

## Effects at KIT: Open Day 2015

**June 27, 2015: Start of the EFFEKTE Science Festival – Look behind the Scenes: Citizens Can Experience First Hand How Future Is Made by KIT Institutes and Laboratories**



*Colorful and diverse: The Open Day program of KIT with more than 200 contributions: [www.kit.edu/effekte2015](http://www.kit.edu/effekte2015) (Graphics: Wilfrid Schroeder, KIT)*

**On Saturday, June 27, Karlsruhe Institute of Technology (KIT) invites the public to come to the Open Day on KIT Campus South. How will we live in the future, what will mobility be like? The topics covered will extend from new approaches to energy supply and mobility to the city of the future, to robotics, to nanoworlds, to virtual realities. From 10.00 to 19.00 hrs, visitors can join guided tours, attend presentations, exhibitions, numerous activities to join in, and live experiments from research, education, and innovation at KIT. The framework program offers stage shows and attractions for children.**

On the same day, the science festival EFFEKTE will start on the Schlossplatz at 11.00 hrs. On this occasion, the President of KIT, Professor Holger Hanselka, and the Lord Mayor of the city of Karlsruhe, Dr. Frank Mentrup, will open the "Walk of Innovation". It presents historic inventions, their applications, and their use and further development in today's KIT research.

**From 13.00 hrs to 15.00 hrs, KIT will offer a tour for journalists to selected venues. President Holger Hanselka will accompany**

**Monika Landgraf**  
Chief Press Officer

Kaiserstraße 12  
76131 Karlsruhe, Germany  
Phone: +49 721 608-47414  
Fax: +49 721 608-43658  
E-mail: [presse@kit.edu](mailto:presse@kit.edu)

**For further information,  
please contact:**

Simon Scheuerle  
KIT  
Public Relations  
Phone: +49 721 608 48761  
Fax: +49 721 608 43658  
E-mail: [simon.scheuerle@kit.edu](mailto:simon.scheuerle@kit.edu)

**them to the first two stations. For detailed information and registration, mail to [presse@kti.edu](mailto:presse@kti.edu) or call 0721 608-47414.**

“The KIT and its precursory institutions have been closely tied to the city for 190 years now. Great inventors, such as Heinrich Hertz, made pioneer discoveries that changed our life here in Karlsruhe,” the President of KIT, Professor Holger Hanselka, says. “Today, about 34,000 people conduct research, teach, work, and study at KIT, many of them are citizens of Karlsruhe. We are honored to celebrate together with the city and to open our house during the EFFEKTE science festival. Visitors will be able to experience first hand how future is made at our research labs.”

“KIT is of particularly high importance to Karlsruhe and the entire technology region. It is a driver of economy, a worldwide image factor, and of crucial significance for the cultural and social climate in the city,” Lord Mayor, Dr. Frank Mentrup, underlines the importance of the science institution to Karlsruhe as a location of innovation. “I am very happy that KIT, with the EFFEKTE science festival, contributes to the celebrations of our city’s birthday and, thus, shows its strong bonds to the urban society.”

### **Open Day – Highlights of the Program**

Robotics: “**Our friend, the robot**” is in the focus of the program at the Institute of Anthropomatics. The intelligent machines are used as surgeons, interpreters, or helpers in the household. Visitors will be able to see the ARMAR household robot in action (building 50.20).

Information technology: The discovery of electromagnetic waves by Heinrich Hertz in 1886 is the basis of radio, television, and mobile radio communications. About 100 years later, the first electronic mail in Germany arrived in Karlsruhe. During the Open Day, scientists of KIT will present novel **solutions for the information era**, among others, IT security approaches (building 50.20), virtual worlds (building 20.20), and computer simulations for science (building 20.21).

Energy: **Research for the Energiewende** will be presented among others by the Energy Smart Home Lab, where future energy systems are studied and tested. The intelligent and energy-efficient building covers an area of 60 m<sup>2</sup> and presents latest, networked technologies for living, electric mobility, and energy supply (building 30.37).

Mobility: Electric vehicles, trains, and planes are operated with electric power. However, electric drives are not only used on the **road**,

**on railways, and in the air**, but also in the household. The Institute of Electrical Engineering (Elektrotechnisches Institut) presents up-to-date and historical exhibits and fascinating experiments (building 11.10).

Hydraulic engineering: At the Theodor Rehbock hydraulic engineering laboratory, scientists will explain the functioning of fish ladders and landscape models that help optimize the course of rivers. Their program is named "**Stadt – Land – Fluss**" (City – Country – River) (building 10.84).

Astroparticle physics and arts: The exhibition "Art of Science - Beauty in Creation" in building 30.25 will reveal what **holds the world together in its inmost folds**. Work of international artists in cooperation with astroparticle researchers will be presented. On the evening before, the exhibition will be opened by a public vernissage at 18.00 hrs. Please register for the vernissage by June 19 at <https://indico.scc.kit.edu/indico/event/88/>.

Karlsruhe inventions in everyday life: The KIT Archives will present an exemplary room of a student, in which everyday objects are displayed, which would not exist without **inventions made in Karlsruhe**: Radio and television, smartphones, and many other objects will be displayed (building 10.30).

