

Cyprus Architecture Lectures

Material Computation in Architecture



University
of Cyprus



CYPRUS
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ASSOCIATION



ACHIM MENGES

24 MAY 2013

Material Computation in Architecture

Computation, in its most basic meaning, refers to the processing of information. In this way, both machinic processes operating in the binary realm of the digital, as well as material processes operating in the complex domain of the physical can be considered computational. The lecture will introduce Achim Menges' work on exploring the territory where machine computation and material computation potentially overlap, where they not simply co-exist but intensely interact in the design process. He will present the related design research - conducted at the Architectural Association, at Harvard University and at his new institute at the University of Stuttgart University over the last ten years - along a series of constructed prototype buildings. This will include the institute's latest research pavilion, which was entirely constructed by robotic carbon and glass fibre filament winding processes.

Achim Menges, born 1975, is a registered architect and professor at University of Stuttgart where he is the founding director of the Institute for Computational Design (since 2008). In addition, he has been Visiting Professor in Architecture at Harvard University's Graduate School of Design (2009-10), at the AA School of Architecture in London (2009-current) and at Rice University in Houston (2004). Achim Menges graduated with honours from the AA School of Architecture in London (2002) where he subsequently taught as Studio Master of the Emergent Technologies and Design Graduate Program (2002-09) and as Unit Master of Diploma Unit 4 (2003-06). Achim Menges practice and research focuses on the development of integral design processes at the intersection of morphogenetic design computation, biomimetic engineering and computer aided manufacturing that enables a highly articulated, performative built environment. His work is based on an interdisciplinary approach in collaboration with structural engineers, computer scientists, material scientists and biologists. Achim Menges has published several books on this work and related fields of design research, and he is the author/coauthor of numerous articles and scientific papers. His projects and design research has received many international awards, has been published and exhibited worldwide, and form parts of several renowned museum collections.

on **24th May 2013 at 19:30** in **Journalists' House, Nicosia**

[12 RIK Avenue, Aglantzia]

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Cyprus Architecture Lectures: ARCH-UCY, ETEK, CAA, CCEAA

Διαλέξεις Αρχιτεκτονικής Κύπρου: APXT-Παν/μιο Κύπρου, ETEK, ΣΑΚ, ΣΠΜΑΚ