

NORDIC FLAME DAYS 2019, DAY 1 28.8 2019

8.20	Registration			
9.20	Conference opening			
9.30	Negative CO ₂ Emissions in the Nordic Countries, A. Lyngfelt, Chalmers			
10.15	Estimating profitability of biomass plants in the future district heating grids, T. Lindroos, VTT			
11.00	1A Modelling I		1B Biomass and sustainability	
	Zhang, NTNU	A two-grid formulation for simulation of fixed-bed biomass combustion	Pikkarainen, VTT	Negative CO ₂ emissions by chemical combustion of biomass: pilot scale results and status of technology demonstrations
	Lundberg, USN	Performance of a novel diesel atomization nozzle	Hildor, Chalmers	Char conversion with LD slag as an oxygen carrier
	Kahila, Aalto University	Modern methods to achieve fast chemistry solution in practical CFD problems	Davidsson, RISE	Foundry slag as bed material in fluidised-bed combustion of waste
	Papafilippou, Luleå Tekniska Universitet	Simulation of premixed syngas combustion in gas turbines	Konttinen, Tampere University	The Sustainability of Bioenergy in Finland and Globally - Fact Check
12.15	Lunch			
13.15	2A Modelling II		2B Modelling III	
	Karlström, Åbo Akademi	Influence of fuel moisture content on NO _x emissions in a biomass fired industrial bubbling fluidized bed boiler	Hiidenkari, Fortum	Dynamic Core-Annulus Model for Circulating Fluidized Bed Boilers
	Guo, NTNU	Jet-like force due to rapid moisture and volatile release during thermochemical conversion of biomass	Hujanen, Sumitomo SHI FW Energia OY	Machine Learning Methods for Early Process Deviation Detection in Circulating Fluidized Bed Boilers
	Luo, DTU	Experimental and modelling study on char combustion and gasification at high temperatures in a single particle combustor	Tekgül, Aalto University	A numerical study on the combustion characteristics of diesel sprays under RCCI engine conditions
	Mousavi, Lund University	CFD simulation of secondary gas phase reactions above a burning biomass pellet	Gunnarsson, Chalmers	Modelling of The Heat Transfer in Industrial Rotary Kilns
	Jensen, DTU	Review on the influence of biomass properties on suspension boiler wood particle combustion - What can be learned from laboratory and modeling studies	Penttilä, VTT	Modelling of non-process elements in a lime kiln burning renewable product gas

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14.45	Coffee
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15.10	3A SNCI	3B Emissions
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Lubrano Lavadera, Lund University	Laminar burning velocities of ethylene/air flames at standard conditions	Ahmad, Aalto University	Impact of Ethane Addition in Diesel/Methane Dual Fuel Combustion
Bertsch, Lund University	Numeric investigation of the flame stability for lean premixed combustion of hydrogen-enriched methane and syngas in a lab-scale atmospheric swirl burner	Brilhac, University of Haute Alsace - LGRE	Particle matter and gaseous emissions from Russian biomass oxidation in a drop tube furnace
Moser, Laboratoire Gestion des Risques et Environnement	Slow combustion of Mg particles in a fixed bed reactor	Edland, Chalmers	Evaluation of NO _x -reduction measures in iron ore rotary kilns
Nyári, Aalto University	Techno-economic feasibility study of a methanol plant using CO ₂ and H ₂	SP da Silva, Åbo Akademi	Laboratory studies and detailed kinetic modeling of volatile nitrogen flame chemistry
Ahmed, NTNU	Combustion Chemistry of n-Propylcyclohexane	Svith, DTU	Experiments and modeling of SNCR process in a cyclone reactor

