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A PRODUCT OF THE BUHLMANN GROUP

B GLOBAL

- BREMEN: PORTRAIT OF SPECIAL MATERIALS
- VALKENBURG: A VISIT TO HELLEBEUK B.V.
- DUISBURG: INTERVIEW WITH FRANK SCHIFFERS



PRODUCTS & PROJECTS:
STAINLESS STEEL AND SPECIAL MATERIALS

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EDITORIAL

UNUSUAL TIMES



LADIES AND GENTLEMEN,

These are unusual times that confront us with many constraints – both privately and professionally. However, as a stockholding dealer with large capacities worldwide, we are able to supply our customers with material in the usual premium quality and continue to support them in their projects. The measures necessary to protect our employees and our business partners are reviewed daily and, if necessary, adjusted to ensure that we can maintain our supply chains.

One of the biggest differences for us in everyday business is that we are currently unable to contact our customers face to face. Close and personal customer relations are a trademark for us, which we have to temporarily do without with a heavy heart. But there will be no "business distancing": Our premium service, which has always distinguished us, is available to all business partners by telephone or digital means.

It is important to us to keep our company on course as usual and this will also apply to you, because we are all in the same boat. The aim must be to prevent a stall. This can be best achieved if we continue to operate as normal. Optimism and confidence take us further than diffuse fears. That's why we've put together our customer magazine **B GLOBAL** for you as usual. We aim to offer interesting reading material that gives you an insight into our business activities and reflects our industry.

For example, the fact that we were able to renew our partnership with Saudi Aramco, the world's largest oil production company, and that we have been recertified is a huge boost for us. You can read more about this achievement by our colleagues from Duisburg and the Netherlands on page 11.

Pages 11 and 12 show you that we are a growing enterprise and we'd like to introduce the latest member of the BUHLMANN GROUP. Hellebeuk B.V. from Valkenberg in the Netherlands joined our company group in January 2020 and we warmly welcome our new colleagues.

And because traveling is difficult at the moment, we will take you on a reading excursion: We will visit our Austrian site in Mürzzuschlag and introduce you to the wonderful surroundings. We feel confident that you will soon be able to follow the recommendations which we have compiled for you.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Jo. O. Buhlmann". The signature is fluid and cursive, with a long horizontal stroke at the end.

Jan-Oliver Buhlmann

A MATERIAL WITH ADVANTAGES

STAINLESS STEEL: ENVIRONMENTALLY FRIENDLY & HYGIENIC

Awareness campaigns to avoid packaging material and bans on drinking straws as well as disposable tableware and bags are effective publicity measures to stem the flood of plastic. Even where the material is "hidden", the use of plastic can be reduced: Stainless steel is highly resistant to chemical and mechanical stress, durable and recyclable – perfect, for example, for the hygienically demanding food industry and hospitals.



> Kitchenware in stainless steel has hygienic advantages and is environmentally friendly.



Microplastic: Tiny particles which are washed out into rivers and oceans by sewage, air and rain water



Microbiological contamination in the food industry can be minimized by stainless steel plants.

The advantages of the material stainless steel are quickly enumerated: It is corrosion-resistant, temperature-resistant, conductive, weldable, hygienic, low-maintenance and durable. Even though these advantages have always spoken for themselves, the development of the plastics polyvinyl chloride (PVC), polyethylene (PE) and polypropylene (PP), which are still the most widely used plastics today, triggered a real plastics boom in the first half of the 20th century. The material is inexpensive, light and durable – although it is precisely the latter property that is now increasingly becoming problematic: One third of the plastic produced ends up in the environment and remains there. Plastic swirls in the sea, pulverized as microplastics in soils, waters and animals – microplastics have even been detected in the human body.

The environmental impact begins with the production process, because the production of plastics is based almost 100 percent on fossil fuels. The added substances, such as plasticizers or dyes, have been proven to have harmful effects on health. Neither the Federal Environment Agency nor the German Environmental Aid Association support the new, biobased plastics because they cannot be degraded properly in most conventional biological processing plants. Plastic pipes commonly used in the construction industry today can release phenol, which damages mucous membranes and causes skin irritation.

