Fraunhofer

HANNOVER MESSE | APRIL 23–27, 2018

SPARKING THE FUTURE

CONTENTS

WWW.FRAUNHOFER.DE/HM2018

Editorial notes

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Please visit our website at **www.fraunhofer.de/hm2018e** and discover more about the Fraunhofer exhibits and other trade fair highlights.

EVENTS

TALKS

TUESDAY, APRIL 24

Fraunhofer-Gesellschaft
Future dialog and workshop
"Biointelligent manufacturing – BIOTRAIN"

Time

9.30 am – 1.00 pm

Location

Convention Center,
Room Leipzig

Speakers

Prof. Dr. Reimund Neugebauer
Fraunhofer-Gesellschaft
Prof. Dr. Thomas Bauernhansl
Fraunhofer IPA
and others

Host

Fraunhofer-Gesellschaft

Fraunhofer-Gesellschaft
Press breakfast
"Digital Solutions and New Materials"

Time

10.00 – 11.00 am

Location

Hall 6, Booth A30 (joint Fraunhofer booth)

Speakers

Andreas Burblies
Spokesman of the Fraunhofer Simulation Alliance
Pedro Santos
Fraunhofer IGD

Host

Fraunhofer-Gesellschaft

TUESDAY, APRIL 24

Fraunhofer-Gesellschaft
Technology briefing
"Industrial data space"

Time

11.00 – 12.00 am

Location

Hall 2, Booth C22 (joint Fraunhofer booth)

Speakers

Prof. Dr. Boris Otto
Fraunhofer ISST
and further representatives of the funding agency and participating Fraunhofer Institutes

Host

Fraunhofer-Gesellschaft

Fraunhofer-Gesellschaft
Technology briefing
"Cognitive internet technologies"

Time

12.00 am – 1.00 pm

Location

Hall 2, Booth C22 (joint Fraunhofer booth)

Speakers

Prof. Dr. Claudia Eckert, Fraunhofer AISEC; Prof. Dr. Albert Heuberger, Fraunhofer IIS; Prof. Dr. Boris Otto, Fraunhofer ISST; Prof. Dr. Stefan Wrobel, Fraunhofer IAIS

Host

Fraunhofer-Gesellschaft

WED, APRIL 25

Fraunhofer-Gesellschaft
Opening ceremony
High-Performance Center Networked, Adaptive Production

Time

4.00 – 6.00 pm

Location

Hall 2, Booth C22 (joint Fraunhofer booth)

Program

Discover the benefits that Industrie 4.0 can bring to your value chain!

Host

Fraunhofer ILT
Fraunhofer IME
Fraunhofer IPT

THU, APRIL 26

Fraunhofer Group for Production
Workshop session
“Smart Maintenance”

Time

9.30 am – 5.00 pm

Location

Convention Center, Room Paris

Program

Come and join us for a lively exchange on the subject of smart maintenance concepts!

Host

Fraunhofer Group for Production

MONDAY, APRIL 23 – FRIDAY, APRIL 27

Bundesvereinigung Logistik e.V.
Fraunhofer IML
Forum
“Logistics 4.0” and “Logistics Solutions”

Location

Hall 20, Booth D50 (CeMAT)
Hall 21, Booth C46 (CeMAT)

Program

The “Logistics 4.0” forum will feature industry and intralogistics experts discussing the new opportunities created by the interconnectivity of production and logistics. The “Logistic Solutions” forum offers a platform for practical demonstrations, interesting lectures and lively discussions.

Organizer

Deutsche Messe AG

Digital press kit
Our digital press kit features all the media events, media information and picture and video material to accompany our exhibits at HANNOVER MESSE 2018.

Our experts are available for interviews. Please contact us in advance.

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http://s.fhg.de/hm18pe

SPARKING THE FUTURE

THE EVOLUTION OF INDUSTRIE 4.0

The future of Industrie 4.0 rests upon our ability to pool expertise and resources. Fraunhofer's interdisciplinary systems expertise sparks the new ideas that meet the challenges of a changing world and helps create customized solutions right along the value chain. Visitors to the joint Fraunhofer booths can experience how a vibrant mix of new technology in the fields of augmented reality, artificial intelligence, data security, sensor systems, digital engineering, human-machine interaction and smart materials is reshaping the future.

For example, the joint research project Research Fab Microelectronics Germany (FMD) has the world's largest pool of systems for interdisciplinary research and development, ranging from materials and process development to customer-specific pilot production. In the Adaptronics section, visitors can find a wide range of applications for sensors and actuators for the Internet of Things. The "Digital Solutions and New Materials" booth is showcasing a whole spectrum of exhibits, ranging from innovative materials for Industrie 4.0 to the Fraunhofer blockchain community. The joint booth of the Fraunhofer Group for Production features exhibits on smart maintenance, human-robot collaboration and additive manufacturing. Be sure to visit the Fraunhofer booths, and together we can develop new ideas for your business.

