

# Tuesday, 31.05.2022

## FORUM HALL 1 Hall 1

09:30 Official opening of digitalBAU 2022

*Thematic block Society & City*

10:00 Big Picture - Big Data

10:30 Superficial Surfaces

11:00 Process and change management for our time

11:30 Panel Discussion City + Society, followed by Q&A (until 12:30 pm)

12:30 Digital planning & building from the perspective of NRW

13:00 Digital fabrication in 3d-concreteprinting

14:00 Cologne: current projects and developments

14:30 Town planning in democratic structures

15:00 Cooperative District Development

15:30 Panel Discussion City + Society

## FORUM HALL 4 Hall 4

*Thematic block Digital development, planning, building, crafting and operating: Current trends - innovative solutions - good practices*

10:00 Welcome and opening

10:05 Kick-off and impulse

10:15 Sustainability begins digitally in project development: Practice and perspectives from business and administration

10:20 Sustainable project development in wood module construction

10:35 Rethinking Architecture & Process

10:50 Better prepare for the use of BIM with a multi-party contract

11:05 Panel Discussion with Speakers and Attendees

11:15 Digital planning with BIM: How can we close the gaps?

11:20 Successful implementation of BIM in construction project management

11:35 A Common Data Environment (CDE) as the basis for efficient BIM collaboration

11:50 Embedding the TGA product data in BIM

12:05 Panel Discussion with Speakers and Attendees

12:15 What opportunities does digitization bring for the skilled trades? Successful examples from practice - also for small businesses

12:20 The order books were full, and then the flood came...

12:35 Digital, mobile time and activity recording and innovative future prospects

12:50 Panel Discussion with Speakers and Attendees

14:00 Innovative solutions for the digital construction site

14:05 On the digital construction site: More about ConTechs and innovative IT

14:20 The BIM pilot construction site

14:35 Simply perfect - a quantum leap in efficiency and quality for prefabrication and modular construction

14:50 Panel Discussion with Speakers and Attendees

15:00 Focus on climate protection in building operations and facility management: Don't wait for tomorrow!

15:05 The EU is serious! Sustainability in the real estate industry.

15:20 With construction IT for climate protection - a challenge for the industry

15:35 Buildings in operation: How CAFM actively supports building certification with regard to ESG and taxonomy

15:50 Digital Twin - the key to a climate-neutral real estate industry

16:05 Panel Discussion with Speakers and Attendees

## FORUM HALL 5 Hall 5

*Thematic block Smart Building*

10:00 Welcome: Thematic block Smart Building

10:05 Buildings on the way to climate neutrality

10:40 Digital Thinking in Architecture

11:15 Yes Dave - I can actually do that!

*Thematic block BIM*

12:00 Sustainability from the start with CDE information management

12:30 Driving BIM and digitalization of construction industry TOGETHER.

13:00 The central IT-platform for digital construction

14:00 Welcome: Thematic block BIM

14:05 Beyond BIM!

14:35 Digitalisation in the Construction Sector

15:15 As time goes by - the more complex the more digital!

15:45 BIM in modular timber construction

16:30 Award Ceremony German Construction Award 2022

## FORUM HEINZE Hall 4

10:00 Modular planning and building in practice

11:00 Proof of Sustainability

12:00 Concepts and ideas for an architecture of 2050

13:00 While we are still dreaming of digital - the future of the building application

14:00 Digitization of construction processes in modular construction

15:00 Startup Pecha Kucha: 4 Founders, 4 Presentations, 4 Solutions

16:00 Modular construction in wood

## SMART FORUM Hall 1

10:00 Digitization strategy for medium-sized construction companies

10:30 Revolution of the product search regarding the Knauf Systemfinder

11:00 Structured & networked data are created in your own company!

