

LANXESS at Aquatech, November 3-6, 2015, Amsterdam, the Netherlands, Stand 06.105

Water expertise from a single source

- **Capacity expansion for membrane elements planned**
- **Ion exchange resins on continued path of growth**
- **Design software developed further**

Cologne – The LANXESS exhibition at Aquatech this year is all about the specialty chemicals company's extensive expertise in water treatment. The trade show is taking place in Amsterdam in the Netherlands from November 3 to 6, 2015. "Membrane technology and ion exchange complement each other perfectly. Many of our customers use the two technologies in tandem. For that reason our foray into the membrane element market in 2012 was only natural – and has been a huge success," says Jean-Marc Vesselle, head of the Liquid Purification Technologies (LPT) business unit at LANXESS.

The Lewabrane product range comprises membrane elements for brackish water and seawater treatment that boast a long service life, a good permeate yield, effective salt rejection and low energy requirements. "Currently, several thousand of our elements are being used in more than two dozen countries around the world," explains Alexander Scheffler, Director Membrane Business in the LPT business unit.

"Our production facilities for membrane elements in Bitterfeld, Germany, are reaching the limit of their capacity. That is why we are planning a significant expansion of our capacity in the course of next year to meet rising demand. Thanks to the experiences we have gathered in a great variety of applications in recent years, we shall become an even more attractive supplier for major customers too," adds Scheffler.

LANXESS AG

Contact:
Ilona Kawan
Corporate Communications
Spokesperson Trade & Technical
Press
50569 Cologne
Germany

Phone: +49 221 8885-1684
Ilona.kawan@lanxess.com

Page 1 of 4

LANXESS can look back on more than 75 years of experience in ion exchange resins with its extensive Lewatit range. All signs point to continued growth in this market too. Demand for weakly acidic cation exchange resins and acrylic anion exchange resins is growing at a rate of three to five percent each year. "Having built up capacities for acrylic anion exchange resins in Jhagadia in India in 2010, we increased the production capacity for weakly acidic cation exchange resins in Leverkusen by around a third in 2014," says Vesselle. The high capacity utilization both of the new production lines and of the newly constructed filling unit in Leverkusen already demonstrates how closely aligned to market and customer requirements these investments were.

Pooled competence for water treatment

The knowledge and experience LANXESS has gained with its Lewabrane and Lewatit grades and its technological and application know-how in membrane technology and ion exchange are continuously being incorporated into its LewaPlus design software. At Aquatech, the beta version of a new module of this software enabling calculations for condensate treatment in water-steam circuits will make its debut. These circuits are very widespread in industry and specifically in the power plant sector and often place high and very specific demands on water quality.

LewaPlus has established itself as a very powerful tool, in particular in the design of combined reverse osmosis/ion exchange systems for water treatment. It goes beyond just calculations of and with technical and analytical parameters. For example, investment and operating costs can be estimated at a very early stage of the planning. This makes the software an interesting proposition not only for planners and operators but also for plant engineers, because more competitive designs mean more orders.

Half-hour presentations by LANXESS experts at the stand will give an insight into the company's extensive expertise in matters of water

LANXESS AG

Contact:
Ilona Kawan
Corporate Communications
Spokesperson Trade & Technical
Press
50569 Cologne
Germany

Phone: +49 221 8885-1684
Ilona.kawan@lanxess.com

Page 2 of 4

treatment. These will be given on the first three days of the tradeshow between 11 a.m. and 3 p.m. Current developments from the fields of ion exchange and reverse osmosis and the LewaPlus design software are to be presented.

Scope for market-oriented innovations

Even if the fundamental aspects of membrane technology have been known for a long time, there is still plenty of scope for innovations, particularly if they reflect the market. This is demonstrated by a joint project by LANXESS and Conwed Plastics, a U.S. company specializing in the manufacture of plastic netting, that is to be introduced at Aquatech. Such nets act as feed spacers in membrane elements and serve several functions there. They provide space for fast-flowing water, support the membrane and cause turbulent water flow. This helps on the one hand to lower the salt concentration at the surface of the membrane but also causes increased pressure drop. This is why optimal design is essential for the performance of the elements.

New types of feed spacer in which the netting is made up of filaments with alternating thicknesses (ASD - Alternating Strand Design) can increase the performance of reverse osmosis elements. This is shown both by simulation calculations and tests on prototypes manufactured as part of the project. "We are currently planning to market the first elements with the new feed spacers next year following the completion of all the tests," explains Scheffler.

Detailed information about LANXESS products can be obtained online at <http://lpt.lanxess.com/en/home/>. Brochures and the LewaPlus software can also be downloaded from this website free of charge.

LANXESS is a leading specialty chemicals company with sales of EUR 8.0 billion in 2014 and about 16,300 employees in 29 countries. The company is currently represented at 52 production sites worldwide. The core business of LANXESS is the

LANXESS AG

Contact:
Ilona Kawan
Corporate Communications
Spokesperson Trade & Technical
Press
50569 Cologne
Germany

Phone: +49 221 8885-1684
Ilona.kawan@lanxess.com

Page 3 of 4

News Release

development, manufacturing and marketing of plastics, rubber, intermediates and specialty chemicals. LANXESS is a member of the leading sustainability indices Dow Jones Sustainability Index (DJSI World) and FTSE4Good.

Cologne, November 2, 2015
sdt/kaw (2015-00053e)

Forward-Looking Statements.

This news release may contain forward-looking statements based on current assumptions and forecasts made by LANXESS AG management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.

Information for editors:

All LANXESS news releases and their accompanying photos can be found at <http://press.lanxess.com>. Recent photos of the Board of Management and other LANXESS image material are available at <http://photos.lanxess.com>. TV footage can be found at <http://globe360.net/broadcast.lanxess/>.

You can find further information concerning LANXESS chemistry in our WebMagazine at <http://webmagazine.lanxess.com>.

Follow us on Twitter, Facebook, LinkedIn and YouTube:

<http://www.twitter.com/LANXESS>

<http://www.facebook.com/LANXESS>

<http://www.linkedin.com/company/lanxess>

<http://www.youtube.com/lanxess>

LANXESS AG

Contact:

Ilona Kawan

Corporate Communications

Spokesperson Trade & Technical

Press

50569 Cologne

Germany

Phone: +49 221 8885-1684

ilona.kawan@lanxess.com

Page 4 of 4