

Abstract submission & Registration

Please register online until 20 May 2016 via

www.forschung-mie.de/170

Venue:

Karlsruhe Institute of Technology (KIT)
Campus North
Institute of Functional Interfaces
Building 330
Hermann-von-Helmholtz-Platz 1
76344 Eggenstein-Leopoldshafen
Germany



Organizers:

Prof. Matthias Franzreb
Prof. Jürgen Hubbuch

Contact:

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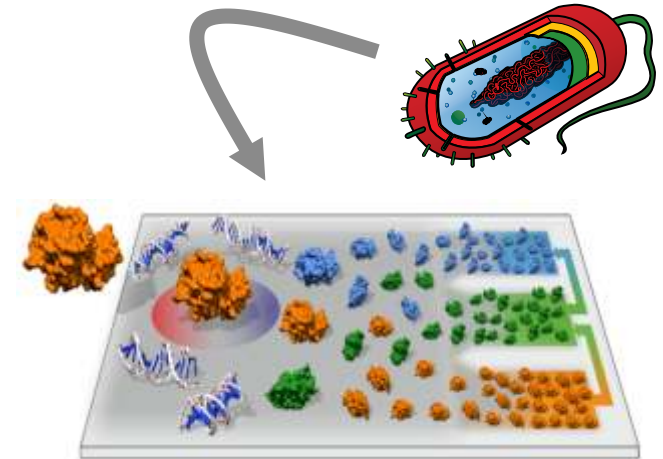
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Workshop Printable Biotechnology

13 -14 June 2016
KIT, Karlsruhe

www.forschung-mie.de/170



Printing in Biotechnology

‚Printable biotechnology‘ is a cutting edge technology that prepares the technical implementation of various achievements in biotechnology to broaden application via printing methods. By means of printing biotechnological processes, sensor systems, diagnostic kits, cell-free as well as cell-containing reaction systems onto and within various structures and surfaces, several novel products will be realised in small scale for bulk production.

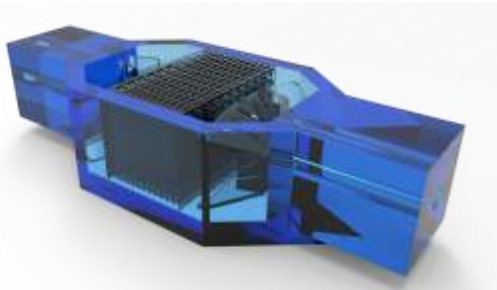


image: KIT

‚Printable Biotechnology‘ is not a single technology but a conglomerate of various approaches that comprise the integration of active biomolecules into diverse structures and materials.

The focus of this workshop lies on two aspects: First, we teach several techniques that can be used to modify surfaces and surface properties. Second, we will focus on the manufacturing of spatial constructs and spatially structured objects by three dimensional printing.



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pattern of ligands (biotin on glass)

images: KIT

The Workshop ‚Printable Biotechnology‘ is a two day event and comprises theoretical as well as practical courses.

Daily routine on both days

Morning:	Lectures
Afternoon:	Labtour / Hands-on

The lectures will be on Printing in Biotechnology in general (Hubbuch), 3-D Printing (Franzreb); Protein adsorption by photobleaching - PAP (Rapp); Dip Pen Nanolithography - DPN (Hirtz); Laser (Schepers); ThinFilm Coating (Schabel/Scharfer), Case studies (N.N.).

Guided lab-tours will demonstrate instruments and derived samples of lithography by PAP and DPN, laser patterning and coating by Thin Film Technology.

Hands-on courses will offer you the opportunity to construct your own CAD model which can then be printed on different 3-D Printers

Fees

The workshop is 400 € for both days and comprises the training materials. Lunch and light refreshments will be provided.

Instructors

Prof. Matthias Franzreb (KIT)

Dr. Michael Hirtz (KIT)

Prof. Jürgen Hubbuch (KIT)

Dipl.-Ing. Josefine Morgenstern (KIT)

Dipl.-Ing. Carsten Radtke (KIT)

Dr. Bastian Rapp (KIT)

Prof. Wilhelm Schabel (KIT)

Dr. Philip Scharfer (KIT)

Prof. Ute Schepers (KIT)

Dipl.-Ing.(FH) Jonas Wohlgemuth (KIT)