

SIGHTS FIXED FIRMLY ON THE FUTURE

SPOTLIGHT ON BUSINESS CENTRE GREIFSWALD

University and Hanseatic City of Greifswald









Fre

View from the cathedral

Institute of Biochemistry

Marina "am Holzteich"

Wieck flood barrier

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Dear Sir/Madam,

As the Mayor of the University and Hanseatic City of Greifswald, I am delighted by your interest in our city. No matter whether you are a tourist or an entrepreneur, you are warmly welcome in Greifswald.

Greifswald is young, dynamic and innovative, three characteristics that the city owes to its population of nearly 60,000.

Greifswald is young. With an average age of 42.2 years, Greifswald is one of the most youthful cities in Mecklenburg-Vorpommern. This is due not least to the more than 10,000 students registered at the Ernst Moritz Arndt University and the significant impact they are having on the city.

Greifswald is dynamic. The people who love living and working in Greifswald are the city's capital. New residents are drawn here by the attractive job opportunities and high living standards. Greifswald with its increasing number of residents is one of the few cities bucking the population trend in Mecklenburg-Vorpommern.

Greifswald is innovative. More than 70 research institutions and high-tech companies have settled near the university. One-third of all Greifswald's inhabitants work in research, development and post-secondary education.

In this business brochure, we would like to introduce a few of the entrepreneurs and scientists who are enjoying great success in Greifswald. I hope their stories will inspire you, and I look forward to seeing you in Greifswald.

Kind regards,

Dr. Stefan Fassbinder Mayor of the University and Hanseatic City of Greifswald



View over the museum port (Museumshafen), HanseYachts AG and Greifswald-Wieck

GREIFSWALD: **REGIONALLY ANCHORED – INTERNATIONALLY CONNECTED**

The three brick churches of St. Marien, St. Nikolai and St. Jacobi dominate the skyline of the University and Hanseatic City of Greifswald, and can be seen from afar welcoming visitors as they arrive. This panorama is the city's historic face immortalised by the artist Caspar David Friedrich, born in Greifswald in 1774, in his painting "Die Wiesen bei Greifswald" (The Meadows near Greifswald). World-famous paintings by the city's most famous son are housed in the Pomeranian State Museum. The Caspar David Friedrich Centre in the Friedrich soapworks, where the painter was born, commemorates the great Romantic painter with various exhibitions.

The river Ryck leads from the Dänische Wiek, as the Baltic bay near the city is known, to Germany's largest museum port (Museums-

hafen) and the museum shipyard (Museumswerft) in Greifswald. Here, in close proximity to the old town, the venerable city's maritime heritage is still thriving. Modern serial boat production is now taking place right next to the historic fishing boats and cargo boats. This

Greifswald enjoys a central location in the Baltic region

is the headquarters of HanseYachts AG, the world's second-largest yacht building company.

Anyone who comes to Greifswald from the south-east gets a clear view of the future. The modern, wavy roof of the Max Planck Institute for Plasma Physics (IPP) has long since become one of the city's landmarks. The goal of researchers at the IPP is to reproduce the sun's energy production on the earth. To this end, scientists, engineers and artisans from all over the world have set up a Stellarator Wendelstein 7-X fusion research device in Greifswald. This large-scale experiment involves testing the technical requirements for deriving energy from the fusion of atomic nuclei, and research is also being conducted into the suitability of this kind of construction for power plants. Scientific operation got under way in February 2016 with the production of the



One in three inhabitants works in research, science or education

first hydrogen plasma. If the researchers in Greifswald succeed in establishing stable reactions in the research reactor, this may be the key to supplying environmentally friendly energy in the future.

Just six kilometres separate the Max Planck Institute from the salt marshes north of Greifswald and is a measure of the city's maximum diameter. Greifswald is consequently also a city where you never have to go very far. A survey conducted by the Geographical Institute at the Ernst Moritz Arndt University in Greifswald

The city's strengths include close links between science, research and technology

revealed that the routes taken in Greifswald average out at two kilometres. Almost half the population of Greifswald travels by bike when going about their everyday business. The people of Greifswald are therefore even more active cyclists than those of Münster, which had been Germany's previous cycling capital.

Greifswald is a vibrant city with a rich cultural life. The well-filled events calendar offers a wealth of highlights that draws visitors

The University's historic main building

from far beyond the region. Every year in May, for example, lovers of Scandinavian music, literature and art meet in Greifswald for the "Nordischer Klang" (Northern Sound), the biggest festival of Northern European culture outside Scandinavia. In June, fans of classical music descend on the city for the "Greifswalder Bachwoche" (Greifswald Bach Week), the northern festival of sacred music. In July, international jazz greats perform against the spectacular backdrop of the ruined monastery of Eldena during the "Eldena Jazz Evenings". The "Gaffelrigg" fisher festival also draws thousands of visitors to Greifswald-Wieck.

Greifswald is a beacon of light in the northeast. For many years, it has been east Germany's youth in particular who have been moving away from the area. This trend is now on the turn, and Greifswald has become the most attractive city in Mecklenburg-Vorpommern.