FUTURE FACTORY

JOINT BOOTH

HALL 2 | BOOTH C22

THE FUTURE OF INDUSTRY

In Industrie 4.0, one of the keys to the creation of value will lie in the production of small batches and one-of-a-kind products under mass-production conditions. "Future Factory," one of the joint Fraunhofer booths, is showing how digital manufacturing and other future technologies will bring about lasting changes to production processes.

The IT cloud platform "Virtual Fort Knox" provides production-related IT solutions in the form of apps. Manufacturing companies can mix and match these services according to needs and incorporate them in existing manufacturing processes. The Fraunhofer Industrial Data Space initiative is presenting various services designed to create a secure environment in which companies retain control of their own data and can use it in a secure manner for smart, innovative services and automated business processes.

By taking in subjects such as cognitive sensor technologies, digital assistance systems and digital-twin simulation, we explain the broader context of Industrie 4.0 and look for concrete ways in which customers can implement their own solutions.

FUTURE FACTORY

JOINT BOOTH

INDUSTRIE 4.0

HALL 2 | BOOTH C22

Exhibition partners

13 Fraunhofer Group for Production
Virtual Fort Knox | Open, hybrid cloud IT platform | Flexible manufacturing | Cyber-physical production systems | Digital services | Digital business models
www.produktion.fraunhofer.de

3 Fraunhofer Institute for Applied and Integrated Security AISEC
IoT solutions | Trusted IoT connector | Secure networking | Physical protection of devices | Cyber security | Industrial data space
www.aisec.fraunhofer.de

2 Fraunhofer Institute for Applied Information Technology FIT
Industrie 4.0 – data-driven models for industrial automation | Health 4.0 – smart services for preventive health monitoring | Infrastructure for smart data exchange | Industrial and medical data space
www.fit.fraunhofer.de

4 Fraunhofer Institute for Chemical Technology ICT
Technical safety | Resilient process design | Characterization of hazardous materials | Risk assessment | Functional safety and risk minimization (SIL) | Single fault safety | Redundancy | Explosives
www.ict.fraunhofer.de

5 Fraunhofer Institute for Digital Media Technology IDMT
Acoustic quality control and process monitoring | Machine learning | Predictive maintenance | Signal analysis and processing | Virtual acoustic product development | Audio-visual 3D technologies | Acoustic event detection | Speech control
www.idmt.fraunhofer.de

6 Fraunhofer Institute for Experimental Software Engineering IESE
Industrie 4.0 | Automated manufacturing | Changeable manufacturing processes | Digital-twin technology | Virtual engineering | Asset administration shells | BaSys4.0 | RAMI 4.0 | FERAL
www.iese.fraunhofer.de

8 Fraunhofer Institute for Integrated Circuits IIS
Cognitive sensor technologies for assembly | Warehousing and picking | Positioning in manufacturing and warehousing | Digital picking assistance | Smart container management | Intelligent tools – assistance systems in assembly | IoT bus systems and edge computing for Industrie 4.0 | Digital value creation | Supply chain analytics | IoT trends
www.iis.fraunhofer.de

12 Fraunhofer Institute for Machine Tools and Forming Technology IWU
Machine 4.0 | 100% availability | Condition monitoring | Predictive maintenance | Quality management | Machine learning | Good feeling production
www.iwu.fraunhofer.de

FUTURE FACTORY

JOINT BOOTH

INDUSTRIE 4.0

HALL 2 | BOOTH C22

7 Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM
Smart production | Adaptive processes | Mobile robots | Robotic machining | Automated assembly | Agile production
www.ifam.fraunhofer.de

10 Fraunhofer Institute for Optronics, System Technologies and Image Exploitation IOSB
OPC UA in industrial data space | Use case production | Secure, flexible data transfer | Usage control | Secure data exchange | Information models
www.iosb.fraunhofer.de

11 Fraunhofer Institute for Software and Systems Engineering ISST
Industrial data space | Use case logistics | Enhancing value of IoT data | RIOTANA: real-time IoT analytics | Data-driven business models | Smart data engineering
www.isst.fraunhofer.de

9 Fraunhofer Institute for Technological Trend Analysis INT
Technology foresight | Cognitive computing | Industrie 5.0 | Technology consulting | Corporate technology foresight | Technology scanning | Machine learning | Technology scouting | Data mining | Data-driven foresight
www.int.fraunhofer.de

1 Fraunhofer Research Institution for Large Structures in Production Engineering IGP
Welding | Automation technology | Sensor-data processing | Measuring of large structures | Production organization | Joining and forming by plastic deformation | Testing technology | Mechanical joining | Adhesive bonding | New materials
www.igp.fraunhofer.de

14 Fraunhofer Academy
Continuing education for business: courses of study, certificate courses and seminars | Cybersecurity Training Lab | Learning technology
www.academy.fraunhofer.de

15 Fraunhofer-Gesellschaft, Recruiting
Career | Job offers | Apprenticeships | Internships | Bachelor and master theses | Doctoral programs | Young talent programs
www.fraunhofer.de/career

