



# MATBIM 2019

5<sup>th</sup> international meeting on  
Material/Bioprocess Interaction

May 08 – 10, 2019  
MILANO, Italy

*...bridging the gap between Academia and Industry*



## Conference Program

# DETAILED PROGRAM

## Wednesday 8 May, 2019

08.30 – 09.30	Registration / Welcome coffee / Poster hanging
09.30 – 10.00	Greetings / Conference opening
10.00 – 12.30	<b>ORAL SESSION</b> Chairs: Julie Goddard and Rafael Auras
10.00 – 10.50	<b>Tony MCNALLY (PLENARY LECTURE-1)</b> Composites of Polymers and 1D/2D Nanomaterials
<b>10.50 – 11.20</b>	<b>Coffee break</b>
11.20 – 11.50	<b>Matteo MINELLI (KEYNOTE-1)</b> Water and oxygen transport properties in nanofibrillated cellulose films and coatings
11.50 – 12.10	<b>Nadège FOLLAIN</b> Barrier properties of multi-nanolayer bio-polyester films
12.10 – 12.30	<b>Francesca LUZI</b> Lignin and cellulose nanostructures in pla active bilayer films
12.30 – 12.50	<b>Hajar FARAJ</b> Development of nanocellulose-based high gas barrier composites for packaging
<b>12.50 – 14.30</b>	<b>Lunch</b>
14.30 – 17.10	<b>ORAL SESSION</b> Chairs: Fátima Poças and Olivier Vitrac
14.30 – 15.20	<b>Mikael HEDENQVIST (PLENARY LECTURE-2)</b> Protein-based materials: processing, properties and applications
15.20 – 15.40	<b>Isabel M. COELHO</b> Design of microbial polysaccharide films for food packaging



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15.40 – 16.00

**Manuela ROLLINI**

Conjugates of bacterial cellulose nanocrystals and sakacin-A in an anti-*Listeria* food packaging material

16.00 – 16.30

**Coffee break**

16.30 – 16.50

**Nasreddine BENBETTAIEB**

Kinetic of aroma sorption by edible gelatin-chitosan films: behaviour and impact on the film structure

16.50 – 17.10

**Farayde M. FAKHOURI**

Coatings based on pea starch to improve conservation of strawberries

17-10 – 18.00

**Poster session**

18.00

End

## Thursday 9 May, 2019

09.00 – 11.00

**ORAL SESSION**

Chairs: Tony McNally and Sandra Domenek

09.00 – 09.50

**Roland FRANZ (PLENARY LECTURE-3)**

Nanomaterials in food contact plastics – what is the risk of migration/release into foods and exposure of the consumer?

09.50 – 10.20

**Jiabil GIGLI (KEYNOTE-2)**

Tailor-made design of new materials for sustainable packaging solutions

10.20 – 10.40

**Alain GUINAULT**

Development of high oxygen barrier coatings based on chitosan



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10.40 – 11.00

**Marta URDANPILLETA**

Optimization of mechanical performance of fish gelatin films

11.00 – 11.30

**Coffee break**

11.30 – 13.00

**ORAL SESSION**

Chairs: Isabel Coelho and Thomas Karbowiak

11.30 – 12.20

**Paolo VACCA (PLENARY LECTURE-4)**

Nanotechnology routes for innovative packaging solutions

12.20 – 12.40

**Elena TORRIERI**

Packaging design and shelf life evaluation of chew gum packed with multilayer PLA/SiO<sub>x</sub> and PLA/AlO<sub>x</sub> film

12.40 – 13.00

**Hela KCHAOU**

Design of gelatin pouches films for the stabilization of linseed oil during storage

13.00 – 14.30

**Lunch**

14.30 – 16.00

**ORAL SESSION**

Chairs: Roland Franz and Céline Pochat-Bohatier

14.30 – 15.20

**Julie GODDARD (PLENARY LECTURE-5)**

Technical hurdles to translation of next generation active packaging

15.20 – 15.40

**Rómulo SALAZAR**

Identification of potential migrants in polyethylene terephthalate samples of Ecuadorian market

15.40 – 16.00

**Phuong Mai NGUYEN**

Cross-mass transfer in biopharmaceutical and biotechnological applications: an ubiquitous issue



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16.00 – 16.30

16.30 – 17.00

17.00 – 17.30

17.30 – 19.00

19.00 – 22.00

22.00

Coffee break

Poster session

Moving to the Museum of Science and Technology  
(MUST)

Tour at MUST

Gala dinner at Cenacolo Hall at MUST

End

## Friday 10 May, 2019

09.00 – 11.00

ORAL SESSION

Chairs: Mikael Hedenqvist and Elena Torrieri

09.00 – 09.50

**Anthony HEHIR & Andrea BULBARELLO**  
(PLENARY LECTURE-6)

Why sustainable nutrition needs sustainable  
packaging?

09.50 – 10.20

**Thomas KARBOWIAK (KEYNOTE-3)**

Challenges for PLA in food packaging

10.20 – 10.40

**Rafael AURAS**

Hydrolytic degradation of PLA films modified with a  
chain extender

10.40 – 11.00

**Céline POCHAT-BOHATIER**

Development of a food-safe and water-based adhesive  
from the aqueous extract of onion plant

11.00 – 11.30

Coffee break



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11.30 – 12.50

### ORAL SESSION

Chairs: Frédéric Debeaufort and Alain Guinault

11.30 – 11.50

### Yuichi HIRATA

Effects of acyl chain structures on oxygen permeability through cellulose ester films

11.50 – 12.10

### Alessandro PIOMBINI

Simultaneous permeability analysis of gases and vapors through packaging materials

12.10 – 12.30

### Itsaso LECETA

Efficiency assessment of microwave technology to extract natural antioxidants from winery waste

12.30 – 12.50

### Olivier VITRAC

High-throughput design of safer and eco-friendly food packaging systems

**12.50 – 14.00**

**Lunch**

**14.00 – 15.00**

**DSM Prize and Best Poster Awards**

15.00

End of the conference