One of Greifswald's modern research institutions: scientists at the Center of Drug Absorption and Drug Transport (C_DAT) research the effects of medicinal drugs



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Greifswald's market square – the city's vibrant centre

This was recently confirmed by a study conducted by the Berlin Institute for Population and Development. Their researchers

The city is a driver of Mecklenburg-Vorpommern's economy

showed there has in fact been a significant influx of people moving to the city on the Bodden. In this respect, Greifswald is on a par with much larger cities such as Jena, Dresden and Leipzig.

Problems associated with an ageing population which confront regions both inside and outside Mecklenburg-Vorpommern are compensated for in Greifswald by a rising birthrate and new residents moving to the city. 598 babies were born in Greifswald in 2015, more than in any year since 1990. Conditions in the city are ideal for young families. Plenty of crèches and nursery places, well-equipped schools and unspoilt natural surroundings ensure high standards of living for families.

Students are drawn to Greifswald by the reputation of its university, thus contributing to the city's growth. The Ernst Moritz Arndt University of Greifswald, which was founded in 1456, is one of the oldest universities in central Europe. The lovingly restored historic university buildings in the old town still exude the venerable spirit of this traditional alma mater. The university's modern campus, which houses the medical faculty, numerous scientific institutes and the main student canteen and library, is now located at Berthold-Beitz-Platz. The university is also a visible sign of the sustainable, future-oriented conditions in Greifswald. As a business hub, the University and Hanseatic City of Greifswald promotes the centrality of its cutting-edge research and innovative technology. Greifswald offers an outstanding climate for start-ups in every respect. Two successful innovation centres, the Technologiezentrum Vorpommern (Vorpommern Technology Centre – TZV) and BioTechnikum Greifswald, have been set up in partnership with the municipal authorities. Companies ranging from small start-ups to globally successful market leaders have become established here.

As a research centre, Greifswald is distinguished by an almost unique concentration and network of scientific institutions and companies focusing on plasma, a key future technology. Included here is the Leibniz Institute for Plasma Science and Technology (INP), the Max Planck Institute for Plasma Physics (IPP), the university's faculties of medicine and physics, the neoplas group, and numerous research projects. Greifswald aims to continue expanding this competence and will be concentrating research in the fields of bioeconomics and plasma in a Centre for Life Science and Plasma Technology.

Along with the existing research institutions and companies, the University and Hanseatic City of Greifswald offers additional business and industrial spaces of varying sizes. Land prices in these areas are very low, and the transport infrastructure is outstanding. Work on expanding broadband services to up to 100 Mbit/s throughout the city was completed in April 2015, meaning that fast, safe data connections are now available.

Greifswald's industrial and technology park offers optimum conditions for businesses. Distances from the partners and companies in various industries established there are short in every respect.

Cheap industrial space with a good infrastructure and fast data connections

Fully-developed industrial and business space can be acquired directly from the University and Hanseatic City of Greifswald at short notice. You will find an overview on the map at the end of this brochure.

The University and Hanseatic City of Greifswald is not only a good place to live, it is also a good place to invest in.



Striking and visible from afar: the Max Planck Institute for Plasma Physics



HANSEYACHTS AG Tradition meets high-tech

Greifswald is a historic Hanseatic city with a boatbuilding tradition that goes back more than 800 years. HanseYachts AG is dedicated to continuing this tradition. From the first Hanse 291 more than 25 years ago to the Hanse 675, more than 30 of the company's regular Hanse brand models have been developed in Greifswald. The motorboat brands Sealine and Fjord and the sailboat brands Dehler, Moody and Varianta also belong to the company. At present, HanseYachts has 32 boats in its product portfolio and astonishes the yacht market with 4 to 6 innovative new models every year.

The new Hanse 675 is once again setting new standards. With 35 tons of high-tech and a carbon mast 32 metres in height, it meets all the requirements for a super yacht. It is also the biggest yacht that has ever been serially produced in Germany.

At the beginning, each new yacht is designed by an international team of 30 developers using a special 3D program for technical drawings. Afterwards, the hull and deck are shaped in polystyrene using a computer-controlled milling process. These true-to-life models then serve as templates for the construction of negatives.

The interior of each boat is also individually developed in Greifswald. A giant robot cuts each of the wooden components in order to ensure that all the parts fit perfectly. Joiners then assemble the fittings by hand before they are sent for production as finished modules.

This is where all the components – such as the engine, furnishings and electrical fittings – are installed by experienced boatbuilders, electricians and fitters working at the pace of a modern assembly line. This streamlined, just-in-time production process enables HanseYachts to

build high-quality, individually designed yachts at competitive prices. Each new model is launched onto

The home of sailing

the water at the shipyard's own dock and tested extensively by the developers on the Greifswald Bodden.

