**xFOCE workshop: present status and future developments**

**Draft agenda**

Date: Friday 29th April, Location: TBD, most likely at Australian Antarctic Division

Organisers: Jonny Stark (jonny.stark@aad.gov.au), Jean Pierre Gattuso (gattuso@obs-vlfr.fr)

Objectives: To advance knowledge of best practices for seafloor controlled CO2 enrichment experiments so as to better understand biogeochemical and ecosystem impacts of ocean acidification. xFOCE systems were developed to specifically address the need for community to organism level investigations in field experiments ranging from short-term to long-term. The workshop will cover all aspects of FOCE from engineering to logistical and scientific perspectives. It will also include an opportunity to inspect the antFOCE system, which was recently successfully deployed for a 12 week period in Antarctica, and discuss its features with the AAD scientists and engineers who modified the xFOCE design for Antarctic conditions and built and deployed it.

**List of participants**

Jim Barry [MBARI; barry@mbari.org ]

James Black [Australia: j.g.black@utas.edu.au ]

Lev Bodrossy [Australia; Lev.Bodrossy@csiro.au]

Juan Diego Gaitan-Espitia [Australia; Juandiego.Gaitanespitia@csiro.au]

Jean-Pierre Gattuso [France; gattuso@obs-vlfr.fr ]

Frédéric Gazeau [France; f.gazeau@obs-vlfr.fr ]

Kent Headley [MBARI: headley@mbari.org ]

Jeroen Ingels [PML; jein@pml.ac.uk ]

Glenn Johnstone [Australia; glenn.johnstone@aad.gov.au]

Mark Milnes [Australia; Mark.Milnes@aad.gov.au ]

Andrew McMinn [Australia; andrew.mcminn@utas.edu.au]

Ana Queiros [PML; anqu@pml.ac.uk ]

Nick Roden [Australia; nick.roden@utas.edu.au ]

John Runcie [Australia; john.runcie@aquation.com.au ]

Emily Shaw [USA; emilycshaw1@gmail.com]

Jonny Stark [Australia; jonny.stark@aad.gov.au]

Scott Stark [Australia; scott.stark@aad.gov.au]

Steven Whiteside [Australia; Steven.whiteside@aad.gov.au ]

Stephen Widdicombe [PML: swi@pml.ac.uk ]

**Proposed timetable**

9:30: Welcome and overview of workshop – Jonny Stark

9:35: Jean Pierre Gattuso – FOCE systems and future directions

**9:45 – 10:45 Presentations and discussion**

9:45: Jim Barry/Kent Headley – swFOCE in Monterey Bay

10:10: Frédéric Gazeau - eFOCE

**10:45 – 11:15 Morning tea (provided)**

**11:15 – 1:00 Presentations and discussion - antFOCE**

11:15: Jonny Stark –antFOCE overview

11:40: Glenn Johnstone – Deploying and sampling antFOCE

12:05: Mark Milnes –controlling pH in antFOCE

12:30: Steve Whiteside - The mechanics of running antFOCE and the ESW

**1:00 – 1:45 Lunch (provided)**

1:45: Nick Roden –Carbonate chemistry of antFOCE

2:15: Tour and inspection of antFOCE system

**3:30 – 4:00 Afternoon tea (provided)**

**4:00 – 5:30 Presentations and discussion**

4:00: Ana Quieros – antFOCE Bioturbation effects

4:25: James Black – antFOCE parallel mini-chambers, short duration incubations

4:35: John Runcie – Submersible instruments for measuring metabolic rates and OA parameters in situ

4:45: General discussion session (drinks available for purchase)

**6:30 – Dinner in Hobart for those interested (at own expense)**