

## University of York Green Chemistry Centre of Excellence Research and Development Delivering Green Excellence: *Chemistry Never Stops!*

### Section 1 About the project

#### Summary

The Green Chemistry Centre of Excellence (GCCE) is an internationally-leading academic facility for pioneering pure and applied green and sustainable chemical research. We provide high quality research-driven education and training programmes and develop strategic research partnerships with global corporations and world-leading universities. The world is now rapidly waking up to the importance of making chemicals and chemistry more sustainable and environmentally compatible – Green Chemistry never stops!

#### Project partners

Our funders include the UK Research Councils; local, national and international industries; Technology Strategy Board; DEFRA-LINK; Wolfson; Royal Society; Carbon Trust, EU FPVII; European Regional Development Fund (ERDF).

### Section 2 The results

#### The problem

To deliver excellence in green and sustainable chemistry to a diverse range of stakeholders from academics to industrialists and to the general public.

#### The approach

Personnel within the GCCE are empowered in an ethos to deliver a sustainable green future that addresses the environmental challenges of the 21<sup>st</sup> century. Our operational model is fully integrated across all levels ensuring fast and effective communication with all our stakeholders. The Green Chemistry Strategy Board liaises with external experts who serve on our External Advisory Board on operational matters and future plans.

Our successes in research and development are incorporated in to undergraduate and taught graduate programmes so as to inspire the next generation of 'green thinkers' and are key part of our University strategy, which is based on four key themes: (a) excellence; (b) internationalisation; (c) inclusivity, and (d) sustainability.

UNIVERSITY of York



#### Profile

- HE
- 14,700 FT and PT students
- 2000 staff
- Urban

# Winner's case study

## Our goals

In challenging times of a restrained global economy, increased competition, and demanding needs of a growing world population are goals are "to maintain and enhance the high quality of provision of green and sustainable chemistry to enable a strategic step change to a low carbon, bio-based economy" based on core values of pure and translational research, education, training, networking and partnerships.

## Obstacles and solutions

Discovery research to commercial reality	Development of mesoporous carbonaceous materials derived from waste polysaccharides leading to a spin-out company Starbon Technologies Ltd.
Inspiring the next generation of green thinkers	Development of interactive touch screens showcased at a public science events

## Performance and results

Current cumulative research funding exceeds £10 m, to support 95 personnel delivering across 74 active projects engaging with the general public, SME's and large companies both regional, national and multinational. With in-excess of 450 publications, numerous national and international awards, the GCCE will move in to new state-of-the-art premises in 2014 which will house an bespoke Industrial Engagement Facility for business to business and academia to business networking.

## Section 3 The future

### Lessons learned

We should from the mistakes created by the expansion in First Generation biofuels. We should not divert food cropping land for fuels. Using waste as a resource represents a unique opportunity to meets the global needs for energy and materials in the 21<sup>st</sup> Century. The future is positively green.

### Sharing your project

We are delighted to share our vision and knowledge of green chemistry with a variety of stakeholders. Please visit our website: <http://www.york.ac.uk/chemistry/research/green/>

### What has it meant to your institution to be a Green Gown Award finalist?

As a World Top-100 Ranked University we are absolutely thrilled to be winners of the Green Gown Award 2013 for Research and Development.

### Further information

Please contact

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Visit our websites:for Green Chemistry: <http://www.york.ac.uk/chemistry/research/green/>

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