



**INC  
INVENTION  
CENTER**



12<sup>th</sup> Aachen  
Technology and Innovation Management Conference

# Agile Invention: Hype or Game Changer?

**October 25-26, 2018**



# Greetings



Univ. Prof. Dr.-Ing. Günther Schuh



Univ. Prof. Dr. rer. pol. Frank T. Piller

A carefully thought-out Technology and Innovation Management (TIM) can no longer be regarded as a luxury, it needs to become an absolute necessity! The core task of TIM is to ensure that technologies (product, production and material technologies) required for innovations are available at the right time and at reasonable costs.

In order to stay competitive on a long-term basis, established companies must progressively focus on innovations that have the potential to change existing business fields fundamentally. However, such discontinuous innovations often are associated with great uncertainties and risks. Therefore, best-practice companies increasingly rely on new approaches in product development and innovation management. Especially in the early stages of invention, but also during the later phases of serial development, new methods such as Lean Start-up, a corporate culture of entrepreneurship or the establishment of agile processes can minimize risks and uncertainties and open up new, unprecedented opportunities for TIM.





The INC Invention Center is located on the RWTH Aachen Campus – the ecosystem around the WZL of the RWTH Aachen and the Fraunhofer IPT.

In addition, designing separate organizational paths for innovation can help companies to drive discontinuous innovations in fields adjacent to their core business – e. g. through using accelerators, incubators, innovation labs or corporate venturing.


The motto of this year's 12<sup>th</sup> Aachen Technology and Innovation Management Conference is: "Agile Invention: Hype or Game Changer?"

In numerous lectures, you will learn how suitable processes, structures and methods can be designed to create an efficient technology and innovation management. Besides keynote speeches and examples from industrial practice, the emphasis will be on the exchange of ideas and opinions among participants. Look forward to the new formats of this year's conference.

You are cordially invited to exchange views and discuss your own experience of Technology and Innovation Management during the conference with both our high-profile speakers and fellow participants.

We are looking forward to welcoming you to the 12<sup>th</sup> Aachen Technology and Innovation Management Conference in October.

Sincerely yours

  
Univ. Prof. Dr.-Ing. Günther Schuh  
Professor and Managing Director,  
Fraunhofer IPT and WZL at the  
RWTH Aachen University

  
Univ. Prof. Dr. rer. pol. Frank T. Piller  
Professor and Head of Group Technology  
and Innovation Management,  
TIME Research Area,  
RWTH Aachen University

# The Hosts



## INC Invention Center

The INC Invention Center located on the RWTH Aachen Campus is the place where visionaries and planners redefine your company. Whether agile hardware development, stress testing or startup screening, we prepare your company for the future. With specific training offers your employees will become Chief Technology Managers and obtain the necessary equipment in order to achieve the optimum solutions for the challenges they may face. Check your "Innovation Readiness Level" and configure your own program which will give your company the innovation spirit that it needs. As an INC partner you can have an impact on the major topics regarding the focus of our activities in R&D and consortial projects. Further information on our partner models can be found on:

[www.invention-center.de](http://www.invention-center.de)



## Fraunhofer Institute for Production Technology IPT

The Fraunhofer Institute for Production Technology IPT develops system solutions for the interconnected adaptive production. Its clients come from all across the manufacturing industry – ranging from the automotive industry and its suppliers to aerospace and precision engineering and from the optical industry to life sciences and medical technology.

[www.ipt.fraunhofer.de](http://www.ipt.fraunhofer.de)



## Laboratory for Machine Tools and Production Engineering WZL

The Laboratory for Machine Tools and Production Engineering WZL of the RWTH Aachen realizes research and consultancy projects. The aim which is to address production-related issues across the whole production engineering spectrum, has resulted in an extensive field of activities ranging from strategic innovation, production and quality management through to control, machine, manufacturing and measurement technology.

[www.wzl.rwth-aachen.de](http://www.wzl.rwth-aachen.de)



## TIME Research Area

TIME stands for Technology, Innovation, Marketing und Entrepreneurship. The common goal is to impart a valuable, evidence-based knowledge of questions relating to the conception, development, design, commercialization and continuous improvement of new products, services and business models within established and new companies to scientists, practitioners and students. Through the concentration of expertise and experience in the TIME Research Area, it offers a unique mix of knowledge, global networking as well as practical application and transfer experience.

[www.time.rwth-aachen.de](http://www.time.rwth-aachen.de)



## KEX Knowledge Exchange AG

The KEX Knowledge Exchange AG is a professional information provider for technology- and market-related information. Smart knowledge management systems in conjunction with extensive links to exclusive information sources and a unique network of experts allow for an effective scanning, scouting and monitoring of technologies and markets. The company supports entrepreneurial decisions ranging from identifying competition-relevant technologies through observing markets, competitors and M&A candidates to identifying new business areas.

