GreenCarbon
Project ID: 721991
Funded under: H2020-EU.1.3.1. - Fostering new skills by means of excellent initial training of researchers

Advanced Carbon Materials from Biowaste: Sustainable Pathways to Drive Innovative Green Technologies

From 2016-10-01 to 2020-09-30, ongoing project | GreenCarbon Website

Project details

<table>
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<tr>
<th>Total cost:</th>
<th>Topic(s):</th>
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<tr>
<td>EUR 3 623 224,47</td>
<td>MSCA-ITN-2016 - Innovative Training Networks</td>
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<td>Spain</td>
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<td>MSCA-ITN-ETN - European Training Networks</td>
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Objective

The energy crisis, environmental pollution and global warming are serious problems that are of great concern throughout the world. Around 40% of the world’s energy consumption is dedicated to the production of materials and chemicals. Thus, there is a need to develop high-performance materials based on renewable resources, simpler to synthesise and cost effective. Carbon materials derived from renewable resources (e.g., biomass) are ideal candidates to meet these needs. The main objective of our proposed Innovative Training Network is to develop new scientific knowledge, capability, technology, and commercial products for biomass-derived carbons (BCs); thus impacting the way that Europe uses and innovates with sustainable carbon materials. This will be accomplished through outstanding research and training programmes for fourteen early-stage researchers (ESRs). Our proposed research programme is feasible given the varied expertise and knowledge of the academic and industrial participants. We expect that GreenCarbon will improve our ability to rationally design a range of functionalised BC-derived materials using different individual and synergistically coupled processes and expand their practical applications. Our research programme comprehensively covers all aspects from precursors (the nature of biomass) to processing (thermochemical conversion, porosity development, chemical functionalisation) and application (e.g., CO2 capture, heterogeneous catalysis and chemicals from biomass) enabling a unique design of engineered sustainable BC materials. At the same time, our training programme is designed with the aim to empower the ESRs through the provision of a comprehensive and coherent training package, which includes complementary competencies and knowledge in all the science, engineering and business skills so as to be capable of deploying new technologies within different environments both inside and outside of academia.

Related information

Report Summaries

Periodic Reporting for period 1 - GreenCarbon (Advanced Carbon Materials from Biowaste: Sustainable Pathways to Drive Innovative Green Technologies)
### Coordinator

<table>
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<tr>
<th>Organisation</th>
<th>Address</th>
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<th>EU contribution</th>
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<tr>
<td>UNIVERSIDAD DE ZARAGOZA</td>
<td>CALLE PEDRO CERBUNA 12, 50009 ZARAGOZA</td>
<td>Spain</td>
<td>EUR 495,745,92</td>
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**Activity type:** Higher or Secondary Education Establishments

**Contact the organisation**

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### Participants

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<td>UNIVERSITEIT GENT</td>
<td>SINT PIETERSNIEUWSTRAAT 25, 9000 GENT</td>
<td>Belgium</td>
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<td>ASTON UNIVERSITY</td>
<td>ASTON TRIANGLE, B4 7ET BIRMINGHAM</td>
<td>United Kingdom</td>
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<td>SCHLOSS HOHENHEIM, 70599 STUTTGART</td>
<td>Germany</td>
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<td>UNIVERSITETSVAGEN 10, 10691 STOCKHOLM</td>
<td>Sweden</td>
<td>EUR 505,347,03</td>
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**Activity type:** Higher or Secondary Education Establishments

**Contact the organisation**
QUEEN MARY UNIVERSITY OF LONDON
327 MILE END ROAD
E1 4NS LONDON
United Kingdom
See on map

**Activity type:** Higher or Secondary Education Establishments

**Contact the organisation**

THE UNIVERSITY OF EDINBURGH
OLD COLLEGE, SOUTH BRIDGE
EH8 9YL EDINBURGH
United Kingdom
See on map

**Activity type:** Higher or Secondary Education Establishments

**Contact the organisation**

FRAUNHOFER GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.
HANSASTRASSE 27C
80686 MUNCHEN
Germany
See on map

**Activity type:** Research Organisations

**Contact the organisation**

ORGANICS LIMITED Participation ended
SOVEREIGN COURT TWO, UNIVERSITY OF WARWICK SCIENCE PARK SIR WILLIAM LYONS ROAD
CV47EZ COVENTRY
United Kingdom
See on map

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

**Contact the organisation**

HTCycle GMBH Participation ended
LIBNOWER LANDSTR. 1-3
17390 MURCHIN OT RELZOW
Germany
See on map

**Activity type:** Other

**Contact the organisation**

**Partner organisations**
DBFZ DEUTSCHES BIOMASSEFORSCHUNGSZENTRUM GEMEINNUTZIGE
GMBH
TORGAUER STRASSE 116
04347 LEIPZIG
Germany
See on map
Activity type: Higher or Secondary Education Establishments
Contact the organisation

Viridor Waste Management Limited
Peninsula House, Rydon Lane
EX2 7HR Exeter
United Kingdom
See on map
Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

Biokol Sverige AB
Sibyllegatan 53
SE11443 Stockholm
Sweden
See on map
Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

Surface Measurements Systems Limited
Unit 5 Wharfside, Rosemont Road,
HA0 4PE Alperton
United Kingdom
See on map
Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation

PYREG GMBH
TRINKBORNSTRASSE 15 17
56281 DORTH
Germany
See on map
Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
Contact the organisation