



**kemira** 



# From waste to wealth, DESTE microbes to the rescue!

Can microbes turn waste into useful products, or purify water with new biopolymers? Can we feed old rugs to microbes? Yes, yes, yes!



2019 | Design Factory | Otaniemi

# The Biogarage Reverse Pitch challenge is light weight competition that offers a great opportunity for students to pitch their ideas to Ikea, Kemira, St1 and Neste.



2019 Design Factory Otaniemi

Each company has a challenge and the competitors will have 3 months to prepare a 5 min pitch for the Finals 27<sup>th</sup> May.



2019 Design Factory Otaniemi

Kick-Off 20th March, 16-18 at Aalto Design Factory for the opening. You can register to compete in advance - or, just show up for the opening and decide there and then if you want to compete!



## March 20<sup>th</sup> 16-18 Kick-Off: Challenges revealed

## April 25<sup>th</sup> 16-19 Workshop: Help and advice

## May 27<sup>th</sup> 16-18 Finals : Pitch your ideas

Kick-Off 20<sup>th</sup> March Agenda



#### **Boosting Circular Economy with Synthetic Biology**

Riitta Silvennoinen /Specialist in the Circular economy focus area at Sitra Fund Nina Pulkkis /Documentarist, Parad Media

#### Synthetic Biology and The Future of Finland

Howy Jacobs Professor of Molecular Biology, Tampere University Science documentary about Synthetic Biology and The Microbial Revolution

### The challenges presented:

Ikea - St1 – Kemira - Neste

#### **Circular Economy: Making edible waste for microbes**

Tomi Erho, VTT Principal Scientist A novel device for processing problematic waste

#### Synbio – what could it be?

Merja Penttilä, Professor, Aalto University & VTT



# lkea

# Aiming for zero waste: Find an innovative & sustainable way of recycling rugs

The rugs are pre-treated with a new extrusion device. (https://www.vttresearch.com/media/vtt-develops-a-noveldevice-for-processing-problematic-waste)



# Kemira

# Enabling Green Chemistry: Novel enzymes for modifying cationic biopolymers for water purification



# St1

St1 produces bioethanol from local sawdust side streams in their Cellunolix® concept, located in Kajaani, North Eastern Finland. The largest side stream from the production facility is hydrolysis lignin from the process. St1 Reverse Pitch Challenge is to find microbial routes for refining the lignin into to higher value products using synthetic biology.



## Further idea development and IPR

The independent Jury will evaluate after the Finals whether any team or individual contestant has developed an idea with potential for further development. The novelty, any conflict of interest and feasibility for business development will be preliminarily addressed, as well as the scientific merit. Thereafter, the contestants will be informed and advised on the possible options to advance their idea with the companies, through Synbio Powerhouse actions or academically.

# Facebook group:

# Bio-Community (temp. Name) >

# WHY JOIN?

• A great way to come in contact with potential employers at

Kemira, Neste, St1 and Ikea

- Potential PhD partners
- Summer jobs
- Internships
- Interdisciplinary contacts

## To register go to:

www.synbio.fi/reverse-pitch

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