Date, time and location

28th March 2017
10.00 - 15.15

FORCE Technology
Park Allé 345
2605 Brøndby
Denmark
T30

Price

Your participation is free of charge, however we will charge a no-show fee of 500 DKK.
Cancellation is possible until the 21th March 2017

Registration

Please register your participation at www.force.dk/arrangementer as soon as possible and no later than 14th March 2017.

Target group

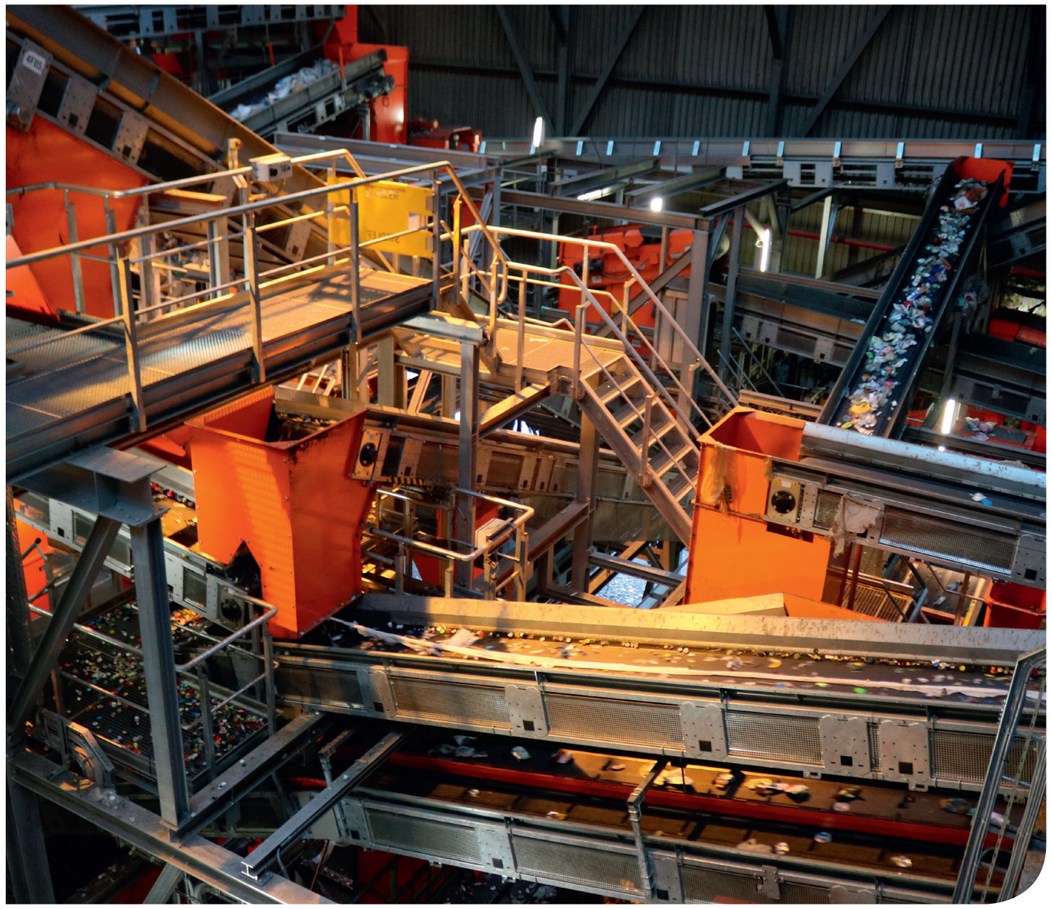
The seminar is targeted companies that use plastic in their production/product or work with collection, sorting and processing of plastic waste.

Further information
Trine Erdal : Tlf. 22 69 70 24 / E-mail: tre@force.dk
Charlotte Merlin : Tlf. 42 62 78 56 / E-mail: chme@force.dk

FORCE Technology
Headquarters
Park Allé 345
DK-2605 Brøndby
Tlf. +45 43 25 00 00
Fax +45 43 26 70 11
info@forcetechnology.dk
forcetechnology.com

Seminar: Recycled plastics

Challenging fractions and applications - what is possible and feasable?



Recycled plastics

Challenging fractions and applications – what is possible and feasible?

With the European strategy on Circular Economy, there is a pressure to increase plastic recycling rates all over Europe. Collection schemes differ amongst countries and regions, and new partnerships in the whole plastic recycling value chain are flourishing in order to produce circular solutions and secondary raw materials in a quality which is demanded by the industry.

Industrial demand for recycled plastics is crucial for an effective and meaningful recycling economy, and companies – large and small – are exploring, introducing or using recycled plastics in new or existing products. Recycled plastics from post-industrial sources are usually easy to find applications for, whereas recycled plastics from household waste can be far more challenging when it comes to industrial use.

