

Veranstaltung: Start of the Conference Series on European Hyperloop Technology
Focus Session on Large Scale European Hyperloop Research Infrastructure

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Redner: VP-F Prof. Dr. Martin Fränzle

Sprache: Englisch

Dear Minister Thümler,

Dear speakers,

Dear Prof. Dr. Kreutz,

Dear Prof. Dr. Neu,

Dear Prof. Dr.-Ing. Schüning,

Dear participants,

I am happy to welcome you to today's start of the **Conference Series on European Hyperloop Technology**. The university of Oldenburg and the University of Applied Sciences Emden / Leer initiated this conference series to create an exchange platform for everybody dealing with hyperloop technology and to strengthen and expand international networking in this field.

The **Focus Session on Large Scale European Hyperloop Infrastructure** is the kick-off event of the conference series, and looking at the list of participants really makes me happy: I am allowed to welcome international partners from science, research and industry, as well as politicians and decision-makers from the EU and the State of Lower Saxony who are responsible for research, traffic and transport and also other stakeholders from the Hyperloop environment. Of course, I would also like to extend a warm welcome to the members of the Hyperloop competition community, including many international students.

Being Vice President for Research, Transfer and Digitalization of the Carl von Ossietzky University of Oldenburg, I am the responsible member of the Presidential Board for hyperloop research located at our university. In this field, our university has been very closely linked to the University of Applied Sciences Emden / Leer for a long time. More than 20 years ago, our universities jointly launched a new and innovative degree course in Engineering Physics.

The year 2013, when Elon Musk presented the idea of the Hyperloop in his White Paper, is considered by many to be the birth of the Hyperloop technology. Similarly, we, the University of Oldenburg and the University of Applied Sciences Emden / Leer, can claim to have created the nucleus for Hyperloop here in north-west Germany with the establishment of the Engineering Physics degree course in the academic year 1998/99!

From the idea of closing the gap between the traditional physics and engineering courses, a cooperative degree course with an international focus and English as the language of instruction was born. The Engineering Physics course quickly established itself as a link between the two classic disciplines – physics and engineering – and has been producing highly sought-after specialists for both science and business for more than 20 years. More than 800 students from nearly 70 countries have completed the innovative degree course from 1998/99 until today!

The Engineering Physics degree course offers ideal conditions for putting one of the main focusses of the University of Oldenburg into practice: Research-based learning is anchored as one of the basic principles in our university's mission statement. With regard to Engineering Physics, the implementation of the concept of research-based learning is evident in a scientific course of study, which enables students to think beyond the content of the course right from the beginning, and to personally become an active part in the scientific process they are involved with.

This is exactly what happens in an exemplary manner in the HyperPodX project group that consists of Engineering Physics students. Several times already, the HyperPodX team has designed and built a transport capsule to take part in the "Hyperloop Pod Competition" of the US company SpaceX. And they have been very successful: With three participations so far, our student team has made it to the finals twice!

The previous outcomes of the HyperPodX project have of course already been incorporated into the teaching. But it is not only research and teaching that benefit enormously from this innovative and highly committed project work: By working for and participating in the Hyperloop competitions, we, as the Oldenburg and Emden / Leer hyperloop community, were able to initiate many contacts to European partners from science and business and to establish a top-class network.

Thanks to this status and the excellent reputation, the University of Oldenburg and the University of Applied Sciences Emden / Leer achieved a great success at the end of 2019 when we received the commitment for start-up financing geared at the realization of a pioneering project: Our universities are receiving 290,000 € from the Ministry of Science and Culture of Lower Saxony in order to start building a research and technology centre for the further development of the HyperPodX project. Dear Minister Thümler, I would like to take this opportunity to express my thanks!

Unlike the Federal Government, which recently announced that it does not intend to support Hyperloop research and technology, the state of Lower Saxony and the EU are interested in and committed to this innovative idea. Therefore, the recently approved funding of the Ministry of Science and Culture is intended to be used to set up a new position that will coordinate the establishment of a European research network and the submission of an EU application over the next three years.

With the initiation of this European HyperLoop Technology Center (EUHyTec), we can bundle the knowledge on Hyperloop technology already available across Europe, and take a leading

position nationwide and even Europe-wide in the future. In addition, within the framework of EUHyTec, we can check whether reactivating the former Transrapid test track in Lathen is a target-oriented and promising option for hyperloop research. The Transrapid test facility, which is practically on our doorstep, offers worldwide unique conditions for the implementation of a pilot track.

I am really proud of the fact that the research activities on Hyperloop and the ambitious efforts to establish EU projects on this highly innovative technology in the framework of the EUHyTec project have developed primarily from the joint degree course in engineering physics.

I am sure that Prof. Dr. Kreutz, being the President of the University of Applied Sciences Emden / Leer, shares my joy and enthusiasm. I am looking forward to his subsequent welcome address. I would finally like to wish you all a successful and insightful conference, which hopefully proves to be a good start for the entire series of conferences.

Thank you.