## International Brokerage Event Brussels, 26-27/10/2017



# Cranfield University Qi Zhang

q.zhang@cranfield.ac.uk

#### **Description of the Organization**



- Cranfield University is an exclusively postgraduate university in technology and management. Cranfield is at the 27<sup>th</sup> for engineering-mechanical, aeronautical, and manufacturing in the QS World University Rankings.
- Selected EU projects that Cranfield took part in
- iGEAR Intelligent Gearbox for Endurance Advanced Rotorcraft, JTI-CS2-2016-CFP03-FRC-02-15, Project ID: 738144.
- iBEARING Intelligent Bearing, JTI-CS2-2014-CFP01-SYS-02-05, Project ID: 687091.
- Environmentally Friendly Fire Suppression System for Cargo using Innovative Green Technology, JTI-CS2-2014-CFP01-LPA-02-05, Project ID: 685482.
- AIRMES Airline Maintenance Operations implementation of an E2E Maintenanace Service Architecture and its enablers, JTI-CS2-2014-CFP01-LPA-03-03, Project ID: 681858.
- DEPART2050 (Design Evaluation and Performance Assessment of Rotorcraft Technology by 2050).
- C-JOINTS Composite joints for improved mechanical and electrical performance, JTI-CS2-2016-CFP04-AIR-02-33, Project ID: 755609.
- SimCoDeQ Simulation tool development for a composite manufacturing process default prediction integrated into a quality control system, JTI-CS2-2014-CFP01-AIR-02-06, Project ID: 686493.
- DEMOS Developing advanced Engine Multi-disciplinary Optimization Simultations, JTI-CS2-2014-CFP01-AIR-01-02, Project ID: 686340.
- Novel Algae-based solution for CO<sub>2</sub> Capture and Biomass Production (Agreement No: 286887, Algadisk)funded by EU FP7.



Photo of Cranfield University's Campus and Airfield

#### Description of the your research interest



- Development of non-toxic, low cost, super strong natural binders for composites
- Solid-state electrochromic coatings by all printing technologies
- Membrane filtration for water purification
- Passive radiative cooling for buildings

## 2017 Call Topic: Energy efficient buildings Title: Development of passive radiative cooling technology for buildings



- Objectives:
  - Saving indoor cooling energy in summers
- Expected results
  - To efficiently reduce the indoor temperature up to 20 degree in summers

## Consortium - profile of known partners (if any)



No	Partner Name	Туре	Country	Role in the Project
01		RTD		
02		SME		
03		IND		
04				
05				
06				
07				
08				

## **Consortium - required partners**



No	Expertise	Type	Country	Role in the project
01	Metamaterials	RTD	any	develop technologies for scale up process
02	prototype	SME	any	manufacture the prototype and test the thermal energy emission
03	building construction	IND	any	Implement and installation
04				
05				
06				
07				
08				

2017 Call Topic: Circular Economy
Title: Development of membrane for water purification
using carbon nanosheets derived from natural precursors



#### Objectives:

- Development of a technology to efficiently manufacture carbon nanosheets from natural precursor, such as peat moss etc.
- Development of membrane technology for water purification for the rural areas in developing countries where water treatment facilities are difficult to access.
- Expected results
  - Robust, size-controlled membranes

## Consortium - profile of known partners (if any)



No	Partner Name	Type	Country	Role in the Project
01		RTD		
02		SME		
03		IND		
04				
05				
06				
07				
08				

## **Consortium - required partners**



No	Expertise	Type	Country	Role in the project
01	Membrane, water treatment	RTD	any	develop technologies for carbon nanosheets
02	membrane manufacture, carbon nanosheets manufacture	SME	any	develop and implement water purification system
03	water purification	IND	any	market
04				
05				
06				
07				



## Qi Zhang

# Cranfield University School of Aerospace, Transport and Manufacturing United Kingdom

Tel: 44 1234 750111

E-mail: q.zhang@cranfield.ac.uk

Web: http://www.cranfield.ac.uk/

#### Recommendations



- The presentation has to last up to 4 minutes (maximum)
- Do not overload your slides
- Provide weblinks to additional material
- Slides should be in English
- Do not use videos etc. they might be not supported by the Infoday IT system
- Send your presentations in PDF format to: <u>CoF@turkeyinh2020.eu until 23</u>
   <u>September 2016.</u>