

2020-07-07

Recyclable structural composites for marine renewable energy

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<http://hdl.handle.net/10026.1/15831>

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RECYCLABLE STRUCTURAL COMPOSITES FOR MARINE RENEWABLE ENERGY

Research question?

In the marine environment:

- metals corrode
- wood rots
- composites survive

Can we make a

sustainable composite structure that is not a problem at end-of-life?

University of Plymouth research activities

Manufacture by monomer infusion under flexible tooling (MIFT)
natural fibre reinforcement

acrylic (PMMA) or polylactic acid (PLA) matrix

Demonstrator component ... to be decided/informed by you?

Life Cycle Assessment (LCA) using SimPro software

keep in touch:

http://www.seabiocomp.eu/interest_group/

GOALS



Drive for innovation in new composite materials



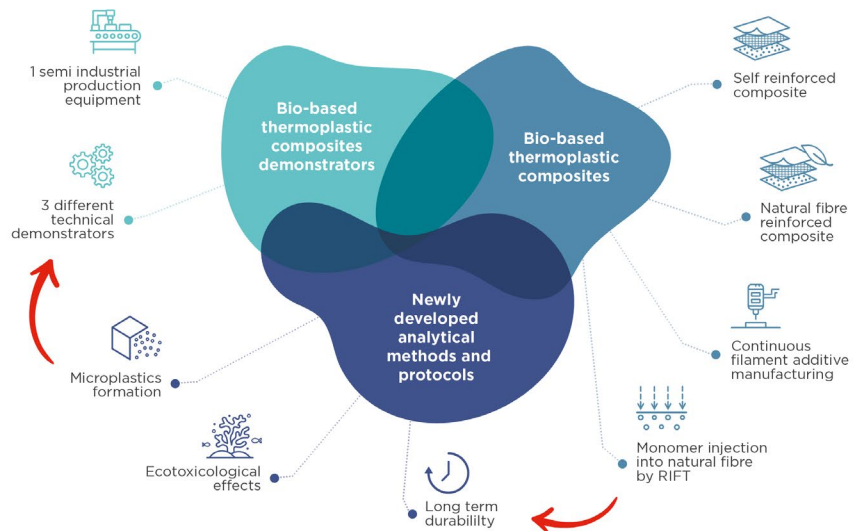
Reduce the environmental impact of composite maritime industry components



Evaluate durability and long-term ecological impact from microplastics



DEVELOPMENT AND DEMONSTRATORS OF DURABLE BIOBASED COMPOSITES FOR THE MARINE ENVIRONMENT

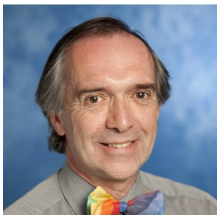


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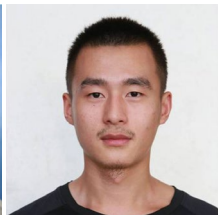
The University of Plymouth Team



UNIVERSITY OF PLYMOUTH



John Summerscales



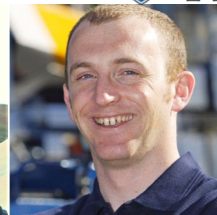
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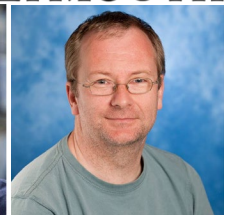
Jasper Graham-Jones



Maozhou Meng



Richard Pemberton



Richard Cullen



European Regional Development Fund



SeaBioComp

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