Logistics: FiFi carries loads of up to 300 kg and follows people, in an entirely automatic way. The **logistics robot** is designed for use in factory halls, but also visitors of the Open Day will have the opportunity to control FiFi and to have it carry their handbag or backpack (building 50.38).

Be active at KIT: Already before the official start of the Open Day will employees of KIT compete for the KIT championship and run from Campus North to Campus South. The start of the competition will be at 9.30 hrs. The finish at the KIT stadium will be embedded in a diverse program organized by the Institute of Sports and Sports Sciences. Its more than 50 contributions promise the visitors to be "**Aktiv am KIT**" (active at KIT). Apart from diving, football, and boxing trainings, visitors can experience on a dementia trail what it will be like to suffer from this disease. Presentations on health and nutrition and other activities to join in for the family will be complemented by a highly entertaining stage and show program. Information at: [www.sport.kit.edu/Institut\\_Tag\\_der\\_offenen\\_Tuer.php](http://www.sport.kit.edu/Institut_Tag_der_offenen_Tuer.php) (near the stadium of KIT).

Nanoworld: The KIT spinoff **Nanoscribe** congratulates the city of Karlsruhe with a minute present: A 3D print of the smallest Karlsruhe Palace in the world. It is true to the very detail and measures just 10 mm. Apart from the palace and the pyramid of Karlsruhe which would have sufficient space on a human hair, Nanoscribe will present other miniaturized objects at its booth (building 20.30).

Snacks and beverages: Special culinary delicacies will be offered by researchers of the Institute of Product Engineering (Institut für Produktentwicklung wbk). Using the **biggest waffle iron in the world**, the staff will bake waffles (building 50.36). The Institute for Pulsed Power and Microwave Technology (Institut für Hochleistungsimpuls- und Mikrowellentechnik) will offer an extraordinary degustation of **wines produced by means of electromagnetic pulses** (building 20.30). Of course, snacks and beverages will be available all over the premises.

**KIT for kids:** At ten stations, children aged 6 and older and adolescents up to 15 years can answer tricky, age-appropriate questions. While taking part in the researchers rallye, they will go on an exciting discovery journey through science and technology. Special programs for children will also be offered at other KIT buildings.

**More information and the complete program can be found at:**  
[www.kit.edu/effekte2015](http://www.kit.edu/effekte2015).

In the evening, the General Students Committee (AStA) of KIT will organize the traditional AStA-Unifest with eight live bands on two stages. A children's program and cabaret performances will take place on the forum the whole day long: [www.asta-kit.de/unifest](http://www.asta-kit.de/unifest).

As a media partner, the SWR will accompany the Open Day event.

#### **Other Activities of KIT Relating to the City's Birthday**

30 epoch-making innovations from 300 years of Karlsruhe will be presented by the **Walk of Innovation**. On a walk from the Palace to KIT Campus South, children and adults will find out how these innovations are used in today's KIT research (June 27 to September 27). A small taster is given by this video: [www.youtube.com/watch?v=fVnSX5EXD5w](http://www.youtube.com/watch?v=fVnSX5EXD5w)

In cooperation with saai | KIT Archive for Architecture and Engineering in Southwest Germany, the Städtische Galerie Karlsruhe presents a comprehensive **exhibition relating to Friedrich**

**Weinbrenner**, who clearly shaped the cityscape of Karlsruhe (June 27 to October 04). [www.weinbrenner-ausstellung.de](http://www.weinbrenner-ausstellung.de).

From June 24 to September 23, the KIT will contribute to the program at the pavilion in the Palace Gardens. Contributions will be made to the **Wissenschaftsdienstage** as well as to the **Stadtgespräche** on Wednesdays (from 19.30 hrs). For the program, click: [www.effekte-karlsruhe.de](http://www.effekte-karlsruhe.de).

At the **Wissenschaftliches Nachtcafé**, visitors will have the opportunity to listen to a presentation by Professor Markus Neppl about the “City of the Future” and to join a discussion afterwards (June 28, 19.00 hrs, Gartensaal im Schloss Karlsruhe).

On three evenings, the first **Karlsruhe Science Film Days** will present scientific films. Afterwards, ZAK | KIT Center for Applied Cultural and General Studies and Stadtmarketing Karlsruhe invite the audience to discuss the respective topics with scientists (June 30 to July 02). Program at [www.zak.kit.edu/sciencefilmdays](http://www.zak.kit.edu/sciencefilmdays).

In addition, KIT contributes to several other activities of the **EFFEKTE science festival**: [www.effekte-karlsruhe.de](http://www.effekte-karlsruhe.de).

**Karlsruhe Institute of Technology (KIT) is a public corporation pursuing the tasks of a Baden-Wuerttemberg state university and of a national research center of the Helmholtz Association. The KIT mission combines the three core tasks of research, higher education, and innovation. With about 9,400 employees and 24,500 students, KIT is one of the big institutions of research and higher education in natural sciences and engineering in Europe.**

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

This press release is available on the internet at [www.kit.edu](http://www.kit.edu).