Call for Papers

DESIGNERS' OPEN (25 to 27 October 2013)

Leipzig, 19 March 2013

Designers' Open: Design meets research and development

Call for Papers for symposium now in effect

Effective immediately, all international experts in material and technology development and research are called upon to submit their topics for technical presentations and panel discussions at the one-day symposium on 24 October 2013 as part of the Designers' Open, which is held from 25 - 27 October. The application deadline for representatives from the science and development sector is 17 May 2013.

This one-day symposium at the start of the Designers' Open functions as an interdisciplinary platform between the sciences and the design industry. Scientists, researchers and industry representatives are called to present their newest insights and innovations and apply as speakers for the three topic groups:

- 1: 3D Spraying / From sprayed 3D geometries to highly functional sprayable surfaces
- 2: Manifold Foldings / Industrial foldings for complex applications
- 3: Digital Fabricators / The future of digital production using printers and robots.

"The exchange of ideas between the design industry and the sciences is of enormous importance for the transfer of new opportunities from the laboratory to sustainable and user-oriented applications. Work that spans across disciplines and the accompanying knowledge transfer form the basis for shaping a complex future," explains Nikolaus Hykel, project director of the Designers' Open.

The DO/Conference is accompanied by a curated special exhibition that presents a large number of unique technology examples from the three topic areas. Here too researchers are requested to present demonstrators and material samples.

The objective of this symposium and special exhibition is to create linkages among potential project partners from research, design and industry, and to establish an exchange of information that spans across fields. The events that are held as part of DO/Industry are interfaces and sources of inspiration for the transfer of innovations from research and development to market-ready products and applications.

The Call for Papers ends on 17 May 2013 and is directed at universities and colleges, research institutes and designers across Europe. The application includes a short abstract of 300 words, and should be submitted via www.designersopen.de/konferenz. The language of the symposium is English.

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What:	DO/Č Block	highly functional sprayable surfaces
	Block	2: Manifold Foldings / Industrial foldings for complex applications
	Block	 Digital Fabricators / The future of digital production using printers and robots.
When:		Thursday, 24 October 2013
Target group	os:	Businesses and representatives from industry, scientists, designers, architects and young talent
Objective:		Interdisciplinary exchange of ideas between representatives and experts from research and development, industry and designers
Conference language:		English
Organiser: Mareike Gas	st / Indu	Leipziger Messe GmbH ustrial Design (scientific consulting, special exhibition)

The topics in detail:

3D Spraying / From sprayed 3D geometries to highly functional sprayable surfaces A surprising amount of materials with functional properties can be sprayed, ranging from plastics, ceramics or metals to plaster and textiles. What are some of the materials and properties that can be used to extend this range and what opportunities arise if several layers with different functions and properties such as hard and soft, flexible and rigid, colourful and transparent or fibre-enforced, are sprayed into complex geometries, maybe even without the use of tools? What is the potential impact on the design process, the production chain or user scenarios?

Which active layers, such as solar cells, batteries, OLEDs or even microbes, will be sprayable in the future in order to functionalise surfaces?

Manifold Foldings / Industrial foldings for complex applications Better known from origami, folding has long been used in industry. Folding technologies can be used to create complex components with a high functional density and extreme stability with minimal weights and reducible volumes. What are some of the developments in industrial folding technology that allow for the series production of highly functional and ultra-light components? What if robots are able to fold? Could that do away with cumbersome tooling, and what does it mean for production processes? Which functional materials, such as solar cells, can now be folded? Or: How are folds designed and parametrically calculated based on the bionic model? What are the opportunities for the design process? Call for Papers

Digital Fabricators / The future of digital production using printers and robots. The possibility of producing items on a customised and computer-controlled basis seems very fascinating - but what is the actual benefit? What is the future of production with digital fabricators? What are the possibilities if biological cells can be printed in addition to plastic? What are some of the new products that are created when robots cut, saw or filament wind completely free shapes?

In addition to customised mass production, it is also conceivable that architecture will adapt to local materials and conditions. It is not just design, static or architectural processes that are undergoing change, but the aspect of data generation is also moving to the forefront. What is the societal influence of digital technologies?

These and other questions will be discussed at the symposium and invite participants to join an interdisciplinary dialogue. The exchange between scientists and designers regarding the three topic areas is understood as an open discourse that will address further questions as well as specialised topics.

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