

PRESS RELEASE

PRESS RELEASE

February 7, 2018 || Page 1 | 2

**Fraunhofer Project Center for Energy Storage and Management Systems ZESS
in Braunschweig, Germany**

Joint research platform for energy storage systems

The new Fraunhofer Project Center for Energy Storage and Management Systems ZESS was inaugurated today, February 7, 2019. Located at the Automotive Research Centre Niedersachsen (NFF) in Braunschweig, it is a joint initiative of the Fraunhofer Institute for Ceramic Technologies and Systems IKTS, the Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM, and the Fraunhofer Institute for Surface Engineering and Thin Films IST – in close cooperation with the Technische Universität Braunschweig. The purpose of the new project center is to develop existing energy storage systems, both mobile and stationary, to the level of industrial maturity, and to demonstrate new solutions at a level of technological maturity of four to six.

The future of numerous sectors of technology and industry hinges, directly or indirectly, on the development of powerful new energy storage systems. The coming generation of electric cars, for example, will require high-performance batteries. Likewise, stationary power storage facilities are needed to help cushion the variations in grid capacity that result from a reliance on fluctuating sources of renewable energy such as photovoltaic systems or wind turbines. Internationally, Germany already occupies a leading role in materials research and process development for energy storage systems. In working to devise innovative responses to social and ecological challenges and provide efficient, climate-conserving solutions, Fraunhofer ZESS will bolster this position. In so doing, the new project center will draw on the combined expertise of three Fraunhofer institutes and TU Braunschweig as well as profit from a well-established research infrastructure.

Major contribution to restructuring the German energy sector

Stephan Weil, minister president of the state of Lower Saxony: “Energy storage systems are the missing piece of the jigsaw puzzle. They will ensure that we can provide our industrialized economy with a reliable supply of renewable energy. At the same time, we also require an effective system of energy storage in order to make our transportation and our heating more environmentally friendly. I am therefore delighted to welcome another flagship center for research and development to Braunschweig and Lower Saxony. Fraunhofer ZESS will now be developing innovations in these fields and making them commercially viable.”

Editorial Notes

Janis Eitner | Fraunhofer-Gesellschaft, München | Communications | Phone +49 89 1205-1333 | presse@zv.fraunhofer.de

Ulrich Markurth, mayor of Braunschweig: "Thanks to the NFF, Braunschweig has already established itself as a center of excellence in Lower Saxony for research into vehicle and transport technology. The arrival of a new federal facility will intensify this focus on research. I am therefore delighted that Braunschweig has secured the nomination for this new research establishment. TU Braunschweig and the city of Braunschweig worked hand in hand in the preparation of the application. Without doubt, this close cooperation and TU Braunschweig's excellent reputation in the field of mobility research played an important role in helping Braunschweig secure the nomination as the site for this innovative research center – as did the anticipated synergy effects. The decision in favor of our city has once again shown that top-level research is very much at home in Braunschweig."

PRESS RELEASEFebruary 7, 2018 || Page 2 | 2

Prof. Reimund Neugebauer, president of the Fraunhofer-Gesellschaft: "Fraunhofer ZESS complements current efforts by government and industry to bring about a necessary restructuring of the German energy sector based on sophisticated power storage systems and fuel cell technology. This will reinforce Germany's position as a high-tech location for the long-term future. Our new project center will also substantially strengthen Germany's role in the key strategic field of energy storage, which will not only safeguard jobs in production and development, but also secure Germany's long-term industrial competitiveness."

Prof. Anke Kaysser-Pyzalla, president of TU Braunschweig: "The Braunschweig-Wolfsburg region offers excellent opportunities for research into new energy storage systems. At TU Braunschweig, we conduct both basic and applied research, the latter with partners from industry. Key topics here include energy supply and future transportation. We are looking forward to this new form of cooperation with the Fraunhofer-Gesellschaft. It will offer even more scope for joint research. I would particularly like to thank the city of Braunschweig for its unfailing and unbureaucratic support. In so doing, it actively promotes Braunschweig as a location for science and business."

Exploiting synergies

The new project center will be able to exploit synergies between various Fraunhofer institutes, and between them and the Battery LabFactory Braunschweig (BLB) which is part of TU Braunschweig. This in turn will lead to the development of an interdisciplinary field of business with input from several Fraunhofer institutes.

For the first five years, the Fraunhofer-Gesellschaft and state of Lower Saxony are providing startup capital of 20 million euros. This will fund 20 individual projects during this initial period and encourage a concentration of expertise and closer networks between stakeholders in Lower Saxony. Once these primary activities have been established in Braunschweig, the next step will be to set up a satellite demonstrator facility in Peine, also in Lower Saxony.