

Supporting information to

## Natural Fibres as a Sustainable Reinforcement Constituent in Aligned Discontinuous Polymer Composites produced by the HiPerDiF Method

Ali Kandemir<sup>1\*</sup>, Marco L. Longana<sup>1</sup>, Tulio H. Panzera<sup>2</sup>, Gilberto G. del Pino<sup>3</sup>, Ian Hamerton<sup>1</sup>, and Stephen J. Eichhorn<sup>1</sup>

<sup>1</sup>Bristol Composites Institute, Department of Aerospace Engineering, School of Civil, Aerospace, and Mechanical Engineering, University of Bristol, Queen's Building, University Walk, Bristol, BS8 1TR, UK.

<sup>2</sup>Centre for Innovation and Technology in Composite Materials – CITeC, Department of Mechanical Engineering, Federal University of São João Del Rei - UFSJ, São João Del-Rei, MG 36307-352, Brazil.

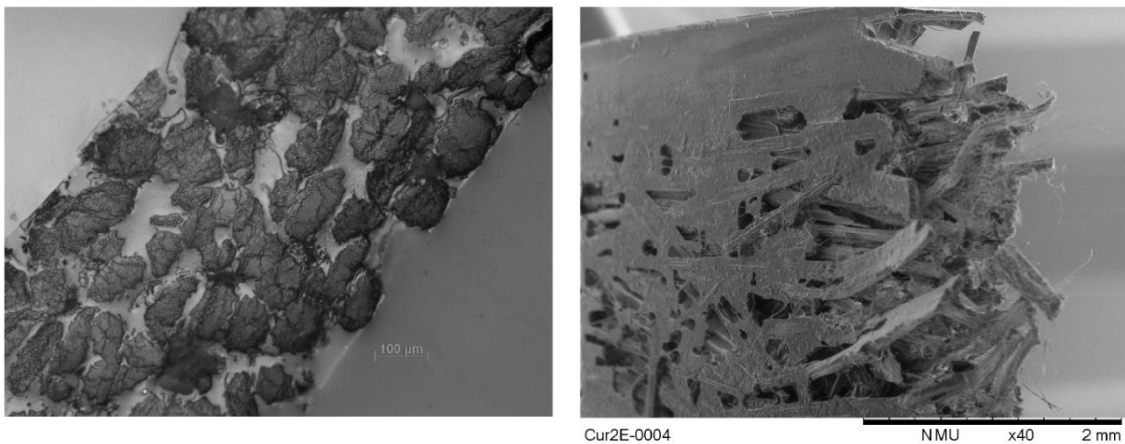
<sup>3</sup>Departamento de Engenharia Mecânica, Universidade do Estado de Amazonas, Manaus-AM, 69050-030, Brazil.

\*e-mail address: ali.kandemir@bristol.ac.uk

The micrographs of the ADNFRFC

### Curaua 2mm

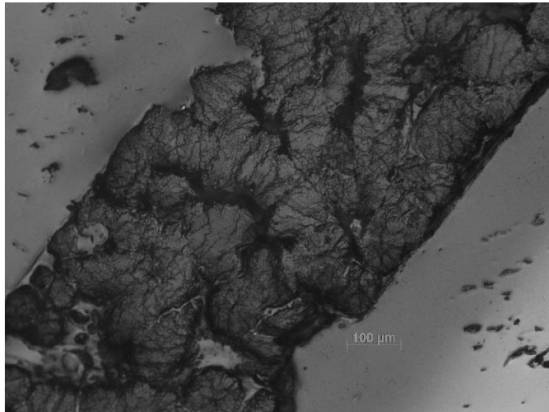
E  
P  
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Y