The seminar will focus on "the borders of plastic recycling" – exploring challenging fractions of mixed plastic waste and challenging industrial applications.

Recycled plastics have been introduced in different types of packaging materials like rubbish bags, boxes and buckets.

- What can be done with the more challenging fractions of mixed plastic waste, and what are possible applications of such fractions?
- What about challenging applications like food packaging - can recycled plastic be used for such purposes?

We have invited speakers from Belgium and the Netherlands to present their views on the questions above while sharing their insights into the ongoing developments within Europe.

Furthermore, FORCE Technology will address the legal and safety aspects of using recycled plastic for food contact, and the environmental consequences of shifting from virgin to recycled plastic will be highlighted based on a newly developed tool.

Please note that the seminar will be held in English.

Meet the speakers

Prof. Dr. Ulphard Thoden van Velzen
Prof. Dr. van Velzen has since 1995 been a senior packaging technology researcher at FBR (Food and Biobased Research) at Wageningen University & Research (NL). His main focus is on executing contract research for packaging companies and FMCG companies using packages. Primary focus areas are:

- Packaging solutions for fresh foods, mostly MA (modified atmosphere) and active packages for fresh foods
- Sustainable packages (biobased and recycled).

Prof. Dr. Kim Ragaert
Prof. Dr. Kim Ragaert obtained her PhD in Polymer Engineering from Ghent University and works as assistant professor in the domain of 'Sustainable Use and Recycling of Polymers and Composites'. Her research team at CPMT (www.cpmt.eu) develops scientific tools to enable improved mechanical recycling of polymer-based materials. Research topics include i.a. compatibilization of mixed recycled polymers, design for and from recycling, as well as identifying specific pathways for the recycling of multy-layer packaging materials.

Jens Sinding
Jens Sinding is a Senior Consultant at FORCE Technology with 17 years of experience in developing, running, auditing and certifying management systems. He operates as lead auditor for FORCE Certification on i.a. ISO 9001 and ISO 22000. His primary area of consultancy and training is food contact materials with a focus on documentation of all types of food contact materials, management systems, HACCP, food contact regulations in the EU and abroad as well as related subjects, such as REACH and Cal.Prop.65.

Morten Bang Jensen
Morten Bang Jensen holds a Ph.D. in resource optimization and has extensive insights into the Danish waste streams and related environmental aspects. Morten has been with FORCE Technology for nearly a year, and is part of the group associated to RessourceLAB. He has worked on multiple LCA and sustainability projects for companies as well as municipalities

Program

10.00 **Registration and breakfast**

10.30 **Welcome and introduction**
by Trine Erdal, Manager ResourceLAB, FORCE Technology

10.45 **Designing the recycling system for improved quality of recyclates**
by Prof. Dr. Ulphard Thoden van Velzen, Wageningen University & Research

The Dutch post-consumer plastic packaging waste recycling system strives towards full circularity. While it is likely to be the broadest collection system in Europe with the highest specific recycling rates, it is also the most expensive and renders problems with packages that are not or hardly recyclable.
Prof van Velzen will give his insights on what is required of the actors in the plastic recycling value chain in order to improve the qualities of recycled plastics that is required for a wider and more advanced application of recyclates.

11.30 **Designing higher quality products from available recyclates**
by Prof. Dr. Kim Ragaert, Ghent University

In Belgium, they are planning to introduce a broader collection scheme equivalent to the Dutch system, where all packaging materials will be collected for recycling. Dr. Ragaert will discuss the current collection systems for plastic waste in Belgium as well as the risks and opportunities of the new system.
How can targeted upcycling strategies like "Design from Recycling", enable the more complex materials (e.g. multilayer packaging or mixed plastics) to stay in the circular economy through mechanical recycling instead of being used for energy recovery or left to landfill?

12.15 **Lunch and networking**

13.15 **Recycled plastic and food contact – are they compatible?**
by Jens Sinding, Senior Consultant, FORCE Technology

What are the main challenges of using recycled plastics in packaging materials in the food and beverage industry? What does the regulatory framework look like and what is the status on authorization of suppliers of food grade recycled plastics? Which recyclable fractions are most suitable for foodstuff packaging and what type of food contact is realistic?

14.00 **Industry case**
To be confirmed

14.30 **Conversion from virgin to recyclates – What is the environmental benefit?**
by Morten Bang Jensen, Specialist, FORCE Technology

- What are the environmental benefits of converting from virgin to recycled raw materials?
- How can LCA be used as a tool supporting decision making and what are the limitations?

Morten Bang Jensen will demonstrate an LCA based screening tool and present results for selected conversion scenarios (from virgin to postindustrial or postconsumer recyclates – what are the environmental differences?)

15.00 **Summary and wrap up**

15.15 **Networking and coffee**