

GENERAL INFORMATION

VENUE

Wissenschaftszentrum Straubing
Schulgasse 16
94315 Straubing, Germany

SCHEDULE

Start: Monday, 11 September 2017, 1 pm

End: Friday, 15 September 2017, 3 pm

LANGUAGE

The course will be held in English.

REGISTRATION

Please complete and return the enclosed form or contact:

DECHEMA-Forschungsinstitut
Training department
P.O. Box 17 03 52
D-60077 Frankfurt am Main

Phone: +49 69 7564 253
Fax: +49 69 7564 414
Internet: <http://dechema-dfi.de/en/kurse.html>
E-mail: gruss@dechema.de

REGISTRATION FEE

incl. course materials, certificate of attendance, lunch, snacks and coffee breaks

PhD and other students: € 580.-

University: € 680.-

Industry: € 860.-

DEADLINE

10 August 2017

ACCOMMODATION

Stadthotel Wenisch
Innere Passauer Str. 59
94315 Straubing, Germany
Phone: +49 9421 9931-0
E-mail: hotel@wenisch-straubing.de
Single room: € 94.05 per night (including breakfast)

Please contact the hotel directly to book a room by 14 July 2017 mentioning the code "SYNBIO".



SUMMER SCHOOL

11 - 15 September 2017
Straubing / Germany

Synthetic Biology: Current concepts and tools for strain development

<http://dechema-dfi.de/en/SynBio.html>



LECTURERS

SYNTHETIC BIOLOGY: CURRENT CONCEPTS AND TOOLS FOR STRAIN DEVELOPMENT

Synthetic biology and systems biology follow the chemical, physical and engineering sciences by using quantitative mathematical models for the description of complex cellular behaviors. Concepts from molecular and systems biology, synthetic biology, process engineering, and economy will have to be combined for the development of efficient biotechnological processes. To enable (molecular)biologists, biotechnologists, and biochemical engineers to pursue this interdisciplinary challenge, it is mandatory to strengthen both the mathematical skills of biologists and the engineers' knowledge of basic biological concepts and molecular techniques as well as designing novel synthetic pathways.

Thus, the Society for Chemical Engineering and Biotechnology DECHEMA (Frankfurt) and the Straubing Center of Science with the Technical University of Munich (TUM) devised a summer school schedule that would allow participants to familiarize themselves with relevant (molecular)biological concepts from synthetic and systems biology, with mathematical modeling strategies and appropriate technologies and software tools. The summer school addresses both biologists and engineers: Biologists will learn how engineering approaches can help them in planning, performing and evaluating experiments, whereas engineers get insight into state-of-the-art molecular and measurement techniques that help to feed their biological models.

The course consists of formal lectures, workshops and tutorials for hands-on experience with state-of-the-art tools. The participants are encouraged to bring their laptop computers. They will be informed on the system requirements and provided with respective software to be installed on the laptop PC.

Dr. Selin Kara	TU Hamburg-Harburg
Prof. Dr. Andreas Kremling	TU München
Dr. Florian Centler	UFZ Leipzig
Dr. Frank Hollmann	TU Delft
Dr. Hannes Link	MPI Marburg
Dr. Jan Marienhagen	FZ Jülich
Dr.-Ing. Stephan Noack	FZ Jülich
Dr.-Ing Jochen Schmid	TU München
Dr. Nick Wierckx	RWTH Aachen

(subject to modifications)



PROGRAMME

MONDAY, 11 SEPTEMBER

- » Basic and Novel Cloning and Genetic Engineering Techniques (Golden Gate, Aqua Cloning, CRISPR/Cas9)

TUESDAY, 12 SEPTEMBER

- » Tools for Synthetic Biology (Next Generation Sequencing, Minimal Cells, Chassis Organisms, High Throughput Screening and Automatization)

WEDNESDAY, 13 SEPTEMBER

- » Metabolic Engineering and Industrial Bioprocesses in the Age of Synthetic Biology (Synthetic Circuits, Omics Technologies)
- » Visit of Geneart Company in Regensburg

THURSDAY, 14 SEPTEMBER

- » Systems Biology for Strain Optimization and Characterization (Modelling and Statistics)

FRIDAY, 15 SEPTEMBER

- » Synthetic Enzymatic Cascades and Pathway Design (*in-vitro* Reaction Cascades)

SOCIAL PROGRAMME / EVENINGS

Monday night, a get-together event is planned to facilitate the networking of the participants. There will be ample opportunity to familiarize oneself with the software of interest in the evenings. Wednesday afternoon we will visit the gene synthesis company Thermo Fisher Scientific/Geneart GmbH in Regensburg.

(subject to modifications)

Reply form

(Fax-No.: +49 69 7564-414)

DECHEMA-Forschungsinstitut
 Training department
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Registration to the DECHEMA summer school 7158
"Synthetic Biology", Straubing, 11 - 15 September 2017

SynBio

Deadline for registration: 10 August 2017

Participant

Ms Mr Title _____

Name _____ Surname _____

Company _____

Department _____

Street/POB _____

Code/Place _____

Phone/Fax _____ E-mail _____

Industry University PhD Student *

* Please attach proof.

Invoice address

Company _____

Department _____

Street/POB _____

Code/Place _____

The course fee amounts to € 860.- (industry), € 680.- (university), € 580.- (PhD students). If we receive a notice of withdrawal at least two weeks prior to the beginning of the course, the participation fee less 10% for administration expenses will be reimbursed. Thereafter, a reimbursement will not be possible.

 Place, date

 signature + company stamp