

4th Summer School

of the International Max Planck Research School (IMPRS) Magdeburg
for Advanced Methods in Process and Systems Engineering (ProEng)
on

Process Systems Engineering

August 31 - September 4, 2015



Control and Optimization of Batch Processes

Dominique Bonvin – Swiss Federal Institute of Technology Lausanne, CH

Advances in Deterministic Global Optimization:

From Theory to Algorithmic Methods to Computations Tools to Applications

Christodoulos A. Floudas – Texas A&M University, USA

Boundary Heat and Mass Transfer: Analytical and Numerical Approaches

Jürgen Fuhrmann – Weierstraß Institut Berlin, Germany



Complex Systems Modeling

Kathrin Hatz – Bayer Technology Services, Germany

Dynamic Optimization of Chemical Processes

Yoshiaki Kawajiri – Georgia Institute of Technology, USA

Estimation, Modeling and Control of Crystallization Processes

Zoltan K. Nagy – Purdue University, USA

Model-based Engineering of Complex Process Systems

Constantinos C. Pantelides – Imperial College London, UK



Sampling-based Approaches for Uncertainty Tracking for Intracellular Processes

Nicole Radde – University of Stuttgart, Germany

Scientific Computing in the Chemical Industry

Anna Schreieck – BASF, Germany

A Systems & Control Perspective on Process Systems Engineering

George Stephanopoulos – Massachusetts Institute of Technology, USA

Process Systems Engineering studies the steady state and dynamic behavior of complex systems as a whole and regarding their individual parts. Advanced mathematical and experimental techniques are applied to formulate and exploit suitable models. The models are used to evaluate different design options and to optimize and control the systems in order to reach specific goals.

Leading experts from academia and industry will introduce and demonstrate different established and currently developed approaches considering various domains of application.

We invite interested PhD students and advanced master students to join our 2015 IMPRS Summer School. An accompanying social program will offer additional chances for communication.

Please find the program and further information under:

<http://www.mpi-magdeburg.mpg.de/summerschool2015>

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