BIO-PLASTIC Conference

February 27th 2020

Plastindustrien.

IDA Polymer

NORDISK BIOPLASTFÖRENING

Dear Bioplastic Professional!

We are pleased to welcome you to the Bioplastic Conference 2020

Why a Bioplastic Conference?

The public debate about plastic has only become more intense during this past year, and the interest in bioplastic has equally increased. As an industry organization, we see a growing number of companies and individuals looking for ways to become more sustainable. Frameworks like the UN Sustainable Development Goals indicate some of the directions in which to go when doing so. However, more specific, definite, and physical decisions are also needed when it comes to product development and sustainable corporate strategies. These processes mean reconsidering the use of resources and investigating different end-of-life scenarios. For many companies with products made from plastic, it also means researching alternatives to traditional plastic materials and that new questions need to be answered - or at least considered. Questions like: Can renewables be used as a feedstock instead of fossils? How does this impact the life cycle assessment? What happens if the plastic item finds its way to the natural environment? Can the plastic be recycled?

When materials seem to bring confident answers to these questions, they often have an advantage over those that do not.

At the Bioplastic Conference 2020, our ambition is to make it easier for you to ask the right questions and find the corresponding answers if these are to be found in bioplastic. We seek to achieve this by providing you with an overview of the possibilities and trends within the bioplastic world and its multitude of new and not so new materials.

Another aim is obviously to inspire you to consider a bioplastic solution to your next material problem – bear in mind that we do not claim that bioplastics solve all issues.

Last but not least, the conference brings together delegates from a wide array of companies and backgrounds, thus making it an excellent opportunity to network and initiate collaboration within and across disciplines.

We welcome all of you to interact with the conference participants and speakers during the networking breaks and bring questions forward in the Q&A sessions following the talks. Speakers will be present during the day, which allows for multiple opportunities to have in-depth discussions on topics of interest. We encourage you to visit the tabletop exhibition area during the breaks to experience the materials and meet the experts.

Last but not least, we hope that many of you will post content to social media, i.e., Twitter and LinkedIn during the day. All of us need to spread the word about the alternative that bioplastic represents. While doing so, please include the primary hashtag **#Bioplast2020**. Other Danish hashtags of relevance are **#Bioplast #GodKemi #CirkulærØkonomi #dkpol #dkgreen #Bæredygtighed #Innovation #Plastindustrien.**

Have a beautiful day, and enjoy your conference.

Planning committee contact information

Pia Dahlin, BASF/Nordisk Bioplastforening, pia.dahlin@basf.com

Daniela Bach, Rockfon, daniela.bach@rockfon.com

Natanya Majbritt Louie Hansen, Teknologisk Institut/IDA Polymer, nmlh@teknologisk.dk

