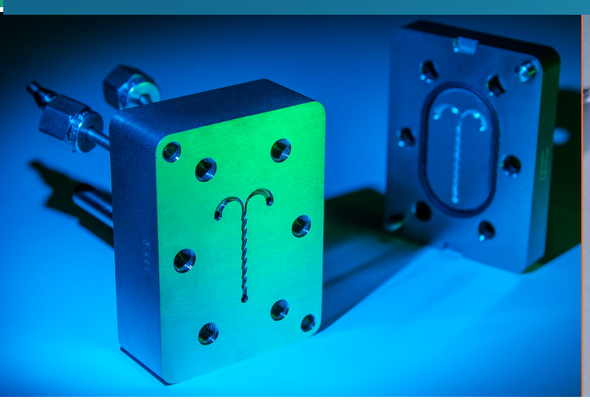
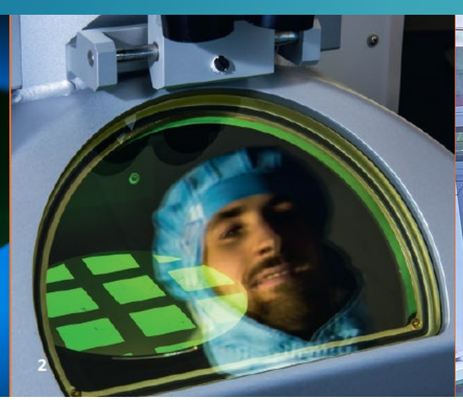
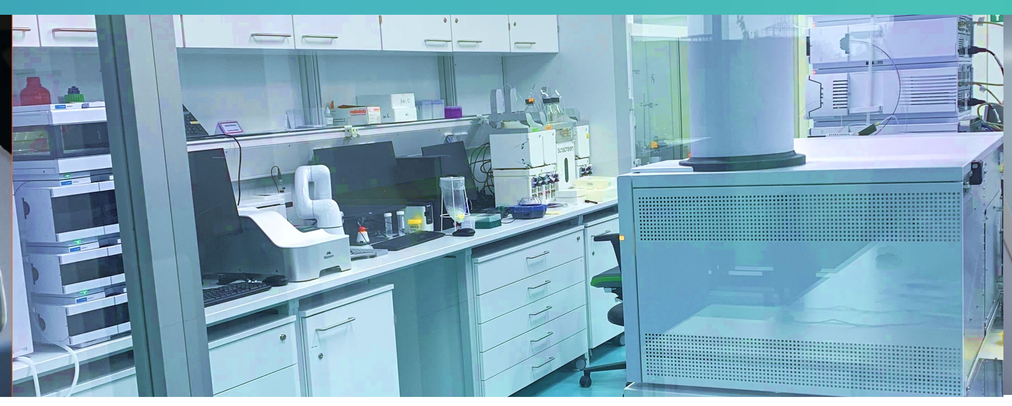
Fraunhofer IMM

Fraunhofer Institute for Microengineering and Microsystems IMM

Services for the development and characterization of nanoformulations


Characterization

- Optimization and implementation of (inline) nano- and bioanalytics
- Analytical Services
  - cryogenic Transmission Electron Microscopy for size and morphology studies
  - Dynamic Light Scattering, Zeta potential
  - Liquid Chromatography coupled Mass Spectrometry for encapsulation, lipid analytics and quality control
  - *In vitro* Toxicity in 2D and 3D cultures
  - *In vitro* Efficacy in 2D and 3D cultures
  - RNA analytic including integrity and encapsulation efficiency testing
- Protocol assistance
- Scientific advice

Industrial collaboration & partnering

- Design, construction and manufacturing of prototypes
- Customized building of formulation and analytic modules
- Technology transfer and licensing

Formulation

- Scalable formulation system for screening and process development
- Process development for continuous, micromixer assisted manufacturing of nanocarriers
- Versatile nanoparticle systems for therapeutic and diagnostic applications

Relevant publications

- TechnoPharm 13, Nr. 5, 248–253 (2023): https://www.ecv.de/aktuelle-ausgabe-tech4pharma?issue=05/2023
- Adv. Mater. 35, 2210704 (2023): https://doi.org/10.1002/adma.202210704
- Chem. Eng. Technol., 42: 2085-2094 (2019): https://doi.org/10.1002/ceat.201900115

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