16 Fraunhofer Industrial Data Space initiative
Data sovereignty | Control over data | Secure value networks | Confidential networks | Interoperability | Powerful ecosystems for business data
www.fraunhofer.de

FUTURE FACTORY

JOINT BOOTH

INDUSTRIE 4.0

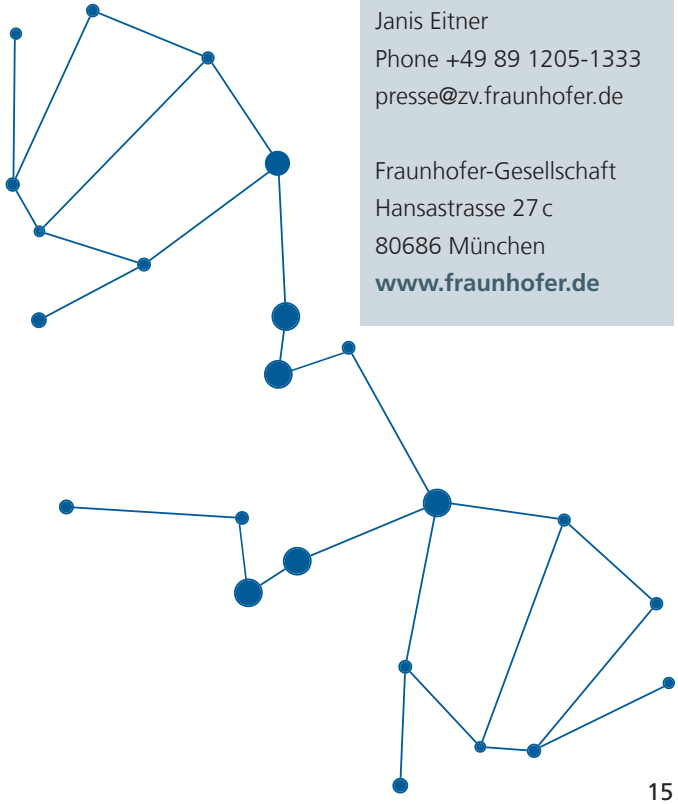
HALL 2 | BOOTH C22

17 International Data Spaces Association
Design of industrial data space | Implementation of use cases | Development of architecture | Promotion of standards | Development of cross-industry business models
www.industrialdataspace.org

18 Alliance 3Dsensation
(represented by Fraunhofer IOF)
Human-machine interaction | Advanced 3D sensing | Secure communication
www.3d-sensation.de

19 Berlin Center for Digital Transformation
Smart production environment | Digital transformation | Process assistance | Gesture-based robot interaction and programming | Augmented reality visualization in production systems | Digital twin | IoT sensor construction kit | Fog/edge computing in IoT gateways | Data aggregation and analysis
www.digitale-vernetzung.org

20 High-Performance Center Networked, Adaptive Production
Flexible product development | Big data analytics in life sciences | Digital twin in the product's life cycle | 5G technology in production
www.vernetzte-adaptive-produktion.de



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FUTURE FACTORY

JOINT BOOTH

ADAPTRONICS

HALL 2 | BOOTH C22

TO INDUSTRIE 4.0 WITH ADAPTRONICS

The thoroughgoing automation of production and logistics processes will be a concrete reality in the factory of the future. While sensors ensure a continuous transfer of data between machinery and product, actuators will process this information and actively monitor and optimize production processes.

In the "Adaptronics" section of the booth, the Fraunhofer Adaptronics Alliance is showcasing, for example, how sensors and actuators can serve as the basic components for interactive networking and optimization of industrial processes.

In the field of sensor technology, visitors will be treated to two special exhibits that demonstrate how far the digitalization of industrial processes has already progressed and is continuing to evolve: a glove for measuring grip forces and a system for the contactless energy transfer to a toothed belt.

FUTURE FACTORY
JOINT BOOTH

ADAPTRONICS | HALL 2 | BOOTH C22

21 **Fraunhofer Adaptronics Alliance**
Adaptronics | Monitoring | Energy harvesting | Active systems | Intelligent materials
www.adaptronik.fraunhofer.de

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www.adaptronik.fraunhofer.de

FUTURE FACTORY
JOINT BOOTH

FMD

FROM THE FIRST DRAFT TO THE FINISHED SYSTEM: DEVELOPMENTS FROM A SINGLE SOURCE

The Research Fab Microelectronics Germany (FMD) is a collaborative project involving 11 institutes from the Fraunhofer Group for Microelectronics along with the Ferdinand-Braun-Institut, Leibniz-Institut fuer Hoechstfrequenztechnik (FHB) and the Leibniz Association member institute Innovations for High-Performance Microelectronics (IHP). The purpose of FMD is to provide its customers with easy and comprehensive access to future-generation technology.

FMD services include customized technology and system developments from a single source and Germany-wide technological expertise providing solutions for all links in the value chain. FMD also has the world's largest pool of systems for interdisciplinary research and development in the field of silicon and compound semiconductors – ranging from materials and process development to customer-specific pilot production.

