



The 3rd Annual

Industrialized Construction Forum

February 23rd, 2017

1:30 to 6:00 pm

Stanford University

Center for Integrated Facility Engineering
473 Via Ortega (Y2E2 Building), Room 292

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Full Program Description

Introduction

What is Industrialized Construction and why is it changing the construction world? Dr. Jerker Lessing provides an overview of Industrialized Construction, drawing from over a decade of experience from consulting, teaching, and research.

Keynote

James Barlow has been a Professor of Technology and Innovation Management at Imperial College Business School, London, since 2003. Previous appointments include SPRU (Science Policy Research Unit, University of Sussex) and the Policy Studies Institute, London. He was educated at the London School of Economics and Political Science. James' research has focused on innovation in complex sectors of the economy, especially the built environment and healthcare. This includes major projects on mass customization in housebuilding, off-site manufacturing capacity, smart homes, flexibility and adaptability in healthcare infrastructure, and the first in-depth exploration of the management processes involved in partnering in the UK construction industry.

Global Perspectives for Industrialized Construction: Sweden, Mexico, and the United Kingdom

Industrialized Construction is an emerging movement worldwide. This session provides three global perspectives: BoKlok, a successful joint venture from IKEA and Skanska; Hi:hab, a startup company in Mexico City, and the UK government, which recently invested \$130 million USD to advance industrialized solutions for housing.

Innovations in Industrialized Construction: NetZero Housing, Modular High Rise Structures, and New Technology Platforms

What innovations are on the horizon for Industrialized Construction? This session looks at four innovative Bay Area companies exploring NetZero Housing, modular high rise structures, and new technology platforms. Following the presentations, an open Q&A panel will discuss new opportunities for innovation in Industrialized Construction on the horizon.

Measuring Offsite Construction

Drawing from 13 years of research on industrialized design and construction, Professor Ryan Smith provides a framework to measure offsite construction strategies.

Scaling Up in a Boom Economy: Technology, Sales, and Production Strategies

Once the product offering is ready, how do Industrialized Construction firms meet the demands of a booming economy? Two companies offer their perspective on scalability from the perspective of technology, sales, and production.



Agenda

- 1:00** ***Registration, coffee and refreshments***
- 1:30** ***Welcome to Stanford University and CIFE***
Professor Martin Fischer Director of CIFE
- Introduction***
Dr. Jerker Lessing Director of Research & Development, BoKlok
- 1:45** ***Keynote: "Just what is the UK's problem with mass customised housing?"***
Professor James Barlow Professor of Technology & Innovation Management
Imperial College London Business School
- 2:30** ***Global Perspectives for Industrialized Construction: Sweden, Mexico & the United Kingdom***
Jonas Spangenberg CEO, BoKlok
Cauahatemoc Perez Medina Founder, hi:hab
- 3:10** ***Break***
- 3:30** ***Innovations in Industrialized Construction: NetZero Housing, Modular High Rise Structures, and New Technology Platforms***
Charles Bovet VP of Business Development, Bone Structure
Randy Miller President, Nautilus Group
Mike Eggers VP Product and Innovation, ProjectFrog
Andrew Dickson Founder & CEO, Acre Designs
- 4:30** ***Measuring Offsite Construction***
Professor Ryan E. Smith Assoc. Professor of Architecture, University of Utah
- 5:00** ***Scaling Up in a Boom Economy: Technology, Sales, and Production Strategies***
Kelly Luttrell Senior VP and Co-Founder, ConXTech
Roy Griffith Director of Corporate Development, Clark Pacific
- 5:30** ***Social hour with wine, cheese and networking***



Speaker Biographies: Academic



James Barlow has been a Professor of Technology and Innovation Management at Imperial College Business School, London, since 2003. James' research has focused on innovation in complex sectors of the economy, especially the built environment and healthcare. This includes major projects on mass customization in housebuilding, off-site manufacturing capacity, smart homes, flexibility and adaptability in healthcare infrastructure, and the first in-depth exploration of the management processes involved in partnering in the UK construction industry.



Ryan E. Smith is an Associate Professor, Associate Dean and Director of the Integrated Technology in Architecture Collaborative at the University of Utah. Smith has researched and taught on offsite and industrialized architecture and construction for over a decade. The collaborative at the university investigates product R&D, performs market analysis, and works to quantify the added value of offsite production in construction processes. He is the author of several books that emphasize offsite and prefabrication practices.



