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Leibniz-Prize for Prof. Achim Menges

The German Research Foundation (DFG) has awarded the 2023 Gottfried Wilhelm Leibniz Prize to Prof. Achim Menges, head of the Institute for Computational Design and Construction at the University of Stuttgart. The award, which is endowed with EUR 2.5 million, is considered by many the most important research prize in Germany. Menges is being honored for his interdisciplinary research on digital planning methods and robotic manufacturing processes for construction, both of which make building more resource-efficient and sustainable.

"We warmly congratulate Professor Achim Menges on the prestigious Leibniz Prize and are quite proud to have such an outstanding pioneer of architecture at our university," says Prof. Wolfram Ressel, Rectorate of the University of Stuttgart. "With his work, Achim Menges exemplifies our vision of 'Intelligent Systems for a Sustainable Society' in architecture and construction. He takes an interdisciplinary approach to researching novel and sustainable construction methods and has established numerous bridges to other departments. These are bundled in our Cluster of Excellence 'Integrative Computational Design and Construction for Architecture' (IntCDC). Without Achim Menges, IntCDC would not exist."

In recent years, Menges has made a name for himself through his research into sustainable building. He has also played a key role in shaping the Department of Architecture at the University of Stuttgart. His field of research is particularly relevant to society because there is considerable demand for new construction worldwide. The construction sector is also responsible for roughly half of the world's waste and almost 40 percent of global energy- and process-related CO^2 emissions, 11 percent of which are attributable to the production of building materials alone. Menges is researching novel and sustainable construction methods made possible by digital design methods and robotic manufacturing processes. The aim is to be able to build much faster with much less material as well as to see this as an opportunity for high-quality architecture that is worth living in.

Menges' open-ended and fundamental research has resulted in integrative design methods, innovative construction processes, and novel building systems that open up completely new possibilities for resource-efficient and sustainable architecture. Examples include robotically wound, long-span, and extremely material-efficient fiber structures, digitally manufactured lightweight wood building systems adaptable to various construction tasks, and adaptive 3D-printed facade elements that do not require any mechatronics or operating power.

Architect, Institute Director and Spokesperson for the Cluster of Excellence

Achim Menges, born in Mannheim in 1975, studied architecture at TU Darmstadt and at the Architectural Association in London. In 2008, he joined the University of Stuttgart as a professor. There, he founded the Institute for Computational Design (ICD) in 2009 and established what was then a unique and now globally visible research activity on digital design methods and robotic manufacturing processes for civil engineering. From 2009 to 2015, Menges was also a visiting professor at Harvard. In 2013, he co-founded the interdisciplinary master's program Integrative Technologies and Architectural Design Research (ITECH) at the University of Stuttgart. Since 2019, Menges has been the spokesperson for the only cluster of excellence for architecture and civil engineering in Germany: "Integrative Computational Design and Construction for Architecture" (IntCDC) at the University of Stuttgart.

About the Leibniz Prize

The Gottfried Wilhelm Leibniz Prize is the most important research award in Germany. The aim of the Leibniz Program, which was established in 1985, is to improve the working conditions of outstanding scientists, to expand their research opportunities, and to relieve them of administrative workloads as well as to facilitate the employment of particularly qualified scientists. The award is endowed with up to EUR 2.5 million.

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Source: University of Stuttgart

Further information

- University of Stuttgart