

Welcome speech

of Secretary of State Dr. Cordelia Andreßen

**at the Blue Biotechnology Cooperation Event
of the SUBMARINER project**

on 9 May 2012, at 9.30 am

in the Kiel Kunsthalle

Ladies and Gentlemen,

I am delighted to welcome so many people today in the Kiel Kunsthalle.

You have come together from all over Europe to exchange views on new strategies and perspectives in marine biotechnology today and tomorrow.

Welcome to Kiel!

It will not surprise you if, as Secretary of State for Sciences of Schleswig-Holstein, I say that you could not have chosen a better venue for your conference: Schleswig-Holstein combines technologies with the sea. And Kiel in particular has a tradition in this field.

Long before we began discussing questions relating to biotechnology, Kiel and the surrounding region were home to some major inventions. Here are just three examples:

- In 1851, the world's first submarine, the Kieler Brandtaucher, was launched by Wilhelm Bauer.

Although the Brandtaucher sank during the test dive in the Baltic Sea and the crew escaped, it did form the basis for later submarine construction.

Submarines characterise the Kiel Fjord to this day. Heading towards the city, you can find a bust of Wilhelm Bauer on the Fjord at the Shipping Museum. Unfortunately, the museum is closed for renovation.

- At the start of the 20th century, Hermann Anschütz invented the gyrocompass in Kiel and developed it further after the First World War in cooperation with Albert Einstein, who at that time enjoyed sailing across the Fjord.

The gyrocompass revolutionised marine navigation, as it works on the basis of the rotation of the earth and not on the earth's magnetic field and therefore eliminates any magnetic declination.

- At that time, the Kiel physician Alexander Behm also invented the echo sounder.

After the Titanic collided with an iceberg – a disaster which is currently attracting plenty of attention in the media – Behm sought physical solutions that warned of icebergs.

In the end, the echo sounder was unable to detect icebergs in view of their physical similarity to liquid water.

However, Behm's invention was ideal for measuring the depth of the sea.

Kiel has therefore long been known as a good location for maritime innovations.

A strong scientific community in Kiel provides the basis:

- First and foremost, I would like to mention the current Helmholtz Centre of Ocean Research GEOMAR.

This major marine research institute on either side of the Kiel Fjord – the aquarium is only a few metres away from here – has emerged from various marine research establishments in Kiel since the middle of the 19th century.

Today, GEOMAR employs nearly 800 people. Besides carrying on basic research in geological, climatic and ecological matters, GEOMAR is also engaged in application-oriented fields such as biotechnology and aquaculture.

I assume that Mr Imhoff will inform you about further interesting aspects of GEOMAR and in particular KiWiZ – our Kiel Centre of Marine Natural Products.

- Christian-Albrechts Kiel University was founded in 1665. Hans Geiger, Heinrich Hertz and Max Planck are among those who have taught and researched there. Today, it is one of the strongest scientific establishments in Northern Germany and in the Baltic region.

Today, the university has 24,000 students and is home to a number of centres of excellence – Kiel Marine Sciences (in cooperation with GEOMAR), Kiel Life Sciences, Kiel Nano Sciences and the “Human Development in Landscapes” Graduate School. The University of Kiel can make valuable contributions to the topics of this conference especially in marine, life and nano sciences.

As examples, I would mention the algae and fish breeders or the broad range of biotechnologists – ranging from pharmacists, biologists and physicians to physicists and engineers.

- Further scientific institutions such as the University of Applied Sciences, the Muthesius Academy of Fine Arts and Design of Kiel and the Max-Planck Institute of Plön play an indispensable role in this city's scientific and economic life.
- I must also mention a jewel of applied science in Schleswig-Holstein which is now emerging.

In Lübeck, the Fraunhofer Research Institution for Marine Biotechnology is in the process of growing into a special branch of the strong Lübeck research landscape.

Schleswig-Holstein supports its diverse range of scientific establishments and promotes their expansion and projects within the scope of its financial possibilities.

For example, we have provided considerable funding to KiWiZ in Kiel, the Society for Marine Aquaculture in Büsum and the Fraunhofer Research Institution in Lübeck.

The state's investments in these establishments are in the double-digit million range because we believe these fields of applied research represent the future for our state.

We urgently need more and more innovation in our state to maintain economic stability in times of global crisis.

The knowledge and skills of people are our greatest capital, which enables us to hold our own in the global market.

Mr Habeck will certainly consider the significance of life sciences in this area in somewhat more detail.

However, we are not just investing in scientific establishments. We are also considering how ideas from basic research can be translated quickly into applications.

In this regard, we are supported by the Life Science Agency Norgenta. As one of the few joint structures of Hamburg and Schleswig-Holstein, it promotes biotechnology and medical engineering in the two states.

Today, we can see one of Norgenta's most recent areas of focus – marine biotechnology – in particular.

Together with experts and service providers in the SUBMARINER project of the Baltic Sea programme, Norgenta is developing a marine biotechnology master plan as a prototype for Schleswig-Holstein.

However, Norgenta is already looking further ahead in this field. Norgenta is seeking to set up a marine biotechnology ERA-NET.

The state government has also established a powerful maritime cluster for Northern Germany. And I am pleased to report that Hamburg and Niedersachsen have in the meantime joined this cluster. Its aim is to strengthen the maritime economy in the region and to link it to the marine sciences.

At the interfaces in particular – in our case between biotechnology and marine technology – our goal must be to bring together the various players on a permanent basis.

In this connection, the cluster managements can provide very good support.

Ladies and Gentlemen,

In our small state between the North Sea and the Baltic Sea, the seas are an ever-present feature. We have heavily used waterways such as the Kiel Canal and increasing numbers of wind farms in the seas.

We want to make it possible to harness the potential of the seas. At the same time, we want to protect the sensitive ecosystems in a sustainable manner.

This is not an easy undertaking.

In the regional administration alone, we can see many dependent – and in some cases competing – fields that are directly related to the seas.

To promote a uniform and cross-departmental approach, we have established the Regional Maritime Initiative “Sea Our Future”.

- In this initiative, Schleswig-Holstein combines the maritime responsibilities in the regional administration and links them with concrete measures aimed at a sustainable use of the seas.
- Through the initiative, the government of Schleswig-Holstein supports research, development and maritime protection by means of strategic planning, campaigns and funding.
- The initiative includes the Maritime Action Plan for Schleswig-Holstein with key guidelines for an innovative and integrated maritime policy.
- The initiative is managed in our Ministry of Science and Economic Affairs.
- It is coordinated by the state government’s Maritime Coordinator, Professor Herzig.

Ladies and Gentlemen,

So far, I have briefly outlined the scientific and business aspects of our seas.

However, we should not forget their value in terms of tourism – which in turn gives rise to economic opportunities.

In this city, cruise tourism is especially significant. Kiel is the third largest passenger exchange port for cruises in Northern Europe.

The cruise season has just begun.

On Monday, two huge ships were berthed a few metres away. Tomorrow, a smaller vessel will visit Kiel.

Large ferries link this city to Norway and Sweden. Indeed, some of you may have come here by sea.

If you did not, then take the ship when you next visit Kiel.

This is also possible from the Baltic states.

And if you have no plans for the third week in June, you can come back for the Kiel Week – one of the largest sailing events in the world and also a huge festival catering to all age groups and all interests.

You will hardly recognise the city – the ships are so close together that you can almost cross the Fjord without getting your feet wet.

However, for now I am pleased that you are here with us today. I would like to thank the organisers for this wonderful conference and I hope that you have two rewarding days here in an inspiring atmosphere.

Thank you for your attention.