Martin Fischer is a Professor of Civil and Environmental Engineering and Director of the Center for Integrated Facility Engineering at Stanford University. His research goals are to improve the productivity of project teams involved in designing, building, and operating facilities and to enhance the sustainability of the built environment. His work develops the theoretical foundations and applications for virtual design and construction (VDC).



Daniel Hall is the lead organizer for the Industrialized Construction Forum. He is a PhD Candidate with the Global Projects Center at Stanford University. The overarching theme of his research is to enhance construction project governance—and hence project outcomes—through a transformation from fragmented project delivery methods to new organizational models in the industry. His work emphasizes strategies for adoption of systemic innovations – including new products, processes, and technologies – in the built environment.



Speaker Biographies: Industry



Jonas Spangenberg is the CEO of BoKlok, based in Malmö, Sweden. Jonas was appointed CEO of BoKlok in 2010, when he left his former position as Business unit president of Residential Development in the Nordic countries within Skanska. Since then BoKlok has developed to be a successful and market leading industrialized house building company in Sweden. BoKlok is a housing development company, founded jointly by IKEA and Skanska, focusing on building affordable homes for the many people, using industrialized construction principles.



Jerker Lessing is the Director of Research and Development at BoKlok. He received his PhD in Construction Engineering in 2015 from Lund University, where his dissertation focused on strategies for industrialized house-building companies. He has been a visiting researcher and lecturer at Stanford University since 2013, and is currently teaching the Industrialized Construction class for the fourth year. He has more than 15 years of experience from the construction industry, including numerous development projects aimed at industrialized house-building.



Roy Griffith is Director of Corporate Development at Clark Pacific where he focuses on strategic planning, market and product development, enterprise technology solutions, and sales organizational support. Before Corporate Development, Roy led Clark Pacific's Virtual Design and Technology practice, where he developed and implemented Industrialized Construction technologies and practices that are leading to increased efficiencies in the construction industry. He received his undergraduate degree from Columbia University and his M.Arch from Yale University.



Kelly Luttrell is the co-founder and Senior Vice President of Business Development for ConXtech, Inc. She is responsible for all activities related to business development, marketing, partnerships and intellectual property. She's an evangelist for the Company's technology, educating, collaborating and fostering relationships to create global demand for the ConX System. A believer in "walking the talk," she led the process for the ConX System to become Cradle to Cradle Certified and is committed to the company's vision of Improving Lives by Changing the Way the World Builds.



Speaker Biographies: Industry



Cuauhtemoc Perez Medina is the Executive Director at hi:hab. He is an experienced professional in the urban planning and real estate industry, with a focus on applying new software and construction technology to reshape how we inhabit cities. Cuauhtemoc leverages his work in the global management consulting industry to drive integrated solutions and interdisciplinary teams. He graduated from the Stanford Graduate School of Business in 2012



Randy Miller is the President of Nautilus Group and Nemo Building Systems. His expertise spans multiple fields including construction, civil engineering, real estate finance, development and design. He is a registered civil engineer, a licensed engineering and general building contractor. Randy runs the firm's day-to-day operations including acquisitions research, financial analysis, investor and financing relations, senior direction of the design team, supervision of construction operations in the field and structural engineering.



Mike Eggers is Vice President of Product and Innovation at Project Frog. He is a licensed architect in the state of California with over 15 years of experience with highly detailed and complex construction projects. He also brings a wealth of knowledge in program management and product development while working with cross functional hardware and software engineering teams to plan, execute, and deploy integrated hardware, software and operations solutions at scale.



Charles Bovet is Vice President of Operations – U.S. West Coast at BONE Structure. He is leading BONE Structure's expansion efforts in California and is on a constant quest for innovations that can be applied to the lagging construction industry. He completed a BS in structural engineering from McGill University in Canada and a MS in Civil Engineering with a focus in Construction Engineering and Management from Stanford.



Andrew Dickson is co-founder and CEO at ACRE Designs, a venture-backed startup. ACRE addresses design and construction from an entirely new perspective., with a mission to replace today's out-of-date houses with innovative, attainable, high-quality homes that are better for people and the planet. His background in industrial design has allowed Andrew to explore manufacturing techniques and lean production principles, which influence his approach to home design.