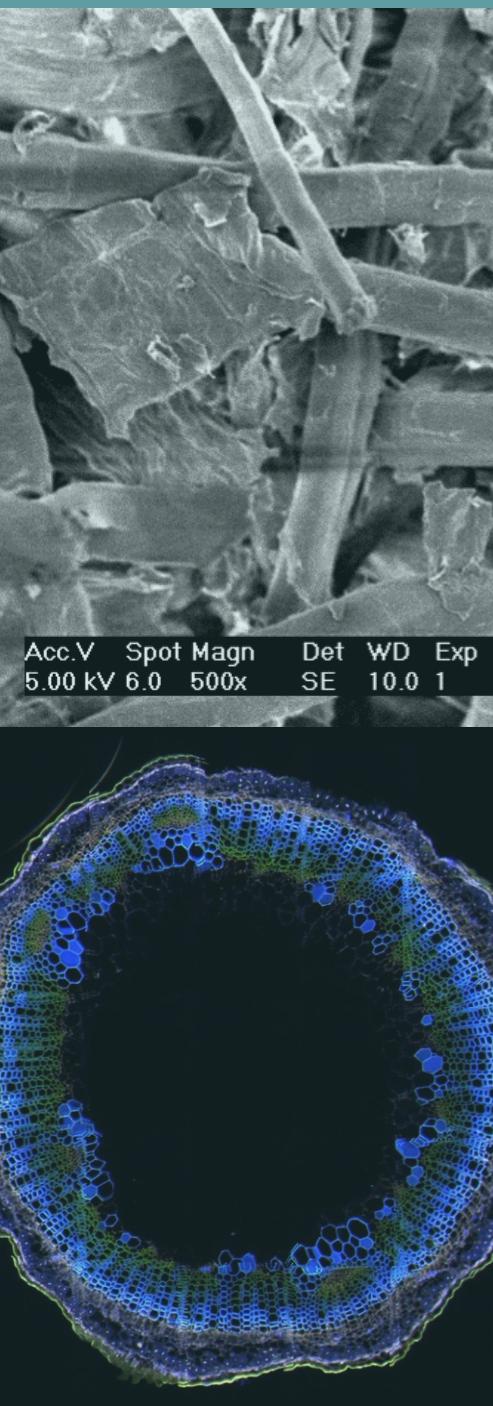


Plant fibres and biopolymers for biobased materials and composites applications



Co-organised by :

SYMBIOSE

Groupement de Recherche CNRS - INRA



FLOWER

Flax composites, LOW weight,
End of life and Recycling

Sponsors:



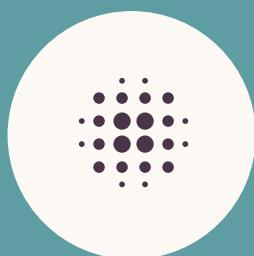
European Regional Development Fund



24-25-26 APRIL 2019

Westotel Nantes Atlantique - La Chapelle Sur Erdre

Contact: symbiose-flower@sciencesconf.org



24/04 pm

SYMBIOSE

SESSION 1

- 13h30 **Keynote : Tatiana Budtova** (*Mines ParisTech*) All-cellulose composites via short fiber approach
- 14h20 **Asja Pettignano** (*IMP - INSA Lyon*) Adsorption on cellulosic surfaces of carboxymethyl cellulose derivatives prepared by Passerini reaction
- 14h45 **Virginie Dulong** (*PBS - Univ. Rouen Normandie*) Functionalisation of polysaccharide with aminoguaiacol: characterisation, antioxidant and antibacterial properties
- 15h10 **Valentine De Villedon De Naide** (*Univ. de Pau et des Pays de l'Adour*) Synthèse de Copolymères Amphiphiles pour la Stabilisation de Latex Biosourcés: Application aux émulsions de Pickering
- 15h35 **Julie Bossu** (*Supagro - Univ. de Montpellier*) Interest of bacterially synthesized polyesters PHBV's in the development of new biodegradable composites: How to enhance their advantages and sidestep their constraints?

