

Zug, November 3, 2020

First 3D printing hackathon launched by LafargeHolcim and Witteveen + Bos

- **The challenge: reinventing building design and methods of a 2-story residential building**
- **An online ideathon with the participation of world-class experts**
- **A final hackathon with live demonstrations in France in March 2021**
- **Mentorship from leading experts, further collaboration and cash prizes reinventing its industry to build a world that works for people and the planet**

LafargeHolcim is calling on the world's brightest students to reinvent the building industry, along with its partner Witteveen+Bos, a Dutch engineering and consultancy firm and with the support of COBOD and Ecole des Ponts. Students in engineering, architecture, and material science are encouraged to join in a hackathon to pioneer new solutions, leveraging concrete 3D printing technology for more effective and efficient housing construction.

With 1.6 billion people lacking adequate housing and the building and construction sector accounting for 40% of the world's CO₂ emissions, 3D printing offers solutions to address both challenges. By building more with less, it is instrumental in accelerating the speed of construction, as well as reducing a building's footprint. Leading the way in green building solutions, LafargeHolcim is actively deploying 3D printing to address these challenges.

Important material and resource savings can allow for a significant reduction of environmental footprint while decreasing overall cost. Record construction productivity can be achieved, with the ability to build a house in just a matter of days.

The purpose of the hack is to come up with solutions that leverage new designs to optimize the use of material, improve the speed of construction and enhance aesthetics and customization potential of a residential building.

"We are convinced that 3D printing will be key in answering the challenges our industry is facing and that we need to join forces to make this groundbreaking technology a reality. Join us on this exciting adventure!" encourages Edelio Bermejo, Head of R&D for LafargeHolcim.

Some of the world's most renowned experts and academics will share their advice and vision through a series of webinars and conferences. "3D printing redefines the built environment, shaping a naturally sustainable material with precision and real-time feedback for collaborating architects, engineers and specialists. I wish everyone participating the very best in discovering the homes of the future!" says Erwin Viray, Head of the Architecture Sustainable Design Pillar at Singapore University of Design.

LafargeHolcim will provide the material used by students across the globe as well as technical mentorship. The Group will offer a EUR 15,000 total prize pool and offer operational support to the winning team for 3D printing their project at full scale.

Witteveen+Bos will provide essential engineering mentorship to participants throughout the hackathon. Marijn Bruurs, digital construction consultant at Witteveen+Bos, says: "3D printing has proven to have the potential to disrupt the construction industry, as we've already shown in several pilot projects around the world. However, to really change the industry over the next decade we need to further develop the technology and solutions. We need challenging ideas and we have to work together. That's why we invite talent from across the world to participate in the hackathon!"

Fondation des Ponts will co-organize conferences and COBOD will provide a 3D printing robot for the live demos.

Register here: <https://3dprintinghousinghack.bemyapp.com/>

About LafargeHolcim Innovation

LafargeHolcim is the global leader in building materials and solutions and active in four business segments: Cement, Aggregates, Ready-Mix Concrete and Solutions & Products. Its ambition is to lead the industry in reducing carbon emissions and shifting towards low-carbon construction. From its state-of-the-art research facility in Lyon, France, LafargeHolcim is leveraging on a global network of regional labs, with experts across the globe reinventing the cement and concrete of tomorrow. Thanks to diverse academic partnerships and supported by an open innovation ecosystem, LafargeHolcim is helping build a greener, smarter world that works for all.

About Witteveen+Bos

Witteveen+Bos is an engineering and consultancy firm that provides services in the sectors water, infrastructure, the environment and construction. With some 1,300 employees, the firm focuses primarily on complex projects requiring advanced knowledge and an integrated approach. The multidisciplinary approach, which involves intensive cooperation between specialists in different disciplines, is a key element of the way we work.

Our clients are public bodies, private sector companies, industries and different types of joint ventures. We operate from our head office in Deventer and seven other offices in the Netherlands. Our international offices are in Belgium, Indonesia, Kazakhstan, Latvia, Singapore, Dubai, UK, Ghana and Vietnam. Witteveen+Bos has a unique ownership structure, with the shares wholly owned by its staff. We are expert, reliable and committed.