



# **CTION TECHNOLOGIES** INNOVATIVE DESIGN AND 09

Information

Elena Magarotto Organization

Coordinator

Prof. Ingrid Paoletti

The Congress will be held at the Politecnico di Milano,

# 6005 YrM #7 - #8 Building complex shapes and beyond bibling

Politecnico di Milano I Faculty of Architecture and Society

POLITECNICO DI MILANO



# Id&cT09 Topics

This International conference wants to give the state of the art of innovative design and construction technologies, with a wide perspective of all the operator involved form architect, to engineer to supplier and client.

The topics for IDCT09 will be focused on the following areas:

### sign and form finding

eering and computational methods nd mass customization **Digital proce** tion industry Innovative materials Advanced design and construct Technology transfer Multidisciplinary approach

A particular focus will be given on innovation, analysing ct, tools, technologies and materials from critical and up proj to date point of view, that could arise the opportunities from privileged contexts to the construction sector in general.

# Scientific Commitee

Anna Mangiarotti Ingrid Paoletti Andrea Vidotto Fritz Scheublin Gerhard Girmscheid ETH Zurich (TG57) Ulrich Knaack Marzio Perin Tommaso Tirelli

Department Best, Politecnico di Milano Department Best, Politecnico di Milano Department DIPSA, Univers TU Eindhoven (TG57) TU Delf Gartner Permasteelisa Grou Arcelor Mittal

Wednesday 6th may

#### 9.15 Welcome

Giulio Ballio, Rector of Politecnico di Milano; Piercarlo Palermo, Dean of Faculty of Architecture and Society, Emilio Pizzi, Head of Best Department Introduction of the conference Anna Mangiarotti, Ingrid Paoletti, Best Department, Politecnico di Milano

#### Morning session:

# FORM FINDING and COMPLEX MORPHOLOGY Chair: Filippo Innocenti, Zaha Hadid Architects

9.30 Sense and Advanced Sensiblity - about the relationship of sensuality, obsessions and advanced design techniques Matias del Campo, SPAN Architects, Vienna

- 10.00 Partly logic / Logic of parts Marc Fornes, Theverymany
- 10.30 Parametric models: formal thinking for architects Arnold Walz, DesignToProduction
- 11.00 Liquid parametrics: fluidity of form and process Cristiano Ceccato, Zaha Hadid Architects
- 11.30 Round table
- **12.00 PARALLEL SESSIONS**
- 13.30 BREAK

# **Morning session: DIGITAL FABRICATION and FILE TO FACTORY PRODUCTION**

Chair: Stefano Converso, DIPSA Departement, Università degli studi Roma Tre 9.30 A bottom-up approach to the implementation of advanced fabrication methods John Nastasi, Product-Architecture Lab, Stevens Institute of Technology / Nastasi Architects 10.00 Architecture = Information Marthijn Pool, ONL Oosterhuis, Lénard 10.30 Compound curved building surfaces with shaped stone blocks Christian R. Pongratz, Pongratz Perbellini Architects 11.00 Application of new "fit-for-use" materials in building and construction marke Erwin van Maaren, Nedcam 11.30 Round table

# 12.00 PARALLEL SESSIONS

**13.30 BREAK** 

## Afternoon session: **ENGINEERING FOR CONSTRUCTION** Chair: Massimo Majowiecki, Studio tecnico Majowiecki

- 14.30 From structure to fabrication Nathaniel Stanton, Buro Happold Special Projects, New York Shrikant Sharma, Buro Happold SMART Group- London
- 15.00 Geometrical approach to complex architecture Luca Buzzoni, Arup Italia
- 15.30 Digital methods in structural design Oliver Tessmann, Bollinger & Grohmann
- 16.00 Complex Building Shapes a Developer's Perspective Bruce Frey, Hines
- 16.30 Round Table
- 17.00 PARALLEL SESSIONS

Evening at FONDAZIONE POMODORO with a presentation on advanced sculpting technologies



# Afternoon session: **TECHNOLOGICAL INNOVATION and** MASS CUSTOMIZATION

Chair: Ingrid Paoletti, Best Department, Politecnico di Milano

14.30 Parametric Fabrication Martin Bechthold, Hravard GSD 15.00 Evolution of Technical Rationalization in Complex Curtain Wall components Christian Florian, Permasteelisa Group 15.30 Compositive Blob Shells Mick Eekhout, Octatube 16.00 Design Driven Innovation Roberto Verganti, DIG - Politecnico di Milano 16.30 Round table 17.00 PARALLEL SESSIONS 18.30 CONCLUSIONS AND GREETINGS