Pipes and pipe accessories made of stainless steel, on the other hand, are not harmful to health, because they do not emit any pollutants, they do not release corrosion particles, they do not lose ions such as copper pipes and they do not release heavy metals. In addition, their smooth surface makes them insensitive to dirt

Continued on page 6 ...

adhesion and even biological lubricating films that could cause germ contamination. An ideal material for drinking water systems, in breweries or for other systems in the food industry.

Even door handles, light switches, transport and hygiene containers or kitchen utensils made of stainless steel are often superior to plastic products thanks to their resistance to dirt, durability and temperature resistance. Hygiene is particularly important here: A study at the Hygiene Institute of the University of Leipzig in Germany, commissioned by the rehabilitation and sanitary equipment manufacturer Frelu, showed that bacteria on stainless steel plates had a very low survival rate after about 120 minutes. Three out of four types of bacteria tested were more than 98 percent dead, and another germ of the genus *Staphylococcus* was 85 percent dead. In contrast, the number of surviving germs on conventional plastic plates was so high that a concrete count could not be made. According to empirical data from the Leipzig Institute, the mortality rate was as low as 50 percent.

Its durability also speaks for the use of stainless steel. The material owes its corrosion resistance to a chemical reaction. As a result of the chromium content of the steel in combination with oxygen in the air or water, a deposit forms on the surface – the wafer-thin passive layer. It is able to repel aggressive substances. In the event of damage caused by external influences, a new layer forms from the matrix of the steel within a fraction of a second. The corrosion resistance is primarily due to the chromium content. Other alloy components such as nickel, molybdenum, manganese and niobium lead to even better corrosion resistance or more favorable mechanical properties. The material numbers of the products are used to clearly identify and differentiate the individual alloys.

Incidentally, stainless steel and "Edelstahl Rostfrei" are not identical: the latter is registered as a trademark. The owner of the trademark is the trademark association Edelstahl Rostfrei e. V. in Düsseldorf. The trademark "Edelstahl Rostfrei" (stainless steel) is a seal of quality for the material used. The trademark users are obliged to select materials appropriate to the application and to process stainless steel properly. The association monitors the use and strengthens the reputation and significance of the quality seal in the public by means of high-impact advertising measures.



Stainless steel is a robust material.

Text: Gabriele Wiesenhavern

AN INSIGHT INTO THE WORK OF BUHLMANN INDUSTRIE TECHNIK



Shurjoint couplings are part of the product range of BUHLMANN Industrie Technik

BUHLMANN Industrie Technik (BIT) has been active on the market since 2018. The company focuses on industrial technology and supplies materials in C or stainless steel as well as boiler tube grades. But what does that mean in daily business? Managing director Arno Hofmann gives us an insight:

In addition to traditional welded joints, we are increasingly supplying alternative fastening systems. "Last year, we supplied various projects in the field of technical building equipment, for example for a skyscraper", explains Arno Hofmann. Grooved pipes and suitable Shurjoint pipe couplings and fittings for fire ex-

tinguishing, cooling water and heating systems were used. "The main advantage of this pipe connection technology is the shorter installation time and constant quality compared to welded joints. This simple joining technique can also be used to counteract the shortage of qualified welders", explains Arno Hofmann. We store both welded pipes with grooves and suitable couplings and fittings in Duisburg (DN50 – 250).

Text: Malte Addiks



WHO IS BUHLMANN INDUSTRIE TECHNIK?

The BIT offers a comprehensive range of piping materials and accessories of the highest quality. Due to its focus, the six-strong team has customers in various industries who can find the right product for every requirement. The products are used for: General supply lines for industrial use, compressed air technology, refrigeration and air conditioning technology, food industry technology, pipeline components for the fire extinguishing sector, technical building equipment and water engineering. As a subsidiary of the BUHLMANN GROUP, BIT has the structures and resources of the entire corporate group at its disposal, including the automatic small parts warehouse and the worldwide purchasing network.



SPECIAL MATERIALS

FROM A GOLDEN TIGER TO ALLOY 600

Friday the 13th can be a lucky day: Eight years ago, BUHLMANN China booked an order from a Chinese fertilizer factory in Mongolia, thus initiating the process that culminated in the foundation of the Special Materials department on January 1st, 2014.

"Our Managing Director and Chief Operations Officer Jörg Klüver asked me in autumn 2013 whether I would like to concentrate on special materials", recalls Senior Sales Manager Christoph M. Tirre. At that time, Tirre had already been with BUHLMANN for over 20 years. He started his training in the company in 1992 and then moved to the export department. Here he began to build up a network from which the department still benefits today.

