



Cambridge Society for the Application of Research

c/o Churchill College
Storey's Way
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Probing the Polar Oceans

Dr Emily Shuckburgh

**Deputy Head of the Polar Oceans Division
British Antarctic Survey**

7.30pm, Monday 16th May, 2016

Wolfson Hall Lecture Theatre, Churchill College, Storey's Way, Cambridge

Please note This Lecture will be preceded by a brief (5 minute) presentation by Luis Pazos, who was a finalist in last year's Student Award programme, about his work on solar energy cells

The Lecture:

Dr Emily Shuckburgh writes:

The polar oceans are extremely harsh environments.

Together with their remoteness, this poses huge challenges for taking scientific measurements.

The vast Southern Ocean in particular is a "data desert", with minimal observational records in winter.

However, it is now clear that the polar oceans are central to our global climate system. Some of the greatest changes on the planet are occurring there, with dramatic loss of Arctic sea ice and warming throughout the depth of the Southern Ocean around Antarctica.

But also changes in the polar oceans have a dramatic influence on the rest of the planet through their impacts on the global carbon budget, on our weather patterns and on the ice sheets and the subsequent global sea level rise.

In this talk I will describe our current understanding of the polar oceans in the context of global climate change, and outline some of our plans for improving our observational records using the latest autonomous technology and the UK's new polar ship.

About the Speaker:

Dr Emily Shuckburgh is a climate scientist and Deputy Head of the Polar Oceans division at the British Antarctic Survey.

She holds a number of positions at the University of Cambridge (including fellow of Darwin College, associate fellow of the Centre for Science and Policy, member of the Cambridge Forum for Sustainability and the Environment and fellow of the Cambridge Institute for Sustainability Leadership).

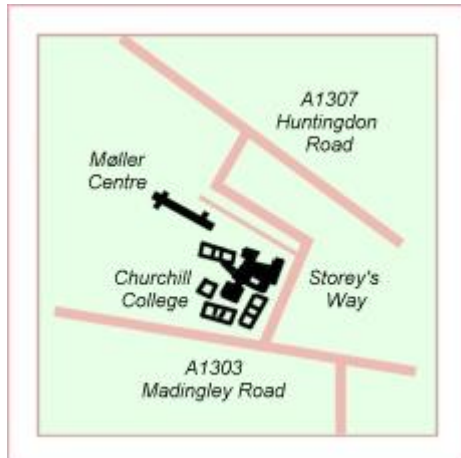
In the past she has worked at Ecole Normal Supérieure in Paris and at MIT.

She is a fellow of the Royal Meteorological Society and co-chair of their Climate Science Communications Group, a trustee of the Campaign for Science and Engineering and a member of the Scientific Steering Committee of the Isaac Newton Institute.

She has also acted as an advisor to the UK Government on behalf of the Natural Environment Research Council.

She was awarded an OBE in the New Year's Honours List 2016 for services to science and the public communication of science.

Practical Matters



Those attending the CSAR lecture may park in the Senior Car Park on Churchill Road, which is off Storey's Way. More parking is available further along Churchill Road, and in the Möller Centre at the far end.

CSAR lectures are open to all; CSAR members are admitted free. Pupils and students may register for free membership at the lecture reception desk.

Non-members are asked to make a nominal contribution of £3.00.

Coffee and biscuits are available in the Wolfson Foyer from around 7pm. For further directions, see: www.chu.cam.ac.uk/about/visitors/directions.php

Attendees are welcome to dine in the Hall at Churchill College (self-service, 5.45-7.15 pm), and to have snacks and refreshments in the College Buttery before and after events.

Microsoft Research

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