		Day 1 , August 13
08.30-12.15		Introduction and Key note speeches at ACC
		Jointly with ICAE
		Day 1, August 13, afternoon at Malardalen University
13.30-14.30		SIMS Introduction - history and future (Esko Juuso and Erik Dahlquist)
		Session Control (Chair Bernt Lie)
14.30-14.50	22	Bernt Lie. Surrogate and Hybrid Models for Control
14.50-15.10	5	Itsaso Menchacatorre, Roshan Sharma, Beathe Furenes and Bernt Lie. Flood Management of Lake Toke: MPC Operation under Uncertainty
15.10-15.30	3	Liubomyr Vytvytskyi and Bernt Lie. Structural analysis in Julia for dynamic systems in OpenModelica
15.30-15.50	9	Maths Halstensen, Joachim Lundberg, Per Ivan Januschas and Hans-Petter Halvorsen. On-line Monitoring of Viscous Properties of Anti-icing Fluid Based on Multivariate Regression Modeling
15.50-16.10		Break
		Session Buildings (Chair Bernt Lie)
16.10-16.30	19	Marius Salen and Dietmar Winkler. Impact of distributed power generation at the customer
16.30-16.50	21	Nils-Olav Skeie and Jørund Martinsen. Building occupation modelling using motion sensor data
16.50-17.10	1	Ole Magnus Brastein, Roshan Sharma and Nils-Olav Skeie. Sensor placement and parameter identifiability in grey-box models of building thermal behaviour
17.10-17.30	4	Casper Amandus Johansen, Bernt Lie and Nils-Olav Skeie. Models for control of thermal energy in buildings
17.30-18.00		Panel Discussion - Strengths of SIMS: where are we? Why 60 years?
		Day 2, August 14, Malardalen University
		Session Measurement and properties (Chair Lars Öi)
08.30-08.50	12	Sumudu Karunarathne and Lars Øi. Density and Viscosity Correlations for Aqueous 3-Amino-1-propanol and Monoethanol Amine Mixtures
08.50-09.10	13	Sumudu Karunarathne, Dag Eimer and Lars Øi. Uncertainty Comparison of Viscosity Measurements of CO2 Loaded MEA and Water Mixtures in a Coaxial Rheometer Using Monte Carlo Simulation and GUM Method
09.10-09.30	14	Sumudu Karunarathne and Lars Øi. Applicability of NRTL Model for Prediction of the Viscosity of MEA + H2O and AMP + MEA + H2O Mixtures
09.30-09.50	31	Ingrid Bokn Haugland, Jana Chladek and Maths Halstensen. Monitoring of Erosion in a Pneumatic Conveying System by Non-intrusive Acoustic Sensors – A Feasibility Study
09.50-10.10		Break
10.10-10.30	28	Madeleine Martinsen, Erik Dahlquist, Anders Lönnermark and Örjan Säker. GAS SENSORS FOR EARLY DETECTION OF FIRE HAZARDS CAUSED BY VEHICLES IN UNDERGROUND MINES

		Session oil production (Chair Lars Öi)
10.30-10.50	2	Christian Berg, Jon Åge Stakvik, Bernt Lie, Knut Vaagsaether and Glenn-Ole Kaasa. Pressure wave propagation in Managed Pressure Drilling- model comparison with real life data
10.50-11.10	26	Simon Salvesen Holte, Jan Vidar E. Knutsen, Roy Sømme Ommedal and Britt Margrethe Emilie Moldestad. Simulation of enhanced oil recovery with CO2 injection
11.10-12.00		Panel discussion - application areas
12-13.30		Lunch and board meeting for SIMS board
		Session Bio-processes (Chair Esko Juuso)
13.30-13.50	30	Erik Dahlquist, Christian Wallin, Eva Nordlander, Anders Avelin and Eva Thorin. Control of waste water treatment combined with irrigation
13.50-14.10	10	Terje Bråthen, Lars Erik Øi and Jon Hovland. Simulation of Dew Points in Raw Biogas Using PR and SRK Equations of State