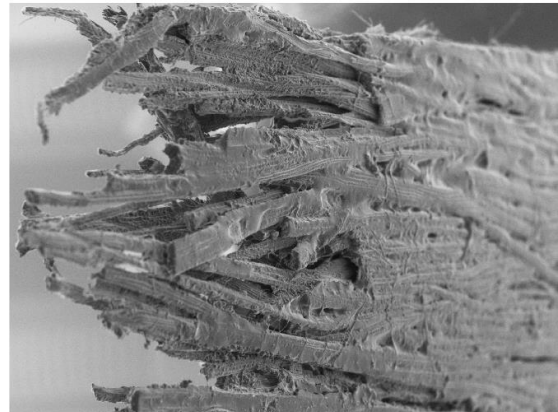
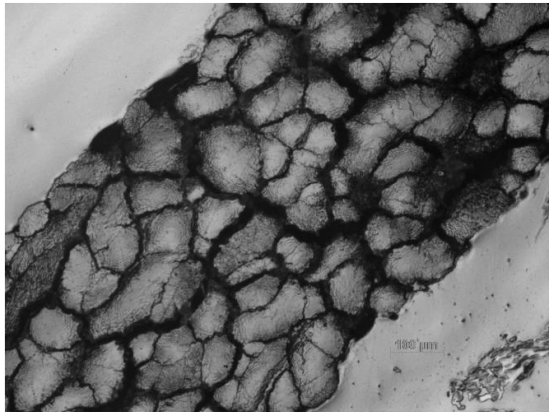
**Figure S1.** The cross sectional optical images (left column) and the fracture area scanning electron micrographs (right column) of 2 mm curaua aligned discontinuous natural fibre composites.

## Curaua 6mm

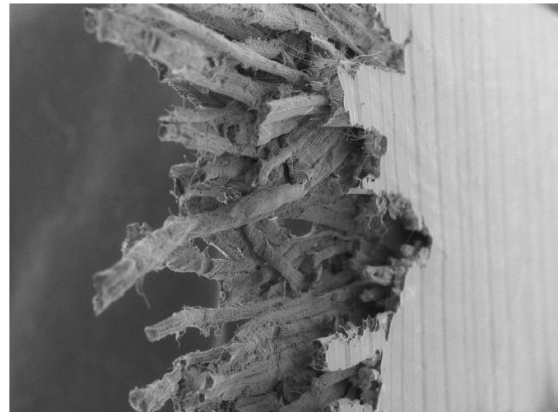
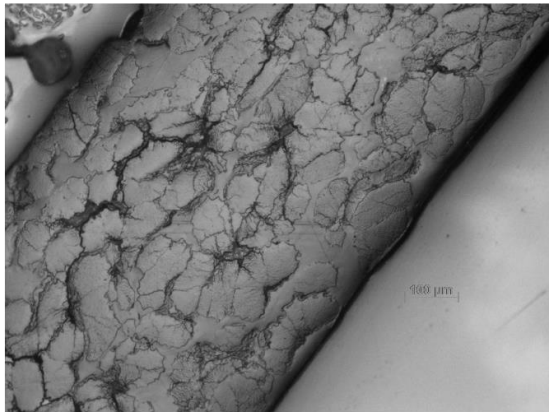
E  
P  
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Y



P  
L  
A



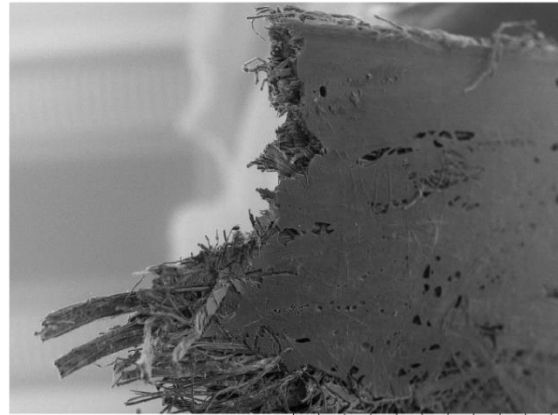
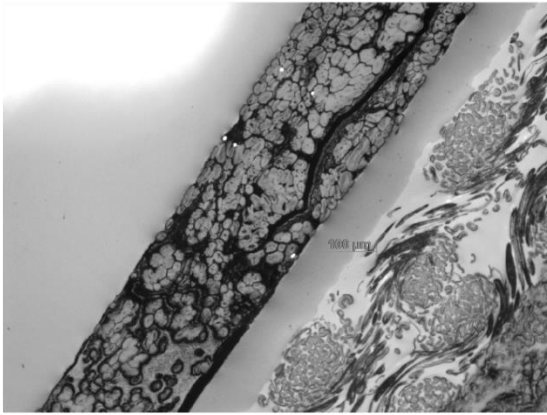
P  
P



**Figure S2.** The cross sectional optical images (left column) and the fracture area scanning electron micrographs (right column) of 6 mm curaua aligned discontinuous natural fibre composites.

