SEW-EURODRIVE Supports KIT Foundation

SEW Funds Professorship for "Basic Electronic and Information Technologies for Functional Safety" and a "Learning and Application Center for Mechatronics"

The partners signing the endowment agreement. From left to right: Katharina Ludwig, Johann Soder (both SEW-EURODRIVE), Holger Hanselka, Thomas Hirth (both KIT). (Photo: KIT)

Operational safety of plants always has to be guaranteed, also in Industry 4.0. In view of increasing interconnection of mechatronic systems, however, the classical "emergency shutdown" button no longer is the best option for this purpose. To better account for these aspects in research, education, and innovation, KIT will establish the SEW-endowed professorship for "Basic Electronic and Information Technologies for Functional Safety" and a "Learning and Application Center for Mechatronics". SEW-EURODRIVE will support both projects with a donation in the amount of millions.

"A highly industrialized country like Germany will be competitive with a highly reliable infrastructure only. By strengthening the research area of "Functional Safety" at KIT, we are now in a position to make a visible contribution to mastering this challenge," says Professor Holger Hanselka, President of KIT. "I cordially thank SEW-EURODRIVE for its financial commitment and look forward to continuing the exchange of ideas in this area."

Monika Landgraf
Chief Press Officer,
Head of Corp. Communications

Kaiserstraße 12
76131 Karlsruhe, Germany
Phone: +49 721 608-47414
Fax: +49 721 608-43658
Email: presse@kit.edu

For further information, please contact:

Kosta Schinarakis
Science Scout
Phone: +49 721 608 41956
Fax: +49 721 608 43658
Email: schinarakis@kit.edu

"Today, interconnected systems can be found anywhere, in the energy sector, transport, or information technology. These critical infrastructures constantly have to be kept operational by more state-of-the-art safety concepts and technologies," Professor Thomas Hirth, KIT Vice President for Innovation and International Affairs, emphasizes. "Thanks to the generous support by SEW-EURODRIVE, we as the research university in the Helmholtz Association can pool and enhance our competencies at this interface of important areas of technologies."

"Practice shows that 'functional safety' in systems engineering requires in-depth understanding of underlying technologies, e.g. of the microprocessor," Johann Soder, Managing Director Technology of SEW-EURODRIVE, says. "KIT already is a center of competence in this area and now takes a closer look at this topic, which is an advantage for us and Germany as a location of innovation."

Functional safety is a central topic in industry and systems engineering and, hence, crucial to entire industrial production. "Functional safety" means that systems are transferred to a safe state under any conceivable unfavorable conditions and prevented from causing any danger and affecting neighboring systems. Ideally, production loss and the expenditure associated with plant restart are minimized. Due to increasing digitization, however, simple shutdown can no longer be assumed to bring the system into a safe state. It is reasonable to integrate "functional safety" into partial systems down to the microprocessor already.

The endowed professorship "Elektrotechnische und informationstechnische Grundlagen der funktionalen Sicherheit" (Basic Electronic and Information Technologies for Functional Safety) will enhance KIT's competencies in the safety-related design of microsystems down to the chip level, i.e. embedded systems and close-to-hardware software. The chair is affiliated to the KIT Department of Electrical Engineering and Information Technology, but will also contribute to research and academic education in mechanical engineering. It will be involved in the programs of "Electrical Engineering," "Mechatronics," "Mechanical Engineering," "Informatics," and "Business Engineering" and a contact partner for manufacturers of safety- and function-critical components and systems. The endowment initially will have a duration of five years. After that, a permanent professorship is envisaged.

In the accompanying "Learning and Application Center for Mechatronics," students will learn in a project-oriented manner and be given the opportunity to apply and experience "functional safety." Work areas

and demonstrator systems for safety research will be set up on KIT Campus South to visualize challenges and solution options.

The donation by SEW will be administrated by the KIT Foundation. The KIT Foundation supports research, academic education, innovation, and academic life at KIT. As a non-profit foundation under private law, the KIT Foundation finances its tasks nearly exclusively from donations and stands for philanthropic commitment at KIT. More information about the KIT Foundation may be obtained at the office (phone +49 721 608-4 69 86) or at www.stiftung.kit.edu (in German only).

The KIT Foundation was established five years ago to support KIT in implementing its core tasks of research, teaching, and innovation and pools philanthropic commitment for the benefit of KIT. The donation by SEW so far has been the highest individual donation made to the KIT Foundation and represents a highlight in SEW's cooperation with KIT.

SEW-EURODRIVE GmbH & Co KG has more than 16,000 employees worldwide and an annual turnover of about EUR 3 billion. KIT has been cooperating with SEW for a long time already. Since 2002, the Ernst Blickle Lecture has been organized jointly at KIT, the objective being to promote the exchange of opinion among industry, politics, science, and society. Since 2011, SEW-EURODRIVE has been funding a total of 26 Deutschlandstipendien (Germany scholarships) at KIT.

Karlsruhe Institute of Technology (KIT) pools its three core tasks of research, higher education, and innovation in a mission. With about 9,300 employees and 25,000 students, KIT is one of the big institutions of research and higher education in natural sciences and engineering in Europe.

KIT – The Research University in the Helmholtz Association

Since 2010, the KIT has been certified as a family-friendly university.

This press release is available on the internet at www.kit.edu.

The photo of printing quality may be downloaded under www.kit.edu or requested by mail to presse@kit.edu or phone +49 721 608-47414. The photo may be used in the context given above exclusively.