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Press release

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Opening of the Fraunhofer Project Center at University of Twente

On Monday, 23 January 2017, the Fraunhofer Project Center for Design and Production Engineering for Complex High-Tech Systems at the University of Twente (FPC@UT) was officially opened by the Dutch Minister of Economic Affairs, Henk Kamp. The Center is an in-house unit at the campus of the University of Twente (UT) and has a starting phase of five years. The Campus is also home to Kennispark Twente, Netherlands' largest innovation campus, where more than 380 high-tech companies combine engineering and entrepreneurship to develop cutting-edge products used around the world.

The FPC@UT is a joint initiative between the UT, the Fraunhofer Institute for Production Technology IPT in Aachen, Germany, and Saxion University of Applied Sciences in Enschede, the Netherlands. The principal objective is to address the smart industry's current pressing product and production issues. The FPC@UT will focus on the development of smart production for smart products technologies and targets a broad range of end-use markets. Work will be conducted in any area related to design and production engineering in complex high-tech systems and will enable R&D; results which can be directly transferred to industrial markets. It is an integral part of the development of the Twente strategy, which aims to become a key high-tech region in the Netherlands.

The FPC@UT develops and provides solutions for smart industry by implementing scientific knowledge into useful technological innovations. In this context, the FPC@UT attempts to cement both Germany and the Netherlands as leading providers of science- and technology-based solutions in today's most vital fields. To harness such synergy in the field of complex high-tech systems, the Fraunhofer IPT, UT and Saxion wish to establish a project center to address the smart industry's current pressing product and production issues.

The partners have agreed to start-off with the launch of three to five pilot projects which have been defined within the focus area of smart production for smart products and the wider domain of design and production of complex high-tech systems. The topics for the pilot projects are predictive maintenance, laser forming, fabrication of low cost piezoelectric microsystems for lab-on-a-chip applications, wafer-level glass molding for integrated opto-mechanical sensors and multimaterial laser- direct micro circuit generation.

Industry's challenges

The industrial production of the future will be characterized by energy- and resource-efficient, environment-friendly manufacturing technologies, adaptive, intelligent and human-friendly manufacturing equipment as well as network-centric communication throughout the value chain. The market size of this sector is considerable. In the Netherlands, there has been a rapid development in the industry for high-tech systems in recent decades, with an annual turnover totaling over 27 billion Euros. Our rapidly changing world provides both tricky challenges as well as crucial opportunities for companies. The FPC@UT addresses industrial challenges and technological needs through joint R&D; projects and grants access to state-of-the-art technologies, development of technology as well as applied solutions.

Fred van Houten, Professor of Design Engineering at UT, has worked behind the scenes for years to facilitate the collaboration with the Fraunhofer IPT and reinforce the connection with German industry partners: “Fraunhofer stands for the social relevance of scientific research”, says Van Houten. “They transmit research results directly to the market, to industry. The collaboration is an incredibly important step, not only for Twente but also for all of the Netherlands. Partly because of the economic crisis, the government has come to realize in recent years that the industry provides the money and jobs that keep our economy running – even more than the service sector, which also remains important, of course. We're working hard in this region to turn Twente into a technological top region and we are certain that this fitting collaboration is a necessity to achieve this goal. Germany is the most important hinterland for Twente."

The Province of Overijssel, which contributes to the Fraunhofer Project Center financially, underlines the added value of the center to the regional innovative ecosystem. Eddy van Hijum, member of the Executive Council of the Province of Overijssel and the Twente Board: “Our policy for the economic prospect of our region is clear: ‘Invest in international robust technology capabilities that can bridge the actual high-tech manufacturing installed base in the east of the Netherlands and which will foster the competitive position of future Smart and Sustainable Industries.’ Fraunhofer-Gesellschaft is the exact and preferred partner in this field and a highly valued representative of our neighbor, Germany.”

About the Fraunhofer Project Center model

The Fraunhofer Project Center model is a standard instrument of the Fraunhofer-Gesellschaft for its collaboration with partners of excellence abroad. The idea is to establish a temporary research unit at universities outside of Germany. The Fraunhofer-Gesellschaft is a recognized non-profit organization that takes its name from Joseph von Fraunhofer (1787–1826), the illustrious Munich researcher, inventor and entrepreneur.
“It is our aim and mission at Fraunhofer to support and strengthen the European industry and research region amongst the global competition with dynamically developing research hubs in the USA and Asia. The Netherlands is one of our European priority countries of cooperation, with well-established strategic relationships such as our cooperation with Radboud University Medical Center in Nijmegen in the field of automation in medical imaging. Now, I am very much looking forward to also pool complementary research competencies in design and production engineering with the University of Twente and to jointly support and accelerate industrial innovations“, says Professor Reimund Neugebauer, President of the Fraunhofer-Gesellschaft.

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This press release and printable photos are also available under
www.ipt.fraunhofer.de/en/Press/Pressreleases/20170123_opening-of-the-fraunhofer-project-center-at-university-of-twente.html

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Top: Maurice Herben, Geert Dewulf, Thom Palstra, Eddy van Hijum, Thomas Bergs, Fred van Houten; Bottom: Wim Boomkamp, Fritz Klocke, Victor van der Chijs
Source: Gijs van Ouwerkerk