Hans Friedsam, Nordemballage/Nordisk Bioplastforening, hans@nordemballage.se

Rasmus Grusgaard, Plastindustrien i Danmark, rg@plast.dk

DI-Hotspot
Username: DI
Password: 1787

Program

Bioplastic Conference, Industriens Hus, February 27th 2020

Time	Genral topics and policies	Who	From
08.30-09.30	Breakfast and registration		
09.30-09.40	Welcome and introduction	*Rasmus Grusgaard*	*Plastindustrien*
09.40-10.00	What is bioplastic? - Is bioplastic the answer?	*Hasso von Pogrell*	*European Bioplastics*
10.00-10.20	Sustainable building blocks for the future – recommendations on materials for packaging, textiles and products with a long time span	*Asbjørn Børsting*	*Chair of The National Bioeconomy Panel*
10.20-10.40	From certification to communication – The role of a certification body	*Philippe Dewolfs*	*TÜV AUSTRIA Belgium*
10.40-11.10	Coffee Break		
11.10-11.30	SOLUM on composting of bioplastics in Denmark	*Morten Brøgger Kristensen*	*Solum*
11.30-11.50	Scenarios for waste management of biobased and biodegradable plastics products, including possibilities for recycling, composting or other biological treatment after end use	*Jesper Skovby Jørgensen*	*Danish Environmental Protection Agency*
11.50-12.10	Increased use of black plastic can help the environment	*Christoffer Bergmann*	*INP Förpackninger*
12.10-12.45	**Brief introduction to material presenters**		
	Braskem I'm green™ Making people's life better today and for generations to come	*Martin David Rangel Clemesha*	*Braskem*
	A platform technology to produce microfibers from feathers and PHAs – a biobased and biodegradable plastic	*Edvard Hall*	*Bioextrax*
	Renewable PP/PE from discarded frying oil	*Sune Holm*	*Albis*
	Biodegradable compounds with a matching look	*Marc Thometchek*	*Beologic*
	Soft plastics from plants – Renewable & Recyclable	*Klas Dannäs*	*HEXPOL*
	Biodegradable and compostable polymers from renewable sources	*Mikko Olavi Långström*	*Bjorn Thorsen*
12.45-13.45	Lunch & table-top exhibitions		
13:45-14:00	New Natural Polymer at IMCD Advanced Materials	*Dan Andersson*	*IMCD*
14:00-14:15	Neste accelerating circularity with renewable and recycled solutions for plastics: Bio-PP and beyond	*Lars Börger*	*Borealis/Neste*
14:15-14:30	SABIC's certified renewable polymers; a TRUCIRCLE™ initiative	*Bart Vanhoof*	*SABIC*
14:30-14:45	Coffee Break		

	Theme 1: Packaging	**Theme 2: Durable Applications**
14.45-15.05	Towards a sustatinable future for packaging design and materials, *Ksenija Garbacenka, Plus Pack*	Ready to use granulates for injection moulding made from hemp, *Martin Lidstrand, Trifilon*
15.05-15.25	New packaging applications, Katharina Schlegel, *BASF*	Renewable · Reusable · Recycable – Bioplastics as part of the circular economy, *Eike Langenberg, FKuR*
15.25-15.45	Coffee Break	
15.45-16.05	UPM Raflatac Forest Film™ self-adhesive labels: Imagine plastic from the forest, *Tuomo Wall, UPM Raflatac*	Bio4Self: Bio-based and biodegradable self-reinforced composites, *Bo Madsen, DTU Wind Energy*
16.05-16.25	Towards a fossil free packaging future, *Rebekka Lorentzen Storgaard, Peter Larsen Kaffe*	The Role of Bioplastics in Our Journey Towards Zero Environmental Impact, *Jesper Bøgelund, Novo Nordisk*
16.25-16.30	**Conference wrap-up**	
16.30-17.00	**Networking drinks**	

Presentations by

EUROPEAN BIOPLASTICS

There are a number of myths surrounding the alleged properties of bioplastics, many of which are completely unfounded. The presentation aims at describing the benefits of bioplastics in their many facets and doing away with some of the persistent myths, replacing them with facts.

European Bioplastics (EUBP) is the association representing the interests of the bioplastics industry along the entire value chain in Europe. EUBP is working very closely with bioplastics businesses, with EU policy makers, and other key stakeholder groups to ensure a supportive policy and economic framework in Europe for our emerging industry to thrive in. Founded in 1993 as a German association for bio- degradable polymers, EUBP evolved into a European association that represents both bio-based and biodegradable plastics. EUBP currently represents about 70 members from the entire value chain of bioplastics, from producers of renewable feedstock, bioplastics producers, and converters to brand owners, research institutes, and waste management organisations. For more information, visit **www.european-bioplastics.org**

THE NATIONAL BIOECONOMY PANEL

A presentation of the most recent recommendations from the Danish Bioeconomy Panel on sustainable building blocks for the future – materials for packaging, textiles and products with a long time span.