FUTURE FACTORY

JOINT BOOTH

FMD

HALL 2 | BOOTH C22

22 Fraunhofer Group for Microelectronics

Research Fab Microelectronics Germany (FMD) | One-stop shop for developments from wafer technologies to complete systems | Power electronics | Heterointegration | Internet of Things | Industry 4.0 | Design of new micro- and nanosystems | Component technology in silicon, silicon-germanium and compound semiconductors | Functional encapsulation of components | Functional and reliability tests

www.mikroelektronik.fraunhofer.de

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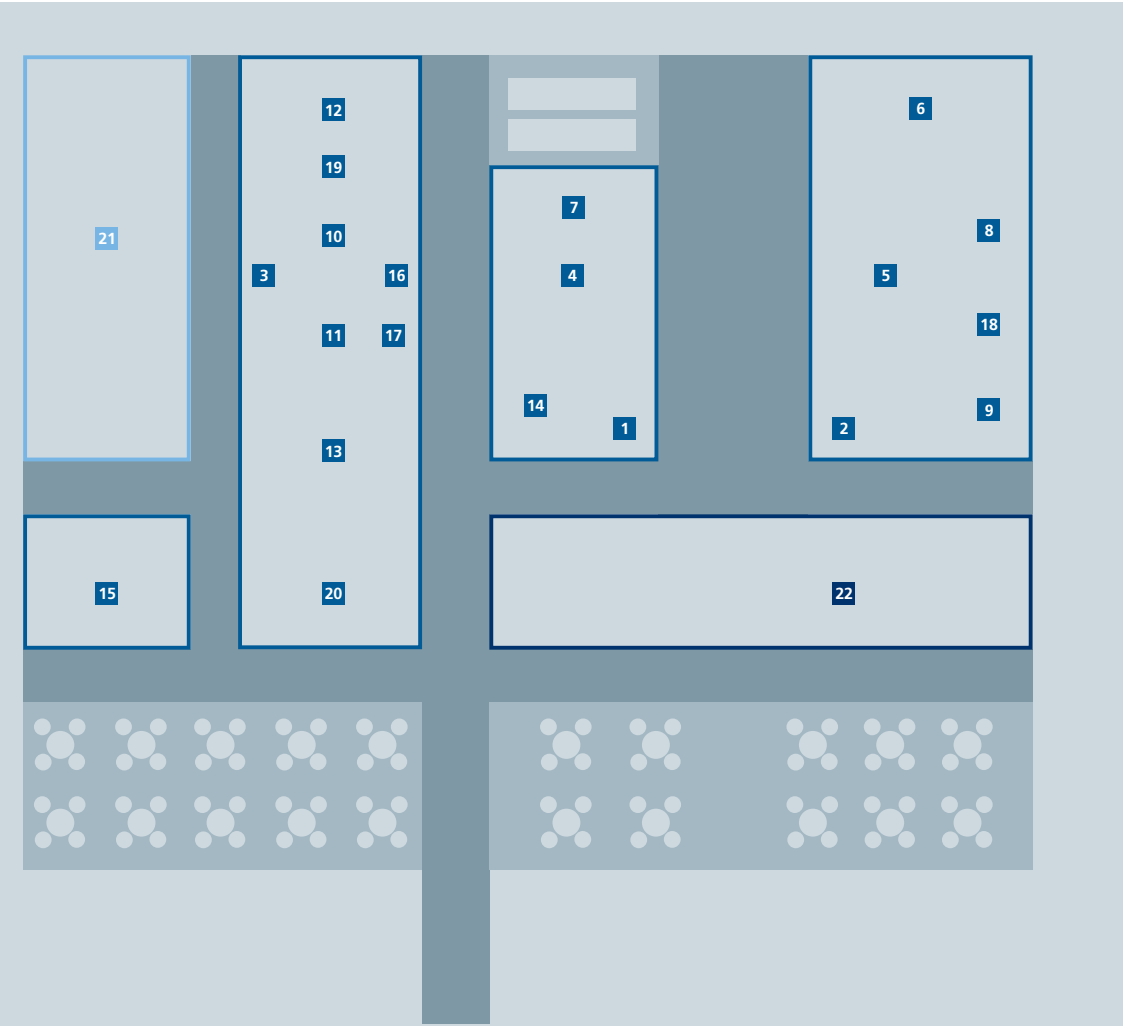
FUTURE FACTORY

JOINT BOOTH

FLOOR PLAN | HALL 2 | BOOTH C22



- Industrie 4.0
- Adaptronics
- Research Fab Microelectronics Germany (FMD)

DIGITAL SOLUTIONS AND NEW MATERIALS

JOINT BOOTH

HALL 6 | BOOTH A30

DIGITAL SOLUTIONS AND NEW MATERIALS

New digital technologies are increasingly being used in simulation and other digital engineering processes. These technologies range from today's industry-standard virtual reality and augmented reality applications to 3D scanning methods.

Visit our booth and discover how, for example, machine learning and the simulation of coating processes are now a key part of the development of new materials and the enhancement of material properties. Materials and surfaces also play crucial role at the interface between physical and digital system components. A prime example here is the use of thin-film sensors. These are applied to components or machine tools, where they communicate directly with control units or the Internet.

