

USRG themes

Carbon Reduction: Addressing scientific and technological challenges in emerging energy technologies, efficiency and sustainability

(Champion: Dr E Richardson, FEE)

Carbon Behaviour: Exploring the political, policy, economic and social context of carbon reduction

(Champion: Dr J Nordensvard, FSHS)

Carbon Capture: extracting CO₂ from existing technologies in a more efficient manner

(Champion: Dr L Armstrong, FEE)

Carbon Sequestration: Exploring biological and geological sequestration options and natural cycles

(Champion: Dr J Matter, FNES)

Carbon Utilisation: Exploring the conversion of CO₂ into synthetic, renewable fuels

(Champion: Dr P Sazio, FPSE)

Carbon Consequences: How we manage our carbon footprint impacts climate, health and food security

(Champion: Dr S Brown, FEE)

Upcoming events

18 May 2016
14:00-15:00
27/2003

Dr Denis Kramer

Rational Design of Oxides for
Low Temperature Fuel Cell
Applications

18 May 2016
15:00-17:00
58/1067

CLEAN CARBON Showcase

Professor Robert Nicholls &
Dr Patrick James

Consequences and Behaviour: 2
talks showcasing Clean Carbon
research

More info:

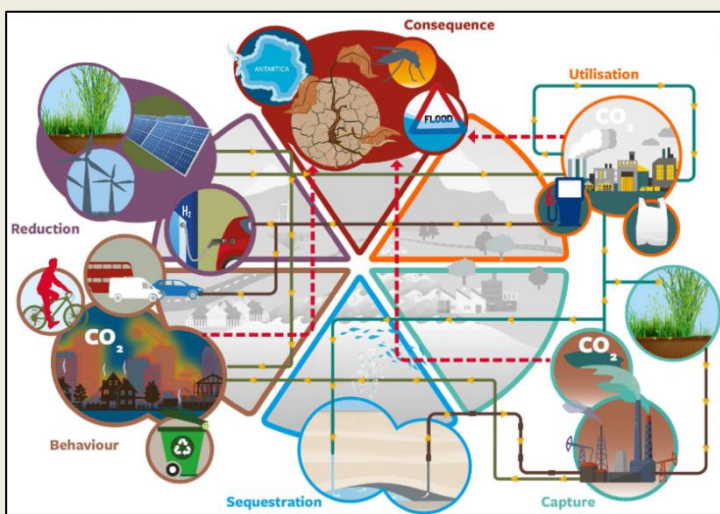
<http://tinyurl.com/h9gm9e6>

Upcoming multidisciplinary event and seminars that you would like to advertise to the wider carbon community? Email fmc@soton.ac.uk

Welcome to the new Clean Carbon newsletter!

This monthly newsletter will provide a roundup of the latest news, events and opportunities that will promote carbon related research across the University and beyond.

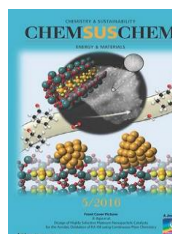
With over 100 internal and external members spanning six key themes (see left), we aim to address carbon related challenges as an interdisciplinary community.



CLEAN CARBON News Release

Southampton scientists and partners win €16 million H2020 funding for unique CCS safety experiment

STEMM-CCS aims to improve risk assessment and monitoring of offshore Carbon Capture and Storage sites. It will be the world's first 'real-world' deep-water controlled experiment and will simulate emission from a submerged carbon dioxide storage reservoir. (More info: <http://tinyurl.com/gnlmji5i> and <http://tinyurl.com/zdnov5b>)



Chemistry and 'Clean Carbon' Combine for Energy-Efficient Chemical Technologies

The latest issue of the prestigious Chemistry and Sustainability journal, **CHEMSUSCHEM**, has chosen to feature a paper by Clean Carbon member, **Dr Robert Raja** and his team. The paper describes a sustainable, energy-efficient method for the manufacture of nylon-6, which mitigates the generation of greenhouse gases, such as CO₂ and other inorganic waste that ends up in landfill. (More info: <http://tinyurl.com/h39cfqb>)

From coal dust to clean fuel – algal biofuel developments at the Nelson Mandela Metropolitan University

Clean Carbon USRG members **Professor Rachel Mills** and **Professor Damon Teagle** visited **InnoVenton**, the Nelson Mandela Metropolitan University (NMMU) Institute of Chemical Technology, South Africa, to explore our common interests in algal biofuels. InnoVenton has established an industrial demonstrator-scale plant for the large-scale cultivation of biofuel algae partly fed on flue gas CO₂. (More info: <http://tinyurl.com/gL58ucy>)



CLEAN CARBON Publication Spotlight

- * Marin-Moreno, H.; et al. (2016) [The challenges of quantifying the carbon stored in Arctic marine gas hydrate](#). *Marine and Petroleum Geology*, 71, 76-82.
- * Armstrong McKay, D. et al. (2016) [Global carbon cycle perturbation across the Eocene-Oligocene climate transition](#). *Paleoceanography*, 31, (2), 311-329.
- * Humphreys, M.; et al. (2016) [Multidecadal accumulation of anthropogenic and remineralized dissolved inorganic carbon along the Extended Ellett Line in the northeast Atlantic Ocean](#). *Global Biogeochemical Cycles*, 30, (2), 293-310.
- * Poulton, A.; et al. (2016) [Production of dissolved organic carbon by Arctic plankton communities: Responses to elevated carbon dioxide and the availability of light and nutrients](#). *Deep Sea Research Part II Topical Studies in Oceanography*

How can we provide more support for our PGR community?

- Multidisciplinary networking events?
- Poster presentation sessions?

Please forward this newsletter to your PGR students and ask them to email fmc@soton.ac.uk.

We want to arrange a networking event to find out what they need and what we can do to support them and further their careers.

New to Clean Carbon and would like to join? Please complete the following application form: <http://tinyurl.com/CC-appl-form> - all are welcome, including students or those outside the University.