But what exactly is so very special about Special Materials? "As a simple explanation, I always say that these are materials that we do not stock ourselves and in which there is a little more nickel," explains Tirre. To understand the whole issue in detail, a lesson on the chemical element with the symbol Ni and the atomic number 20 should now follow. But let's remain more general: Nickel makes steel resistant to corrosion and increases its hardness, toughness and tensile strength. Steels alloyed with nickel are used in particularly corrosive environments. Such as the fertilizer factory in Mongolia mentioned earlier.

Tubes, fittings, flanges or even sheet metal, made of titanium, nickel-based materials, stainless steel boiler tubes and other special materials: Christoph M. Tirre, Dennis Ehlbeck and Juliana Kosanke are the contact persons for material that deviates from the warehouse standard. "I have always had a weakness for materials that we don't have in stock," says Tirre. Close contact with colleagues in the sales departments is crucial in this respect, because Special Materials does not make its own bookings, but is an internal service department that supports the individual sales units in being successful in this market segment.

The first project, which was offered, negotiated and booked via BUHLMANN China in 2014, the year in which the Special Materials department was founded, went by the name "Golden Tiger": Extensive material in Alloy C4 was supplied to the specialty chemicals group Lanxess, a spin-off from Bayer AG.

Christoph M. Tirre was previously responsible in the export department for Italy and some of the emerging so-called "BRICS" countries Brazil, Russia, India, China and South Africa, among others. The first four countries are among the ten largest nickel producers worldwide. South Africa is among the largest titanium producers. So it's no wonder he says: "Many customers in Italy from the past are now suppliers." Sales Manager Dennis Ehlbeck was previously responsible for Scandinavia, among other things. "I took the opportunity to develop within the company," says Ehlbeck. "Getting to know the field of special materials was a new challenge." Juliana Kosanke also finds it exciting to deal with the new suppliers and manufacturers.

For the members of the department a special order from last year is particularly worthy of mention as it goes beyond BUHLMANN's core business: Not tubes, but sheet metal was delivered to China by BUHLMANN Global Projects in cooperation with Special Materials at the beginning of 2019, 12.5 tons to be exact. The sheets in

the material Alloy 600 went to a chemical plant in Yantai, China. They were produced by the manufacturer VDM for the boiler walls of the chemical reactor – where the chemical processes take place. Alloy 600 is highly resistant to corrosion and is used in particular where thermoplastic polyurethane (TPU) and methylene diphenyl isocyanate (MDI) are produced. Alloy 600 is also used in industrial furnaces, protective tubes, reaction vessels and heat exchangers. The special material can even be found in airbags.



Christoph M. Tirre, Juliana Kosanke and Dennis Ehlbeck (from top to bottom)

Text: Gabriele Wiesenhavern

A NEW COMPANY MEMBER FROM LIMBURG:

INTRODUCING HELLEBEUK B.V.



The building ensemble in Valkenburg with its red brick walls, large dark green gates and well-maintained landscaping does not only look like a country manor: Trakehner horses were bred here and at first glance nothing reveals the specialist for stainless steel products. This complete opposite of the expected industrial ambience is the home of Hellebeuk B.V., the youngest member of the BUHLMANN GROUP.

The Dutch company Hellebeuk B.V. with its headquarters in Valkenburg aan de Geul near Maastricht and a sales office in Tiel 170 kilometers away has been part of the BUHLMANN GROUP since January 2020. The family business was founded in 1963 and operates as a trading company for round, square and rectangular pipes, weld-in, threaded and press fittings, flanges, valves, elbows and other accessories. With a stock assortment of around 550 tons of stainless material, the company serves customers not only in the Netherlands but throughout Europe. It supplies the chemical and food industries, the installation sector, technical wholesalers, the water treatment industry and heavy industry.

Incidentally, the new colleagues in Valkenburg work at a very popular excursion destination; the small town of 16,500 inhabitants in the south of the Dutch province of Limburg is a real tourist magnet. The castle ruins from the 11th century that gave the town its name are of the only hilltop castle in the Netherlands. The Valken-

burg looms above the river Geul, and under the castle there are large grottos in which the Romans mined the sedimentary marl rock 2000 years ago. The calcareous rock is also the reason for something that is not usually associated with the Netherlands: The area has been cultivating wine for a long time.