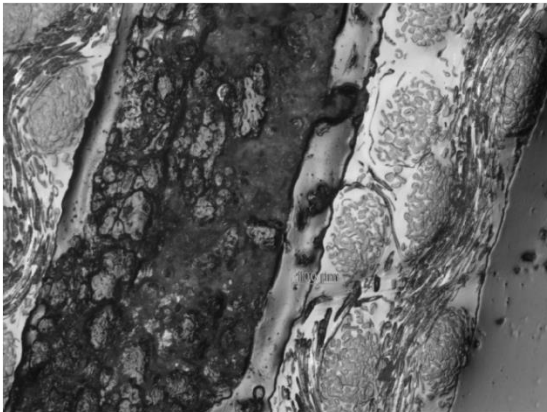
## Flax-cu 4mm

E  
P  
O  
X  
Y



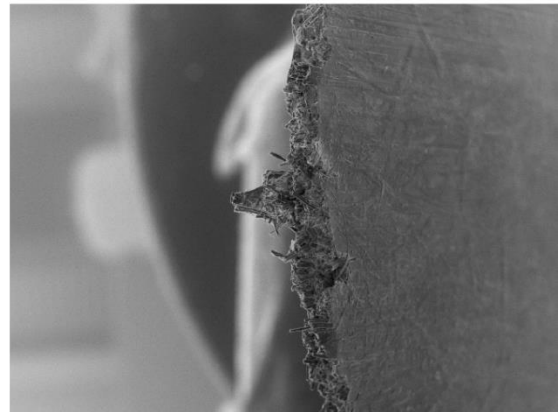
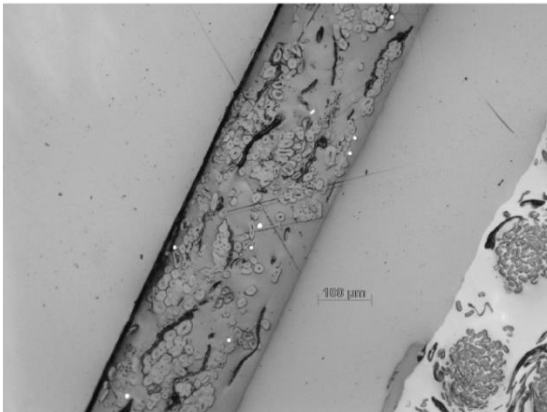
FCU4E-0004 NMU x40 2 mm

P  
L  
A



FCU4PLA-0001 NMU x40 2 mm

P  
P

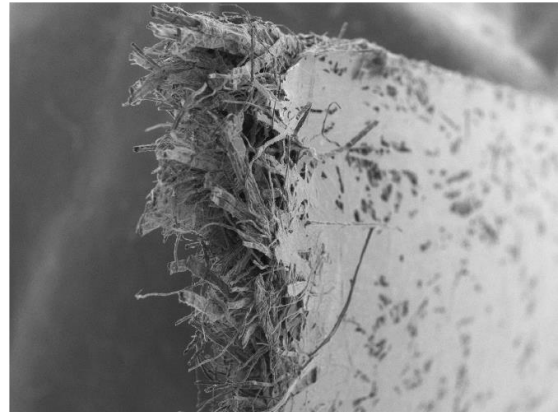
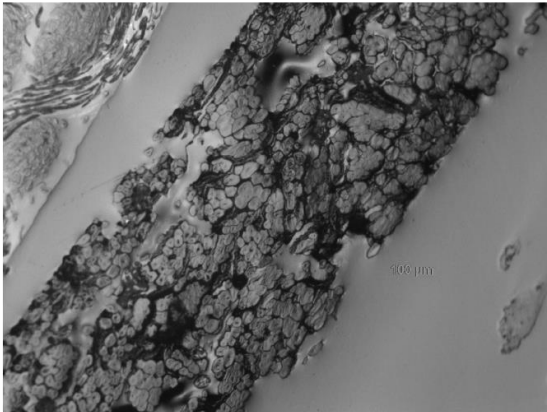


FCU4PP-0003 NMU x50 2 mm

**Figure S3.** The cross sectional optical images (left column) and the fracture area scanning electron micrographs (right column) of 4 mm flax-cu aligned discontinuous natural fibre composites.

