

2nd BioProScale Symposium

Inhomogeneities in large-scale bioprocesses

System biology and process dynamics

14 to 16 March 2012
Berlin – Germany

Three-day symposium about development and application of bioprocesses in industrial scale

■ Focus: Biosystems

Cellular stress responses

Metabolic adaptation

Population dynamics

Analytical tools and modelling

■ Focus: Bioreactor environment

Large-scale bioprocess characterisation

Bioprocess scale down: Systems, sensors,
industrial relevance

Scale up: Consistent bioprocess development
considering large-scale reality in industrial
systems

Language: English



Department for
Bioprocess Engineering

IfGB



Institute
for Biotechnology and
Fermentation in Berlin

Early booking discount
until 31st January

In
cooperation
with



Inhomogeneities in large-scale bioreactors

System biology and process dynamics

■ Organisers

Technische Universität Berlin –
Department of Bioprocess Engineering &
Institute for Biotechnology and Fermentation in Berlin
(IfGB)

■ Conference days

14 to 16 March 2012 (Wed - Fri)

■ Location

TU Berlin, Institute for Chemistry, Lecture hall C130
Strasse des 17. Juni 115, D-10623 Berlin (Charlotten-
burg), Germany

■ Language

Congress language is English. No translation will be
provided.

■ Target groups

Producers of biogas and enzymes, antibiotic produc-
tion, bioprocess development, pharmaceutical bioproc-
esses, brewery processes – experts from research &
development and industrial practice

■ Aim

Consistent bioprocess development needs to be
performed at the perspective of the final process scale.
As a result a better understanding of the final industrial
scale is an important issue, which includes technical
challenges (sensors, modelling tools) and the cellular
dynamic regulatory networks and population dynamics.

The 2nd BioProScale Symposium aims to discuss
progresses and challenges in the different scientific
disciplines. It summarises the current state of knowl-
edge in relation to our understanding of processes in
large scale bioreactors for different bio products. The
symposium covers related applications starting from
food production, white biotechnology and bio based
energy/biorefinery processes up to the field of biophar-
maceutical production.

■ Confirmed presentations

Prof. Matthias Reuss (Univ. Stuttgart):
Lifelines of single cells and populations in large scale
bioreactors – Complex dynamic interplay between
extracellular environment and cell machinery

Prof. Christopher J. Hewitt (Biological Engineering,
Loughborough University):
Physiological heterogeneity and population dynamics
in microbial cultures

Prof. Octavio T. Ramirez (Instituto de Biotechnology,
UNAM, Mexico):
Consistent bioprocess development and scaling

Dr. Joachim Venus (ATB Potsdam, Germany):
Scale up of Lactic acid production

Thomas Schweder (Ernst-Moritz-Arndt-Universität
Greifswald, Germany):
Bioprocess monitoring by marker gene analysis

Michael Klocke (Leibniz-Institut für Agrartechnik
Potsdam-Bornim e.V. (ATB), Potsdam, Germany):
Population composition and dynamics in biogas reac-
tors

■ Poster session

The symposium will be accompanied by a poster
session. Please submit your abstract online at
www.ifgb.de/bioproscale

The Call for Papers / Posters is still open!

■ Scientific Advisory Board

Dr. Henk Noorman (DSM)
Prof. Octavio T. Ramirez
(Instituto de Biotechnology, UNAM, Mexico)
Prof. Matthias Reuss (Universität Stuttgart)
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Dr. Marco Jenzsch
(Roche Diagnostics, Penzberg, Germany)
Dr. Guido Seidel (Wacker Biotech, Jena, Germany)
Dr. Claus Lattemann (Sanofi, Frankfurt, Germany)

■ Exhibition

The symposium will be accompanied by an exhibition.
More information on www.ifgb.de/bioproscale

■ Contact

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Information & registration
www.ifgb.de/bioproscale