

KT Consortium Meeting 2017

6-8 June 2017

Beach Hotel Marienlyst, Elsinore, Denmark

Ndr. Strandvej 2
DK-3000 Elsinore
Tel.: +45 4521 4000
Mail: hotel@marienlyst.dk
<http://www.marienlyst.dk/>

Preliminary Technical Program

Tuesday 6 June 2017	
DTU Kemiteknik (KT) / DTU Chemical and Biochemical Engineering, Lyngby	
Morning	Visit the Department of Chemical and Biochemical Engineering (KT), DTU, in Lyngby (for those arriving early)
11:00-14:00	ICAS Workshop, Professor Rafiqul Gani and Post Doc Alay Aray (including lunch) in room 003, bld. 229
12:00-13:00	Lunch for all AM17 participants
13:00-14:00	PILOT PLANT tour, bld. 228, by Lars Kjørboe, Head of PILOT PLANT, and Associate Professor Ioannis V. Skiadas
14:00	Departure by bus from bld. 229 to Marienlyst
14:30	Arrival at Marienlyst and check-in to rooms
15:30	Walk (10-15 min.) from Marienlyst to Kronborg
16:00-17:00	Sightseeing at Kronborg: "In Hamlet's Footsteps"
18:30-22:00	Get-together-reception at Marienlyst – "Salon 1"
20:30-21:30	Advisory Board Meeting, Marienlyst – "Kronborg 11"

Wednesday 7 June 2017 (Technical Program 8:30-16:30)	
Beach Hotel Marienlyst, Elsinore – “Kronborg Salen”	
08:30	Welcome & Introduction - <i>Professor Kim Dam-Johansen, Head of Chemical and Biochemical Engineering (KT), DTU</i>
08:50	KT Consortium - Current Status - <i>Professor Rafiqul Gani</i>
	Presentation of main research areas by selected PhD students
09:15	<i>(PhD 1) Olivia Perederic</i> - Thermodynamic property modelling for Lipids Based Process and Product Design
09:35	<i>(PhD 2) Daniela Damaceno</i> – Improvement of predictive tools of vapor-liquid equilibrium based on group contribution methods applied to lipid technology
09:55	<i>(PhD 3) Andre Vinhal</i> - Simultaneous representation of critical point and phase equilibria with advanced thermodynamic models
10:15	<i>Break</i> - coffee station outside the meeting room
10:45	<i>(PhD 4) Spardha V. Jhamb</i> – Property model based chemical substitution & formulation design
11:05	<i>(PhD 5) Xinyan Liu</i> – Energy efficient hybrid gas separation with ionic liquid
11:25	<i>(PhD 6) Rebecca Frauzem</i> – Sustainable CO ₂ capture & conversion technologies
12:00	<i>Lunch</i> – “Salon 1”
13:00	Poster Session & Meet the Faculty <i>Projects on property prediction; hybrid separation; superstructure based optimization; process intensification, ionic liquids for CO₂ capture, electrolytes, asphaltenes and other complex mixtures with CPA and interfacial properties (PhD; MSc; and visiting students)</i>
15:00	<i>(PhD 7) Maria-Ona Bertran</i> – Modelling, Synthesis and Analysis of Biorefinery Networks
15.20	<i>(PhD 8) Alessandro Rosengart</i> – Strategy for adipic acid production
15:40	<i>(PhD 9) Mauro Torli</i> - Thermodynamics, Design, Simulation and Benchmarking of Biofuel Processes
16:00	<i>(PhD 10) Nipun Garg</i> – Systematic Chemical and Sustainable Process Synthesis, Design and Intensification
18:30	<i>Annual Meeting Dinner</i> – “Sea Point” <i>Oral and Poster Awards</i>

Thursday 8 June 2017 (Technical Program 8:30-14:30)	
Beach Hotel Marienlyst, Elsinore – “Kronborg Salen”	
08:30	Invited lecture 1 - <i>Dr. Maxime Durot, TOTAL MS, France</i> – New approaches for bio-based product design at TOTAL
09:00	Invited lecture 2 – <i>Mr. P. Crafts, Genesis Oil and Gas Consultants, Aberdeen, UK</i> – Mercury in oil and gas processing
09:30	Invited lecture 3 - <i>Dr. Eirini Sioukrou, Dept. Chemical Engineering, National Technical University of Athens, Greece</i> - Systematic methods for solvent design; Towards better reactive processes
10:00	<i>Break</i> - coffee station outside the meeting room
	Presentation of main research areas by KT Consortium Faculty Members & Post Docs
10:30	<i>(1) Post Doc Alay Arya</i> – Software News & Status
11:00	<i>(2) Assistant Professor Xiaodong Liang</i> - Fluid phase equilibria and interfacial tension from advanced equations of state
11:30	<i>(3) Post Doc Teng Zhou</i> – Systematic methods for reaction solvent design
12:00	<i>Lunch</i> – “Brasserie”
13:00	<i>(4) Professor John M. Woodley</i> - Development of industrial bioprocesses
13:30	<i>(5) Professor Georgios Kontogeorgis</i> - Thermodynamic models for process and product design. Status and Future trends
14:00	Open discussion with member companies (Professors Rafiqul Gani, Georgios Kontogeorgis, John M. Woodley and Assistant Professor Xiaodong Liang)
14:30	<i>End of meeting</i> – bus transportation to DTU, bld. 229
15:00	<i>Arrival at DTU, bld. 229</i>
15:45-16:45	PILOT PLANT tour, bld. 228, by Lars Kjørboe, Head of PILOT PLANT, and Associate Professor Ioannis V. Skiadas

KT Consortium - Poster Presentations 2017 – “Kronborg Salen”

No.	Personnel	Poster Title
	MSc Students:	
P1	Anders Jaksland	Development of novel processing networks for biorefineries
P2	Evangelia Koumaditi	Intensified reaction-separation schemes
P3	Jacob Møller Jensen	Design of a CO ₂ Utilizing and neutral process
P4	Maria do Carmo	Food waste upgrading by an integrated biorefinery process
P5	Tereza Kolaiti	Process design and analysis for the synthesis of glycerol to 3-hydroxypropionic acid and 1,3-propanediol
	PhD Students:	
P6	Edgar Vergara	Inhomogeneous fluid behavior: density function theory approaches
P7	Li Sun	Modeling CO ₂ semi-clathrate hydrate related systems: literature review and database
P8	Anders Schlaikjer	Development of CPA for electrolyte mixtures
P9	Mauro Torli	The SYNFERON project
P10	Arne B. Gladis	Upscaling of enzyme-enhanced carbon capture process
P11	Susana Almeida	Predictive modeling of gas diffusion and solubility in polymers for offshore application
	Researchers:	
P12	Alay Arya	Recent application of CPA for flow assurance (asphaltenes)