

12-14 February 2018

### SECOND YEAR COLLOQUIUM AND RESEARCH EXHIBITION "PROTOTYPES"

The Second Year Colloquium is a shared evaluation event in which all ESRs present their research development. The seminar invites therefore all beneficiaries and industry partners to discuss the research development of the ESR projects in plenum. This includes review and evaluation of industrial collaboration and secondment programme including the secondment periods.

Keynote speakers will give lectures to support the further research development in field of WP3 to WP5. Invited scientists will carry out evaluation of level of work and progress within the network.

Meetings of the Industry Partner Board takes place on the second day, while meetings of the Steering Committee and ESRs' will take place on the third day of the Colloquium.

The Colloquium is organised around three sessions presenting the three Work Packages:

- WP3 Communicating Design, Chair Jan Knippers, ITKE
- WP4 Simulating for Design, Chair Ulrika Knagenhielm-Karlsson, KTH
- WP5 Materialising Design, Chair Bob Sheil, BSA

The second InnoChain exhibition "Prototypes" focuses on the role of the industry collaboration as a driving force for the development of the Innochain project. For this ESRs are asked to showcase their industry collaborations, which they have been working on through their secondments over the recent past.

The ESRs will use videos to show how their industry partner collaboration is going; a dialogue on what is the interest for both sides to accelerate the research being developed. This video content will be illustrated with a series of prototypes of the latest work being developed by the ESRs.

Further detailing of collaboration across the network within the work package and/or with other ESRs should be outlined.

The presentations in the colloquium should be timed for 20 min and will be followed by feedback from a panel of beneficiaries, industry partners and the ESR group (about 20 min). A group of invited peers will further extend the conversation allowing an external view on progress within the network. Prototypes of all ESRs will be exhibited.

#### **VENUE**

# THE CHAMBER OF ARCHITECTS OF BARCELONA (COAC), PLACA NOVA 5, 08002, BARCELONA

#### **PROGRAMME**

Visiting Scientists: Mark Burry (Swinburne University); Christoph Gengnagel (Berlin University of the Arts)

## Monday, February 12

**12:00 WELCOME AND INTRODUCTION:** Director of COAC (15 min); Academic Director, Areti Markopoulou, IAAC (15 min)

#### 12:30 SESSION 1: WP5 Materialising Design

Chair Bob Sheil, BSA (intro 15 min)

12:45 Stephanie Chaltiel, Small scale robotic manufacturing for large scale, IAAC,
McNeel, ROK-Office (20 min presentation, 20 min feedback)
13:30 Arthur Prior, Applied robotics - Controlled Material Deposition, BSA, Foster+, Buro Happold. (20 min presentation, 20 min feedback)

#### 14:15 LUNCH

- 15:30 **Ayoub Lharchi**, *Design for Manufacture and Assembly*, CITA, Bluhmer Lehman, designtoproduction (20 min presentation, 20 min feedback)
- 16:15 **Saman Saffarian**, *Material Gradient FRP*, ITKE, Str.ucture, S-Form (20 min presentation, 20 min feedback)
- 17:00 **Helena Westerlind**, *Concrete Printing*, KTH, SBI, White (20 min presentation, 20 min feedback)

17:40 Workpackage discussion together with the industry partners: Common questions, perspectives and opportunities (mod. Bob Sheil)

19:30 KEYNOTE LECTURE: ENRIC RUIZ-GELI (Cloud9), & REFRESHMENTS (COAC CLOSING AT 22.00)

Tuesday, February 13

## 10:30 SESSION 2: WP4 Simulating for Design

Chair Ulrika Knagenhielm-Karlsson, KTH (intro 15 min)

- 10:45 **Giulio Brugnaro**, *Simulating robotic feedback*, BSA, ROK-Office, BIG (20 min presentation, 20 min feedback)
- 11:30 **Vasily Sitnikov**, *Simulating concrete formwork*, KTH, Buro Happold (20 min presentation, 20 min feedback)
- 12:15 **James Solly**, *Virtual Prototyping FRP*, ITKE, Fibr, Foster+ (20 min presentation, 20 min feedback)

#### 13:00 LUNCH

- 14:15 **Efilena Baseta**, *Programming adaptive stiffness structures*, IOA, Cloud 9, Bluhmer Lehman (20 min presentation, 20 min feedback)
- 15:00 **Paul Poinet**, *Multi Scalar Data Modelling for Building Design*, CITA, Buro Happold, designtoproduction (20 min presentation, 20 min feedback)
- 15:45 Workpackage discussion together with the industry partners: Common questions, perspectives and opportunities (mod. Ulrika Karlsson)

## Wednesday, February 14

Visiting Crits: Aviad Almagor (Trimble)

#### 11:00 SESSION 3: WP3 Communicating Design

Chair Jan Knippers, ITKE (intro 15 min)

- 11:15 **Zeynep Aksoz**, *Interactive multiple criteria search in early design phase*, IOA, Str.ucture (20 min presentation, 20 min feedback)
- 12:00 **Tom Svilans**, *Integrating Material Performance*, CITA, Bluhmer Lehmann, White (20 min presentation, 20 min feedback)
- 12:45 **Evy Slabbinck**, Multiple States of Equilibrium for Bending-Active (tensile) Structures, ITKE, McNeel, Foster+, S-Form (20 min presentation, 20 min feedback)

#### 13:30 LUNCH

- 14:45 **Dimitrie A. Stefanescu**, *Alternate means to Communicate Measure*, BSA, HENN (20 min presentation, 20 min feedback)
- 15:30 **Angelos Chronis**, *Building Physics for Performance Control*, IAAC, McNeel, Foster+ (20 min presentation, 20 min feedback)
- 16:15 Workpackage discussion together with the industry partners: Common questions, perspectives and opportunities (mod. Jan Knippers)

19:30	KEYNOTE LECTURE: Aviad Almagor, Trimble
20:30	EXHIBITION OPENING AT IAAC, REFRESHMENTS
	INDIVIDUAL DEPARTURE