EU Brokerage Event

on Industrial KET* in Horizon Europe

*Key Enabling Technologies

10th November 2022 • Strasbourg

Conference & Bilateral/B2B Meetings

Calls 2023- 2024

Project idea/ Field of expertise:

Bioinspired complex materials and advanced natural fibre composites

Organisation Name:



Addressed topic(s):

Cluster 4-Materials,

Sustainable Composites

Natural fibres

Bamboo

Biomimicry

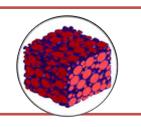


Any activity related to development or production of equipment or system dedicated to the production and the characterization of advanced materials

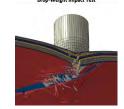
Skills and expertise

Design & Simulations

- Data-driven computational Mechanics
- Multi-scale modelling & analysis
- Virtual testing and simulation

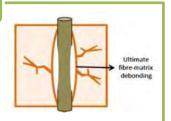


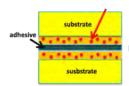


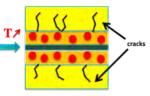


Advanced Materials

- Development of novel polymers & formulations & characterizations
- Filler -Surface & interface engineering,
- Material Characterization and Testing







Advance Manufacturing

- Robotized Composite Manufacturing
- (Fiber-reinforced) 3D Manufacturing
- Advanced joining







Experiences

SUSPOCO; VIPCOAT, COMPOSELECTOR, BIOCEL3D

Our project idea

- Bioinspired complex composites and fibres
- Natural fibre composites with advanced functionalities

We can offer

- Manufacture of man-made fibres with hierarchical organization for tougher composites (electrospinning of CNC with regenerated cellulose)
- Intermittent interfaces for tougher composites
- Natural fibres with high thermal resistance, fireproof, electrical and thermal conductivity
- Natural fibre composite interfaces which are self healable, high adhesion, and can be debonded on demand.
- Unique mechanical process for bamboo fibre extraction, prepregs and tapes of UD bamboo fibres (strength ~900 MPa)

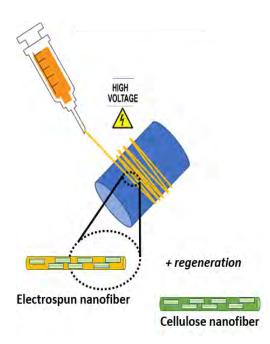




Bambo fibre



Bambo fibre composite





Bambo fibre tape

Contact details

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10th Novembre 2022 – KETs