Measured by revenue, HanseYachts AG is now the world's second-largest sailing yacht construction company. 550 to 600 boats are built every year, i.e. nearly 3 a day. 85 percent of these are exported to 80 countries all over the world through an international network of 200 dealers. One in three yachts even leaves the Greifswald shipyard under its own power, as many international dealers and clients prefer to collect their yachts in person. How their new boat gently glides over the waves is then experienced for the first time on the Greifswald Bodden.

German engineering combined with years of boatbuilding experience A Dehler 46 built in Greifswald

"MODERN PRODUCTION AND INNOVATIVE IDEAS" Interview with Dr. Jens Gerhardt

How has Greifswald influenced the success of your company?

Along with its perfect location by the sea, the Hanseatic City of Greifswald also has a long tradition of boatbuilding. We also have numerous reliable, medium-sized suppliers nearby who provide us with specially crafted parts. We believe that our location in Greifswald gives us a clear competitive edge, especially in combination with our Polish subsidiary in Goleniów.

In recent years, HanseYacht has expanded significantly in Greifswald. What experiences have you had with the municipal administration?

Working with the municipal administration is very positive and professional. Particularly in the years when major investments were being made, we always managed to find the compromises necessary to protect both the city's interests and our business interests.

Sailing is teamwork, just like boatbuilding. How do you persuade new staff to come to Greifswald?

We are growing bigger every year and now have 1,200 staff. Our skilled workers mostly come from the region but specialists in production technology, development and sales also come to us from all over the world. A new collective agreement was concluded

with IG Metall in January 2016; the company has a works council and employee representatives on the supervisory board. This fosters mutual trust and employee satisfaction.

The Hanseatic City of Greifswald has a long tradition of shipbuilding; cog-built vessels were being made in Greifswald even in Hanseatic times. What future developments do you anticipate for HanseYachts in our city?

HanseYachts AG belongs to Greifswald like the bascule bridge to Wieck. The company has established itself as one of the largest employers in the region, and benefits not only from the good infrastructure, but also from the long tradition of craftsmanship in the city. In recent years, the company has grown at a rate higher than that of the industry as a whole, and our modern production and innovative ideas have strengthened its competitive edge on the global market.







TUCHWERKSTATT Quality production for individualists

It all began at Greifswald's museum harbour, in the confined, initially makeshift premises of the former rigging workshop. Sebastian Hentschel wanted to make traditional sails for old ships, manufacturing them in the way that had been handed down from generation to generation. That was back in November 2006. Now, only 10 years later, the sole trader has 8 employees and 4 trainees, and the team is backed-up by seasonal workers as needed. The sail-making workshop is now located opposite the harbour in the newly built company headquarters with an area of 450 square metres.

These 10 years have seen countless orders of all sizes, from repairing torn sails to making whole new sail sets. Hanseatic cog-built vessels from Wismar, Lübeck and Uecker-Randow all carry square sails from Greifswald, and traditional ships such as Ernestine and Hansine bear the sailmaker's logo on their gaff sails. The stylised gaff cutter has long since become both a trademark and a seal of quality in the industry.

Sebastian Hentschel has also opened up new areas of business for his company: as the German representative of the prestigious yacht sail import company Sailselect, the sailmakers supply modern yacht sails at reasonable prices along with customised boat covers, tarpaulins and welded PVC sheets. Thanks to the interior designer on the team, the company can also supply boat and yacht upholstery. Another of the company's specialities is the construction of stable tarpaulins on domed wooden or aluminium frames.

The sailmakers appear every year at the industry's largest trade fairs, such as Hanseboot in Hamburg, BOOT in Düsseldorf and Boatfit in Bremen. Even in the age of the Internet, this is the best form of advertising, as quality can only really be felt, irrespective of whether the sails are made of cotton or modern high-tech fibres.

The logo is both a trademark and a seal of quality

When Sebastian Hentschel has time, he takes part in regattas on the Baltic with his Baltic junk Peregrine – which naturally carries customised rigging made by himself. The Latin word "Peregrinus" incidentally means "wanderer"; however, this skipper and his boat have put their wandering days behind them – they are now permanently anchored in Greifswald.

Sebastian Hentschel, founder and owner of Tuchwerkstatt

MAX PLANCK INSTITUTE FOR PLASMA PHYSICS (IPP)

So close to the sun

The Chancellor of Germany recently dropped in for a visit. That sounds very casual, but it wasn't the first time. After all, visits by top politicians, entrepreneurs and scientists are anything but out of the ordinary here. This is hardly surprising, as the IPP is one of the world's leading plasma physics centres. At Greifswald, research is being conducted into the ability of a fusion device known as the Wendelstein 7-X stellarator to operate on a permanent basis, which in turn will establish whether it is suitable for integration into a power plant.

The Stellarator itself is not a reactor, but an experimental device for fusion research. Put simply, the goal is to reproduce the sun's energy production on the earth. Energy is generated through the fusion of hydrogen nuclei. For this, the nuclei are enclosed in a specially designed magnetic field in the form of an extremely hot gas with a temperature of approximately 100 million degrees Celsius (plasma). Researchers in Greifswald are compiling the fundamental information required for a new primary energy source, thus supplying an important element required for future energy supplies.



