

## Conference Programme: "Life in a High Carbon World", 15 September 2015

9.00 - 9.30	Coffee and registration
9.30 - 9.45	Welcome and introduction: Professor Rachel Mills, Head of Ocean & Earth Science
9.45- 10:30	Keynote: Professor Hans-Otto Pörtner, Alfred-Wegener-Institute, Bremerhaven "Climate change impacts on ocean biology: physiological underpinnings, projections and uncertainties"
10.30- 11.00	Break
<i>Theme 1: Carl</i> Chair: Dr Jessi	ca Whiteside
11.00 - 12.10	(11.00 - 11.20) <b>Keynote:</b> Professor Andrew Watson, University of Exeter <i>'The ocean in the global carbon cycle'</i>
	(11.20 - 11.30) Professor Gavin Foster, Ocean and Earth Science ' <i>Climate sensitivity in warm worlds of the past</i> '
	(11.30 - 11.40) Professor Richard Sanders, National Oceanography Centre <i>'Controls over mesopelagic mineralisation'</i>
	(11.40 - 11.50) Dr Stephanie Henson, National Oceanography Centre <b>'How big is the ocean's biological carbon pump?'</b>
	(11.50 - 12.00) Professor Rachael James, Ocean and Earth Science ' <i>Causes and consequences of methane release from seafloor sediments in the</i> <i>Arctic</i> '
	(12.00 - 12.10) Professor Mary Edwards, Geography and Environment <b>'The role of lakes in greenhouse gas emissions from the northern high latitudes'</b>
12.10 - 1.30	<b>Buffet lunch with posters viewing and judging</b> Conference delegates to vote for posters, final decision to be made by the Judging Panel
	bon effects on organisms and ecosystems for Jörg Wiedenmann
1.30 - 3.00	(1.30 -1.50) <b>Keynote:</b> Professor Chris Perry, University of Exeter <i>'Trajectories of coral reef carbonate production and accretion in a high CO2 world'</i>
	(1.50 - 2.00) Dr Phyllis Lam, Ocean and Earth Science ' <i>Nitrifiers in a high CO2 setting</i> '
	(2.00 – 2.10) Dr Jessica Whiteside, Ocean and Earth Science 'Ecosystem reliance to ocean deoxygenation and acidification: Ancient molecular clues from mass extinction events'
	(2.10 - 2.20) Dr Chris Hauton Ocean and Earth Science 'The physiological performance of two contrasting decapod crustaceans in response to increased pCO2 and changes in salinity'



(Cont'd) Theme 2: Carbon effects on organisms and ecosystems Chair: Professor Jörg Wiedenmann		
1.30 - 3.00	(2.20 – 2.30) Dr Felix Eigenbrod, Biological Sciences 'Vulnerability of ecosystems to climate change moderated by habitat intactness'	
	(2.30 – 2.40) Professor Patrick Doncaster, Biological Sciences 'Early warnings of a critical transition in biodiversity from compositional disorder'	
	(2.40 - 2.50) Dr Tom Roland, University of Exeter ' <i>Peatlands and the carbon cycle: past, present and future'</i>	
	(2.50 - 3.00) Professor Toby Tyrrell, Ocean and Earth Science <i>'Did ocean acidification kill off the ammonites?'</i>	
3.00 - 3.30	Break	
<i>Theme 3: Hui</i> Chair: Dr Chri	man societies and mitigation of high carbon effects s Hauton	
3.30 - 5.00	(3.30 -3.50) <b>Keynote:</b> Professor Mark Maslin, UCL <i>"The perfect storm: Population, development and climate change"</i>	
	(3.50 - 4.00) Dr Thomas Bibby, Ocean and Earth Science <b>'Marine algal biotechnology'</b>	
	(4.00 – 4.10) Professor Gail Taylor, Biological Sciences <b>'Going carbon negative: Can bioenergy be part of the solution?'</b>	
	(4.10 - 4.20) Dr Denis Pasero, Ilika Technologies Ltd. <i>'Carbon emission remediation through wireless sensor networks: From transport to homes'</i>	
	(4.20 – 4.30) Professor Ian Williams, Engineering and Environment 'Overcoming barriers to the development of standardised and transparent methods for practically realisable carbon management at different scales'	
	(4.30 - 4.40) Dr Marije Schaafsma, Geography and Environment ' <i>Energy, carbon and conservation in Sub-Saharan Africa</i> '	
	(4.40 - 4.50) Dr James Dyke, Geography and Environment <b>'Is it rational to develop new fossil fuel reserves?'</b>	
4.50 - 5.00	Plenary discussion and conference close Chaired by: Professor Jörg Wiedenmann	
5.00 - 6.00	Poster session, wine & canapés Poster prize award sponsored by <u>Southampton Marine &amp; Maritime Institute</u>	