



Biobased Composites for Mobility & Transportation: Moving Towards Sustainability

15-16 DEC 2021
Cambridge University



Wednesday 15th December 2021 at Sidney Sussex College, William Mong Hall

Registration (8:30-9:00)

Session 1: Farm to Fibres

- 9:00-9:20 **Welcome + FLOWER Introduction**
Dr Darshil Shah & Dr Alain Bourmaud
- 9:20-9:50 **Karim Behloui**, Natup Fibers and Ecotechnilin (Keynote)*
A vision for natural fibres in the automotive sector
- 9:50-10:20 **Prof Vijay Kumar Thakur**, Scotland's Rural College (Keynote)*
Extraction and development of hemp composites
- 10:20-10:40 Break
- 10:40-11:00 **Dr Lydia Smith**, National Institute of Agricultural Botany
Potential of Hemp for reintroduction into UK agriculture
- 11:00-11:20 **Jamie Bartley**, Unyte Hemp
Hemp value-chain in the UK: from cultivation to carbon credits
- 11:20-11:40 **Lobna A.El Seify***
Evaluating the Suitability of Leaf Fiber Reinforcements for Automotive Composites
- 11:40-12:00 **Wassim Guerfala**
Elaboration of hybrid bio-composites with thermoplastic matrix: material formulation and modelling of the quasi-static behaviour

Lunch, College Canteen (12:30-13:30)

Session 2: Resins and Biocomposites

- 14:00-14:30 **Alan Banks**, Ford Motor Company
Net-Zero enabling lightweight technology
- 14:30-15:00 **Dr Stuart Coles**, University of Warwick
The development of a waste cooking oil-based substitute for epoxy resins and how it can be used in impact structures for automotive applications
- 15:00-15:20 **Dr Gareth Roberts**, Cambond
Grain waste-based bioresins and adhesives for fully-green moulded composites
- 15:20-15:40 Break
- 15:40-16:00 **Dr Morwenna Spear**, Bangor BioComposites Centre
What can natural fibre composites learn from recent advances in wood modification?
- 16:00-16:20 **Dr Nilmini Dissanayake**, National Physical Laboratory
Influence of moisture uptake on creep behaviour of flax fibre reinforced composites
- 16:20-17:00 **Panel discussion** chaired by Prof Hom Dhakal

Reception, Old Kitchen (17:00-19:00)



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Thursday 16th December 2021 at Downing College, Howard Theatre

Registration (8:30-9:00)

Session 3: Applications and Circularity

- 9:00-9:30 **Dr Arthur Monti**, Chereau Group
Flax composites for the truck and haulage sector
- 9:30-10:00 **Prof Fabrizio Scarpa**, University of Bristol *
Ssuchy - Plant fibre composites in transportation
- 10:00-10:20 **Iris Aquilina Anderson**, Bioladies Network
Standards and Green Claims Code for Bio-based Plastics
- 10:20-10:40
- 10:40-11:00 **Suneet Shivprasad**, Rare Earth Global
Hemp based materials for vertiports, aircraft and supporting infrastructure
- 11:00-11:20 **Omar Elhawary**
Recycling of Polypropylene In PPE Face Masks For Manufacturing of FlaxPP Eco-composites
- 11:20-11:40 **Agnès Mattlet**
Which properties make the use of a recycled matrix viable in a polypropylene/flax fibre composite?
- 11:40-11:55 **Dr Moumita Sit**, University of Portsmouth
Vibration damping characteristics of flax fibre reinforced composites for automotive applications
- 11:55-12:00 **Wrap-up**
Dr Darshil Shah