But back to the here and now: Hellebeuk fits perfectly into the group of companies since premium goods and service are prioritized in the same way as in the rest of the BUHLMANN GROUP. "The high delivery availability and fast reaction times as well as the high quality and service standards are a perfect match for our service portfolio", says BUHLMANN Managing Director and Chief Technical Officer Dr. Christian Baum, who also acts as the new Managing Director of Hellebeuk B.V. "Due to the similar product range, we are on the one hand in a familiar area, so that we can contribute our strengths, and on the other hand we – and thus our customers – can benefit from complementary product expertise and new purchasing strategies", adds Baum.

The fact that the total of 15 new colleagues in Valkenburg and Tiel bring a great deal of know-how with them is demonstrated by the successful placement of the company on the market. Special attention is being paid to threaded fittings, ball valves, flanges and butt weld fittings. Technisch Handelsbureau Hellebeuk B.V., which can be found on the Internet at www.hellebeuk.nl, scores points

Picturesque setting: In former times
Trakehner horses were bred here



not only with its extensive stock range and fast delivery, but also with an automated warehouse for small parts, similar to those at the BUHLMANN locations in Oud-Beijerland and Burghausen.

"We are looking forward to the cooperation and to welcoming the new employees", says BUHLMANN Managing Director Christian Baum. The takeover of the Dutch company means our business and customer areas are expanded and our BUHLMANN storage capacities are extended. Thus, the BUHLMANN GROUP is consistently continuing its strategy of inorganic growth as well.

Text: Gabriele Wiesenhavern



INTERVIEW WITH MARKETING & SALES MANAGER RICK LAEVEN FROM HELLEBEUK B.V.

B GLOBAL // How does the company feel about becoming part of the BUHLMANN GROUP and what are your expectations regarding the cooperation?

Rick Laeven // *Becoming part of the Buhlmann Group means that we are able to thrive even more with our company than before. With the shared knowledge about purchasing, warehousing, logistics and other topics, we as Hellebeuk are able to serve our customers even better and expand our business. We expect that working together and creating a synergy with the group will enable us to become an even more reliable and trustworthy partner in stainless steel.*

What does growing together in short term and in the long run require?

In the phase that we are in right now, the early stages of merging, it's important to get to know each other and the companies more thoroughly. This will make sure that we will start collaborating in the most efficient way possible. This requires a lot of brainstorming and developing on a wide arrange of topics.

How did the takeover come about, when was it first thought about?

We held talks throughout 2019. Hellebeuk was looking for the next step for the company and after evaluating all possible options, the merger with BUHLMANN was deemed the right way to go. This will create synergies and gain us the know-how we all need to thrive.

INTERVIEW WITH FRANK SCHIFFERS, PROCUREMENT MANAGER:

“THE INFLUENCE OF GLOBAL EVENTS IS INCREASING”

Frank Schiffers has been the new Director of the Procurement Business Division since January 1st. The 46-year-old looks back on many years in leading procurement positions and has various plans for his new function at BUHLMANN. In this interview, he explains his goals and what the industry has to expect in the future.

B GLOBAL // Mr Schiffers, welcome to BUHLMANN. Could you please tell us what you knew about BUHLMANN before joining the team or if you even had contact with us before?

Frank Schiffers // *Many thanks. Yes, contact had already been made before. In a previous job I worked with BUHLMANN as a supplier. In my former functions as Purchasing Manager and Commercial Director of Bilfinger Scheven GmbH, we built above and below ground pipelines for municipal utilities and for industrial customers, for example in refineries. As a result, I knew BUHLMANN and regarded it as a professional company, which as a customer you can always sense in consultation, support and delivery.*

What image do you have of BUHLMANN now? Which strengths do you see?

My impression has not changed. Of course I perceive the positive sides more strongly due to the internal insights. On the one hand, there is the worldwide networking, which gives you contact to all suppliers in the world. In addition, there is our large storage capacity, which gives us a considerable advantage over our competitors. In addition, the company can draw on an incredible amount of expertise. There are specialists in all areas, not only on the subject of pipes, but also with regard to pipe accessories and other materials. I consider this flexibility to be valuable. Last but not least, there are long-term and sustainable partnerships with suppliers and manufacturers, through which we are closely connected to the markets, both on the manufacturer and supplier side.





