

International Conference on

NANOSCIENCE & TECHNOLOGY

May 21-22, 2018 | New York, USA

Nanotechnology for sustainable buildings

Attmann O

University of Colorado, USA

s a principle element of architecture, technology has Aallowed for the wall to become an increasingly dynamic component of the built environment. The traditional connotations and objectives related to the wall are being redefined: Static becomes fluid, opaque becomes transparent, barrier becomes filter and boundary becomes borderless. Combining smart materials, intelligent systems, engineering, and art can create a component that does not just support and define but significantly enhances the architectural space. This paper presents an ongoing research project about the development of a new class of architectural wall system by incorporating distributed sensors and macroelectronics directly into the building environment. This type of composite, which is a representative example of an even broader class of smart architectural material, has the potential to change the design and function of an architectural structure or living environment. As of today, this kind of composite does not exist. Once completed, this will be the first technology of its own.

Speaker Biography

Osman Attmann is an Associate Professor at the School of Architecture, University of Colorado at Denver. As an active scholar, Professor Attmann publishes and lectures regularly on architectural technology and green architecture. In addition to authoring and co-editing more than seventy papers, he has a published book, "Green Architecture," in 2010, two edited books, and four book chapters. His writings have appeared in various journals and conferences.

e: o.attmann@ucdenver.edu

