

#### FRAUNHOFER INSTITUTE FOR MANUFACTURING ENGINEERING AND AUTOMATION IPA



1 Universität Stuttgart IFF / Fraunhofer IPA, Source: Rainer Bez, Heike Quosdorf

# SEMINAR ON THE PRODUCTION WORK OF THE FUTURE

#### **Digital transformation**

Our working world is in a state of upheaval. Internet and mobile technologies are fundamentally changing the way we live and work. Cyber-physical manufacturing systems, intelligent automation, and crowdworking are advancing this change. Digitalization and intelligently connected people, machines and objects are also having an impact on knowledge work, production work, services, and their interfaces. In many areas, employees, companies, and social partners already recognize the benefits of digitalized working and living environments – this is further fueling developments.

#### Industrial work is changing

Socio-technical work systems, as well as work organization and design, are changing in response to this development. Strong order fluctuations from volatile markets in-

crease companies' needs for flexibility in terms of time and space. Mobility demands on employees are growing and new forms of employment are emerging alongside the conventional employment relationship. As a result, the ability to handle digitalization and IT competently is increasingly becoming the "entrance ticket" for numerous work tasks. But what exactly will industrial work look like in the future?

#### Production work of the future

People work in collaboration with robots, are assisted by sensors and artificial intelligence, or receive feedback almost in realtime. The Future Work Lab showcases these and further aspects of how the production work of the future will look like in over 50 demonstrators. This makes it the largest innovation laboratory of its kind in Germany. Since 2017, over 13,000 interested guests have visited the Future Work Lab. Visiting the lab has become the most popular way

### Fraunhofer Institute for Manufacturing Engineering and Automation IPA

Nobelstrasse 12 70569 Stuttgart | Germany

#### Constact

Simon Schumacher
DiglTools for Manufacturing
Phone +49 711 970-1747
simon.schumacher@ipa.fraunhofer.de

www.ipa.fraunhofer.de/en/ www.futureworklab.de/en/





of getting to grips with the changes implemented by Industrie 4.0. With a diversity of content and a focus on future topics, visitors prompt new ideas for their own use cases. This often results in further research projects and lively technical discussions.

The demonstrator world presents use cases along the value chain and is divided into eight subject fields:

- Ergonomics and safety
- Training and learning at the workplace
- Networked manufacturing system
- Digital assistance
- Smart machines and processes
- Human-robot collaboration
- Virtual development and planning
- Artificial intelligence in manufacturing

The seminar on the production work of the future introduces a variety of focused services offered by the Future Work Lab, such as the Future Work Check and the joint development of prototypes.

#### Structure of the seminar

#### Impulse presentation

A 30 to 45-minute impulse presentation on the production work of the future forms the basis of the contents of the seminar. We provide insights into current research topics and point out practical scenarios. The presentation is held by an expert from the Future Work Lab and can take place in a meeting room or in the Future Work Lab itself.

#### Guided tour

In the guided tour through the Future Work Lab demonstrator world, you get to experience the changes in production work for yourself. A selection from over 50 demonstrators highlights the potential offered by digitalization, automation, and Al, as well as their impact on the production work of tomorrow. Visitors are interactively involved in the tour and can try out some of the solutions on display for themselves.

#### Q&A session

The seminar is rounded off by a session based on your individual questions. If desired, you can submit questions on related topics in advance. The tour through the demonstrator world usually prompts further questions concerning applied research and the use of the demonstrated solutions in an industrial environment.

#### Your advantages

- We bring you up to date with the latest developments in Industrie 4.0 and empower you to get started on your own
- You discover typical Industrie 4.0 topics and corresponding use cases
- This enables you to identify Industrie 4.0 potential in your company and design tailor-made applications

#### Target groups

The seminar is aimed at manufacturing companies that want to get started with Industrie 4.0 and take the first steps in the targeted use of new technologies. We primarily address the business areas of production, assembly, logistics, planning and maintenance. Planners, middle management, executive management, and all interested parties are invited to attend.

## Book the seminar on the production work of tomorrow now!

The seminar costs 3,500 € excluding VAT and catering. It can be held in German or English. Other languages are possible with interpreter if you provide one. To gain the full benefit of the seminar, numbers are limited to 25 participants. For larger groups, please submit an individual request.

- 2 Source: Ludmilla Parsyak, <sup>©</sup> Fraunhofer IAO.
- 3 Source: Ludmilla Parsyak, © Fraunhofer IAO.