What did you do before your time at BUHLMANN?

For almost my entire professional career I have worked in purchasing and held management positions there. I learned how to integrate a modern purchasing department in a company during my time as commercial manager, whereby additional knowledge from other areas was helpful. The last three years I was head of purchasing for an international group of companies as a supplier to the automotive industry.

What are your goals and what challenges do you see for yourself and the industry as a whole?

The original goal of purchasing is, of course, to secure the best purchasing conditions and to guarantee security of supply. The influence of global events is constantly increasing and is also becoming increasingly short-term and difficult to predict. Particularly in the case of topics such as COVID-19, we are in close contact with our suppliers at an early stage in order to ensure supply. In addition, I want to rethink and possibly optimize some internal processes. In this context, the digitalization of purchasing processes including the use of digital interfaces to suppliers is certainly an important issue. In addition, existing partnerships need to be further expanded and the stock levels need to be constantly optimized. This is very challenging, especially in view of the highly volatile and competitive market environment. In addition, the environment and sustainability are gaining noticeably in importance, not only on the supplier side but also on the customer side. It is also important to continue implementing our quality concept and standards in the supply chain.

How important is the question of quality for you?

Extremely! I recognized early on that inadequate quality of the delivered goods can lead to considerable problems within the company and even to customers. These process disturbances are usually unpredictable and difficult to compensate for. Therefore, I have completed further training as a quality auditor and in the field of environmental management in order to demand the necessary quality directly from our suppliers or the manufacturers.

Questions by Malte Addiks

The large storage capacities of BUHLMANN are a great competitive advantage for Frank Schiffers



MÜRZZUSCHLAG: THE GREEN HEART OF AUSTRIA

The office of BUHLMANN Austria is located in the tranquil inner city of Mürzzuschlag, right next to historic buildings such as the Ratsburg, built in 1382. Framed by the forests and mountains of Styria, the town, which lies at an altitude of 670 meters, is a popular Austrian resort. When travel is once again possible without restrictions, a visit will definitely be worth your while.

"The metalworking industry has a very long tradition here. One example is the fact that the city was granted exclusive iron rights for small iron production in the 14th century," explains Sabrina Wiedenegger, Finance Coordinator at BUHLMANN Austria. "And in the 19th century, the first mountain railway in Europe was built over the Semmering mountain pass, this was important for the economy and encouraged the founding of numerous steelworks," she adds. In the years that followed, the steel industry shaped the region: For example, the Austrian engineer Max Mauermann developed the first rust-resistant steel here in 1912. At the end of the 20th century, the importance of the steel industry declined, but highly specialized companies remained. "Sheet metal production, forging plants, pipe works, manufacturers of technical instruments and other metal processing companies are still represented in the Mürzzuschlag district. As such, the steel industry remains one of the most important employers in the region," says Sabrina Wiedenegger.

But tourism is also an important branch of the economy, Mürzzuschlag has a lot to offer: Just the journey by train from Vienna with the Semmering Railway mentioned above is a highlight. The mountain railway has been a UNESCO world heritage site since 1998 and crosses numerous viaducts on its way to Mürzzuschlag. Already during the journey and even more so at the destination, you can feel why Styria is also called the green heart of Austria. "Typical for the region are the many outdoor leisure activities such as climbing, mountain biking, fishing and even hiking," reports Sabrina Wiedenegger. If you are out and about with children, for example, you can discover the new adventure outdoor trail at Mürzzuschlager Au and experience nature in a different way. Those who want to hike longer distances will find numerous routes embedded between different mountain ranges. In addition to long-distance hiking trails, there are also shorter routes that lead to cozy huts. Here you can enjoy a good meal with a striking view over the mountains and valleys: A wonderful array of roast pork, bacon, dried sausage, cheese, horseradish, vegetables,



