Strategic Focus Area
Advanced Manufacturing

Industry Workshop

Sensing Technologies and Analysis of Sensor Data

We invite researchers and industry partners to participate in our first industry workshop on

12. October 2023 at Empa (Dübendorf)

INDUSTRY PARTNERS
Learn about cutting-edge sensing technologies

→ Find new project partners! ←

RESEARCHERS
Present your research of high technology readiness level!

This workshop offers two parallel sessions. One session covers all technology building blocks that need to interplay to manufacture sensors: materials, processes and equipment as well as sensing products for specific applications. The second session covers the use and the interpretation of sensor data, in particular for the monitoring and control of production processes. This includes machine learning and artificial intelligence.

Presented Technologies

SENSING TECHNOLOGIES

- **Additive-free functional inks for large-scale and room-temperature printing of electronics**
  Sina Abdolhosseinzadeh (Empa)

- **Multi-analyte chemical sensing and meso-porous sensing layers for fast determination of traces compounds**
  Xavier Lefèvre (CSEM)

- **Trace gas sensing with nitride semiconductors**
  Ian Rousseau (Hexisense SA)

- **Fast toxic gas sensing with ultraclean carbon nanotubes**
  Seoho Jung (Chiral Nano AG)

- **Additive and digital manufacturing of smart objects: Towards customization and sustainability**
  Danick Briand (EPFL)

ANALYSIS OF SENSOR DATA

- **Unlocking the power of fleet operational experience of diverse assets for detecting and diagnosing complex systems' faults**
  Olga Fink (EPFL)

- **Artificial Intelligence in condition monitoring and predictive maintenance**
  Angela Meyer (BFH)

- **Artificial intelligence for quality monitoring and control in industrial applications**
  Sergey Shevchik (Empa)

- **Implementing feedback in laser processing**
  Yves Bellouard (EPFL)

- **Intelligent process parameter optimization for manufacturing**
  Alisa Rupenyan (ZHAW / inspire AG)

SFA-AM   Empa   EPFL   PAUL SCHERRER INSTITUT PSI   ETH zürich   ENRICH Sensor Group

Information and registration: **https://www.sfa-am.ch/sensors.html**