11:30 My window knows

12:00 Digital door planning - BIM data management from planning to operation

12:30 Innovation in construction through networking along the value chain

14:00 iTWO 4.0 for construction companies | the company platform for more efficiency and sustainability

14:30 3D mobile mapping and handheld SLAM technology - revolution in digital construction industry

15:00 Cloud services and mobile apps for construction accounting with BIM

15:30 A comprehensive digital solution for construction projects

16:00 With xRM to successful object-oriented sales

# Wednesday, 01.06.2022

## FORUM HALL 1 Hall 1

### *Thematic block Digitalization of HVAC*

- 10:00 Welcome: Thematic block Digitalization of HVAC
- 10:05 The first BIM-based digital building approval request in Germany
- 10:45 Mobile inventory and maintenance in CAFM
- 11:15 Climate responsive design and digital tools
- 11:45 Digital ways to better building technology

### *Thematic block Digital Design*

- 12:30 Potential of digital ecosystems along the value chain
- 14:00 Welcome: Thematic block Digital Design
- 14:05 Digital Design and Anamorphosis – Perception based Architecture
- 14:40 Advanced Training with Quality: The “BIM Standard of German Chambers of Architects and Engineers”
- 15:15 “Analogue – Digital” – Continuous reinvention
- 15:45 Digital design in a low carbon age

## FORUM HALL 4 Hall 4

### *Thematic block AI + Production*

- 10:00 Internet of Construction
- 10:30 Exploring the Interface
- 11:00 Digitalisation as the key to lightweight construction 2.0
- 11:30 Panel Discussion Artificial Intelligence (AI) + Production, followed by Q&A (until 12:30 pm)

### *12:30-14:00 break*

- 14:00 Additive Manufacturing in Construction
- 14:30 Digital Fabrication - Future Construction Technologies & Practice
- 15:00 Robotics and sustainable aesthetics
- 15:30 Panel Discussion Artificial Intelligence (AI) + Production
- 16:00 Innovation Challenge 2022: Live Pitch + Award Ceremony

## FORUM HALL 5 Hall 5

### *Thematic block Prerequisites for the consistent digitalisation of the construction industry*

- 09:30 Building an Automated and Sustainable Future
- 09:50 Status update - BIM & the Digitization of the Construction Industry
- 10:10 Digitalization – a matter of a joint philosophy
- 10:30 openBIM needs open exchange
- 10:50 Digitization in craft - from the office to the tool belt
- 11:10 Digitisation of construction invoice - efficient and cloud-based
- 11:30 Collaboration and sustainability: Building on data
- 11:50 Digital Transformation of the Construction Industry - What Do We Need?

### *Thematic block Digital innovations in the building sector*

- 12:30 The competition “Auf IT gebaut - Bauberufe mit Zukunft” 2022 - Award Ceremony

### *Thematic block BIM in Germany: Development and Perspectives*

- 14:30 Automated floor plan production in the design phase
- 15:00 AI and human creativity from the perspective of architecture
- 15:30 AI + VR in the digital BIM planning process
- 16:00 Evolution of the real estate sector - the open cloud technology
- 16:30 BIM + GIS for Environment and Landscape
- 17:00 BIM in Germany: Development and Perspectives

## FORUM HEINZE Hall 4

- 10:00 City of intelligent mobility
- 11:00 Future Spaces through Data-Driven Design
- 12:00 Digitalisation today - tomorrow - after tomorrow
- 13:00 Design for Disassembly - The ornament of deconstruction
- 14:00 Agent-based simulation in architecture and urban planning
- 15:00 Short presentations and panel discussion

## SMART FORUM Hall 1

- 10:00 Service brings added value - how construction companies benefit from services
- 10:30 No more chaos: Lean Management on Construction Sites
- 11:00 Building sustainably with BIM - and why this is only possible with standards!
- 11:30 Product Experience Management - Product data create buildings.
- 12:00 Surely easy - the digital surety
- 13:00 The BIM Alliance: BIM as an opportunity for planners and clients
- 15:00 Digitization in construction - Learnings from other regions
- 15:30 Shaping the World - together!
- 16:00 Construction industry special: How digital business really becomes successful