[www.kex-ag.com](http://www.kex-ag.com)



## WZLforum of the RWTH Aachen

Located in Aachen's world-famous center for research in engineering sciences, the WZLforum brings together the latest developments of the Laboratory for Machine Tools and Production Engineering (WZL) and the Fraunhofer IPT. We help career starters with their entry into the profession and equip personnel from specialists to senior managers with the know-how to put these latest findings into practice.

[www.wzlforum.rwth-aachen.de](http://www.wzlforum.rwth-aachen.de)

# Our Speakers



**Christoph Burkhardt**

Innovation Strategist & CEO  
Burkhardt Group



**Prof. Dr. Frank T. Piller**

Professor and Head of Chair Technology  
and Innovation Management of  
RWTH Aachen University



**Toni Drescher**

CEO, KEX Knowledge Exchange AG  
Director, INC Invention Center



**Prof. Dr. Günther Schuh**

Director, Fraunhofer IPT /  
WZL of RWTH Aachen University



**Robert Hardt**

Managing Director & Partner Catalyst  
next47 GmbH (Siemens AG)



**Dirk Vanderhaeghen**

Sr. Director Market Strategy OEM  
Lumileds Germany GmbH



**Patric Hellermann**

Chief Digital Venture Officer  
HeidelbergCement AG



**Markus Wellensiek**

Head of Department Technology  
Management, Fraunhofer IPT



**Reiner Köttgen**

Sr. Expert Agile Transition  
TRUMPF GmbH + Co. KG



## Discuss your questions with the following experts



**Matthias Nawrocki, MBA**

Sr. Manager Technology Management  
Gira Giersiepen GmbH & Co. KG



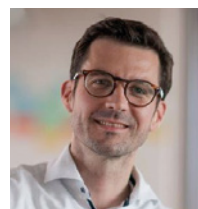
**Nico Schön**

Manager Innovation Strategy  
thyssenkrupp AG, tkGarage Mobility



**Prof. Dr. Bernhard Rumpe**

Professor and Head of Chair Software  
Engineering of RWTH Aachen University



**Dr. Stefan Thomas**

Head of Digital and Disruptive Business  
REHAU AG + Co., UNLIMITED X





# The Event



## Conference Concept

The aim of the conference is to provide participants with insights into successful approaches in Technology and Innovation Management. The conference will focus on practice-oriented presentations held by high-profile speakers from industry and science in which these approaches will be detailed. Furthermore, interdisciplinary knowledge exchange and the opportunity for networking are key elements in our conference setting. Therefore, the number of overall participants is limited in order to ensure an efficient knowledge transfer between participants and speakers.

## Conference Program

The program is designed for one and a half day. The motto of this year's 12<sup>th</sup> Aachen Technology and Innovation Management Conference is "Agile Invention: Hype or Game Changer?". The conference includes detailed presentations on successful innovation approaches from both the industrial practice and the research area, ranging from the identification of potentially disruptive ideas and technologies to the development with agile methods in the company or alternative development paths and their implementation in successful products in the market.

## Target Group for the Conference

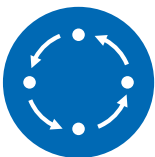
The conference addresses specialists and executives of technology-oriented companies, particularly from the sectors Research and Development, Technology and Innovation Management, New Business Development and Strategy, Production as well as the Technical Procurement and Management.

## Networking

During the breaks, you will have the opportunity to network and discuss issues of your particular interest with fellow participants and speakers. Use the opportunity to get to know each other, to establish new contacts and to enter into dialogues with speakers or employees from one of our institutes.



## Thematic Emphases



### Agile Hardware Development

#### How to meet fuzzy customer requirements faster and more reliable

Especially in the early stages of development, companies often get challenged by latent and fuzzy customer needs. In order to meet these needs, highly iterative development methods, which originate from software development, are increasingly being used in the development of physical products.



### Incubators, Innovation Labs & Co.

#### How to successfully design alternative development paths for radical innovations

Optimizing the core business and simultaneously growing in future fields often fails due to inadequate organizational structures. Incubators, accelerators and innovation garages have established themselves as means to increase the development speed aside the historically grown structures.



### Corporate Culture of Innovation

#### How to build a key factor for future competitive strength

Even the best ideas cannot be launched successfully onto the market when they come up against internal barriers. Dismantling this form of resistance and developing an innovation-friendly corporate culture are among the most important management functions and are key factors for future competitive strength.



### Innovation ecosystems

#### How to enhance speed through cooperation in networks

Companies have to develop new unique selling propositions faster than ever. This often requires building up new competences beforehand. Engaging in innovation networks and -ecosystems enables companies to access missing competences in a quick and flexible manner.