By combining the two fields of digital solutions and new materials, Fraunhofer is showing how to achieve a successful transition to the digital future. Topics on show include processes to enhance material properties, innovative materials for Industrie 4.0, interactive simulation and the Fraunhofer blockchain community.

DIGITAL SOLUTIONS AND NEW MATERIALS

JOINT BOOTH

HALL 6 | BOOTH A30

Exhibition partners

2 Fraunhofer Blockchain Community
Blockchain | Data and process integrity | Smart contracts | Machine economy | Automated process chains | Distributed ledgers | Ethereum | Hyperledger Fabric
www.fit.fraunhofer.de/blockchain

8 Fraunhofer Group for Light & Surfaces
Lasers | Optics | Measurement technology | Coating technology | Laser manufacturing | Beam sources | Optical systems and manufacture of optical systems | EUV technology | Process and system simulation | Materials technology| Micro- and nanotechnology | Thin-film technology | Plasma technology | Electron beam technology
www.light-and-surfaces.fraunhofer.de

7 Fraunhofer ICT Group
Manufacturing | Logistics | Mobility | Transportation | Energy | Sustainability | Safety | Security | Cybersecurity | Virtual Reality | Augmented Reality | Simulation | Big Data | Artificial Intelligence
www.iuk.fraunhofer.de

3 Fraunhofer Institute for Algorithms and Scientific Computing SCAI
Virtual material design | Molecular dynamics | New materials | Nanotechnology | Multiphysics | Interface standards for simulation software | Integrated virtual material modeling
www.scai.fraunhofer.de

4 Fraunhofer Institute for Computer Graphics Research IGD
Visual computing as a service | Interactive simulation | Additive manufacturing | Virtual and augmented reality | Cyber-physical equivalence | Assistance systems in production | Visual control center | 3D scanning and modeling
www.igd.fraunhofer.de

6 Fraunhofer Institute for Industrial Mathematics ITWM
Simulation of materials, products and processes | Digital human models | Real-time simulation of flexible components | E-mobility: predicting consumption and emissions – battery simulation
www.itwm.fraunhofer.de

DIGITAL SOLUTIONS AND NEW MATERIALS

JOINT BOOTH

HALL 6 | BOOTH A30

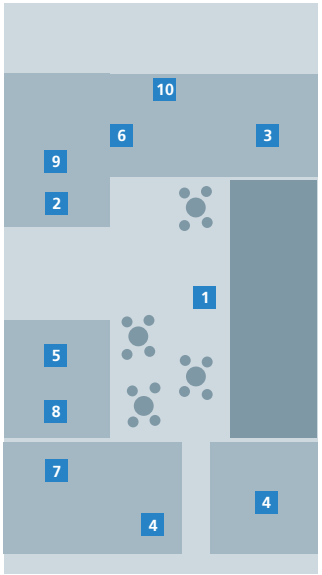
5 Fraunhofer Institute for Surface Engineering and Thin Films IST
Customized surfaces and thin films for Industrie 4.0 | Plasma technology | Thin-film sensors | Intelligent shims | Simulation of coating processes | Modeling of thin-film systems | Analytics and test engineering
www.ist.fraunhofer.de

1 Fraunhofer Simulation Alliance
Product design and component analysis | Production and logistics | Services | Software development | Material modeling | Production technology
www.simulation.fraunhofer.de

9 fleXstructures GmbH
Global distribution of IPS product portfolio | IPS Cable Simulation – real-time simulation of flexible components (cable, cable harness and hoses) | IPS IMMA – digital human modeling | Process optimization with IPS Robot Optimization | Winner of the Robotics Award at HANNOVER MESSE 2017
www.flexstructures.de

10 Math2Market GmbH
GeoDict® software – a digital materials lab | Modeling of materials | Characterization of material properties | Simulation-driven material development and optimization of processes | Modeling for additive manufacturing
www.math2market.com

FLOOR PLAN



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PRODUCTION

JOINT BOOTH

HALL 17 | BOOTH C24

INTERCONNECTIVITY IS THE FUTURE OF MANUFACTURING

In a demonstration to show what changes will affect manufacturing in the future, the Fraunhofer Group for Production is focusing on digital networks that connect manufacturing machinery with the product and the supplier.

Meanwhile, the advent of Industrie 4.0 will bring human-robot collaboration ever closer to the heart of manufacturing. With the help of virtual reality, visitors to the booth can interact with a heavy-payload production robot. There is also a demonstration of how the 5G wireless standard enables real-time transmission of machinery data. Using smart sensors, component vibrations can be recorded and visualized live and direct.

Smart maintenance is a further trend that is expected to drive production. Visitors can see how new assistance systems and machine-learning methods simulate machine errors and reach predictions on impending machinery downtimes. Detailed information is available at the "Smart Maintenance" workshop on the Thursday of the trade fair.

