

BrIAS Forum 04: The past, present and future of food innovation



Dr. Adam Preslar
Hazel Technologies, Inc.



Yannick Schandené
Fermenthings



Prof. Dr. ir. Frédéric Debaste
Bioengineering School and Polytechnic
School of Brussels, ULB

18:00-20:30 | Wednesday 16 February 2022 | ULB-Plaine, Salle Solvay, Building NO 5th floor & [Teams](#)

Unlocking the Lost Opportunity of Food Waste in the Supply Chain with Biological Signaling

Dr. Adam Preslar

Hazel Technologies, Inc.

Food waste in agriculture is a lost harvest in a world where resource intensity must increase to meet demand and defend natural resources. Perishable produce is an essential part of a quality diet, but loss in the supply chain and at retail can exceed 20%. Fruits and Vegetables are living organisms, and through the careful control of conditions and the signals they encounter in the environment, it is possible to greatly extend shelf-life, and thus reduce waste. Hazel Technologies takes advantage of biological signaling in storage and packaging to address food waste and tap into the lost harvest of produce.



Unsold bread, an unavoidable waste ?

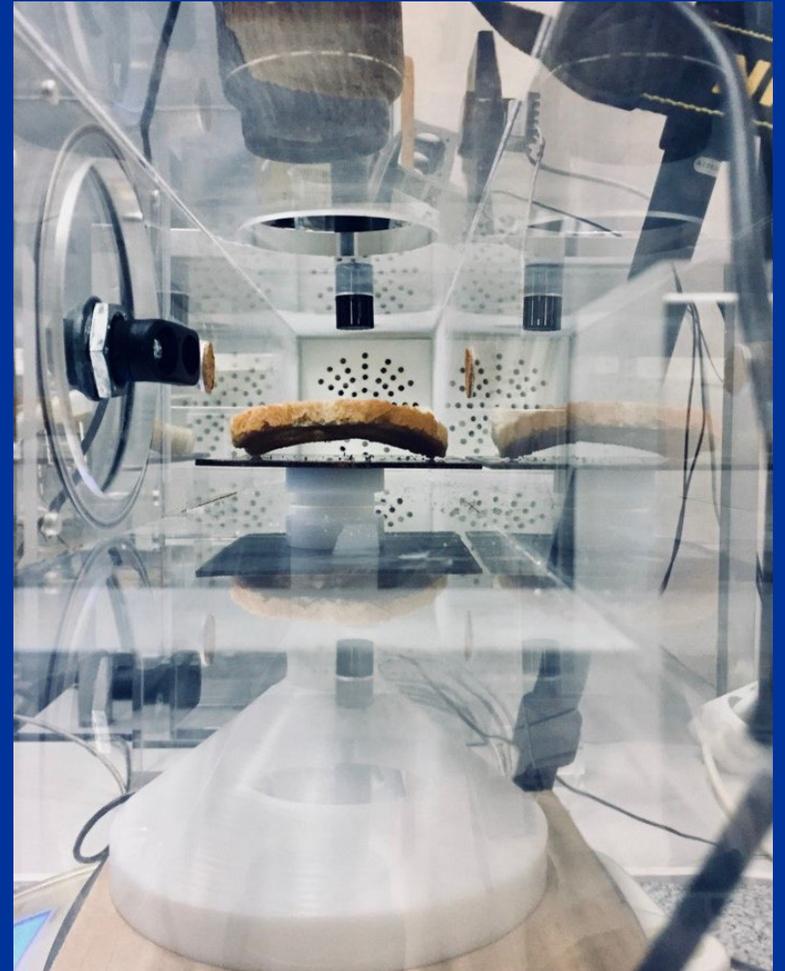
Prof. Dr. ir. Frédéric Debaste

Bioengineering School and Polytechnic School of Brussels

Université Libre de Bruxelles

Bread is one of the most consumed and one of the most wasted food products in our society. In this talk, we will first briefly discuss how the corresponding loss can be evaluated. Then, we'll discuss the various ways of limiting the waste: not producing it, or if produced, how to valorise it.

The various possibilities of processing and uses of unsold bread will then be shortly presented and discussed based on the Moerman scale. This will highlight two main challenges: one in the logistics and the other in the conservation and storage. We'll finish with a focus on the least expensive conservation technique: drying.



Ferment Lab: Creation of a circular fermentation chain in our food production system

Yannick Schandené
Fermenthings

Fermenthings is a space dedicated to all the possibilities around food fermentation and preservation. In the last year we were focused on the framework that fermenting brings to the kitchen, we called Circular Fermentation. Through our research we started to notice the patterns within fermentation techniques and secondary products like spent grains or green tomatoes. We created limonades, shoyu or miso paste using locally sourced ingredients and "food waste" while learning techniques from around the world like Koji & Cheong.

Our goal now is to systemize this think process and create an overview of possibilities thanks to ancient knowledge & modern available resources. Creating loops of products and inserting it in our food production chain. We had vinegar makers next to almost every brewery back in the 19th century, so why not have multifunctional fermentation spaces next to local producers?



BrIAS Forum F04

The Past, Present and Future of Food Innovation

Wednesday February 16th 18.00 pm – 20.30 pm (CET)

Location: *In person* at ULB La Plaine Campus, Salle Solvay, Building NO 5th Floor*
Online via Microsoft Teams. To participate, please use this [link](#).

Organisers: Prof. Dr. Christian Hermans (ULB), ir. Annette Hansen (VUB) &
Dr. ir. Frits Heinrich (VUB).

- 18.00 ***Introduction to BrIAS***
Prof. Dr. em. Frank Deconinck
- 18.15 ***Introduction to the Forum***
Prof. Dr. Christian Hermans (ULB), ir. Annette Hansen (VUB) &
Dr. ir. Frits Heinrich (VUB).
- 18.20 ***Unlocking the Lost Opportunity of Food Waste in the Supply Chain with
Biological Signaling***
Dr. Adam Preslar, Hazel Technologies, Inc.
- 18.45 ***Unsold bread, an unavoidable waste?***
Prof. Dr. ir. Frédéric Debaste, Bioengineering School and Polytechnic School of
Brussels, Université Libre de Bruxelles
- 19.10 ***Ferment Lab: Creation of a circular fermentation chain in our food production
system***
Mr. Yannick Schandené, Fermenthings
- 19.35 ***Discussion & Q&A***
- 20.25 ***Closing statement***

The Covid Safe Ticket (CST) is required for in-person access to the event. Wearing a mask is mandatory while seated in the room.

About BrIAS

The newly founded Brussels Institute for Advanced Studies (BrIAS), co-founded by the Université libre de Bruxelles (ULB) and the Vrije Universiteit Brussel (VUB), aims to expand upon the mission of other IASes as an incubator of ideas and research by focusing on current and urgent themes with a great societal impact. Located in the heart of Brussels, it aims to attract the very best scientists, artists or designers, coming from various fields or countries and with no philosophical or political restriction, and provide the opportunity to work in an atmosphere of complete freedom, collaboration, mutual emulation and cross-fertilisation. In this context, BrIAS aims to facilitate collaborations with countries facing critical challenges pertaining to sustainability. For more information and updates about BrIAS, our upcoming events, and our current research theme *The past, present and future of food, climate and sustainability*, Follow us on our [webpage](#), [LinkedIn](#), [Facebook](#) and [YouTube](#)!