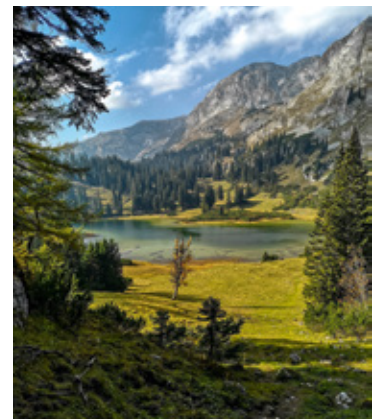
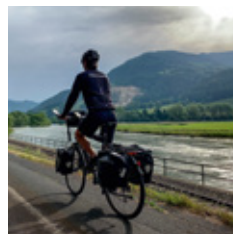
spread and farmhouse bread served on a wooden platter. In addition to the alpine huts, traditional inns and restaurants also offer local dishes, with a focus on regionality and sustainability. Well-known specialities include Sterz, a small crumbly side dish made from semolina, beans or potatoes; Fedelkoch, a sweet milk dish; or Grubenkraut, a herb lactofermented in cabbage pits, which has a particularly long shelf life.

In winter the region invites you to go skiing. No wonder, after all Toni Schruf comes from here. Together with Max Kleinoscheg, he is one of the skiing pioneers who made the sport famous in Central Europe. They started various initiatives to boost tourism and made Mürzzuschlag a center for winter tourism, also thanks to its good location. This historical background as well as many other collections worth seeing and information on the subject can be found in the Winter Sports Museum, which was founded in 1947. Those who prefer to experience the sport actively can enjoy themselves on the slopes in the winter sports areas Schmoll Lifte and Stuhleck, one of the largest ski regions in the country.

"But Mürzzuschlag was also a popular place of passage and recreation for poets and composers," says Sabrina Wiedenegger.



Styria offers various sports and leisure activities all year round.



This is where the Hamburg-born composer Johannes Brahms wrote his 4th and last symphony during his summer stays in Mürzzuschlag in 1884 and 1885. The Brahms Museum shows original exhibits from his estate and organizes concerts throughout the year. "Mürzzuschlag was also frequently quoted by the famous Austrian writer and poet Peter Rosegger, whose home is in the immediate region," adds Sabrina Wiedenegger. Peter Rosegger's close ties to his home region have left their mark – traces

of the poet can be found everywhere. Sabrina Wiedenegger also recommends a visit to his birth and death place in Krieglach-Alpl. Whether action, culture or nature: Mürzzuschlag has something to offer for everyone all year round.

Text: Malte Addiks

MILESTONES IN THE DEVELOPMENT OF PLASTIC AND STAINLESS STEEL

1531

The Augsburg Benedictine priest Wolfgang Seidel produces malleable and solid material from lean cheese, so-called artificial horn or casein.



○ Plastic
● Stainless Steel

1821

The French geologist and mineralogist Pierre Berthier realizes in 1821 that the addition of chrome leads to stainless steel. However, the technological implementation was not yet possible at that time.



1856

The Englishman Alexander Parkes develops the so-called Parkesine, the first thermoplastic in 1856. He is considered the discoverer of celluloid.



1869

The Hyatt brothers from New York discover 1869 celluloid by chance. This is groundbreaking for the distribution of film material.



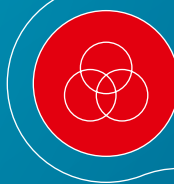
1907

The chemist Leo Baekeland, who emigrated to America, develops the first truly synthetic and mass-produced plastic in 1907. Polyvinyl chloride (PVC) can also be attributed to him.



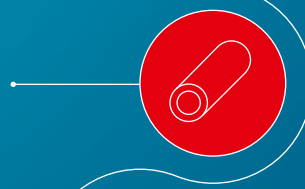
1908

In 1908 the Krupp company and the Germania shipyard build the yacht "Germania" with stainless steel. But it is several years later that the material can be produced cost-effectively on a large scale.



1912

Max Mauermann developed the first stainless steel in 1912 in Mürzzuschlag, Austria. At the same time Eduard Maurer and Benno Strauß from the Krupp company in North Rhine-Westphalia apply for a patent on stainless steel. A short time later Harry Brearley on the British side and Elwood Haynes in the USA discovered stainless steel for the Anglo-Saxon world.



1918

Eduard Maurer and Benno Strauß receive their patents in 1918, Harry Brearley and Elwood Haynes are granted their patents a few months later.



1953

The German scientist Hermann Staudinger is awarded the Nobel Prize for Chemistry. The basics of plastics chemistry are still important today.