The fusion research facility's plasma container under construction



Around 390 staff work under the striking wavy roof

Fusion research is therefore research into energy supply. If the experiment succeeds, this could be a key to supplying environmentally friendly energy in the future: fusion fuels are cheap and evenly distributed all over the planet. One gram of fusion fuel could generate 90,000 kilowatt hours of energy in a power plant – this is equivalent to the combustion heat emitted by 11 tons of coal. Energy obtained from nuclear fusion would be climate-neutral, technically safe, widely available and capable of bearing a constant load, i.e. able to provide a constant supply of electrical energy. This is not the case with photovoltaic systems and wind power.

The Ernst Moritz Arndt University, the Leibniz Institute of Plasma Science and Technology and the IPP together make up a plasma research competence centre which is probably the only one of its kind in the world. This gives them a special edge when recruiting leading scientists. The IPP additionally welcomes more than 200 guest researchers from all over the world every year.

Apart from its scientific significance, the Institute is also an important economic factor. Around 390 staff are employed in Greifswald, which means that around 24 million euros in wages and salaries stay in the region every year. Big orders are placed with local companies in almost all branches.

Scientific fundamentals of a new primary energy source

No further explanation is therefore required as to why 1 billion euros has been invested in the IPP since 1995, or why the Institute enjoys global renown. However, Angela Merkel's most recent visit marked a very special occasion: trial operations got under way in February 2016 with the production of the first hydrogen plasma. This means that the IPP has taken a major step towards achieving its research objectives.

"A UNIQUE RESEARCH FACILITY" Interview with Prof. Dr. Sibylle Günter

Is it difficult for a facility like the IPP to attract leading scientists from all over the world to Greifswald?

No, not at all. Wendelstein 7-X is a unique research facility, and any scientist who wants to work in the area of stellarator research will find outstanding working conditions here. Word of this has got around quickly in the scientific community.

Many of your colleagues previously lived in major cities and carried out research at universities all over the world. How do they adapt to life in the comparatively small University and Hanseatic City of Greifswald?

I only rarely get to hear that our staff miss living in a big metropolis. A lot of them are delighted by the city's attractive location on the Baltic Sea and the comparatively cheap prices of houses and apartments. The city also goes to great lengths to support our foreign staff. The excellent childcare facilities and schools here are greatly appreciated. What's more, there is an impressive variety of cultural offerings. Last but not least – our staff themselves contribute to the city's international, cosmopolitan spirit.

What makes Greifswald so attractive for a facility like the IPP?

For us, of course, the most important factor is the proximity to our scientific partners, the Ernst Moritz Arndt University in particular, and also the INP. Much more generally, however, the conditions here are good for us. We have been able to recruit many highly motivated scientific and non-scientific personnel from nearby. We also greatly appreciate our constructive partnership with the state government and municipal administration.

Experimental scientific operation got under way at the IPP in February 2016. Have any results been obtained yet, has any new knowledge come to light?

Yes, we are delighted at having obtained initial scientific findings showing that the structural measurements of the Wendelstein 7-X magnetic field correspond precisely to calculations. The start-up and first days of scientific trials went very well. We have already managed to achieve very high plasma temperatures, almost 20 million degrees for ions in plasma and about 80 million degrees for electrons.

How is your research scheduled to proceed?

Now that the initial experiments have been successfully concluded, we are already doing more conversion work. Precise measurements of the magnetic field lines have been obtained up to the wall, and so we are now tackling the interior and integrating wall elements that should be able to withstand a much greater flow of heat. From the middle of next year, we will be able to test the optimised Wendelstein 7-X thoroughly by operating it at full heating capacity for 10 seconds. There are sure to be surprises, otherwise we would not be researching the fundamentals. Once the conversion work is complete, we expect to be able to heat plasma ions to much higher temperatures. From 2020, we hope to have plasma running for 30 minutes.

Prof. Dr. Sibylle Günter, Scientific Director of the IPP





CHEPLAPHARM ARZNEIMITTEL GMBH Made in Europe

"We'd simply out grown our old premises near Greifswald," says CEO Sebastian Braun, sounding almost as if he felt the need to apologise for the modern, prestigious company headquarters at the Ziegelhof industrial park in Greifswald. The number of staff employed by the company has grown rapidly since its establishment in 1998; the demands made of the infrastructure and equipment have also intensified. The new building now offers modern, attractive workplaces and an ideal environment for welcoming international business partners –

optimum conditions for CHEPLAPHARM Arzneimittel GmbH. The company is a supplier of speciality pharmaceuticals, producing high-quality drugs, food supplements and cosmet-

ics in modern conditions and subjecting them to stringent quality control. It

Open, youthful and dynamic

focuses on substance markets and diseases that are too small or rare for the giant pharmaceutical concerns and generic drug manufacturers.

Its success strategy goes by the name "buy and build": the limited liability company acquires full product rights to pharmaceutical products that have already been developed, takes over production and opens up new markets for these products worldwide. It now markets 150 licensed products in 100 countries all over the world. The company focuses on targeted, success-oriented cooperation with local marketing and distribution partners, particularly in regions where sales are low – the "Made in Europe" seal is a significant advantage here.

