

September 2018



Success within PET-foam

Nexam Chemical has recently received a large order with a value of SEK 5.7 million, published in a press release on September 21, 2018. The order, that has been received from one of the world's four largest manufacturers of PET-foam, concerns a pre-mixed masterbatch to be used when producing the customers high performance PET-foam. Nexam Chemical has, for a period, cooperated with the customer who now increase the use of Nexam Chemicals masterbatch when manufacturing their high volume products.

Nexam Chemical develops and manufacture property enhancing additives under the product brand NEXAM-ITE®. These products are delivered as a pre-blended mix (a masterbatch) which simplifies the production processes and allows us to deliver our technology in a qualitative and efficient packaging. PET-foam have



many applications, such as in the turbine blades of windmills and building constructions. This order is a big step forward within our focus area and the outcome is a direct result of a long and close cooperation with our customers.

Breakthrough for NEXIMID® on the Chinese market

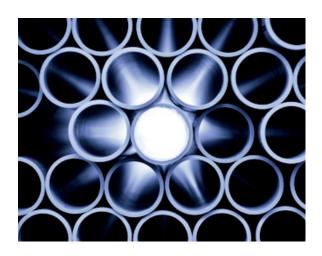
In mid-September, press released on September 13, 2018, Nexam Chemical received an order of approximately 1 MSEK regarding the product NEXIMID®. NEXIMID® is a product that enables substantial improvements in the properties of lightweight composites. Historically, the sales of NEXIMID® have had a strong link to the North American market, however, for some time we have been allocating resources with the purpose of introducing this product on the Chinese market as well. In China, major efforts are made within the composites industry to supply, e.g. the emerging civil aviation industry, with light weight material. The demand for products, such as NEXIMID®, are continuously growing in China. The increasing demand is also supported by the current situation in China, where the price on domestic products have increased due to



the government closing environmentally unfriendly production, a situation which makes the country viable for foreign competition. We see this increased order volume as a confirmation that we have established an important position on the Chinese market and see good possibilities of a further growth for NEXIMID®.

Focus area PE-pipe

Projects with NEXAMITE® A48 are advancing, we now have three polyolefin producers in Europe, the Middle East and Asia applying the product at full scale tests in their production. After full scale plant test the produced materials will be used for pipe extrusion and undergo required testing and approvals before commercialization. Nexam Chemical have ongoing trials with a group of polyolefin producers and several pipe manufacturers are testing and evaluating commercial pipe grades. We believe that 2019 will be the year when we see traction towards large scale commercialization in the focus area "PE-Pipes."





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Jonna Opitz - new member of the board

In May, at Nexam Chemicals Annual General Meeting, Jonna Opitz was elected as new member of Nexam Chemicals Board of Directors. She has a background within investor relations (IR) and communication. She has the role as Senior Vice President for Marketing, Sales & Communication at the listed window and door company Inwido.

Tell us shortly about your background?

I would say that I have a two-folded background. I started my career as a professional tennis player on the Women's Tennis Association (WTA) tour, back in the early 90s. You could say that I was in the periphery of the Swedish Tennis wonder and during my career I had the privilege of representing Sweden at several occasions both as a junior and as a professional. My highest ranking as a pro was 147th in the world and 2nd in Sweden.

The latter part of my career started as a sports journalist at a well renowned Swedish newspaper, Sydsvenskan. From there I moved into the corporate world and became an editor for several internal magazines, a shareholder magazine as well as Intranet establishments at

two of Sweden's largest companies, Trelleborg AB and Tetra Pak.

My next step was into the world of Investor Relations which I headed, both at PartnerTech and ReadSoft for some 10 years, all in all. I started at Inwido, Europe's largest supplier of windows and doors, in 2009 and took an active part in our IPO in 2014 when the company was listed at Nasdaq Stockholm. Apart from working with our external and internal communication I also manage our customer support center in Vilnius, Lithuania, am the Key Account Manager (KAM) for our international retail agreements and also responsible for our brand/marketing strategy.



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What was it in the role as a member of the board in general and Nexam Chemical's business in particular that attracted you to the company?

As you might read from my experience above I've taken steps in my career that has moved me closer and closer into the core of business and business development. In 2015 I decided to do an MBA and in 2017 I got my diploma from Lund University. To me the opportunity to step into "another world" through my engagement in Nexam Chemical was the perfect match. I felt that this was an interesting new business where I could learn a lot, while at the same time I and of course Nexam Chemical could share the benefits of the experiences I've gained over the years. I also think that Nexam Chemical is at a very exciting stage in its development, especially with the acquisition of Plasticolor Sweden AB. The potential in combining these two businesses is great and I was honored when I was approached by the Nomination Committee, asking me to be a part of that journey.

What are the possibilities and challenges you see in your role as a member of the board?

To me this is teamwork, and it's important that we use the different skills we possess in the best and most

effective way. It's of course the Management Team that run the company and the daily operations and our task is more connected to setting the direction strategically, together with management, and then follow up on this. At times we can also work as a sounding board, challenge the actions taken and praise the success they achieve.

What is the most important experience you bring from your field, investor relations (IR), as our latest member of the board?

That's a difficult question to answer since I don't know what challenges and/or opportunities that we will face. But I've worked with Investor Relations and communication for several years and in several different industries now and hopefully that can be of use in the journey we are on. I think it is important to stay calm, humble, focused and stick to your plan whether it's business or communication. At the same time, in this digital world, we need to stay flexible and on our toes in order to catch the possibilities and threats on the rise. I truly believe that timing is of essence both in business and communication.