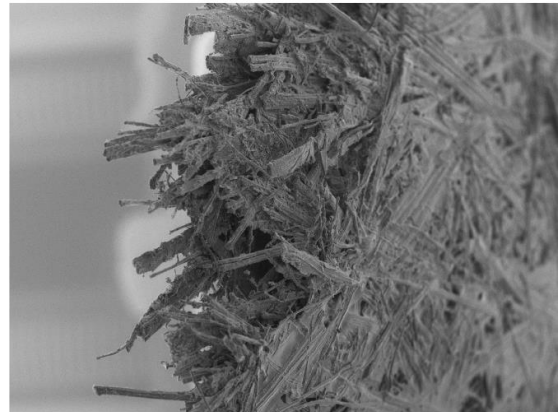
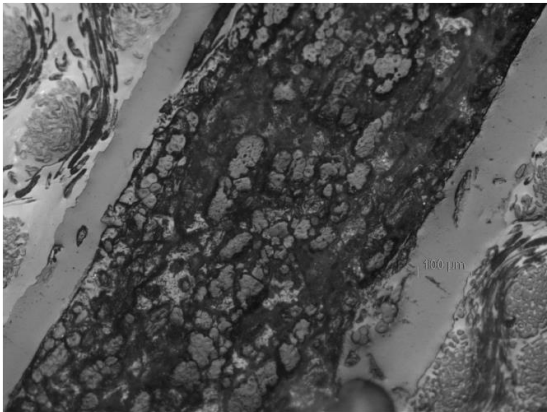
## Flax-ft 2mm

E  
P  
O  
X  
Y



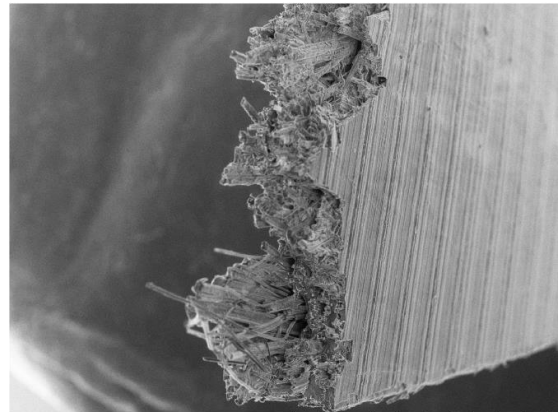
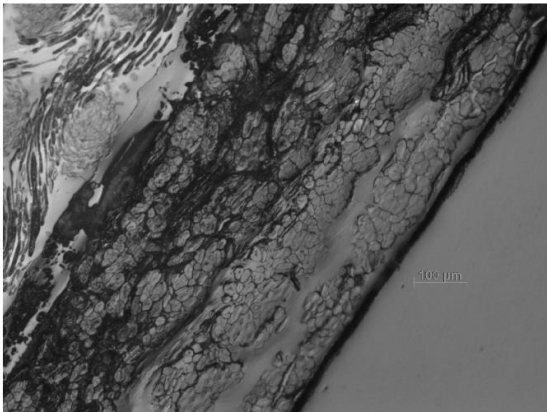
FFT2E-0003 NMU x40 2 mm

P  
L  
A



FFT2PLA-0003 NMU x40 2 mm

P  
P

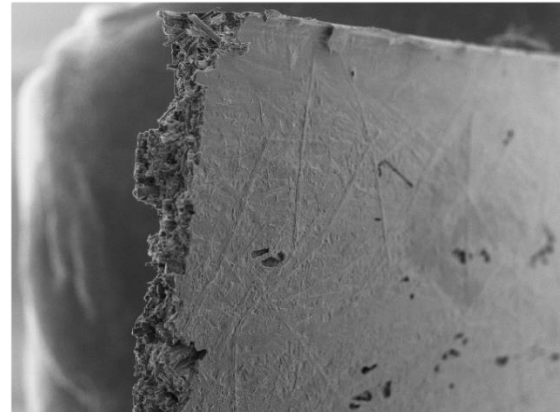
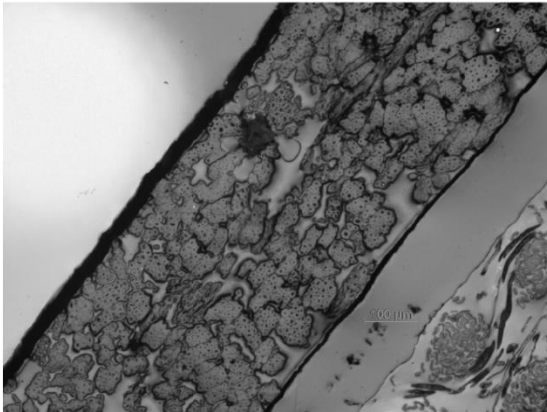