16h : Coffee Break

SESSION 2

- 16h20 **Laurent Plasseraud** (*ICMUB CNRS - Univ. Bourgogne*) Biomass-derived phenylpropenes as precursors of thermosetting epoxy resins : a quest to fully biobased composites
- 16h45 **Etienne Grau** (*LCPO - Univ. Bordeaux / CNRS*) Hop as source of bio-based polymer materials
- 17h10 **Hubert Chapuis** (*LERMAB - Univ. de Lorraine*) - Design of tannin based rigid foams : from hydrophilic to hydrophobic insulating materials
- 17h35 **Aurélie Bichot** (*LBE - INRA*) - Enzymatic hydrolysis of lignocellulosic substrates to enhance ferulic acid release

19h: Dinner cruise – Les Bateaux Nantais

25/04 am

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SESSION 3

- 8h30 **Welcome - Marie-Christine Ralet** (*Chef de Département Adjoint CEPIA - INRA*), **Bernard Cathala** (*BIA - INRA*), **Johnny Beaugrand** (*BIA - INRA*), **Alain Bourmaud** (*IRDL - Université de Bretagne Sud*)
- 8h55 **Keynote : Hélène Angellier-Coussy** (*Univ. de Montpellier*) Biocomposites as sustainable food packaging materials : Key achievements and remaining bottlenecks
- 9h35 **Julien Bras** (*INP- Univ. Grenoble Alpes*) Nanocellulose : Surface functionnalisation for high value added application
- 10h00 **Clara Jimenez Saelices** (*BIA-INRA*) Synthesis of latex stabilized by unmodifoed cellulose nanorystals : parameters for tuning the particle size

10h25: Coffee Break & Poster session

SESSION 4

- 11h00 **Maud Chemin** (*BIA-INRA*) Supramolecular structures of reducing-end functionalized cellulose nanocrystals
- 11h25 **Brigitte Chabbert** (*FARE-INRA*) Dew retting dynamic of hemp straw used in agro materials
- 11h50 **Nadège Follain** (*PBS - Univ. Rouen Normandie*) Evidence of nanolayering in bio-polyester multilayer films. Impact on barrier performances

12h15: Buffet Lunch

25/04 pm

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SESSION 5

- 14h **Keynote : Hom Dhakal** (*Univ. of Portsmouth*) Performance enhancement of flax biocomposites and their hybrids for structural applications: recent advances
- 14h40 **Nicolas Le Moigne** (*IMT Mines Alès*) Swelling of natural fibres in hygro / hydrothermal conditions: determination of hygro / hydroexpansion coefficients
- 15h05 **Pierre Ouagne** (*LGP - ENIT*) Is dew retting of hemp sufficient for composite application ? Are there other alternatives ?
- 15h30 **Victor Gager** (*EcoTechnilin-UBS/IRDL*) Introducing a new method to analyse the fiber orientation distribution in plant fibre composite preforms

15h55 : Coffee Break & Poster session

SESSION 6

- 16h40 **Nicolas Brosse** (*LERMAB - Univ. de Lorraine*) Steam explosion : a versatile process for biomass fractionation
- 17h05 **Marwa Abida** (*CIRMAP - Univ. Caen Normandie*) Multiscale determination of water-swelling coefficients of flax/epoxy composites and flax yarns
- 17h30 **Mikaela Borjesson** (*Chalmers Univ. of Technology*) Flexible and thermoplastic films of arabinoxylan extracted from wheat bran

18h: Cocktail

20h30: Dinner (Westotel)

26/04 am

SYMBIOSE

SESSION 7

- 8h30 **Keynote : Thierry Delair** (*IMP Lyon*) Polyelectrolyte complexes from polysaccharides: nanomaterials for drug and vaccine delivery
- 9h10 **Davy-Louis Versace** (*ICMPE - UPEC*) New photoinduced bio-based coatings for antibacterial applications
- 9h35 **Louise Breloy** (*ICMPE - UPEC*) Photoinduced chitosan-based hydrogels for antibacterial applications

10h: Coffee Break

SESSION 8

- 10h30 **Aline Maire du Poset** (*Chalmers University of Technology*) Tuning the structure of cross-linked polygalacturonate hydrogels via the nature of the divalent cation
- 10h55 **Cherryl Mirabelle Zang Ondo** (*LERMAB - Univ. Lorraine*) New biosourced gelling compounds : synthesis and characterization of supramolecular gel derived
- 11h20 *Discussions about the future of GDR Symbiose - Questionnaire evaluation*

PRACTICAL INFORMATION <https://symbiose-flower.sciencesconf.org/>

Address: Westotel Nantes Atlantique - 34 rue de la Vrière 44240 La Chapelle sur Erdre

Access: by the Tram/Train from Nantes city centre (Train station), "Erdre Active" station, by car Gate n°25 - GPS : 47.282795 - 1.550430

