organized by regions
1800-2030	<b>Reception</b> , Tasmanian Museum and Art Gallery hosted by <i>Matthew Huelsenbeck</i> , manager, Wendy Schmidt Ocean Health XPRIZE

## Day 2 Monday 09 May 2016

0830-0835	Day 2 objectives and summary of day 1 <i>Bronte Tilbrook</i> , CSIRO
0835-0850	<b><u>Toward increased involvement of developing states in GOA-ON</u></b> <i>Lina Hansen</i> , IAEA
0850-0900	<b><u>Introduction of GOA-ON Mentorship Effort</u></b> <i>Libby Jewett</i> , NOAA
0900-1030	Breakout #1 group reports and discussion
1030-1100	Morning Tea & Coffee
1100-1130	<b><u>Challenges in observing OA: distinguishing natural from anthropogenic variability</u></b> <i>Richard Feely</i> , NOAA
1130-1200	<b><u>Modeling requirements</u></b> for the OA observing network at local, regional, and global scale <i>Fei Chai</i> , University of Maine
1200-1300	Lunch
<b>Ecological/biological component of GOA-ON</b>	
1300-1325	<b><u>GOA-ON biology working group</u></b> outcomes and recommendations on key biological variables, and theoretical framework linking physical-chemical changes to biological response <i>Sam Dupont</i> , University of Gothenburg
1325-1350	<b><u>GOOS Biology and Ecosystems working group EOVs</u></b> <i>Samantha Simmons and/or Patricia Miloslavich</i> , GOOS Biology and Ecosystems Panel
1350-1405	<b><u>GOOS Biogeochemical EOVs</u></b> and links with GOA-ON requirements <i>Maciej Telszewski</i> , International Ocean Carbon Coordination Project
1405-1430	<b>Biological requirements:</b> <b><u>Breakout #2 charge:</u></b> Develop recommendations for biological monitoring to serve GOA-ON goals. Using the inputs from the three morning sessions (observing challenges, modelling requirements, biology efforts to date), identify biological monitoring system (variables and opportunities) and biological needs from chemical/physical measurements at global, regional, and local scales. <i>Bronte Tilbrook</i> , CSIRO
1430-1500	Afternoon Tea & Coffee, move to breakout rooms
1500-1730	Breakout #2: Discussions by breakout groups by scale: global, regional, local
1800-1930	<b><u>GOA-ON Showcase and poster session</u></b> including 3 min talks to provide a showcase for new GOA-ON members to highlight research and to introduce posters

## Day 3 Tuesday 10 May 2016

0830-0835	Day 3 objectives <i>Jan Newton</i> , University of Washington
0835-1000	Breakout #2 group reports, discussion, and consensus building
1000-1030	Morning Tea & Coffee
<b>OA observing technology, data management and products</b>	
1030-1050	<b><u>Error propagation in carbonate chemistry calculations</u></b> <i>Jim Orr</i> , LSCE/IPSL
1050-1110	<b><u>Technological advances for observing OA</u></b> <i>Adrienne Sutton</i> , NOAA
1110-1130	<b><u>GOA-ON Data Management and data synthesis products</u></b> <i>Benjamin Pfeil</i> , University of Bergen
1130-1200	<b><u>Presentation of GOA-ON portal and plans</u></b> <i>Emilio Mayorga</i> , University of Washington
1200-1230	<b>Capacity building needs:</b> <b>Breakout #3 charge:</b> Regional GOA-ON capacity building needs in the next 2-3 years. Define the requirements and opportunities for implementation of GOA-ON activities for: <ul style="list-style-type: none"> <li>• data synthesis products in both global and regional settings</li> <li>• data management</li> <li>• training workshops and developing communities of practice</li> <li>• development/support of regional networks</li> </ul> <i>Bronte Tilbrook</i> , CSIRO
1230-1400	Working lunch for breakout #3 groups
1400-1500	Breakout #3 group reports and discussion
1500-1630	<b><u>Synthesis and consensus recommendations</u></b> to add to the GOA-ON Plan <i>Jan Newton</i> , University of Washington
1630-1700	Meeting wrap up and thanks