With 90 staff in all and annual revenues that most recently reached 100 million euros (including the two subsidiaries in Hamburg and Englewood, New Jersey, USA), CHEPLAPHARM is one of the fastest-growing concerns in Mecklenburg-Vorpommern. Its export quota is currently 80 percent, a figure that is likely to rise to between 85 and 90 percent over the next few years. Investments amounting to 90 million euros are planned for 2016 alone, and at least 15 more specialists are to be recruited.

"Our country and product mixes are optimally diversified, and we are consistently pursuing the path of a globally active company," says Sebastian Braun. His eyes turn to the mirrored glass and aluminium façade of the company's headquarters. "That is now a visual symbol of our corporate values," he says, "open, youthful and dynamic."

Sebastian Braun, CEO

ml&s GmbH & Co. KG Precision electronics

ml&s GmbH & Co. KG from Greifswald is a successful full-service production company active in the electrical and electronics sector. The company's name encompasses its three areas of business: manufacturing, logistics & services.

Greifswald is an electronics centre with a long tradition of manufacturing and testing flat modules, an area that is still one of ml&s core competences today. Telecommunication technology and marine electronics were produced at VEB Nachrichtenelektronik Greifswald until 1991. Two years after the fall of the Berlin Wall, Siemens AG took over the former GDR company and gained market positioning for the formerly publiclyowned company specialising in the development and production of network access technology for telephony

Temporary and permanent workers cooperate closely

and data transmission. More than ten million people worldwide make telephone calls using technology developed and constructed in Greifswald.

Siemens' production segment was hived off in 2002. Udo Possin and Bernd Odoj started up manufacturing, logistics & services GmbH & Co. KG and new orders were acquired, thus safeguarding 250 jobs in the company and almost 1,000 jobs in the region.

Today, ml&s manufactures high-quality electronic products for customers in a wide variety of industries such as renewable energy, automobile construction, telecommunications, machine construction and IT. In 2009, a modern logistics centre was opened to ensure efficient control along the supply chain from the receipt of individual components to global product shipment. 520 permanent employees currently work in Siemensallee, including highly-qualified experts and an unusually large number of young people. The majority of the staff have undergone technical training; about a quarter of them have a degree. Their expertise and years of experience are a critical factor in the company's success. Young people are trained as electronics technicians every year. Short-lived markets and enormous cost pressures from electronics providers require a lot of flexibility from suppliers. ml&s therefore recruits temporary employees as needed depending on the order books.



A look inside the production facility: 520 permanent employees currently work in Siemensallee



"DIVERSIFICATION IS CENTRAL TO OUR CORPORATE SUCCESS"

Interview with Udo Possin

What do you and your staff like about Greifswald?

I was born in Greifswald and live here with my family. The things I like about Greifswald are the small-town familiarity, the beautiful scenery and the university. I can't really speak for all our staff. However, it's true to say that many of them have been with us for a long time, some since the foundation of VEB Nachrichtenelektronik Greifswald in 1969, the originator of today's company. ml&s has one of the largest workforces of any company in Greifswald.

How do you persuade new staff to come to Greifswald?

The number of permanent employees has almost doubled since 2002. In recent years, we have focused on recruited young employees who are very well trained and are able to work in other regions. We attract them with long-term perspectives, good pay, and interesting challenges with cutting-edge technologies.

How does your proximity to the university and other research institutions affect your work?

We are involved in a project on working time flexibility with Prof. Dr. Bornewasser from the Institute of Psychology at Greifswald University. One of the central issues of this project is how to create a balance between staff needs in terms of development, loyalty and security and the company's need for flexible work structures. The analysis is paying special attention to

Udo Possin, Managing Partner

interactions between temporary and permanent employees. This is an important aspect of our corporate culture.

Your company's premises have expanded significantly in recent years. ml&s is located in the technology park. What is your view of the industrial space available in the business centre of Greifswald?

In all, around 1,500 staff now work at the ml&s technology park. We cooperate intensively with Vorpommern Technology Centre, which is located right next door. The ml&s site also adjoins the industrial and business park Herrenhufen Nord. I can imagine an industrial campus establishing itself here in the south of Greifswald.

What will ml&s be focusing on in the years to come?

Diversification is and will remain central to our corporate success. ml&s provides services for companies in various industries. These have varying economic cycles, some of which balance each other out. We always focus on industries with big growth potentials. This is what happened in 2002, when we started producing solar modules prior to the introduction of statutory feed-in tariffs. In future, we will continue bundling our potential and focus more on presenting ourselves as systems providers.

AKB HOLDING GMBH Energy and environmental technology for sensitive areas

There's a twinkle in Michael Lüdeke's eye when he tells his story: he was on holiday in the area in 2007, saw the company, and impulsively asked his wife if she would like to live here. She agreed, he took over the company as its owner and CEO, and made AKB what it is today: a corporation with more than 300 staff and annual revenues of around 30 million euros.