The Danish Bioeconomy Panel has been set up by the Danish government to provide recommendations on how to harvest potentials of the bioeconomy, to the benefit of the environment, climate, economy and employment. The Panel consists of scientists from leading universities, representatives from commercial interests as well as representatives from civil society and a trade union. For more information, visit **mfvm.dk/miljoe/det-nationale-biooekonomipanel/fremtidens-baeredygtige-byggeklodser/anbefalinger-fra-det-nationale-biooekonomipanel/**

TÜV AUSTRIA BELGIUM

As bioplastics certifiers for almost 25 years, we have seen the market evolve, at first - very - slowly. From the first garden waste collection bags with poor printings in the 1990s, to the recent -high-tech multi-layer food packaging, we have had the opportunity to see the products and the market grow. Today, the market is developing much faster and new players are coming, sometimes with strange requests for certification... Our role as certifier is impacted: from technical compliance verifiers, we are becoming more and more, through our logos, vectors of communication. So, may a toy be certified compostable at home? Does this make sense? And what then becomes the role of the certifier?

TÜV AUSTRIA Belgium, an independent Belgian inspection and certification body, took over the Vinçotte's 20-year-old bioplastic certification activities in 2017. TÜV AUSTRIA Belgium is a member of the TÜV AUSTRIA Group founded in 1872 and employing worldwide around 1700 people in more than 40 countries. TÜV AUSTRIA is a leading, impartial and independent service provider for integrated management of safety, quality, environment and resources with international orientation. For more information, visit **www.tuv-at.be**

SOLUM

The Aikan technology implemented at BioVækst in Holbæk since 2003 is a three-step combined biogas- and composting plant design for biodegradable municipal solid waste. Aikan makes benefit of biodegradable bags, cups etc. and Aikan can sort out plastics too. The process will be explained in detail. The benefit of biodegradable plastics in the food waste system is to harvest the full potential in the food waste. Since food scraps that cling to the bags, cups plates etc. is degraded instead of being sorted out and incinerated. The final product from Aikan is a nutrient rich dry compost product that can be used in organic farming. The turning point in proper food waste handling is the waste planning systems itself. The important perspective is to gain circularity in as much of the system as possible.

Solum Gruppen create value by integrating waste handling, biogas- and compost production. Our main scope is to create circular economic solutions. Solum Roskilde A/S is the largest supplier of compost and growth media based on compost and deal with upcycling of many different wasted materials too. BioVækst A/S is a combined biogas- and composting plant based in Holbæk. The plant is based on the Aikan technology invented by Solum. The Aikan plant utilize all types of organic waste and surplus. Aikan makes degrade biodegrable bags, cups etc. and are at the same time capable to screen out unwanted matter like plastic bags, metals etc. For more information, visit **www.solum.dk**

DANISH ENVIRONMENTAL PROTECTION AGENCY

Eunomia have for the Danish Environmental Protection agency carried out an investigation on the current state of bio-based and biodegradable plastics. The study covers an introduction to bio-based and biodegradable plastics along with a literature review of current research on biodegradation of plastic and existing certifications and standards. Furthermore, the national and international market for bio-based and biodegradable plastics, waste management and environmental footprint are covered.

The Danish Ministry of Environment and Food and with it the Environmental Protection Agency works systematically to simplify existing and new legislation. The objective is to minimize the administrative requirements made of commerce and industry by the Ministry. For more information, visit **mst.dk**

INP FÖRPACKNINGER

As an Automation Technician, Christoffer has worked with thermoformed plastic packaging primarily for food packaging in Ljungby, Sweden since 1994. He has experienced the movement from PVC to PET and now, sort of, from PET to BIO. Christoffer has always worked on the sales side in the company, he hears what the market says they want, but do they really know what they want?

INP Förpackninger manufacture plastic packaging by thermoforming in thicknesses from 0,15-1,90mm PET A-PET R-PET. Depending on your preferences, or from our standard range. INP designs, develops and creates the form for the customer, to get the package that suits the product it's intended for. We manufacture the entire toolkit in our factory in central Småland, Sweden. For more information, visit **www.inp.se**

BRASKEM

The presentation will start with an explanation of the value proposition of our I'm green™ portfolio of products, some success cases will be shared and we will close looking at what's coming up next when it comes to our I'm green™ biopolymers offering.

