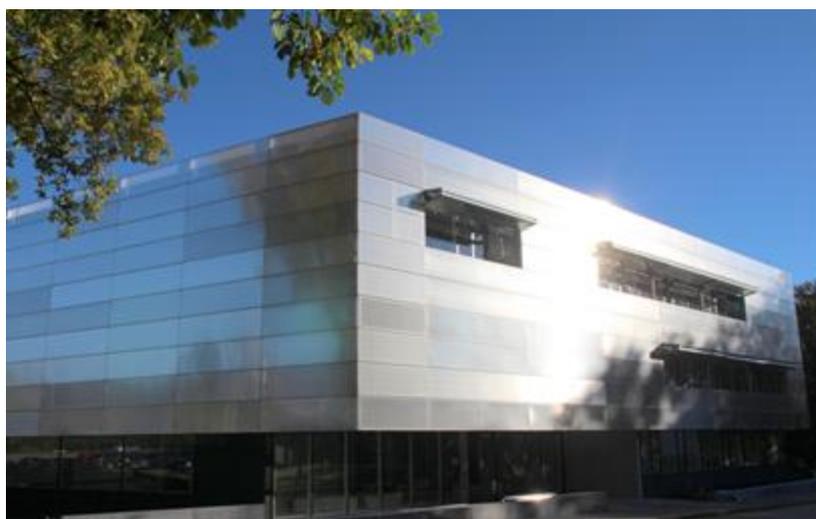


New Research Building for the Helmholtz Institute Ulm

Opening Ceremony in the Presence of the Federal Minister of Research Wanka and State Minister of Research Bauer



The new building of the Helmholtz Institute Ulm. (Photo: Daniel Messling, HIU)

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At the Helmholtz Institute Ulm for Electrochemical Energy Storage (HIU), scientists conduct research into efficient battery systems and new materials for future batteries to be used for the Energiewende. To offer the researchers optimal prerequisites for their work, the State of Baden-Württemberg erected a new building with modern laboratory equipment in Ulm. The building with a funding volume of EUR 12 million has an area of 2400 m² accommodating laboratories and offices. As the HIU is a Helmholtz institution, its operation is funded by the Federation and the State of Baden-Württemberg at a ratio of 90 to 10.

Four partners cooperate at the HIU: The Karlsruhe Institute of Technology (KIT), Ulm University, and the associated partners German Aerospace Center (DLR) and Center for Solar Energy and Hydrogen Research Baden-Württemberg (ZSW). The new building eliminates the spatial separation of researchers that has been existing since 2011 and will enhance the cooperation of the teams. During the opening ceremony, the Federal Minister of Research, Professor Johanna Wanka, pointed out that research into the next battery generation at Ulm will help make the Energiewende become reality.

“We need enhanced storage capacities to transform the energy system and bring about the Energiewende. At Ulm, we have established state-of-the-art conditions that will allow for groundbreaking developments. Work focuses on a topic of relevance to the future,” Wanka said.

“Successful research does not only require smart and creative minds, but also appropriate structures and modern buildings. With the new building of the HIU, we give scientists of four renowned research institutions in Baden-Württemberg a common basis for work on one of the central topics related to the Energiewende: The development of high-performance, long-lived, and low-cost energy storage systems,” Theresia Bauer, Baden-Württemberg Minister for Science, Research, and the Arts, underlined.

The new building on the campus of Ulm University is part of the Science City and was built by the Ulm Office of Vermögen und Bau Baden-Württemberg on behalf of the Baden-Württemberg Ministry of Finance and Economics. “On the campus of Ulm University, the new building of the Helmholtz Institute will be a center of trendsetting energy research. Securing energy supply is one of the biggest challenges of our time,” said Rolf Schumacher, Head of Department of the Ministry of Finance and Economics of Baden-Württemberg, during the opening ceremony in Ulm.

The center of battery research in Ulm is managed by Karlsruhe Institute of Technology (KIT). As a member of the Helmholtz Association, the KIT initiated the HIU in 2011 together with Ulm University and the associated partners. With a total of 350 researchers at the HIU, the Ulm University, and the ZSW, Ulm has now become the biggest battery activity in Germany.

