Chemie und Physik von Biotinten

SUMMER SCHOOL

TRR 225 Biofab

Mon

10:00am
Registeration and Get-together

11:15am
Opening Remarks:
Novel biomaterials to be used in bioinks
Thomas Scheibel

12:00pm
Lunch

13:30pm
Tools for the Entrepreneur: Patents and Intellectual Property
Elise DeSimone

14:15pm
A brief introduction to solid and fluid mechanics
Ben Fabry

15:00pm
Coffee break

15:30pm
A brief introduction to cell and tissue mechanics
Ben Fabry

16:15pm
4D biofabrication
Leonid Ionov

19:00pm
Blue Bowling

Tue

9:00am
Biomaterials: 'Fit for Function' design considerations
Veronica Glattauer

10:00am
Coffee break

10:30am
Introduction to Biofluid Simulations
Stephan Gekle

11:15am
Rheological Characterization of Bioinks
Tomasz Jüngst

12:00pm
Lunch

13:30pm
Simple Mathematics behind rheology or how to make models
Dirk W. Schubert

14:15pm
Carbohydrates and Bioinks
Jürgen Seibel

15:00pm
Coffee break

15:30pm
Lab Tour
Prof Gekle/Prof Lang
Prof. Scheibel
Prof Schmidt

17:00pm
Museum Tour
Markgräfliches Opernhaus

Wed

9:00am
Molecules to neo-tissue templates
Veronica Glattauer

10:00am
Coffee break

10:30am
Tissue biomechanics and relation to bioinks
Sahar Salehi

11:15am
Additive Manufacturing Techniques for Tissue Engineering
Gregor Lang

12:00pm
Lunch

13:30pm
Führung Fraunhofer

15:00pm
Coffee break

15:30pm
New methods of polymerizations
Greg Qiao

16:15pm
Applications of polymers in tissue engineering
Greg Qiao

Thur

9:00am
Biofabrication applications and future challenges
Veronica Glattauer

10:00am
Coffee break

10:30am
Nanotechnology at biomedicine -
Alessia Weiß

11:15am
Nanoengineering of polymeric particles
Alessia Weiß

12:00pm
Lunch

13:30pm
Biofabrication: Definition and Techniques
Jürgen Groll

14:15pm
Polymeric drugs
Greg Qiao

15:00pm
Coffee break

15:30pm
Nanotechnology at biomedicine - Biomedical applications for particulate systems
Alessia Weiß

16:15pm
Physics of hydrogels
Ben Fabry

19:00pm
Dinner & Party at "Sudpfanne"

Fri

9:00am
AFM for measuring Mechanics and Interactions
Andreas Fery

10:00am
Coffee break

10:30am
Polymer gradient materials
Hans-Werner Schmidt

11:15am
Closing Remarks
Prof. Thomas Scheibel

12:00pm
Lunch

13:30pm
Workshop Rheobase practical course