# The Agenda

Day 1 | Thursday October 25, 2018

## 09.00 Welcome and get-together

### 09.30 Welcome speech

Toni Drescher, INC Invention Center and Ramon Kreutzer, Fraunhofer IPT

### 09.45 Why agile development can be a Game Changer

- Why agility is playing a central role for companies
- From Stage Gate and Lean Start-up to Agile Development and back again?
- Agility hands-on: A product development in 35 minutes

Prof. Dr. Frank T. Piller, TIME Research Area at the RWTH Aachen University

## 11.15 Coffee break

### 11.30 Transformation in the construction industry: From traditional craftsmanship to the world's most decentralized factory

- How digital disruption will transform the construction sector within the next 10 years
- How HeidelbergCement is preparing to thrive disruption as an attacker
- Insights on how HeidelbergCement uses Venture Building and Start-ups to their advantage

Patric Hellermann, HeidelbergCement AG

## 12.30 Networking lunch

### 14.00 "New" corporate venturing as a catalyst for the global growth of start-ups

- Why ambidexterity requires a brave step forward
- How to break free from corporate structures and generate a momentum of innovation
- How Corporate Venturing can realize first achievements even in a short time

Robert Hardt, next47 GmbH

### 15.00 Don't be a robot

- How evolution, intelligence and technological change are intertwined
- What makes humans able to adapt
- Implications of evolution and agility for corporate culture

Christoph Burkhardt, Burkhardt Group

## 16.15 Coffee break and Meet-the-Expert

### 16.45 Disruption or back to the future innovation?

- Actual business opportunities for standardized LED bulbs and modules
- Market adoption by cost effective solutions vs. first of a kind disruptive innovative solutions
- Dynamics of the innovation cycle and readiness of customers in their regional markets

Dirk Vanderhaeghen, Lumileds Germany GmbH

## 20.00 Soirée at the Uptown Sky Lounge, Inside by Melia Aachen



Day 2 | Friday October 26, 2018

**08.30 Welcome coffee**

**09.00 Agile innovation in networks**

- Why agile invention requires cooperation
  - How companies can utilize networks to innovate more rapidly elaborated on the case of the RWTH Aachen Campus Innovation Factory
- Prof. Dr. Günther Schuh, Fraunhofer IPT / WZL at the RWTH Aachen University

**09.45 Meet our experts**

**Agile product development: applications and work practices**

Discuss with: Prof. Bernhard Rumpe, SE@RWTH and Matthias Nawrocki, Gira Giersiepen GmbH & Co. KG  
Moderation: Tim Wetterney and Thomas Schwarberg, Fraunhofer IPT

**Alternative development paths: Design and best practices**

Discuss with: Dr. Stefan Thomas, REHAU AG + Co., UNLIMITED X and Nico Schön, thyssenkrupp AG, tkGarage Mobility  
Moderation: Felix Lau and Florian Vogt, Fraunhofer IPT

## Breakout Session

Ask the experts for their approaches to issues of your particular interest!

**10.45 Coffee break**

**11.15 Agile@TRUMPF**

- Agile methods in development of large scale projects in machinery and plant engineering
  - Integration of an agile development in established structures and the running core business
  - Challenges and benefits of an agile development in the machinery and plant engineering
- Reiner Köttgen, TRUMPF GmbH + Co. KG

**12.15 Agile Invention – Hype or Game Changer?**

- Agility as partial solution of organizational ambidexterity
  - Agile R&D versus the agile enterprise
  - What an agile enterprise might look like
- Markus Wellensiek, Fraunhofer IPT

**12.45 Networking lunch**

**14.00 End of event**



# Industrial Collaborative Projects



## Work Groups

We work through specific issues relating to Technology and Innovation Management and examine them in-depth with interested companies in a diverse range of work groups. The work groups are an ideal platform for trustfully exchanging ideas and views. You will benefit from the experiences and views of partners from companies working across a range of industrial sectors on issues that are of particular relevance to your company.



## Practitioner Days and Seminars

One-day courses and seminars are held regularly, focusing on selected issues from Technology and Innovation Management. Discover what methods and approaches will lead you to achieve your goals in application-oriented workshops and presentations.

**Visit for this [www.wzlforum.de](http://www.wzlforum.de)**



## Consortium Benchmarking Studies

We regularly organize consortium benchmarking studies on selected areas of Technology and Innovation Management. We identify success factors in Technology and Innovation Management in international, cross-sectoral studies focusing on the interests of our partners in the consortium. As a partner in the consortium, you have the opportunity to accompany us on visits to the five best companies, thereby gaining profound insights into their processes and methods. Participants in the studies have the chance to measure their own achievements with those of the best and to have their processes and methods benchmarked free of charge.



## Individual Business Consultancy

### **Practice-oriented consultancy and advanced training in Technology and Innovation Management**

We advise our customers in all issues relating to Technology and Innovation Management – from conceptualizing to configuring strategies, processes and methods of a customized Technology and Innovation Management.