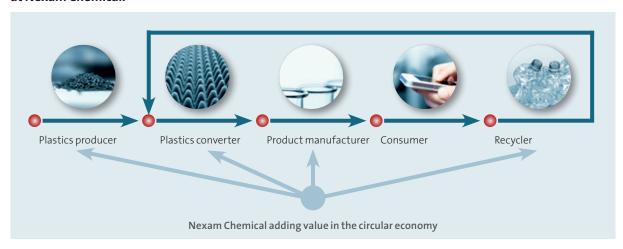






Recycling performance contributes to circular economy

There is an increasing demand and interest for recycled polymers throughout the values chain for many applications. "Performance from recycled polymers in terms of processability and final applications is improving. The time when the driver to use recycled material was only cost is over. Properties are now increasingly expected to be equivalent to virgin material. The driver is sustainability," says Lars Öhrn, CMO at Nexam Chemical.



Challenges with recycling

Lars highlights a number of current issues in the industry. These include process stability and performance requiring increased melt strength, as well as the ability to run long process times without stopping for cleaning or failures. Performance of recycled plastics in different applications is also an issue. "There are many challenges in the plastic recycling business," he says. "The biggest one is probably getting clean material (mono-material). Post-consumer material is usually very difficult to use for this reason."

Improving processing and final product performance of recycled polymers remains paramount. "We address this with different combinations of NEXAMITE® products and other additives such as antioxidants and polymer

processing aids in multifunctional masterbatches," Lars says. "We also combine reactive extrusion technology that improves melt strength and physical performance with additives that further decrease the need for cleaning and unwanted production stops. Depending on what challenge the converter has processing the recycled plastic material we have a toolbox that makes life easier for companies working with recycled plastic streams. The toolbox contains highly effective processing aids that help processing the plastic so that it flows easier leaving fewer deposits and less dye build ups. In addition, antioxidant combinations help to protect the polymer during processing from further deterioration. NEXAMITE® can also form long chain branches improving melt strength, and finally we can add a carrier that can further improve properties in the final product."



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Strengthened offer to the industry

Nexam Chemical have recently introduced NEXAMITE® M480502 and M480504, PE0180 and PE0191 - masterbatches designed for extrusion applications such as film, pipe and profile. We have also launched several NEXAMITE® masterbatches specifically designed for polyester industrial applications.

Nexam Chemical will continue to create tools for plastic materials to enhance function in the circular economy. "The reference point is the performance of virgin material," Lars says. "In many cases recyclers are mixing recycled and virgin material. In those cases, we want to create solutions that will enable more recycled material to be used."



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The art of matching colors in plastics

With our recent acquisition of Plasticolor we acquired industry leading know-how in the field of color matching. Our technicians in the laboratory have about 50 years of joint experience in this field. Both new and existing customers contact us on a regular basis and together we develop products that match their specific needs. Our customers rely on our experience and expertise to eliminate unnecessary and costly problems in their own processing of the materials.

With 100 color pigments in our toolbox

The process of color matching basically starts by looking at the customers end-product. Will the product be used in a consumer good? Or is it a product meant for packaging of food or medical supplies? Different end usages require certain types of material properties and in our tool box we have about 100 color pigments from which we can mix the exact color shade that the customer is requiring. Also, we must consider how the customer will process the material, since every processing facility has its very own specific needs.

Following the clients request of a certain color we take a look into our vast library of color schemes. If this is a completely new color to us i.e. we haven't matched it before, we need to start by making a color analysis. For this process we use an array of high-end laboratory equipment to produce a sample of the material. Usually the sample will match the color directly. However, sometimes the sample will meet all the technical requirements, but the color is not exactly according to the customer's specification. In a situation like this, our knowledgeable technicians use their long experience

and well-trained eyes to produce a sample that will meet the customer's requirements.

The challenge to get the right color in the customers product

Now we come to the last critical part of color matching. Our technicians will have to make sure that the customer's end-product get the exact right color when our color masterbatch is mixed with a larger volume plastic, for example polyethylene, by the customer. Our color masterbatch make up about 2 % of our customers' end-product. We then need to re-create the same color and quality for each new order we receive from the customer, making sure that our color masterbatch gives exactly the same color in the end-product as previously delivered masterbatches.

In conclusion, color matching is a true art form where the practitioners develop a skill set through many years' experience. Therefore, we consider ourselves proud to incorporate this heritage and know-how to Nexam Chemical.





Nexam Chemical participated in RPTC 2018 in Moscow

Nexam Chemicals representatives, CMO Lars Öhrn and Dr Carlos Solano, participated during the past week at the exhibition RPTC 2018 in Moscow. RPTC, Petrochemicals Technology Conference & Exhibition, is a part of Moscow Refining, Gas & Petrochemicals Week. RPTC is widely considered by Russian & CIS petrochemical companies and their partners to be the leading annual platform that addresses key technology challenges and market trends that impact the development of the petrochemical industry within the region.

At the conference, Dr Carlos Solano held a presentation with the title "Melt Modification of Polyethylene – Creating New Business Opportunities".

For more information about the exhibition/conference see

www.europetro.com/week/mw2018#rptc



Nexam Chemical participates at Stora Aktiedagen 2018

Nexam Chemical will participate at Aktiespararnas Stora Aktiedagen in Stockholm on November 26, 2018. On Stora Aktiedagen approximately 50 companies present their business for about 1 000 visitors. Registration for

the event is made on www.aktiespararna.se. Nexam Chemicals presentation will be sent live on the web or afterwards on-demand. More information about Stora Aktiedagen will follow during the autumn.

Next newsletter will be published in December.