With a human-oriented global vision of the future, Braskem strives every day to improve people's lives by creating sustainable solutions with chemicals and plastics. Braskem is the largest producer of thermoplastic resins in the Americas and the leading producer of biopolymers in the world, creating more environmental-friendly, intelligent, and sustainable solutions through chemicals and plastics. Braskem exports to clients in approximately 100 countries and operates 41 industrial units, which are located in Brazil, the United States, Germany and Mexico, the latter in partnership with the Mexican company Idesa. For more information, visit **www.braskem.com**

PHA BIOEXTRAX

Bioextrax has developed a technology to significantly cut the production cost of the biobased and biodegradable group of polymers called PHAs. Using the same basic principle, they can also turn poultry feathers into keratin microfibers which can be used as reinforcements in plastics, to increase the strength while lowering the density.

Bioextrax is a company based on research from the department of biotechnology at Lund University. Their platform technology is based on a clean, bio-based method that makes it possible for to turn waste into value by selectively hydrolysing a number of protein rich materials. They have successfully applied their technology to, among other things, harvest PHA (bioplastics) granules, organic single cell protein, keratin fibers, bio-oils, and protein-rich by-products. For more information, visit **bioextrax.com**

ALBIS

ALBIS present CIRCULEN bio-based polyethylene and bio-based polypropylene that combine renewable feedstock and LyondellBasell's technical capabilities. CIRCULEN (Certified Mass Balance PE & PP) and CIRCULEN PLUS (Certified C14 Content PE & PP) are biobased materials with same properties and approvals as virgin polymers.

ALBIS PLASTIC Scandinavia AB is a distributor and supplier of a very wide "full basket" polymer product range including distribution for partners, ALBIS own tailor made compounds, licensed compounds and masterbatches. The signs of the times are green: the use of recycled and biobased plastics makes all kinds of applications greener, lighter and more sustainable - with consistent quality. ALBIS work, after thorough analysis, with you to identify the best-fit sustainable solution for your application and accompany you through the production process to the finished product. or more information, visit **www.albis.com**

BEOLOGIC

Beologic is dedicated to the production of sustainable thermoplastic compounds. Beograde is our newest range of compostable and biodegradable materials. Adding wood creates a look and feel that emphasizes the biodegradable characteristics. It's our ambition to replace traditional polymers but maintain their technical characteristics, whilst at the same time being sustainable.

Beologic, a Belgian compounding company with more than 20 years' experience, is dedicated to the production of sustainable thermoplastic compounds. We develop, manufacture and market compounds for the plastic industry. Together with our R&D company Innologic, we are able to optimize and improve our materials depending on the application. Recently we've launched different and innovative solutions to improve sustainability. For instance, a biobased ASA compound with good weathering properties, a 100% fully bio-based roto moulding powder and our latest range of Beograde materials. Over the years this has resulted in 4 product brands; either being biobased (Beobase – adding natural fibres), biodegradable or compostable (Beograde), fully recycled (Beocycle) or ecologic (Beosmart). The Beograde family is made of thermoplastic compounds containing renewable resources and designed to degrade under compost conditions. Our materials can be used in a wide range of applications: extrusion, injection moulding, rotomoulding, thermoforming, blow moulding … Adding wood creates a look and feel that emphasizes the biodegradable characteristics. It's our ambition to replace traditional polymers but maintain their technical characteristics, whilst at the same time being sustainable. For more information, visit **www.beologic.com**

HEXPOL

What does it mean for Hexpol TPE to be on a sustainability journey, what are the challenges being faced and are there really such things as drop-in solutions?

