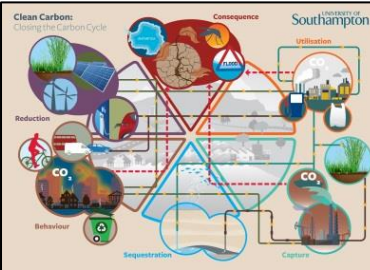


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# NEWSLETTER

July 2016 (Issue 3)



### USRG themes

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

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

**Carbon Capture:** extracting CO<sub>2</sub> from existing technologies in a more efficient manner

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

**Carbon Utilisation:** Exploring the conversion of CO<sub>2</sub> into synthetic, renewable fuels

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

### CARBON DATING for your diary

28 Sept 2016, 09:30-16:00

#### CLEAN CARBON Sandpit

Theme-crossing research proposals  
Formulating discussions for upcoming EU bids

Info: <http://tinyurl.com/hyoxzk3>

19 Oct 2016, 14:00-17:00

#### CLEAN CARBON Showcase

Utilisation and Sequestration:  
Professor Robert Raja & Dr Doug Connelly

2 talks showcasing Clean Carbon research

Info: <http://tinyurl.com/zrl83wm>

25 Nov 2016, 15:00-17:30

#### CLEAN CARBON Meets...

Professor Jon Gibbins, Director of UK Carbon Capture and Storage Research Centre (UKCCSRC)

Info: <http://tinyurl.com/hmm3scr>

### MOVING ON!

Sadly Clean Carbon will be losing a highly valued member of its community. **Dr Milena Büchs**, affiliated with the Behaviour Theme, focuses on societal issues around climate change, particular in relation to energy saving and low-carbon lives. She is moving to the Sustainability Research Institute at the University of Leeds.

Good luck Milena! ☺

Upcoming multidisciplinary event that you would like advertised to the wider carbon community?  
Email [fmc@soton.ac.uk](mailto:fmc@soton.ac.uk)

### CLEAN CARBON HEADLINES

#### Southampton part of £10 million Leverhulme Trust Research Centre Award

Clean Carbon members **Dr Andrew Yool**, **Professor Rachael James** and **Dr Chris Pearce** will be working with colleagues from partner organisations on a long-term programme of research which will investigate the role of enhanced rock weathering as a means of safely removing large amounts of CO<sub>2</sub> from the atmosphere to cool the planet while also mitigating ocean acidification.



The Leverhulme Centre for Climate Change Mitigation (LC<sup>3</sup>M), Led by Director, Professor David Beerling FRS, at the University of Sheffield, which launched on 1 June 2016, will be organised across four linked themes (earth systems modelling, fundamental science, applied science and sustainability and society), designed to understand enhanced weathering as a 'low tech' strategic option for revolutionising climate change mitigation by adapting agricultural practices for delivering resource-efficient global environment and food security.

More info: <http://tinyurl.com/zojz6tv>

### CLEAN CARBON News Release

#### CARBON REDUCTION: Southampton student team in the Shell Eco Marathon

Southampton competed for the first time in the **Shell Eco-Marathon Competition** at the London Olympic Park. The team, led by **Roberto Lot** and **John Walker**, designed a new light-weight aluminium vehicle and participated in the battery-electric prototypes category, with ~50 contestants. The team passed all technical inspection results, a big achievement for the first year at the competition, however due to a breakdown of the electronic system were not able to post a qualifying lap time. Robert said "The result left all of us hungry to improve for next year and the Team has already identified the ambitious target of **500 km/kWh** for 2017, aiming for a top ten ranking."



The **Southampton University Formula Student Team (SUFST)**, supervised by **Andy Cruden**, achieved their best ever placing at the UK competition at Silverstone last week, finishing 60<sup>th</sup> out of 108 teams from around the world. The Team have designed and built a fantastic car this year, including a full front and rear aero package for the first time, and still managed to achieve the lightest car they have made yet, with a mass of 199kg (in 2012 the SUFST car weighed 305.5kg!).

The team is hoping to modify their car to compete in the all-electric class over the next few years ... so watch this space!!

More info: <http://tinyurl.com/h8bac6>

#### CARBON UTILISATION: Southampton students take their research on porous materials in carbon utilisation to Rio de Janeiro

University of Southampton researchers joined scientists from all over the world for the highly-acclaimed 18th **International Zeolite Conference (IZC)**. Clean Carbon's **Professor Robert Raja** attended, along with doctoral students **Stephanie Chapman** and **Elpinki Georgiou**, both of whom had been invited to deliver conference presentations. The conference **program** featured a diverse array of materials and applications, including the role of porous materials for CO<sub>2</sub> capture and utilisation.

More info: <http://tinyurl.com/hn732wv>



### CLEAN CARBON Publication Spotlight

- \* Blackmore T.; et al. (2016) **Effects of turbulence on tidal turbines: Implications to performance, blade loads, and condition monitoring**, *International Journal of Marine Energy*, volume 14 pages 1-26.
- \* Couldrey, M.; et al. (2016) **On which timescales do gas transfer velocities control North Atlantic CO<sub>2</sub> flux variability?** *Global Biogeochemical Cycles*, 30, (5), 787-802
- \* Allinson, David.; et al. (2016) **Measurement and analysis of household carbon: the case of a UK city**, *Applied Energy*, 164, 871-881

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