14.10-14.30	23	Evgheni Ermolaev, Erik Dahlquist, Cecilia Lalander, Björn Vinnerås and Eva Thorin. Model selection for waste conversion efficiency and energy demands in a pilot for large-scale larvae treatment
14.30-14.50	27	Zahra Nikbakhtkenarsari, Nirmal Ghimire, Rune Bakke and Wenche Hennie Bergland. Thermophilic Anaerobic Digestion Modeling of Lignocellulosic Hot Water Extract using ADM1
14.50-15.10	32	Esko Juuso. Intelligent dynamic simulation of fed-batch fermentation processes
15.10-15.30		Break
15.30-15.50	8	Eshetu Janka, Rune Bakke, Carlos Dinamarca, Vasan Sivalingam, Osama Ibrahim, Sergey Kukankov, Babafemi Omodara, Hildegunn Haugen and Shuai Wang. Chemical equilibrium model to investigate scaling in moving bed biofilm reactors (MBBR)
15.50-16.10	15	Ramesh Timsina, Britt Moldestad, Marianne Sørflaten Eikeland and Rajan K Thapa. Simulation of air-biomass gasification in a bubbling fluidized bed using CPFD model
16.10-16.30	7	Ramesh Timsina, Rajan K Thapa and Marianne Sørflaten Eikeland. Aspen Plus simulation of biomass gasification for different types of biomass
16.30-17.00		Discussion about bio-processes
17.00-18.00		Annual SIMS meeting
19.00		Conference dinner
		Day 3, August 15, Malardalen University
		Session Fluid beds (Chair Britt Moldestad)
08.30-08.50	11	Cornelius Agu and Britt Margrethe Emilie Moldestad. Effect of Superficial Gas Velocity on Bubbling Fluidized Bed Behaviour in a Biomass Gasifier
08.50-09.10	17	Rajan Jaiswal, Nora C.I. S. Furuvik, Rajan K. Thapa and Britt M.E. Moldestad. Investigation of the segregation and mixing behavior of biomass in a bubbling fluidized bed reactor using a CPFD model
09.10-09.30	18	Rajan K. Thapa, Saroj Thapa, Rajan Jaiswal, Nora C.I.S. Furuvik and Britt M.E. Moldestad. Experimental and computational study on effect of ash deposition on fluid dynamic behavior in a bubbling fluidized bed gasifier

09.30-09.50	24	Nora Cecilie Ivarsdatter Furuvik, Rajan Jaiswal, Rajan Thapa and Britt Margrethe Emilie Moldestad. Study of agglomeration in fluidized bed gasification of biomass using CPFD simulations
09.50-10.10		Break
10.10-10.30	25	Janitha Bandara, Britt Moldestad and Marianne Eikeland. Analyzing the Effects of Geometrical and Particle Size Uncertainty in Circulating Fluidized Beds using CPFD Simulation
		Session Electrical applications (Chair Erik Dahlquist)
10.30-10.50	6	Madhusudhan Pandey, Thomas Øyvang and Bernt Lie. State Estimation of a Thermal Model of Air-cooled Synchronous Generator
10.50-11.10	20	Prabesh Khakda, Dietmar Winkler and Thomas Øyvang. Online Monitoring of a Synchronous Generator's Capability with MATLAB
11.10-11.30	29	Anahita Davoodi, Peter Johansson, Myriam Aries and Thorbjörn Laike. Current use of lighting simulation tools in Sweden
11.30-11.50	16	Helge Nordal and Idriss El-Thalji. Operations Dynamics of Gas Centrifugal Compressor: Process, Health and Performance Indicators
11.50-12.10	33	S. Firouzifar, E.Dahlquist: ELECTRICAL CHARACTERISTIC OF NEW CALCULATION IN sub-TRANSMISSION LINE with simulation
12.10-13.10		Lunch
13.10-13.30	34	S. Firouzifar, E.Dahlquist : The optimization of a distribution and over distribution lines structure
13.30-14.30		Panel discussion - Future directions of SIMS (changes, conferences, publications, industry,..)