“Research into high-performance and low-cost battery systems is one of the key activities of KIT, since efficient storage systems are the prerequisite for the success of the Energiewende,” emphasized the President of KIT, Professor Holger Hanselka. “The HIU, a KIT institute on the campus of Ulm University, will be based on the expertise of four strong partners. The new building with its highly modern infrastructure provides excellent prerequisites for work at full speed on the scientific fundamentals for marketable and trendsetting batteries.”

“The new HIU building allows for an even closer cooperation of the partners Ulm University, KIT, ZSW, and DLR for the development of novel high-performance battery systems,” emphasized Professor Karl Joachim Ebeling, President of Ulm University. “The already

successful cooperation secures our leading position in battery research in Europe and enhances the attractiveness of our campus.”

About Research at HIU:

Scientists of HIU study the fundamentals of low-cost and high-performance batteries in order to further optimize the lithium-ion technology, for instance. While small lithium-ion batteries are commercially applied in entertainment electronics, electric tools, hybrid vehicles, and electric cars, commercial application of larger energy storage systems is still in its infancy. A significant increase in energy density of battery cells will only be achieved with new storage materials and a more compact design. Increased performance also requires new storage concepts. Thus, the researchers also work on entirely novel battery types that are hoped to give rise to major innovations in the future. Since its foundation, three new professorships have been established at HIU. The HIU is embedded in the energy storage portfolio of the Helmholtz Association. Under the Helmholtz programme “Storage systems and cross-linked infrastructures”, the scientists conduct important fundamental research. Thirteen research teams work at the HIU. Work is organized in five research areas: Electrochemistry, materials, theory, systems, and methods. The groups are headed by renowned researchers, who also head institutes or research groups at one of the four partner institutions. In addition, the HIU has defined four topics for interdisciplinary work to solve major problems.

About the New Building of HIU:

The new building constructed by the State of Baden-Württemberg and operated by Ulm University has been planned and designed by the Architectural Office of Professor Nickl and Partners, Munich, since February 2011. In early summer 2012, construction work started. With its three floors and a complete basement, the building has an area of 2400 m² and, hence, will provide space for about 100 employees. At the moment, about 90 scientists are already working in the new building of HIU, another 15 researchers involved in HIU research are working at KIT. The new high-technology chemical and physical laboratories and a drying room provide for excellent research conditions. The researchers were integrated in the equipment of the laboratories. In this way, the latter were adapted exactly to the scientists’ needs. A characteristic architectonic feature of the building is the façade that consists of perforated metal plates. Variably sized perforations produce a pattern of optical interferences. The elements can be folded up in front of the office windows and used as sun shades. The artist Gert Wiedmaier installed rectangular metal

plates with lasered, colored words inside the building. The HIU scientists participated in the process of selecting the words.

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About Ulm University

Ulm University, the youngest university in Baden-Württemberg, was established in 1967 as Ulm College of Medicine and Natural Sciences. Since then, the scope of subjects has been extended significantly. The presently about 10,000 students study at four faculties (medicine, natural sciences, mathematics and economics, and engineering and computer science).

Ulm University is the driver and center of the Science City, in which a rather diverse research community of hospitals, technical compa-

nies and other institutions has developed. Research activities of the university focus on life sciences and medicine, biological, nanoscaled, and energy materials, financial services and their mathematical methods as well as on information, communication, and quantum technologies.

The Karlsruhe Institute of Technology (KIT) is a public corporation according to the legislation of the state of Baden-Württemberg. It fulfills the mission of a university and the mission of a national research center of the Helmholtz Association. Research activities focus on energy, the natural and built environment as well as on society and technology and cover the whole range extending from fundamental aspects to application. With about 9400 employees, including more than 6000 staff members in the science and education sector, and 24500 students, KIT is one of the biggest research and education institutions in Europe. Work of KIT is based on the knowledge triangle of research, teaching, and innovation.

This press release is available on the internet at www.kit.edu. Information on HIU can also be found at www.hiu-batteries.de/en/.

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.

Other photos taken during the ceremony will be available from 15.00 hrs for download at www.kit.edu or may be requested by mail to presse@kit.edu or phone +49 721 608-47414.