

With guest speakers from Alfa Laval and Novozymes.

Building on the successful first Research Seminar in October 2016, we are organizing the second one in autumn 2017. With the seminar, we aim to provide an informal networking platform and share with you the latest developments and highlights from our research activities, which include resource recovery, biocatalysis, modelling and computational fluid dynamics (CFD), and Process Systems Engineering (PSE) for process synthesis, design, operation, control and optimization.

The Research Seminar will give an opportunity to learn about the ongoing projects within the center, and also to meet and discuss in an informal way with the PhD students, postdocs, senior researchers and faculty members of the center during the poster sessions. Furthermore, we hope to provide our industrial stakeholders with the opportunity to connect with colleagues across different industries.

Participation in this event is free, but registration to the event is mandatory in view of logistical arrangements.

For registration, please contact Mrs Gitte Læssøe: gnie@kt.dtu.dk
Registration deadline is September 22, 2017.

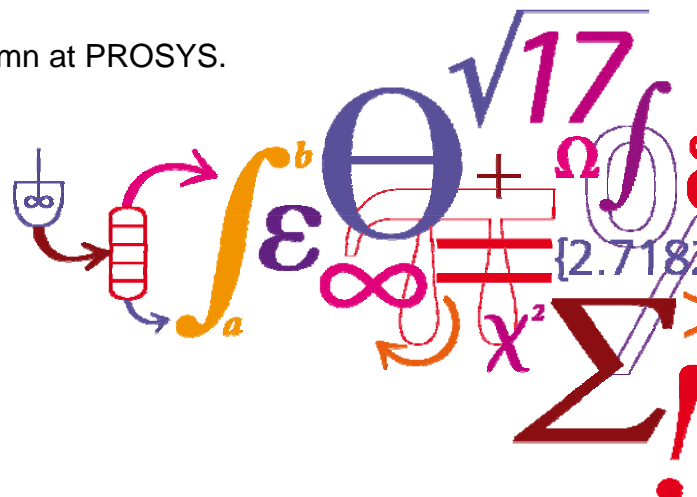
New for this year's research program, is that we also organize a **workshop** on Monte Carlo Applications for Process Design and Simulation, which will take place on **Thursday 12 October**. Details about the workshop **content and registration details** are provided on a separate page.

We look forward to meeting you in DTU this autumn at PROSYS.

Kind regards

Kernan

Prof. Krist V. Gernaey



Process and Systems Engineering Center (PROSYS)

Research Seminar, October 13, 2017

Anker Engелunds Vej 1, Building 101A – 1st Floor, Meeting room 1, Kgs. Lyngby, Denmark

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| 8:30 – 9:00 | Registration and Breakfast |
| 9:00 – 9:20 | Welcome by Krist Gernaey. Overview about the Process and Systems Engineering Center (PROSYS) |
| 9:20 – 9:40 | Bent Sarup, Alfa Laval: Innovation and Development at Alfa Laval Edible Oil Technology |
| | Process synthesis, design and operation |
| 9:40 – 9:50 | <i>Multi-scale and multi-purpose modelling for in silico design and optimization of a pharmaceutical crystallization process</i> – Getachew S. Molla |
| 9:50 – 10:00 | <i>The power of Monte-Carlo simulations in process models</i> – Jerome Frutiger |
| | Resource recovery from bio-based processes |
| 10:00 – 10:10 | <i>Resource recovery from bio-based processes</i> – Seyed Soheil Mansouri |
| 10:10 – 10:20 | <i>Chromatographic separations</i> – Kristian Meyer |
| 10:20 – 10:30 | <i>Optimization of energy recovery in the Novozymes wastewater treatment plant</i> – Hannah Feldman / Pedram Ramin |
| 10:30 – 10:40 | Introduction to Posters |
| 10:40 – 11:30 | Poster session + Coffee |
| 11:30 – 11:50 | Karin Nikolajsen, Novozymes: The secret of great collaborations between university and industry |
| | Biocatalysis |
| 11:50 – 12:00 | <i>Development of ADH/NOX systems</i> – Mafalda Dias Gomes |
| 12:00 – 12:10 | <i>Development of ER/GDH/FDH systems</i> – Rowan Lindeque |
| 12:10 – 13:00 | Lunch |
| | Computational methods in Bio-based processes |
| 13:00 – 13:10 | <i>Cleaning in Place</i> – Jifeng Yang |
| 13:10 – 13:20 | <i>CFD applied to miniaturized bioreactors</i> – Tannaz Tajsoliman |
| 13:20 – 13:30 | <i>CFD applied to pilot- and full-scale fermentation processes</i> – Christian Bach |
| 13:30 – 14:30 | Poster session + Coffee |
| 14:30 – 15:00 | Final remarks |