

Biological and climatic impacts of ocean trace element chemistry

Monday 7 – Tuesday 8 December 2015 | The Royal Society, London

Discussion meeting organised by Professor Gideon Henderson FRS, Professor Ed Boyle, Professor Maeve Lohan, Dr Micha Rijkenberg and Dr Géraldine Sarthou

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DAY 1				DAY 2			
Session 1: The chemical cycle of trace elements in the ocean		Session 2: Micronutrients and biology		Session 3: Understanding chemical tracers of past and present process		Session 4: Human influence	
09.00	Welcome by the Royal Society and organisers						
09.05	Robert Anderson Trace elements in seawater: advances from global measurement campaigns	13.30	Mick Follows Micronutrient resources and marine phytoplankton communities: theory and simulations	09.00	Tina van der Flierdt Radiogenic isotope tracers of present and past circulation and metal cycles	13.30	François Morel Trace metal biogeochemistry and bioavailability in an acidifying ocean
09.30	Discussion	14.00	Discussion	09.30	Discussion	14.00	Discussion
09.45	Tim Jickells Atmospheric transport to the oceans of trace elements and micronutrients	14.15	Mark Moore Ecosystem response to dust and ash input to the surface ocean	09.45	Derek Vance Transition metal isotopes as tracers of oceanic metal budgets and cycling	14.10	Carl Lamborg The ocean mercury cycle and its anthropogenic perturbation
10.15	Discussion	14.45	Discussion	10.15	Discussion	14.40	Discussion
10.30	Coffee	15.00	Tea	10.30	Coffee	14.50	Tea
11.00	Catherine Jeandel Ocean margins as a critical source of trace and major elements	15.30	Alessandro Tagliabue Hydrothermal inputs of micronutrients as a control on ocean productivity	11.00	Gideon Henderson FRS U-series rate-meters for ocean processes	15.20	Ed Boyle Anthropogenic Pb isotopes as pollutants and tracers of ocean processes
11.30	Discussion	16.00	Discussion	11.30	Discussion	15.50	Discussion
11.45	Reiner Schlitzer Mixing, advection, and scavenging: modelling transport of trace elements	16.15	Maite Maldonado Ecosystem control on ocean metal cycles	11.45	Karen Casciotti Nitrogen isotope variations as tracers of marine nitrogen biogeochemistry	16.00	Philip Boyd Intentional Fe fertilisation and geoengineering
12.15	Discussion	16.45	Discussion	12.15	Discussion	16.30	Discussion
12.30	LUNCH	17.00	CLOSE	12.30	LUNCH	16.40	Summary and closing remarks
						17.00	CLOSE

Draft programme – correct as of 20/10/2015 – subject to change