HEXPOL TPE is a global polymer compounding group specializing in Thermoplastic Elastomers (TPE) for key industries such as consumer, medical, packaging, automotive and construction. Driven by a core belief in being the easiest company to do business with, HEXPOL TPE is dedicated to delivering a trusted combination of application know-how, R&D, production capabilities and comprehensive technical services. As part of the HEXPOL group of companies, we share an extensive global footprint covering EU, Asia-Pacific and North America, enabling us to support our customers worldwide. For more information, visit **www.hexpol.com**

BJORN THORSEN

With an eye on sustainability and anticipating market trends and future environmental regulations, NUREL has developed a new range of renewable and compostable biobased biopolymers: INZEA®. With optimal mechanical properties and similar processing parameters and methods, INZEA could be the sustainable solution to replace petroleum-based polymers.

Bjørn Thorsen A/S is a North European chemical distributor. Its core team focuses on sales of a wide range of products from leading chemical manufacturers (e.g. BYK, ExxonMobil, Lubrizol, Borealis, Cabot, Sun Chemicals, Nurel, DRT and others) to Northern European customers active in diverse end uses in Automotive, Coating, Construction, Industrial, Medical, etc. For more information regarding the distribution portfolio, visit **www.bjorn-thorsen.com**

IMCD

IMCD presents a new natural polymer with fantastic properties. Lactips is a natural and biodegradable material that responds to a wide range of business opportunities. 100% bio-based, fully biodegradable, barrier properties, sealable, water-soluble and printable. This unique innovative solution represents a high-performance and organic packaging material that helps brand owners in their circular financial strategy.

IMCD is a leading company in sales, marketing and distribution of specialty chemicals and food ingredients. Representing major global producers, our sales people are market focused technical experts who offer solutions for customers' problems utilizing our comprehensive and complementary product portfolio. We provide our partners with optimum tailored solutions for multi-territory distribution management in EMEA, Asia-Pacific and Americas. Through our people, their expertise and the creation of open and lasting partnerships, IMCD is able to provide advice on formulation, production process and application, thus generating unrivalled growth for our partners. Headquartered in Rotterdam, The Netherlands, IMCD had a turnover of EUR 2,379 M in 2018 and employs over 2,800 professionals in more than 45 countries. For more information, visit **www.imcdgroup.com**

PLUS PACK

Packaging for private consumption serves two primary functions: Protecting a product during transport from the producer to the consumer and providing important product information for the consumer. Once a consumer has finished using the product in the packaging, the packaging has no value to the consumer and is disposed of. Plastic packaging must not end up as worthless waste in the consumer's rubbish bin, it must be designed, to a greater extent, in a way that allows it to remain a valuable resource, where either the packaging or the material's properties and value are retained in a circular cycle.

Plus Pack designs, develops and manufactures innovative and sustainable packaging solutions for the global food industry. The company is headquartered in Denmark, dating back to 1914 and currently run by the 4th generation of the Haustrup family. Production takes place in Denmark and in Belgium. Plus Pack is driven by UN's Global Goal no. 12: 'Responsible Consumption and Production', and the vision "to be the preferred partner of customized and sustainable packaging solutions, delievering 100% recyclable products with zero CO_2 emissions". Plus Pack has 220 employees and is in good growth based on the promise "We make food stand out". For more information, visit **pluspack.com**

BOREALIS/NESTE

Bio-based plastics produced from Neste's renewable hydrocarbons are fully compatible with existing production and recycling infrastructures and a "drop-in" alternative to conventional plastics in all applications requiring reusable and recyclable high-quality plastics. Consumers will be able to use the plastic items and packages just as they are used to, with high comfort - and eventually recycle with a good conscience knowing that their use of plastics has not accelerated climate change.