PRODUCTION

JOINT BOOTH

HALL 17 | BOOTH C24

Exhibition partners

11 Fraunhofer Group for Production
Industrie 4.0 | Competence matrix | Business models | Smart maintenance | Assistance systems | Predictive analytics | Condition monitoring
www.produktion.fraunhofer.de

9 Fraunhofer Institute for Environmental, Safety and Energy Technology UMSICHT
Industrie 4.0 for the energy and chemical industry | Smart sensors | Self-optimization in dynamic energy and production systems
www.umsicht.fraunhofer.de

5 Fraunhofer Institute for Factory Operation and Automation IFF
Maintenance 4.0 | Process manufacturing | Predictive maintenance | Mobile maintenance assistance systems | Mixed reality
www.iff.fraunhofer.de

10 Fraunhofer Institute for Machine Tools and Forming Technology IWU
Efficient human-robot interaction (HRI) | Physical interaction with heavy-payload robot | Superordinate safety system for HRI applications | Zone-based robot control for flexible HRI | Smart maintenance
www.iwu.fraunhofer.de

7 Fraunhofer Institute for Manufacturing Engineering and Automation IPA
Smart maintenance | Responsiveness of manufacturing facility interconnectivity | Smart sensors and actuators | Rule-based approaches
www.ipa.fraunhofer.de

4 Fraunhofer Institute for Mechatronic Systems Design IEM
Human-robot collaboration | Smart mechatronic systems | Physical interaction with robotic arms | Process reliability | CAD-based selection of trajectories
www.iem.fraunhofer.de

6 Fraunhofer Institute for Production Systems and Design Technology IPK
Digitally integrated manufacturing | Cloud-based robot control systems | Synchronization of heterogeneous production systems | Modular shop floor IT | Digital twin
www.ipk.fraunhofer.de

8 Fraunhofer Institute for Production Technology IPT
5G | Networked, adaptive production | Wireless sensor technology | Process monitoring | Digital twin
www.ipt.fraunhofer.de

PRODUCTION

JOINT BOOTH

HALL 17 | BOOTH C24

1 Fraunhofer Research Institution for Additive Manufacturing Technologies IAPT
Additive manufacturing | 3d-printing | Laser-beam melting | Topology optimization | Lightweight design | Bionic design | Mass customization
www.iapt.fraunhofer.de

2 Fraunhofer Research Institution for Casting, Composite and Processing Technology IGCV
Human-robot collaboration | Physical, cognitive assistance systems | Additive manufacturing | Hybrid manufacturing chain | Remanufacturing
www.igcv.fraunhofer.de

3 Fraunhofer Research Institution for Large Structures in Production Engineering IGP
Maritime industry 4.0 | Digital structural condition assessment | Mobile assistance systems | Prototyping | Manufacturing engineering for large structures
www.igp.fraunhofer.de

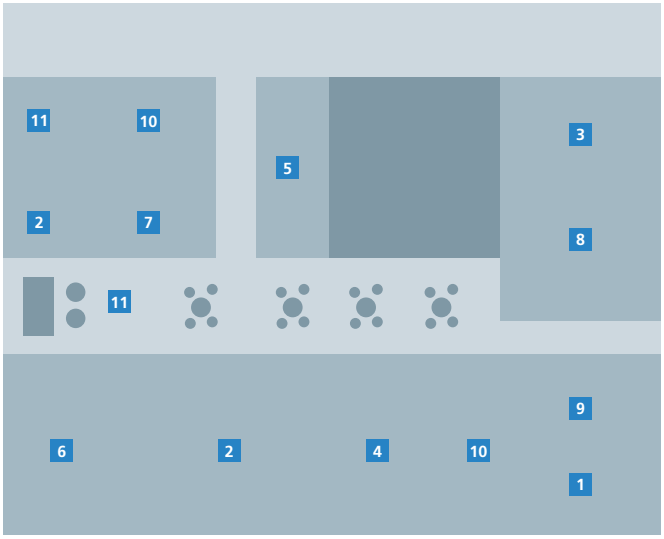
11 Further exhibition partners

Fraunhofer Austria Research GmbH
www.fraunhofer.at

Fraunhofer Institute for Industrial Engineering IAO
www.iao.fraunhofer.de

Fraunhofer Institute for Nondestructive Testing IZFP
www.izfp.fraunhofer.de

FLOOR PLAN



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and Automation IFF
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**www.produktion.
fraunhofer.de**

FURTHER

FRAUNHOFER UNITS

Fraunhofer Center for Maritime Logistics and Services CML
Hall 2, Booth A26
www.cml.fraunhofer.de

Fraunhofer Institute for Applied and Integrated Security AISEC
Hall 6, Booth D02
www.aisec.fraunhofer.de

Fraunhofer Institute for Ceramic Technologies and Systems IKTS
Hall 2, Booth A38
Hall 5, Booth A26
Hall 27, Booth E49
www.ikts.fraunhofer.de

Fraunhofer Institute for Computer Graphics Research IGD
Hall 2, Booth C28
www.igd.fraunhofer.de

