

## On its way to supersonic speed with carbon fibers from SGL Group

*Wiesbaden, July 19, 2017.* From Munich to Berlin in 35 minutes – this is the vision of the Scientific Workgroup for Rocketry and Spaceflight (WARR) student initiative from the Technical University of Munich. With their newest project, they want to come closer to their goal and are receiving support from SGL Group in the form of materials and expertise.

At the beginning of the year, the students from the Munich-based workgroup won the first prize in the “SpaceX Hyperloop Competition”. Hyperloop is a concept originally proposed by Elon Musk, the founder of Tesla and SpaceX. The aim is to build high-speed trains that travel through a tube under a partial vacuum at almost supersonic speed. To realize the project, 30 selected student teams presented their concepts for transport “pods”, which could one day be used to transport passengers through the tube, at the competition in Los Angeles. During the final stage of the competition, the student group from Munich prevailed with the “fastest pod” and furthermore won the award for “Best Performance in Flight”.

While the first competition focused on an overall functional concept of a Hyperloop pod, the second competition will concentrate on the maximum speed that can be achieved on the test track. The students in the WARR Hyperloop team developed a new prototype made of carbon fiber-reinforced plastic (CFRP) with support of carbon fiber materials provided by SGL Group. In addition, SGL shared with the WARR team its expertise as well as resources and systems from its Lightweight and Application Center (LAC) in Meitingen, near Augsburg. At the LAC, the students had the chance to work in close collaboration with engineers from various areas on developing and producing carbon components for the Hyperloop pod prototypes.

Andreas Wüllner, Head of the business unit Composites – Fibers & Materials (CFM) at SGL Group said, “With the Hyperloop pod, we have the chance to support an international project in the area of futuristic mobility. The project also reflects our strategy: Together with our partners, we aspire to develop comprehensive solutions for the requirements of the specific application.”

SGL Group also works in close collaboration with the Technical University of Munich beyond the Hyperloop project. For over eight years, the company has supported the Carbon Composites endowment chair (LCC), which maintains a holistic approach towards development of fiber-reinforced composites and their applications.

#### About the SGL Group – The Carbon Company

The SGL Group is a leading manufacturer worldwide of products and materials made from carbon. The extensive product portfolio ranges from carbon and graphite products, carbon fibers all the way through to composites. The SGL Group's core expertise comprises the control of high-temperature technologies as well as the deployment of many years' application and engineering know-how. This is used to exploit the company's wide materials base. These carbon-based materials combine a number of unique material properties such as very good conductivity of electricity and heat, resistance to heat and corrosion as well as lightweight construction coupled with high firmness. The level of demand for the SGL Group's high-performance materials and products is increasing due to the industrialization of the growth regions of Asia and Latin America and the ongoing substitution of traditional construction materials by new materials. The SGL Group's products are deployed in the automotive and chemicals industries as well as in the semiconductor, solar, LED industry segments and in the field of lithium-ion batteries. Carbon-based materials and products are also used in wind energy, aviation and space travel as well as in the defense industry.

**With 33 production locations in Europe, North America and Asia as well as a service network in over 100 countries, the SGL Group is an enterprise with a global orientation. In the 2016 financial year, approx. 4,000 employees generated 769.8 million euros in sales revenue. Its Head Office is based in Wiesbaden / Germany.**

*Further particulars on the SGL Group can be found in the Newsroom of the SGL Group at [www.sglgroup.com/press](http://www.sglgroup.com/press) and at [www.sglgroup.com](http://www.sglgroup.com).*

#### **Important note:**

To the extent that our press release contains forward-looking statements, the latter are based on information that is available at present and on our current forecasts and assumptions. Forward-looking statements, by their very nature, entail known as well as unknown risks and uncertainties that may lead to actual developments and events differing substantially from the forward-looking assessments. Forward-looking statements must not be understood to be guarantees. Instead, future developments and events depend on a large number of factors; they comprise various risks and imponderables and are based on assumptions that may possibly turn out not to be appropriate. These include unforeseeable changes to fundamental political, economic, legal and societal conditions, particularly in the context of our main customers' industries, such as electric steelmaking, the competitive situation, interest and exchange rate trends, technological developments as well as other risks and uncertainties. We perceive additional risks e.g. in pricing developments, unforeseeable events in the environment of companies acquired and Group member companies as well as in current cost savings programs from time to time. The SGL Group assumes no obligation and does not intend to adjust or otherwise update these forward-looking statements either.

Contact Corporate Communications:

Telephone +49 611 6029 100 / Fax +49 611 6029 101

E-mail: [press@sglgroup.com](mailto:press@sglgroup.com) / [www.sglgroup.com](http://www.sglgroup.com)