Neste (NESTE, Nasdaq Helsinki) creates sustainable solutions for transport, business, and consumer needs. Our wide range of renewable products enable our customers to reduce climate emissions. We are the world's largest producer of renewable diesel refined from waste and residues, introducing renewable solutions also to the aviation and plastics industries. We are also a technologically advanced refiner of high-quality oil products. We want to be a reliable partner with widely valued expertise, research, and sustainable operations. In 2017, Neste's revenue stood at EUR 13.2 billion. In 2018, Neste placed 2nd on the Global 100 list of the most sustainable companies in the world. For more information, visit **www.neste.com**

BASF

Fruit and vegetable bags made of ecovio® are more than simple carrier bags: They can be used to buy fruit and vegetables at the supermarket in a safe and hygienic way, to carry them home and to store them for a long time in the fridge due to measurable shelf life extension in comparison to conventional bags. Re-used as organic waste bags they can improve the collection and recovery of organic food waste. Certified compostable materials enable the easy collection and increased recycling of organic waste, thus reducing the inefficiency and the greenhouse gas emissions of other disposal ways for organic waste and additionally support creating high-quality compost or organic feedstock for new products.

At BASF, we create chemistry for a sustainable future. We combine economic success with environmental protection and social responsibility. The approximately 122,000 employees in the BASF Group work on contributing to the success of our customers in nearly all sectors and almost every country in the world. Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface Technologies, Nutrition & Care and Agricultural Solutions. For more information, visit **www.basf.com**

SABIC

SABIC recently launched its TRUCIRCLE™ initiative. TRUCIRCLE™ is a significant milestone in SABIC's journey and it's a considerable step to closing the loop to creating a circular economy for plastics. The new tradename has been introduced as a way to collectively showcase SABIC's circular innovations and help manufacturers reduce plastic waste through the adoption of a range of sustainable material solutions.

SABIC is a global leader in diversified chemicals headquartered in Riyadh, Saudi Arabia. SABIC manufactures on a global scale in the Americas, Europe, Middle East and Asia Pacific, making distinctly different kinds of products: chemicals, commodity and high performance plastics, agri-nutrients and metals. SABIC supports its customers by identifying and developing opportunities in key end markets such as construction, medical devices, packaging, agri-nutrients, electrical and electronics, transportation and clean energy. For more information, visit **www.sabic.com**

UPM RAFLATAC

At UPM Raflatac, we are labeling a smarter future. By introducing Forest FilmTM, we take a leading role in sustainable labeling and answer to our customers' needs of using renewable instead of fossil-based raw materials. UPM Raflatac Forest Film™ is the first polypropylene film label material produced from UPM BioVerno™ naphta – a product innovation originating from sustainably managed forests.

UPM Raflatac is labeling a smarter future beyond fossils by developing innovative and sustainable labeling solutions. As one of the world's leading producers of self-adhesive label materials, we supply high-quality paper and film label stock for consumer product and industrial labeling through a global network of factories, distribution terminals and sales offices. We employ around 3,000 people and made sales of EUR 1.5 billion (USD 1.9 billion) in 2018. UPM Raflatac is part of UPM. For more information, visit **www.upmraflatac.com**

PETER LARSEN KAFFE

Peter Larsen Kaffe introduced PLA-coffee capsules to the market in 2016. Mistakes were made and lessons were learned. Which mistakes did Peter Larsen Kaffe make and how do they communicate now? The company has a packaging strategy for 2030 where all materials should be made from renewable or recycled resources. How do Peter Larsen Kaffe communicate the strategy?

Peter Larsen Kaffe has brought coffee to the people since 1902. We try to make the coffee industry a little more sustainable step by step. As one of the first companies we introduced Fairtrade (then Max Haavelar) to the Danish market in 1994. Today over 60% of our products are certified and in 2021 it will be 100%.

Since 1993 we have been working on making our packaging better for the environment. We are still on a journey and by 2030 we have a goal that all our packing should be made from renewable or recycled resources. We do all of this because your coffee is in danger. If we do not stop the climate crisis, ensure fairer price and a future for the coffee farmers, and start using the coffee plant more efficiently, we might not have good coffee in the future. Peter Larsen Kaffe is part of the family owned coffee company Löfbergs. For more information, visit **www.peterlarsenkaffe.dk**

FKUR

Circular economy and recyclability are widely discussed today. Especially recyclability has a high priority when it comes to legislation and politics. But still most plastics are made from a CO_2 one-way source like crude oil and no one is questioning this status quo. The concepts of compostability and biodegradation as an alternative waste route for plastics are often misunderstood and easily confused, as well as seen as a threat for recycling. However, it is essential to close the carbon loop and not only the material loop in order to move forward to a CO_2 neutral industry or society.