Fraunhofer Institute for Electronic Nano Systems ENAS
Hall 6, Booth C30
www.enas.fraunhofer.de

Fraunhofer Institute for Energy Economics and Energy System Technology IEE
Hall 27, Booth B67
www.iee.fraunhofer.de

Fraunhofer Institute for Factory Operation and Automation IFF
Hall 24, Booth D18 (CeMAT)
www.iff.fraunhofer.de

Fraunhofer Institute for Industrial Engineering IAO
Hall 2, Booth B22
www.iao.fraunhofer.de

Fraunhofer Institute for Machine Tools and Forming Technology IWU
Hall 2, Booth C28
www.iwu.fraunhofer.de

Fraunhofer Institute for Manufacturing Engineering and Automation IPA
Hall 6, Booth C18
www.ipa.fraunhofer.de

Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM
Hall 9, Booth D35
Hall 27, Booth E49
www.ifam.fraunhofer.de

Fraunhofer Institute for Material and Beam Technology IWS
Hall 5, Booth A34
www.iws.fraunhofer.de

Fraunhofer Institute for Material Flow and Logistics IML
Hall 21, Booth K24 (CeMAT)
www.iml.fraunhofer.de

FURTHER

FRAUNHOFER UNITS

Fraunhofer Institute for Mechatronic Systems Design IEM
Hall 2, Booth C28
Hall 16, Booth A04
www.iem.fraunhofer.de

Fraunhofer Institute for Microengineering and Microsystems IMM
Hall 27, Booth B74
www.imm.fraunhofer.de

Fraunhofer Institute for Microstructure of Materials and Systems IMWS
Hall 27, Booth E51
www.imws.fraunhofer.de

Fraunhofer Institute for Molecular Biology and Applied Ecology IME
Hall 2, Booth A26
www.ime.fraunhofer.de

Fraunhofer Institute for Optronics, System Technologies and Image Exploitation IOSB
Hall 6, Booth D02
Hall 7, Booth D26
Hall 8, Booth C24
www.iosb.fraunhofer.de

Fraunhofer Institute for Optronics, System Technologies and Image Exploitation IOSB Industrial Automation branch
Hall 16, Booth A04
www.iosb.fraunhofer.de

Fraunhofer Institute for Photonic Microsystems IPMS
Hall 9, Booth A11
www.ipms.fraunhofer.de

Fraunhofer Institute for Secure Information Technology SIT
Hall 2, Booth B22
Hall 2, Booth C28
www.sit.fraunhofer.de

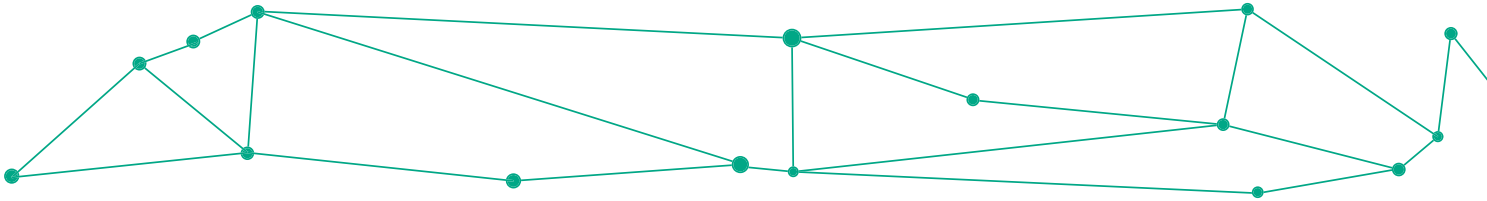
Fraunhofer Institute for Silicate Research ISC, Center for High-Temperature Materials and Design
Hall 2, Booth A52
www.htl.fraunhofer.de

Fraunhofer Institute for Solar Energy Systems ISE
Hall 27, Booth C58
www.ise.fraunhofer.de

Fraunhofer Institute for Telecommunications, Heinrich-Hertz Institut, HHI
Hall 2, Booth C28
www.hhi.fraunhofer.de

Fraunhofer Research Institution for Additive Manufacturing Technologies IAPT
Hall 2, Booth A26
www.iapt.fraunhofer.de

