smartFactory KL®

Newsletter 2/2019

Dear Sir or Madam,

at the last General Membership Meeting, I was selected to succeed Prof. Zühlke as the new Chairman of the Executive Board. But, together with my fellow board members, we do not want to let a visionary like him just fade into retirement. Instead, we have secured his expertise and appointed him honorary member of the board.

This newsletter provides a vehicle for me to now inform you about our current activities. In addition, I have prepared a personal Video Message in which I introduce my goals as the new Chairman.

SmartFactory-KL was established in 2005 as a pioneering organization for what has come to be known as Industrie 4.0. Since that time, much has happened. My team and I have been looking ahead over the past few months at "Production 2025." The main topic of our attention is *Autonomous Production*. We believe the next, logical technological step is the integration of production, logistics, people, and AI to a flexible, highly efficient, adaptable production system. We will publish the results of our work in the coming weeks.

Prior to that, however, we will present our new vision to our members at a strategy meeting for review and possible adjustment in mid-July.

SmartFactory-KL will continue in the future to provide major impulses for the manufacturing of tomorrow.

Sincerely,

Prof. Dr.-Ing. Martin Ruskowski, Chairman of the Executive Board of Technologie-Initiative SmartFactory KL e. V.

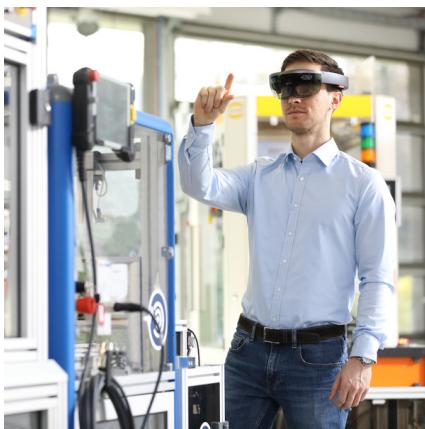## Trade Fair Review - AI attracts visitors to the Hannover Messe

SmartFactory-KL was again represented with 15 partners from industry at the Hannover Messe exhibition. Artificial Intelligence proved to be the visitor magnet as the motto of the exhibition itself was "Integrated Industry – Industrial Intelligence." For the first time, SmartFactory-KL deployed condition monitoring, data analysis, and anomaly detection in its manufacturer-independent Industrie 4.0 production plant. Other topics at the SmartFactory-KL exhibit were infrastructure and TSN, Smart Safety, as well as the new 5G wireless standard. Some impressions of HM19, including our short exhibition video are available online.

New research and working projects

AI-Trainer

Competence Center for SME 4.0 in Kaiserslautern July 1, 2019 – DFKI presents new technologies and opportunities for the digital transformation of SMEs in the state of Rhineland-Palatinate. The aim is to account for the regional characteristics in AI-specific development of the state. The goal is to create an exemplary pilot region for the transfer of interdisciplinary Industrie 4.0 know-how relative to smart manufacturing and business model transformation

Production as a Service - Realizing service-based production with BaSys 4.0

The digital transformation gives SMEs the opportunity to prepare production relevant information. This ability paves the way for the transformation from subcontractor to service provider. The "BaSyx" middleware from BaSys, describes the work stations and their capabilities with administrative shells, making them useful in automated feasibility studies. Production orders with a large number of variants up to lot size 1 can be evaluated, scheduled and accepted. The approach known as 'Production as a Service' (PaaS) is also explored within the project framework. This approach can be seen as an extension of the 'Software as a Service' (SaaS) approach.

BaSys 4.0 for the digitalization of existing systems for the visualization of data from the production processes and the value chain

Through the digitalization of manufacturing processes, live integrated images of the processes become available, so that problems can be detected and eliminated much faster. However, a comprehensive technology is lacking that can uniformly describe the characteristics, process data, and device interfaces of equipment from different manufacturers while enabling interoperability between equipment. BaSys 4.0 middleware enables end-to-end communication between units from different levels of the automation pyramid.

From Industrie 4.0 to AI in Service and Production

Now available online for the first time: the exciting lecture by Prof. Martin Ruskowski, presented at the 16th Empolis Executive Forum 2019 in Berlin.

> Watch here (only available in German)

2nd Open Call for CloudiFacturing

An EU initiative called CloudiFacturing is soliciting innovative use cases for the second time: From 1 July to 30 September 2019, Start-ups, SMEs, and manufacturing companies (end users) can participate in the "Second Open Call" and submit their experiments in the area of "Production." Interested companies are already using this time to collect ideas. Applications are now being prepared in consultation with CloudiFacturing partners.

> More information

South Korean Television

The South Korean Television channel Seoul Broadcasting System (SBS) visited us on June 3, 2019. Reporter Sun Woo-suk wanted to know what SmartFactory-KL does, what is behind Industrie 4.0, and what advantages industrial networking can bring to South Korea's economic development programs. Woo-suk believes that South Korea has focused too heavily on software development in recent years at the expense of industrial production, which is the reason for current economic indicators pointing down. The next filming location for the team is at our partner PILZ, which we helped them to organize.

BMWi: Open seats for a delegation to India, October 2019

The current demand for products and services in the area of automation systems and Industrie 4.0 in India is extremely high. Appropriately, the Federal Ministry for Economic Affairs and Energy is offering intensive support to German companies exporting to this market.

As a consequence, BMWi cordially invites industry representatives to take part in a delegation trip to India on October 14-18, 2019, to introduce their range of services and establish new business contacts. Detailed information and registration form is available online.

Top Publications

„SmartFactory mit neuem Chef"
Article in *Die Rheinpfalz* daily newspaper about the new CEO (10 May 2019)
> Read here

„SmartFactory-KL und die autonome Produktion"
Interview with Prof. Dr. Ruskowski in *IT&Production* (print edition, 1 May 2019)

„On the move: manufacturing's return to the developed world"
Interview with Prof. Dr. Zühlke in *fDi Intelligence* (18 April 2019)
> Read here

„SmartFactory KL: Prof. Ruskowski übernimmt den Vorsitz"
Article in *atp-magazin* (7 June 2019)
> Read here