The FKuR group is a medium-sized, privately held group of companies focusing on the development, production and marketing of high-quality special compounds and the distribution of plastics specialties. The group currently includes FKuR Kunststoff GmbH, one of the leading suppliers of bioplastics compounds for flexible packaging solutions and engineering applications, and FKuR Polymers GmbH, specializing in the development and production of TPE and PP / PE compounds. For more information, visit **fkur.com**

TRIFILON

While biocomposite technologies have been around for decades, they were primarily focused on cost reduction. Trifilon has taken a different approach in developing a 2nd generation of biocomposites – material performance. Today, high performance hemp biocomposites are a relevant technology for brands to meet both their sustainability goals as well as create stronger, lighter, higher performing products.

Trifilon serves architects, designers, engineers, builders and brand owners – makers who want their high-quality products to be sustainable. Trifilon's biocomposite materials offer a step towards a greener economy by incorporating sustainable hemp fibres into a wide range of thermoplastics. Trifilon's specially designed biocomposites are engineered for use in conventional injection molding systems. For more information, visit **www.trifilon.com**

DTU WIND ENERGY

The project Bio4self (2016-2019) aimed at fully bio-based, easily recyclable, reshapable and even industrially biodegradable self-reinforced composites. The composites are produced using one type of material: polylactic acid (PLA), a thermoplastic bio-polyester derived from renewable resources, such as agricultural wastes. Use of PLA is currently limited to low demanding packaging or agrotextiles. The project Bio4self has brought PLA to the next level of applications, such as parts for automotive and home appliances, by combining two types of PLA to form so called self-reinforced PLA composites, using high stiffness PLA fibres.

As a result, the developed self-reinforced PLA composites matches the requirements of currently used commercial self-reinforced polypropylene, PP, composites. The presentation will explain how the Bio4Self project has succeeded in producing self-reinforced PLA composites by presenting the challenges overcome by the Bio4self innovations and demonstrating the performance of the material.

Section for Composite Materials at DTU Wind Energy covers manufacturing, characterization and mechanical testing of composites for wind turbine blades, and other structural applications. The section has long-term experience in applied research and development of composite materials, as part of international and national projects and in close collaboration with industry. For more information, visit **www.vindenergi.dtu.dk**

NOVO NORDISK

Via the Tripple Bottom Line, environmental stewardship has always been a part of the Novo Nordisk DNA. However, in early 2019 a new and updated environmental strategy was launched with the title 'Circular for Zero' taking our next steps into sustainability of business operations, R&D, production and treatment of diabetes and other chronic conditions. With inspiration from The Ellen MacArthur foundation renewed focus was put on our use of materials for medical devices among many other aspects. In this journey we see bioplastics as an important component.

Novo Nordisk is a global healthcare company with 97 years of innovation and leadership in diabetes care. This heritage has given us experience and capabilities that also enable us to help people defeat other serious chronic diseases: haemophilia, growth disorders and obesity.

Our key purpose is to prevent the rise of type 2 diabetes and obesity, discover and develop better biological medicines, manufacture them to meet increasing global demand and make them accessible wherever they are needed. For more information, visit **www.novonordisk.dk**

Plastindustrien.
The Danish Plastics Federation

The Danish Plastics Federation is a trade association for plastics companies in Denmark and their suppliers, including those handling bioplastics. With more than 250 members DPF represent around 70 percent of the turnover in the Danish plastics industry.