FFT2PP-0004 NMU x40 2 mm

**Figure S4.** The cross sectional optical images (left column) and the fracture area scanning electron micrographs (right column) of 2 mm flax-ft aligned discontinuous natural fibre composites.

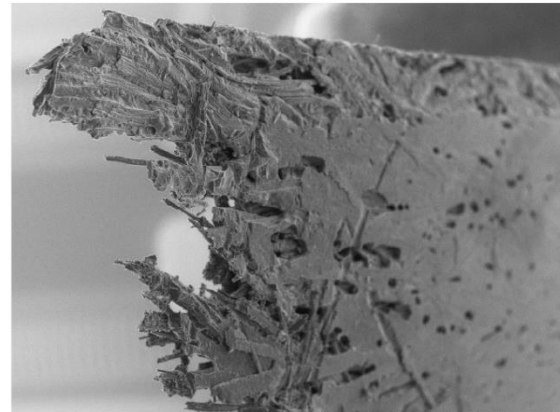
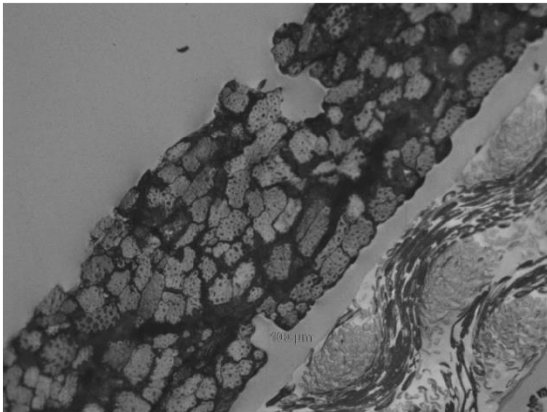
## Jute 4mm

E  
P  
O  
X  
Y



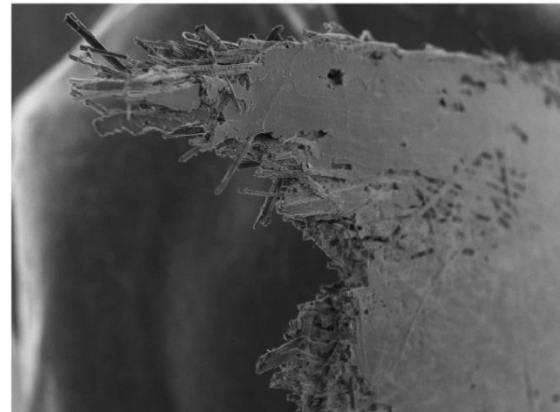
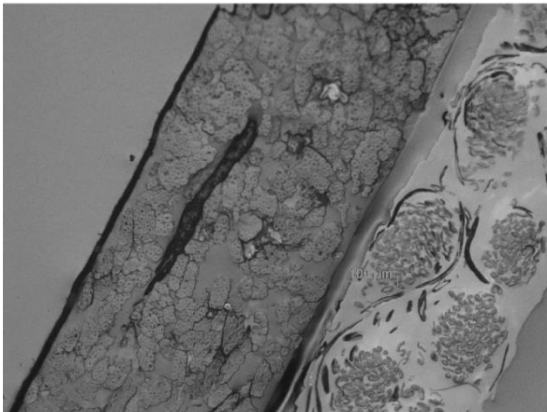
J4E-0003 NMU x40 2 mm

P  
L  
A



J4PLA-0004 NMU x40 2 mm

P  
P



J4PP-0002 NMU x40 2 mm

**Figure S5.** The cross sectional optical images (left column) and the fracture area scanning electron micrographs (right column) of 4 mm jute aligned discontinuous natural fibre composites.