Fraunhofer Venture
Hall 17, Booth B68
www.fraunhoferventure.de



THE HALLS

AT A GLANCE

1 Hall 2, Booth A26
Fraunhofer CML
Fraunhofer IAPT
Fraunhofer IME

2 Hall 2, Booth A38
Fraunhofer IKTS

3 Hall 2, Booth A52
Fraunhofer ISC, Center for High-Temperature Materials and Design

4 Hall 2, Booth B22
Fraunhofer IAO
Fraunhofer SIT

5 Hall 2, Booth C22
Future Factory joint booth

6 Hall 2, Booth C28
Fraunhofer HHI
Fraunhofer IEM
Fraunhofer IGD
Fraunhofer IWU
Fraunhofer SIT

7 Hall 5, Booth A26
Fraunhofer IKTS

8 Hall 5, Booth A34
Fraunhofer IWS

9 Hall 6, Booth A30
Digital Solutions and New Materials joint booth

10 Hall 6, Booth C18
Fraunhofer IPA

11 Hall 6, Booth C30
Fraunhofer ENAS

12 Hall 6, Booth D02
Fraunhofer AISEC
Fraunhofer IOSB

13 Hall 7, Booth D26
Fraunhofer IOSB

14 Hall 8, Booth C24
Fraunhofer IOSB

15 Hall 9, Booth A11
Fraunhofer IPMS

16 Hall 9, Booth D35
Fraunhofer IFAM

17 Hall 16, Booth A04
Fraunhofer IEM
Fraunhofer IOSB, Industrial Automation branch

18 Hall 17, Booth B68
Fraunhofer Venture

19 Hall 17, Booth C24
Production joint booth

20 Hall 21, Booth K24 (CeMAT)
Fraunhofer IML

21 Hall 24, Booth D18 (CeMAT)
Fraunhofer IFF

22 Hall 27, Booth B67
Fraunhofer IEE

23 Hall 27, Booth B74
Fraunhofer IMM

24 Hall 27, Booth C58
Fraunhofer ISE

25 Hall 27, Booth E49
Fraunhofer IFAM
Fraunhofer IKTS

26 Hall 27, Booth E51
Fraunhofer IMWS

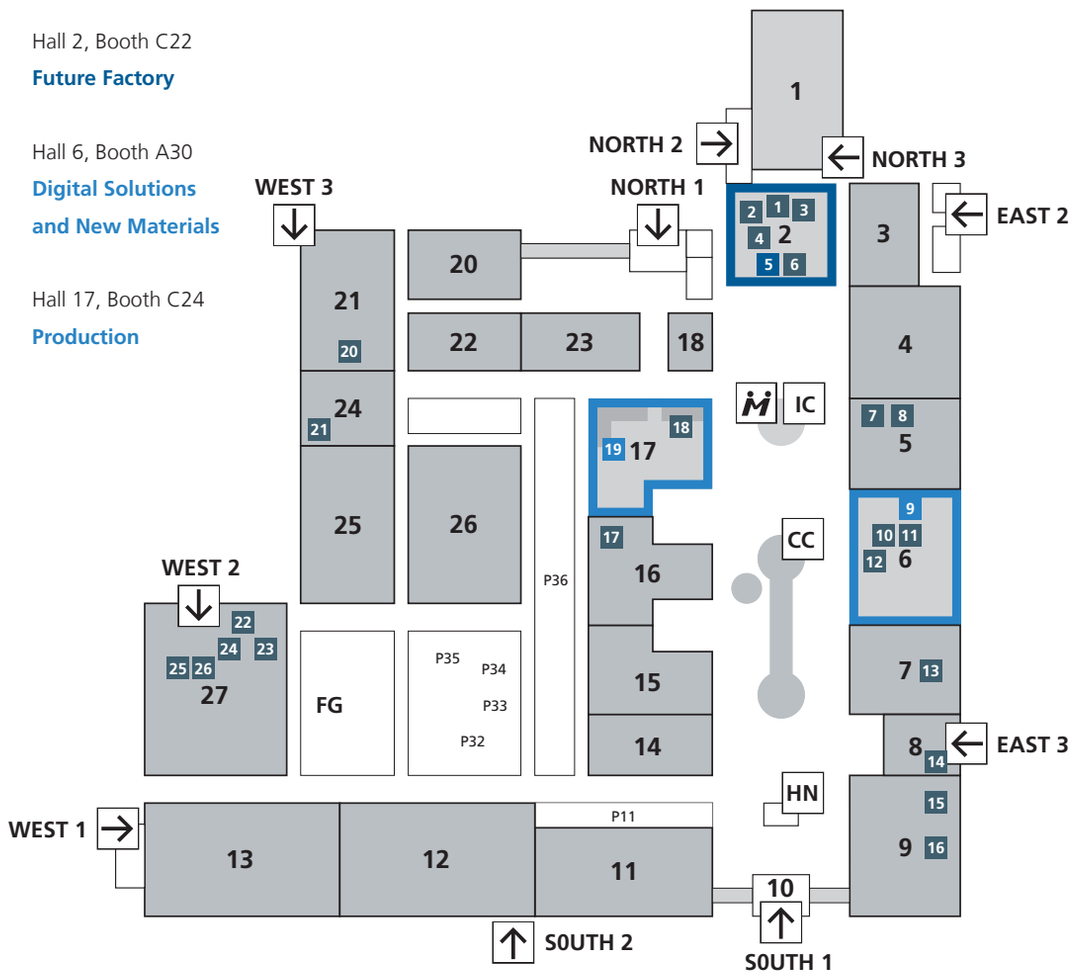
SITE PLAN

JOINT BOOTHS

Hall 2, Booth C22
Future Factory

Hall 6, Booth A30
Digital Solutions and New Materials

Hall 17, Booth C24
Production



FRAUNHOFER UNITS AND HIGH-PERFORMANCE CENTERS

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