16.40	Break
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16.50	SNCI general assembly
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18.30	Conference dinner, Hus Lindman
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9.00	Optimizing Waste incineration – A Challenge in Many Respects, F. Winter, TU Wien			
9.30	4A Ash I		4B Fuel and co-combustion I	
	Balint, Åbo Akademi	Laboratory investigation of deposit aging of K-Na-Cl-SO ₄ salt mixtures exposed to a temperature gradient	Magdeldin, Aalto	Process design and techno-economic assessment of black liquor gasification via supercritical water
	Holmgren, Umeå Universitet	Entrained flow biomass gasification: Liquid carbonate formation via alkali additives	Bhatnagar, Tampere University	Staged Thermal Treatment of Agro-Residue and Separation of Liquid Products
	Schmid, Åbo Akademi	Influence of additives on fly ash properties in BFB combustion of biomass: leaching behavior of major and trace elements	Niska, SWERIM AB	Hydrogen as a Fuel in Steel Reheating Furnaces
	Strandberg, Umeå Universitet	Characterization of porosity and microstructure of phosphorus-rich ash particles with X-ray micro-tomography	Kumar, Andritz	An integrated study of flue gas flow and superheating process in recovery boiler using computational fluid dynamics and 1D-process modeling
11.00	Break			
11.15	5A Ash II		5B Fuel and co-combustion I	
	Cañete Vela, Chalmers	Ash-rich fuel gasification in fluidized bed, enhancing gas conversion by partial bed material recirculation	Tschamber, Laboratoire Gestion des Risques et Environnement	Lab-scale gasification of mechanically dried wood chips: parametric study using the Taguchi methods
	Jokiniemi, University of Eastern Finland	Composition and formation of ashes in fluidized bed and grate combustion of waste and material recovery	Chishty, Luleå Tekniska Universitet	Modelling of Cyclone Gasifier Using Eddy Breakup Approach
	Staničić, Chalmers	Fate of lead, copper, zinc and phosphorous in dual fluidized bed gasification of automobile shredder residue	Brackmann, Lund University	Characterization of biomass pyrolysis and gasification using Raman Spectroscopy
	Sandström, Umeå Universitet	Estimating ash properties for new fuels in calcination kilns	Nikku, LUT	Characterization of fuel reactivity in a isothermal laboratory scale reactor and TGA

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12.30	Lunch			
13.30	6A Corrosion		6B Diagnostics I	
	Fantozzi, Valmet	Field test exposure of protective coatings in a eucalyptus bark fired BFB boiler	Gall, Chalmers	Experimental investigation on thermal treatment of scrubber liquid effluents using online alkali measurement technique
	Forstén, Valmet	Deposit chemistry in fluidized bed combustion of high-calcium fuels	Leffler, Chalmers	Multisensor System to Predict Bed Agglomeration During Fluidized Bed Combustion
	Hagman, Perstorp AB/Umeå Universitet	Long term alloy degradation and alkali chloride interaction in a CFB vortex finder application at 880 °C	Thorin, Umeå Universitet	Photofragmentation spectroscopy combined with TDLAS for KOH detection in fuel-rich flames
	Duplain, Brais, Malouin and associates (BMA)	Using Numerical Simulation to Diagnose Boiler Tube Failures	Viljanen, Tampere Univeristy	Online Monitoring of Gas Phase K-Cl-S Chemistry in a Pilot Scale Combustion Unit
14.45	Coffee			
15.10	7A Ash III		7B Diagnostics II	
	Pettersson, University of Borås	Phosphorous rich bottom ash with low cadmium content by ash design by means of co-combustion of municipal sewage sludge in a 27 MW _{th} grate fired boiler	Cafaggi, DTU	Experimental Measurement Campaign of an Auxiliary Marine Boiler: HFO and Diesel operation
	Vainio, Åbo Akademi	Recovery of valuable elements from waste incineration ashes	Kim, Lund University	Investigation of hydrogen enriched natural gas flames in full-scale burners with high-speed OH PLIF and chemiluminescence imaging techniques
			Cheng, Aalto University	Dual Fuel Combustion in an Optically Accessible Engine
16.10	Closing session			