The company formerly known as AKB Anlagen- und Rohrleitungsbau Greifswald GmbH already had a history of success. Founded in 1996 by Gisela Brandt and Waldemar Kukuk, the company initially focused on systems and power plant construction. AKB designed, manufactured and assembled pipelines for conventional and nuclear power plants and for systems in paper factories and chemical and food supply facilities.

All from one source

Michael Lüdeke single-mindedly continued expanding AKB and adding new business segments. Since 1 January 2016, the company has been doing business as AKB Energie- und Umwelttechnik GmbH; Horst Strand was appointed managing director for the technical division.

AKB Montage- und Personaldienst GmbH now also has two more branches, expanding its presence to cover the whole of Germany. With its licence to supply temporary workers and a permit to work in controlled areas outside the company, the AKB Group is able to work in plants that handle radioactive substances. Clients also have access to managerial and industrial personnel through conventional temporary employment channels.

The acquisition of AKB Maschinen und Anlagentechnik GmbH in 2010 saw the Group's business segments expanded to include rail technology, wind energy, marine technology and general plant construction. AKB Umformtechnik GmbH joined the group in 2011, adding machining to its list of competences.

AKB is currently participating in projects in various sectors worldwide. When asked about the grounds for his success, Michael Lüdeke doesn't have to think for long: skilled staff, reliability, flexibility, modern technology and precision. All from one source.

Successful entrepreneur with a twinkle in his eye: Michael Lüdeke





FRIEDRICH-LOEFFLER-INSTITUTE (FLI) World-class research into animal disease

When Friedrich Loeffler was searching for a serum to prevent foot-and-mouth disease in a stall just outside Greifswald at the beginning of the last century, there was no such thing as high-security laboratories. Viruses repeatedly escaped and caused the disease to spread throughout the Greifswald region. When, in consequence, the Prussian government forbade Loeffler to continue his research, he returned to his initial idea of seeking an island for his work, as this location would "exclude the risk of the infectious agent spreading", as he put it. This is how the world's first virological research institute came into being in 1910, in a two-storey house on the island of Riems. "Loeffler was to virology what Nobel Prize winner Robert Koch was to bacteriology," says Prof. Dr. Dr. h.c. Thomas C. Mettenleiter, President of the present-day Federal Research Institute for Animal Health, which was named after its founder.

More than one hundred years after Loeffler's discovery of the virus that causes foot-and-mouth disease, the idyllic island in the Greifswald Bodden with an area of just twen-

National reference laboratory for animal diseases

ty hectares is home to one of the world's most modern animal research institutions. The work of the Friedrich Loeffler Institute (FLI) focuses on the health and wellbeing of agricultural

livestock and on protecting people from zoonoses, i.e. infections that can be transferred from animals to people. Today, no less than two out of every three pathogens that cause disease in humans originate from animals, e.g. bird flu, rabies and tick-borne encephalitis.

Population growth, globalisation and climate change are making it possible for diseases previously only heard of in distant countries to reach Germany quickly. Researchers in Riems are on the trail of the pathogens that cause these diseases, whose origins are reflected by their exotic names, e.g. West Nile virus and Crimean Congo Fever virus. They research these pathogens, that are also hazardous to humans, on large animals in laboratories that meet the requirements for the highest biosecurity category, category 4. This was previously only possible in Winnipeg, Canada, and Geelong, Australia.

Researchers in Riems are on the trail of the pathogens that cause these diseases, whose origins are reflected by their exotic names, e.g. West Nile virus and Crimean Congo Fever virus. They research animal diseases.



Research at the heart of glorious countryside: the Friedrich Loeffler Institute on the island of Riems



"GREIFSWALD SOMETIMES REMINDS ME OF TÜBINGEN"

Interview with Prof. Dr. Dr. h.c. Thomas C. Mettenleiter

You have been in Greifswald for more than twenty years. How have you seen the city develop in this time?

Greifswald has developed immensely in every respect. I can still vividly remember my first visit to Greifswald in 1993, when I saw practically nothing of the flair of a university town and was shocked by the condition of many of the buildings in the city centre. This has changed beyond recognition. Greifswald has now become established as an outstanding research centre thanks to the university, the Max Planck Institute for Plasma Physics, the Leibniz Institute of Plasma Science and Technology, the Alfried Krupp Institute of Advanced Study and (of course) the FLI. There are also a number of successful companies, some of which are spin-offs founded by the university and other research institutions. This is must be exceptional for a city of this size.

What do you think gives the city its character?

As a university city, Greifswald attracts many young people – this is evident from the city's image and atmosphere and is something I like very much. It sometimes reminds me of Tübingen, my former place of work. The historical aspect is also remembered and respected; after all, the Friedrich Loeffler Institute can now look back on one hundred years since its foundation, while the university is more than 550 years old.

Do you feel at home in the region? How about your colleagues?