# Thursday, 02.06.2022

## FORUM HALL 1 Hall 1

### *Thematic block Craft Goes Smart*

- 09:30 Rethink building: New technology revolutionizes construction industry
- 09:55 Service 4.0 – Rocking the digital craft
- 10:20 Challenges on the way to becoming a digital craft business
- 10:45 Building contractors targeting automated building documentation
- 11:10 bygg.ai: From family craft business to an IoT solution provider
- 11:35 Searching software for craft businesses with IT2match

### *Thematic block Digital Methods for the Built Environment in Research*

- 13:00 Welcome & Moderation
- 13:05 TUM GNI for Artificial Intelligence in the Built World
- 13:20 Extraction of LOD3 objects for 3D models from point clouds
- 13:35 From digital design & to manufacturing for additive manufacturing
- 14:00 Simulation brings life to the Digital Urban Twin
- 14:15 Education about Digital Methods for the Built Environment
- 14:30 Project iECO: Gaia-X based applications for construction industry

## FORUM HALL 4 Hall 4

### *Thematic block CAFM*

- 10:00 Welcome: Thematic block CAFM
- 10:05 Questions/answers in the integration of BIM, CDE, GLT, IoT, CAFM
- 10:35 CAFM in all project phases - from construction to handover
- 11:05 Procedure and challenges in the introduction of CAFM
- 11:35 CAFM in transition

### *Thematic block BIM*

- 12:00 BIMcontracts - Automated contract and payment management

### *Thematic block Smart Construction*

- 12:30 Smart Construction Platform – Start the future now!

### *Thematic block Robotics, AI and Production*

- 14:00 3DWoodWind Research Prototype
- 14:30 Human-in-the-loop — How human-machine collaboration could shape the future of digital design and fabrication

### *Thematic block Future-oriented planning, building and operating*

- 15:00 Autonomous robotic assembly

## FORUM HALL 5 Hall 5

### *Thematic block Academic Research + Practice*

- 10:00 Innovative Work Spaces at IGZ in Falkenberg
- 10:30 Robotic building for the future of architecture
- 11:00 Transinformations
- 11:30 Lighting in digital spaces
- 12:00 Panel Discussion Academic Research + Practice
- 12:30 Artificial intelligence in the construction industry

### *Thematic block BIM practice in municipalities in North Rhine-Westphalia and requirements for contractors*

- 13:30 Introduction BIM practice in municipalities in NRW – Quo vadis?
- 13:35 Digital planning and building - Activities of the Land of NRW
- 14:00 Digitization in municipal administration
- 14:30 BIM practice at a municipal client - Example District of Viersen
- 15:00 Contractor's point of view in municipal BIM projects
- 15:30 Discussion and clarification

## FORUM HEINZE Hall 4

- 10:00 Additiv Manufacturing (AM) in construction
- 11:00 Parametric and BIM Workflows at Elbtower Hamburg
- 12:00 Rewe Green Building 20XX
- 13:00 Integration of sustainability data into BIM
- 14:00 Coordination and collaboration in BIM projects
- 15:00 Startup Pecha Kucha: 5 Founders, 5 Presentations, 5 Solutions

## SMART FORUM Hall 1

- 10:00 THE SMART AND GREEN CONSTRUCTION WASTE DISPOSAL OF THE FUTURE
- 10:30 Cost Planning and Management in times of BIM with California.pro
- 11:00 Gaining control on-site through AI-based technology
- 11:30 Green BIM - Digital solutions for a sustainable circular economy in construction
- 12:00 Digitization in the construction industry - between aspiration and reality
- 12:30 Building inclusivity into the design process
- 13:00 Visualization in construction
- 13:30 Workplace of the future from the perspective of facility management
- 14:00 The end of paper quality management with Augmented Reality