### **Business Model Innovation**

- What emerging business models are suitable for your company?

### **Open Innovation**

- How can external parties be involved in the innovation process?

### **Agile product development**

- How to apply agile methods in hardware R&D and create an added value?

### **Incubator set-up**

- What are successful configurations for the set-up of alternative development paths?

### **Technology Forecasting**

- Which are the relevant weak signals?

### **Technology Strategy**

- What is your company's future-oriented technological focus?

### **Technology Planning**

- Which technologies are required when?

## Your contact

### **Markus Wellensiek**

Fraunhofer IPT  
[markus.wellensiek@ipt.fraunhofer.de](mailto:markus.wellensiek@ipt.fraunhofer.de)

### **Toni Drescher**

INC Invention Center | KEX Knowledge Exchange AG  
[toni.drescher@kex-ag.com](mailto:toni.drescher@kex-ag.com)

# Organization

## Date

October 25-26, 2018

## Venue

Pullman Aachen Quellenhof  
Monheimsallee 52  
52062 Aachen, Germany

## Conference Fee

1,400,- € (Early booking 1,200,- € until August 03, 2018)  
1,050,- € Special reduced fee starting with the second enrollment per company (Early booking 975,- €)  
Conference documents, refreshments during breaks, lunch and evening event are included, but not accommodation or travel expenses. Please do not pay the fee until you have received our invoice. In case of cancellation of your enrollment until one week prior to the event, 100,- € will be charged for administrative expenses. Otherwise the participation fee will be charged in full.

## Enrollment

Via attached enrollment form or online until October 18, 2018. Preliminary reservations via phone are welcome. Should your written enrollment not have been received four weeks in advance of the conference, we reserve the right to transfer your preliminary reservation to other interested parties. Enrollments will be processed in the order in which they are received.

## Your Contact

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52074 Aachen, Germany  
Ms. Lisa Fiegen, B.A.  
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Fax +49 241 8022-575  
E-Mail [l.fiegen@wzl.rwth-aachen.de](mailto:l.fiegen@wzl.rwth-aachen.de)  
Internet [www.wzlforum.rwth-aachen.de](http://www.wzlforum.rwth-aachen.de)

## Accommodation

Rooms can be reserved by contacting:

aachen tourist service e.v.  
Postfach 10 22 51  
52022 Aachen, Germany  
Phone +49 241 18029-50  
Fax +49 241 18029-30  
E-Mail [booking@aachen-tourist.de](mailto:booking@aachen-tourist.de)  
Internet [www.aachen-tourist.de/hotels](http://www.aachen-tourist.de/hotels)

Or directly from the event venue:

Pullman Aachen Quellenhof  
Monheimsallee 52  
52062 Aachen, Germany  
Phone +49 241 9132-00  
Fax +49 241 9132-100  
E-Mail [h5327@accor.com](mailto:h5327@accor.com)  
Internet <https://bit.ly/1dAGEtm>



## Deutsche Bahn Special – Congress Ticket

In cooperation with Deutsche Bahn we offer the opportunity to travel to and from the event in comfort, at an affordable price and in an environmentally friendly train. Your long-distance journey to and from the conference will be powered entirely by green electricity.

Further information is available on our website:  
[www.wzlforum.rwth-aachen.de/infoservice](http://www.wzlforum.rwth-aachen.de/infoservice)



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## Registration

### **12<sup>th</sup> Aachen Technology and Innovation Management Conference** **Agile Invention: Hype or Game Changer? | October 25-26, 2018**

I hereby confirm my participation at 12<sup>th</sup> Aachen Technology and Innovation Management Conference  
„Agile Invention: Hype or Game Changer?“ at the fee of 1,400,- € (Early booking 1,200,- € until August 03, 2018)  
(Special reduced price starting with the second enrollment per company 1,050,- € until August 03, 2018 only 975,- €)

Surname*	First Name*	Title
Company*	Department*	Position*
Street / P.O. Box*	Zip code / City*	Country
Phone*	Fax	E-Mail*

Please send the filled out form to WZLforum at the RWTH Aachen University, Steinbachstr. 25, 52074 Aachen or send it per fax to +49(0) 241 80 225-75. In case of several registrations please copy the reply card. In addition there is an option to register online at [www.wzlforum.rwth-aachen.de](http://www.wzlforum.rwth-aachen.de). I hereby agree that my name and my business address will be registered. Exclusively for the purpose of the organization of the seminar, and that my name and address will be electronically processed and saved.

Information on data privacy protection: your data will be used for postal submission of similar offers (see GTC).

We would be pleased to send you event information: ☐ per email ☐ only per email

We may use your data for purposes of advertising per post or per email unless you request not to.

Signature	Date
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\*Input requested

Or use our  
online registration:



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