I felt at home in the region right from the start. The scenery is beautiful, and I couldn't imagine a more beautiful workplace than the island of Riems with its views of the Greifswald Bodden. Anyone who loves the mountains or the hustle and bustle of a big city may find things difficult at first. But I think that most of the staff quickly get used to living here.

How do you persuade new staff to come to the island of Riems?

As a federal institute, we advertise job openings accordingly. Good local conditions and the FLI's renown are both important when it comes to recruiting new staff. With its proximity to the University City of Greifswald, its location in the Baltic holiday region, and of course the facilities with their state-of-the-art scientific infrastructure and technology, the FLI does seem to be an attractive employer. And it's reassuring to know that headhunting of our staff is not always successful even when extremely attractive packages are involved!

Prof. Dr. Dr. h.c. Thomas C. Mettenleiter, President of the Friedrich Loeffler Institute

IDT BIOLOGIKA (RIEMS) Serving animal health

The dam leads to the island of Riems. This island in the south west of the Greifswald Bodden, between the mainland and the island of Rügen, is home to the present-day Friedrich Loeffler Institute, the world's oldest virological research facility. There is also a site before the dam renowned for futuristic vaccines for veterinary applications: IDT Biologika (Riems). Once it is complete, the Riems facility will cover the entire spectrum from research and development to production. The new research complex will cost around ten million euros. Another two million euros are being invested in the manufacturing and logistics infrastructure. The state of Mecklenburg-Vorpommern is contributing around three million euros to the project.

For a long time, the white buildings in Greifswald's Riems district were the headquarters of Riemser Arzneimittel AG (which became Riemser Pharma GmbH in 2012). They became the subsidiary's headquarters when the site was taken over in autumn 2013 by IDT Biologika, which is based in Dessau-Rosslau. This is where innovative products for fighting

animal diseases are

developed and manu-

factured for marketing

worldwide. The com-

Research and development

pany currently employs 70 staff in Riems.

The company logo with the Aesculapean snake and the name IDT will soon also feature on the new building located in the front. This is because the pharmaceuticals company is expanding its capacities. The topping-out ceremony for the new research building with its modern laboratories and futuristic equipment was celebrated in spring 2016. 27 research and quality control laboratories are being constructed on an area of 1,800 square metres.

"We have now finished the shell and are concentrating on the interior," reports CEO Dr. Jörg Kohler. If everything goes according to plan, the building will be officially licensed by the middle of 2017 and will then be able to commence operations. Dr. Ralf Pfirmann, Chief Executive Officer of the parent company, puts it this way: "Once the new building has been audited and put into operation, our site in Riems will be making an invaluable contribution to the development and production of vaccines. Major vaccine projects and new locations in the USA and Canada have strengthened IDT Biologika's reputation far beyond Germany. We are continuing the globalisation process in the field of animal health."

There is consequently no doubt that the site before the dam in the Greifswald's Riems district will continue to be a major source of innovative animal vaccines in the future.



Dr. Jörg Köhler, CEO of IDT Biologika (Riems)



LEIBNIZ INSTITUTE OF PLASMA SCIENCE AND TECHNOLOGY (INP)

Through to market readiness

With more than 160 scientists, engineers and other experts, the Leibniz Institute of Plasma Science and Technology (INP Greifswald) is one of Europe's leading extramural research institutes for lowtemperature plasma. Along with application-based basic research, the Institute fosters the development of plasma-supported processes and products.

The research topics are based on market needs. The current focus of interest is plasma for materials, energy, the environment and health. Greifswald plays a leading role in plasma medicine. In 2011, the world's first professorship in plasma medicine was established at the Ernst Arndt Moritz University; the chair was awarded to pharmacist Prof. Dr. Thomas. This professorship was established in cooperation with the INP.

In keeping with the motto "From idea to prototype", fundamental research at the INP is closely linked with the promotion of new applications. Innovative product ideas conceived by researchers are developed in direct cooperation with industrial partners or translated into marketable products and services by the Institute's spin-off organisa-

tions. The INP was the first Leibniz Institute to found its own company, neoplas GmbH, for the transfer of technology. This was followed by neoplas control GmbH, focusing on production and distribution, and by innovative start-ups in the field of medical technology, neoplas tools GmbH and Coldplasmatech GmbH.

INP spin-off companies make research results marketable

Since 1992, INP Greifswald has been a part of the Leibniz Association, which is dedicated to fostering science and research in its member institutions. It was renamed the Leibniz Institute of Plasma Science and Technology in 2007.

Plasma medicine moved into clinical practice with the launch of the plasma pen

"PLASMA MEDICINE IS EXPERIENCING A SIGNIFICANT UPTURN ALL OVER THE WORLD" Interview with Prof. Dr. Klaus-Dieter Weltmann

After many years in Zurich, you became the director of the INP in 2003 and consequently returned home. What do you particularly appreciate about Greifswald?

As a renowned university city, Greifswald naturally has a special charm for scientists. Many disciplines come together here. The short distances mean that innovative ideas and partnerships can be implemented quickly. This is particularly valuable in the new interdisciplinary area of plasma medicine. Other advantages include the dynamism of the city's development in the fields of business, education and culture, and of course its proximity to the sea and my home, the island of Rügen.