Read more about DPF at **www.plast.dk**

Participants

Alexander Schwarz, *Roll-o-Matic A/S*
Alexandra Thygesen, *ATOPIA*
Alex Sundbäck, *Elpoalma*
Amalie Pernille Rasmussen, *Student*
Amanda Max Andersen, *Student*
Anders Gideon, *DAKOFA*
Anders Højholdt Daugaard, *Convatec / Unomedical*
Anders Schmidt, *Good Food Group/Scandic Food*
Ane Høfler, *Nova Group International*
Anette Munch Elmér, *Polykemi*
Anette Werner, *Teknologisk Institut*
Anke Pasold, *KEA - Material Design Lab*
Ann-Britt Aspholm-van der Brugge, *Kuraray*
Ann-Christin Kessler, *Student*
Anne Kaae Nielsen, *VELUX A/S*
Anne-Mette Hjorth, *Nopa Nordic A/S*
Anne Ristorp Kraufeldt, *Magasinet Plast*
Anne-Sofie Ravn Bering, *Vikan*
Annette Bitz, *Ambu*
Annette Thomsen, *Carpenter ApS*
Annika Ravn Tandrup, *PKI SUPPLY A/S*
Åsa Lidström, *Camfil AB*
Asbjørn Børsting, *Dakofo*
Bart Vanhoof, *Bart Vanhoof*
Beata Wojtyszyn, *Carlsberg Breweries A/S*
Beatrice Schultz, *Student*
Benedikte Fjellheim, *Ivar Holte*
Benjamin Kofod, *Eva Solo A/S*
Bent Kloster Hansen, *Solina Group*
Bent Ole Nørregaard, *LogiCon Nordic A/S*
Birgitte Gravesen, *Covia Europe*
Birgitte Kjær, *Landbrug & Fødevarer*
Bjarne Högström, *Polymerfront*
Bjørn Jensen, *Arne B. Corneliussen AS*
Bjørn Marcher, *Trioplast Nyborg A/S*
Bjørn Østergaard, *EHRNO Flexible a/s*
Bo Madsen, *DTU Wind Energy*
Bo M.Nielsen, *Controlled Polymers A/S*
Bo Toftdahl, *Kellpo*
Bo Willumsen, *Poul Willumsen P/S*
Brian Eskildsen, *ASLI A/S*
Brian Jensen, *Eurofins Product Testing Denmark A/S*
Brian Smith, *MAISTIC Bio Group*
Camilla Fougner, *Beesnapp*
Camilla Magnusson, *Nolato*
Camilla Sandfeld, *Student*
Carl Malm, *Innovation Skåne*
Carsten Brøgger, *BKI foods*
Catharina Cronsjö, *Orthex Sweden AB*
Catrin Lindblad, *RISE*
Charlotte Ammentorp, *A-TEX*
Charlotte B. Naabye, *Plus Pack*
Charlotte Høj Brarup, *Schur Flexibles Denmark a/s*
Christian Dela, *Convatec / Unomedical*
Christoffer Bergman, *INP Förpackninger*
Christoffer Nilsson, *Välinge*
Christoffer Smed Karlog, *Carve*
Claes Torkelsson, *IMCD*
Clara Pierrou, *RenFuel K2B AB*
Claudia Sick, *Plastic Change*
Claus F Thomsen, *Harpun*
Claus Holm Christensen, *Ubro Systempac A/S*
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Dansk Klæberulle Industri A/S, *Dansk Klæberulle Industri A/S*
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Marianne Brøndby, *Covestro Global Services Denmark*
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Mette Marko, *KEA - Material Design Lab*
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Peter Skals, *Coloplast a/s*
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Tuomo Wall, *UPM Raflatac*
Ulrik Rosenørn, *Lantmännen Schulstad A/S*
Ulrik Sthaalros, *Schur Star Systems GmbH*
UPM Raflatac, *UPM Raflatac*
Vanessa Hoffmann, *Abena Global Supply A/S*
Vedran Mesovic, *Eurofins Product Testing*
Victoria Vengsgaard, *Profilbureauet Denmark*
Walker Camacho, *Tetra Pak AB*
Willem van der Beek, *Novo Nordisk A/S*

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