

11 August 2010

***Earth System Science and Climate: Policy Relevant Outcomes of the
NERC QUEST Programme***

**4 November 2010, 10am – 4pm, Church House Conference Centre,
Westminster, London, SW1P 3NZ**

Dear Colleague

The UK Natural Environment Research Council's programme *Quantifying and Understanding the Earth System* (QUEST) would like to invite you to its Finale Event on 4th November 2010 at Church House, London to celebrate its scientific achievements.

The scope of the research programme includes the global atmosphere, oceans, hydrological systems, the cryosphere (ice), biological systems, natural change (climate, volcanic eruptions) and human-induced change and consequences. Specifically, QUEST research projects are centred around the themes:

1. How important are climate-biosphere feedbacks?
2. How is atmospheric composition naturally regulated?
- 3a. How much climate change is "dangerous"?
- 3b. Managing the biosphere: what can be done to mitigate climate change?

QUEST has been operational since 2004, involving around 300 scientists. It has already made a substantial contribution to the peer-reviewed literature with at least 300 publications so far, and many more expected after the project closes later this year. QUEST represents the best of UK world-leading environmental science and excellent research value.

QUEST has actively developed a stronger UK Earth System Science community, with scientists who are now more able to collaborate across traditional disciplinary boundaries to answer questions that can only be tackled with an interdisciplinary approach. QUEST scientists have worked closely with policymakers and other users of scientific research from the early stages of the research to develop and deliver scientific evidence. It has provided advice and information to many organisations including on historic and future emissions to the DECC and the Committee on Climate Change, forestry to DECC and the Copenhagen climate negotiations, bioenergy to Volkswagen, global fish stocks to DfID and the international fishing industry, and managing peatlands to UK land managers.

The QUEST Finale Event will present the key outcomes of the research to policy-makers, synthesising knowledge across projects to address challenging questions. It will give participants an opportunity to meet scientists over interactive displays of their work and ask their own questions of experts. It will discuss lessons learnt and the way forward under the Living with Environmental Change initiative and other research/policy processes.

The programme for the day is overleaf. Details on how to register for this event and how to receive further information are at the bottom of your invitation.

I would be delighted if you could attend and look forward to seeing you.

Yours faithfully

A handwritten signature in black ink, appearing to read 'A. Thorpe', with a large, elegant flourish at the end.

Professor Alan Thorpe
Chief Executive

Please address all queries to Rebecca Farncombe, Events Manager at ren@nerc.ac.uk,
01793 411568

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04 November 2010, Church House Conference Centre, London

Provisional Programme

Chair: Lord Selborne

- 09:15 Coffee/tea and registration
- 10:00 Welcome & Introduction
Professor Alan Thorpe, NERC Chief Executive
- 10:05 Key Questions QUEST set out to answer and how far we got?
Professor Colin Prentice, University of Bristol, QUEST Programme Leader
- 10:35 Science keynote speaker
Professor Joe Alcamo - Chief Scientist, United Nations Environment Programme
- 10:50 Policy keynote speaker
Professor John Beddington
- 11:05 Tea and Coffee

Chair: (TBC)

- 11:20 Theme 1: How important are biotic feedbacks for 21st century climate change?
Dr Eleanor Blyth - QESM, Centre for Ecology and Hydrology,
- 11:40 Theme 2: How are climate and atmospheric composition regulated on time scales up to a million years?
Dr Eric Wolff – DESIRE, British Antarctic Survey
- 12:00 Questions and Answers
- 12:15 Lunch and networking opportunity “Ask the experts”
- 13.30 Theme 3: Mitigation and impact
a. Dr Manuel Barange – QUEST, Plymouth Marine Laboratory
b. Professor Pete Smith – University of Aberdeen
- 14:00 Question and Answers
- 14:20 Summary - *David Warrilow - Department of Energy and Climate Change (DECC)*
- 15:00 Coffee and networking opportunity “Ask the experts”
- 16:00 Close