The foundations of plasma research in Greifswald are based on the long history of the university's Institute of Physics. What were the most important milestones in the development of plasma research in Greifswald, and what, in your opinion, are the city's future prospects?

The history of plasma physics in Greifswald began in 1918, when Rudolf Seeliger joined the university's Institute of Physics. Seeliger was a pioneer of gas discharge physics. In 1940, he took over the post of Director of the Institute of Physics. Another milestone was the foundation of the "Research Facility for Gas Discharge Physics" by Paul Schulz in 1946. It was originally part of the Academy of Sciences, was renamed "Institute of Gas Discharge Physics" in 1950, and subsequently became the "Central Institute for Electron Physics" in 1969. After the reunification of Germany, the Institute was formally dissolved and the INP Greifswald founded on 1 January 1992 at the recommendation of the Science Council; from then on it has been part

of the Leibniz Association. The next milestone came in 1994 with the foundation of the "Institute for Plasma Physics" (IPP). This signalled the arrival of high-temperature plasma physics in Greifswald.

These three representatives, the Institute for Physics, the INP Greifswald and the IPP Greifswald, make up a constellation that is almost the only one of its kind in Germany and Europe, covering the entire spectrum of plasma physics from fundamentals to applications.

How does plasma medicine research in Greifswald rank internationally?

Plasma medicine is a new, interdisciplinary field of research that has been experiencing a significant global upturn for about ten years. As a science hub. Greifswald has become established as an international leader in this area under the aegis of the INP. The Professor's chair in Plasma Medicine in particular has enhanced Greifswald's international standing. We had the opportunity to demonstrate our outstanding position back in autumn 2010 at the 3rd International Conference for Plasma Medicine. With 200 international participants, it was the biggest conference on this topic at that time. In 2013, the plasma pen kINPen MED was certified as a medicinal product, the fruit of a partnership with neoplas tools. This step saw plasma medicine move into the realm of clinical practice. This plasma device is primarily used to treat chronic wounds and infectious skin diseases. Current projects aim to develop new applications, e.g. for tumour therapy, hygiene and dental medicine.

Prof. Dr. Klaus-Dieter Weltmann, Director of INP Greifswald





COWORK GREIFSWALD One good idea rarely comes alone

Workspace, notebook, WLAN and creative neighbour – multiplied by ten. A large communal table for brainstorming, making telephone calls or simply for chatting and taking a break. These are the workplaces of tomorrow. And sometimes also of today.

For example at Cowork Greifswald. This open office community, one of a kind you would more commonly expect to find in the world's hippest

cities, was established in 2012: 80 square metres of space for creative minds who want to become part of an inspiring, rewarding network. They rent workplaces at the heart of the vibrant city centre as they need them: sometimes by the hour or day, sometimes for weeks or months.

These are the workplaces of tomorrow

Open communities of this kind are a whole new concept of communal working. They are "third places" between home offices and classic offices that combine the advantages of the two. Along with maximum sovereignty and flexibility (like being at your desk at home but without the seclusion), they offer a communicative, friendly atmosphere (like in a traditional office but without the hierarchies). Cowork Greifswald also holds events, training sessions and regular social meetings. Outside work, it offers a platform for dialogue, joint learning and networking.

Cowork is the brainchild of the Vorpommern Technology Centre (TZV), a technology and start-up facility that helps companies become established and develop further. Initially, it was just a pilot project for freelancers in IT-oriented sectors such as software development, design and advertising. It has now become a vibrant workplace for creative people in all industries, new start-ups and other types of knowledge and project work.

"Cowork Greifswald is an incubator for new plans, projects and business ideas," is how Dr. Wolfgang Blank, CEO of the TZV, puts it. "After all, one good idea rarely comes alone."

Dr. Wolfgang Blank, CEO of Vorpommern Technology Centre

PRIME LOCATION FOR YOUR COMPANY Industrial zones in Greifswald



Helmshäger Berg business and industrial park

Area: 125 ha Industries: Manufacturing industry, services, wholesale, construction Companies established here: approx. 110

Herrenhufen Süd business and industrial park

Area: 36 ha Industries: Processing industry, transport and warehousing, wholesale, construction Companies established here: approx. 20

Herrenhufen Nord business and industrial park

Area: 35 ha

Industries: Processing industry, transport and warehousing, wholesale, construction Companies established here: approx. 25

Industrial park at Ziegelhof/ Am Mühlenweg

Area: 16 ha

Industries: Manufacturing industry, trade, services

Companies established here: approx. 40

Greifswald-Ladebow seaport

Area: 27 ha

Industries: Typical port businesses, transshipment

Companies established here: approx. 20

Greifswald technology park

Area: 27 ha Industries: Technology companies, manufacturing industry Companies established here: approx. 70





Legal notice

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Map of industrial zones: University and Hanseatic City of Greifswald Municipal Planning and Construction Office



