d|b|t|a
Fachgebiet
Dynamik und Betrieb technischer Anlagen

Spring School 2015

3. 3. - 6. 3. 2015

Process Simulation and Optimization of Chemical Plants

Prof. Dr.-Ing. habil. Prof. h.c. Dr. h.c. G. Wozny
Dipl.-Ing. S. Fillinger, Dipl.-Ing. V.A. Merchan , M.Sc. G. Tolksdorf

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Spring School 2015 PK Krakau
Time schedule

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Day/Time	Tuesday 03.03.2015	Wednesday 04.03.
8:15- 9:30	Opening, Introduction Prof. Wozny	Column Modeling – Basics Prof. Wozny
9:30- 9:45	*Break*	*Break*
9:45-11:00	Modeling approaches, Fundamentals Prof. Wozny	Exercises Column Modeling in MOSAIC
11:00 – 11:15	*Break*	*Break*
11:15-12:30	Modeling approaches, Fundamentals Prof. Wozny	Exercises Column simulation with MOSAIC
12:30-13:30	*Lunch Break*	*Lunch Break*
13:30-14:45	Introduction in MOSAIC Prof. Wozny Concept, Usability aspects	Reactor Modeling – Basics Prof. Wozny
14:45-15:00	*Break*	*Break*
15:00-15.45	Evaporator Modeling – Basics In MOSAIC - Prof. Wozny	Exercises Reactor Modeling in MOSAIC
15:45-15:00	*Break*	*Break*
15:00-15:45	Exercises Evaporator Modeling – In MOSAIC -	Exercises Reactor Simulation with MOSAIC
15:45-16:00	*Discussions*	*Discussions*

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Day/Time	Thursday 05.03.2015	Friday 06.03.2015
8:15- 9:30	Discussion- Resume Modeling and Simulation	Exercises Optimization using MOSAIC
9:30- 9:45	*Break*	*Break*
9:45-11:00	Fundamentals of Optimization Prof. Wozny	Flowsheeting – Basics Prof. Wozny
11:00 – 11:15	*Break*	*Break*
11:15-12:30	Fundamentals of Optimization Prof. Wozny	Flowsheeting in MOSAIC M.Sc. Tolksdorf
12:30-13:30	*Lunch Break*	*Lunch Break*
13:30-14:45	Usability MOSAIC for Optimization Problem definition	Exercises Flowsheeting in MOSAIC
14:45-15:00	*Break*	*Break*
15:00-15.45	Exercises Optimization using MOSAIC	Special features in MOSAIC
15:45-15:00	*Break*	*Break*
15:00-15:45	Exercises Optimization using MOSAIC	Final discussions / Conclusions
15:45-16:00	*Discussions*	

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Mosaic

Literature see:

www.mosaic-modeling.de

Examples:

MOSAIC: An Online Modeling Platform Supporting Automatic Discretization of Partial Differential Equation Systems, PSE Juli 2014, Cle Elum USA
E. Esche , D. Müller , G. Tolksdorf , R. Kraus , G. Wozny

Prozesssimulation und automatisierte 3D-Visualisierung in der Modellierungsumgebung MOSAIC
Lecture PAAT, 2015 Lüneburg, Germany
Sandra Fillinger, Günter Wozny, Technische Universität Berlin

MOSAIC a web based modeling Environment for code generation, S. *Kuntsche, R. Kraus, T. Barz, H. Arellano-Garcia, G. Wozny, : Computers &Chemical Engineering 2011*

A Posteriori Integration of University CAPE Software Developments
Lecture IChEAP Milano Italy 2015
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