Details

IMSEAM Core Facility (ICF)

The IMSEAM Core Facility (ICF) at the Institute for Molecular Systems Engineering and Advanced Materials (IMSEAM) is used for the production and characterization of samples and components for materials science research. It provides a clean room with facilities for micro- and nanostructuring using electron beam lithography and photolithography as well as various analytical methods (including X-ray diffraction and various optical spectroscopy methods).

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69120 Heidelberg
Baden-Württemberg
Deutschland
To website

Host Institution

Universität Heidelberg
Grabengasse 1
69117 Heidelberg
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Deutschland
https://www.uni-heidelberg.de

Scientific Domain

Primary Subjects:
- Physics
- Materials Science and Engineering

Secondary Subjects:
- Biology
- Chemistry
- Computer Science, Electrical and System Engineering

Category

Micro- and Nanotechnology facilities

Scientific Services

The facilities of the ICF are available for use by members of the institute as well as external users of the university and other public institutions. One focus is on the production of samples and devices. Methods such as nanostructuring using electron beam lithography, microstructuring using optical lithography, production of devices for organic electronics using wet-chemical and vacuum-based processes in glove boxes as well as evaporators for metals and organic materials are available. A clean room (260m², ISO 4 to ISO 8) is available for these methods. Another focus is on analytical methods such as various optical spectroscopy methods (IR, UV-vis, fluorescence), X-ray diffractometry, layer thickness determination and optical microscopy. The various methods are offered partly in user mode and for selected devices also in service mode.

Scientific Equipment

- Cleanroom
- Electron beam lithography
- Mask aligner
- Various PVD systems
- X-ray diffractometer
- Optical spectroscopy
- AFM Jupiter (Oxford Systems Jupiter XR atomic force microscope)

Keywords

- Micros structuring (cleanroom)
- Device fabrication (cleanroom)
- X-ray diffraction
- Optical spectroscopy

Networks

Users per annum

Internal Users: ca. 110 (Trägereinrichtung Universität)
External Users in total: 1
External Users: 1
External Users in the EU: 0
External Users outside of EU: 0