“Ocean acidification: what’s it all about?”

Finale event for the UK Ocean Acidification research programme (UKOA) held jointly with the German programme Biological Impacts of Ocean Acidification (BIOACID)

Royal Society, 6-9 Carlton House Terrace, London SW1Y 5AG: 4-5 June 2015
Meeting website with link to online registration:
http://www.nerc.ac.uk/research/funded/programmes/oceanacidification/news/meeting

PROVISIONAL SCHEDULE

Thursday 4 June
Registration and refreshments from 09.30

Welcome and introductory remarks

10.15 **Duncan Wingham** *NERC Chief Executive*
Harry Elderfield *Cambridge University; Chair of UKOA Programme Advisory Group*
Hans-Otto Pörtner *AWI Bremerhaven, BIOACID Co-Chair*

What is ocean acidification? Chair: **Ian Boyd** *Defra Chief Science Adviser*

10.30 Introduction to ocean acidification **Phil Williamson** *NERC & University of East Anglia*

10.50 Global and regional observations of pH change **Ute Schuster** *University of Exeter*

11.10 Lessons from the past **Paul Pearson** *Cardiff University*

11.30 Forecasting future ocean acidification at global and regional scales
Jerry Blackford *Plymouth Marine Laboratory*

11.50 Ship-based studies of acidification impacts on the upper ocean, from Arctic to Southern Ocean
Toby Tyrrell *University of Southampton*

12.10 Pelagic ecosystems under ocean acidification **Maren Voss** *Leibniz Institute for Baltic Sea Research*

12.30 Lunch

Why should we care about ocean acidification?

Chair: **Louise Heaps** *Marine Chief Adviser, WWF-UK*

13.20 Impacts of ocean acidification and warming on seafloor organisms and ecosystems **Steve Widdicombe** *Plymouth Marine Laboratory*

13.40 Responses of benthic assemblages to interactive stress **Martin Wahl** *GEOMAR Kiel*

14.00 Effects of ocean acidification in a warming climate on species interactions at distribution boundaries **Felix Mark** *AWI Bremerhaven*

14.20 Ocean acidification effects on commercially-important species - and wider impacts **Kevin Flynn** *Swansea University*

14.40 Ocean acidification impacts on ocean services: research approaches and stakeholder perspectives **Stefan Gössling-Reisemann** *University of Bremen*

15.00 Tea/coffee

What can we do about ocean acidification?

Chair: **Richard Black** *Director, Energy & Climate Intelligence Unit*

15.30 Ocean acidification science-to-policy at national and international levels **Carol Turley** *Plymouth Marine laboratory*

15.50 Ocean acidification and the Intergovernmental Panel on Climate Change **Hans-Otto Pörtner** *AWI Bremerhaven*

Panel discussion: The environmental and societal risks of ocean acidification

Chair: **Roger Harrabin** *BBC Environment Analyst*

16.10 (to ~17.00) Panel members

Ian Boyd *Defra Chief Science Adviser*
Jason Hall-Spencer *Plymouth University*
Louise Heaps *WWF-UK*
Nick Lake *CEO Scottish Shellfish Growers Association*
Ken Wright *Science Adviser, DECC Science Team*

[Evening dinner for speakers, chairs and panel members].

Friday 5 June

Welcome

09.30 **Harry Elderfield** *UKOA* and **Hans-Otto Pörtner** *BIOACID*

Science insights and achievements: session #1

Chair: **Angela Hatton** *Scottish Marine Institute*

09.40 Natural CO_2-rich reefs as windows into the future **Frank Melzner** *GEOMAR Kiel*

10.00 Ocean acidification and the future of coldwater corals **Seb Hennige** *Heriot-Watt University*

10.20 Scaling up impacts from physiology to ecosystems: general principles **Silvana Birchenough** *Cefas Lowestoft*

10.40 Scaling up impacts from physiology to ecosystems: a specific example
Ana Queirós *Plymouth Marine Laboratory*

11.00 Coffee/Tea

Science insights and achievements: session #2

Chair: **Paul Halloran** *University of Exeter*

11.30 Monitoring ocean acidification: principles and practicalities **Dorothee Bakker** *Univ of East Anglia*

11.50 Calcified algae provide 125 year record of pH changes in the Arctic **Jan Fietzke** *GEOMAR Kiel*

12.10 The complex responses of coccolithophorids to ocean acidification
Jeremy Young *University College London*

12.30 Greenhouse gas feedbacks: more OA, less N_2O? **Andy Rees** *Plymouth Marine Laboratory*

12.50 Lunch

Science insights and achievements: session #3

Chair**:** **Tim Jickells** *University of East Anglia*

13.30 Regional variability of acidification in the Arctic: modelling a sea of contrasts
Ekaterina Popova *NOC Southampton*

13.50 Ocean acidification in whole ecosystem models **Dougie Speirs** *University of Strathclyde*

14.10 From natural science to management: Sea butterflies (pteropods) as sentinel species for ocean acidification monitoring **Nina Bednarsek** *University of Washington & NOAA*

14.30 Interactions of acidification and metal toxicity **Ceri Lewis** *University of Exeter*

Panel discussion: What have we learned? What are the future science challenges?

Chair: **Carol Turley*** *Plymouth Marine Laboratory*

14.50 Panel members:

Peter Liss* *University of East Anglia*
John Raven* *University of Dundee*
Murray Roberts *Heriot-Watt University*
John Shepherd* *NOC Southampton*
Maren Voss *Leibniz Institute for Baltic Sea Research*
Andrew Watson* *University of Exeter*

15.30 Concluding remarks: **Harry Elderfield***

15.45 Tea/coffee. Meeting ends

**Authors of Royal Society report "Ocean acidification due to increasing atmospheric carbon dioxide", published June 2005 (additional authors: Ken Caldeira, Ove Hoegh-Guldberg & Ulf Riebesell)*

This meeting is an accredited side event for "Our Common Future under Climate Change"; main conference, Paris 7-10 July 2015 http://www.commonfuture-paris2015.org