

**Licentiate examinations at the Subject of Energy Engineering, Luleå University of Technology**

1. 1989 Dahl, J. Short term water heat storage: experimental study of temperatures and velocities
2. 1989 Hermansson, R. Short term water heat storage: an experimental investigation of thermal stratification
3. 1991 Westerlund, L. The open absorption system: experimental study of the system and different absorbers
4. 1996 Fredriksson, C. Cyclone gasification of wood powder
5. 1996 Veber, P. Studies of the flow pattern in short term hot water storages
6. 1998 Gabra, M. Bagasse gasification in a cyclone gasifier
7. 1999 Sundqvist, T. *Title?*
8. 1999 Hökfors, C. Application of multivariate methods for emission minimization and process optimization in industrial boilers
9. 1999 Salman, H. Biomass feeding system for a cyclone gasifier
10. 2001 Johansson, L. The open absorption system: energy savings in different applications
11. 2002 Lundgren, J. Performance of a new wood-chips fired boiler for small district heating systems
12. 2003 Larsson, M. Analysis and optimisation of energy and environmental performance of an integrated steel plant by process integration
13. 2003 Wiinikka, H. Particle emissions from wood pellet combustion
14. 2004 Leduc, S. Study of the reduction of particle emissions and borate black liquor gasification in bioenergy systems
15. 2004 Lindberg, J., Experiments and simulations of lean methane combustion
16. 2005 Eriksson, G. Combustion of solid waste from wood-based ethanol production
17. 2005 Ilskog, E. And then they lived sustainably ever after?: Part I, experiences from rural electrification in Tanzania, Zambia and Kenya
18. 2005 Wang, C. Climate change mitigation through CDM: bioenergy technology and energy efficiency in the steel industry

19. 2006 Larsson, A. High frequency distortion in power grids due to electronic equipment
20. 2006 Lundmark, M., High-frequency noise in power grids, neutral and protective earth
21. 2007 Ryman, C. On the use of process integration methods: evaluation of energy and CO<sub>2</sub> emission strategies in blast furnace ironmaking and oxygen steelmaking
22. 2009 Carlsson, P. Entrained flow black liquor gasification: detailed experiments and mathematical modelling
23. 2010 Nordgren, S. Energy analysis of pelletising in a straight grate induration furnace
24. 2011 Rönnerberg, S. Power line communication and customer equipment
25. 2011 Risberg, M. Black liquor gasification: burner characteristics and syngas cooling
26. 2011 Göktepe, B. Interaction of sound waves with a swirl stabilized wood powder flame and their effects on flame characteristics
27. 2011 Nordgren, D. Experimental studies of pulverised biomass combustion: Impacts on ash transformations and process temperature
28. 2011 Sandberg, J. Process integration as a tool for energy systems analysis: application to LKAB in Kiruna
29. 2012 Yang, K. Wind-turbine harmonic emissions and propagation through a wind farm
30. 2012 Etherden, N. Increasing the hosting capacity of distributed energy resources using storage and communication 2012 Licentiatavhandling, sammanläggning (Övrigt vetenskapligt)
31. 2012 Näzelius, I.-L. Influence of peat addition to biomass pellets on combustion characteristics in residential
32. 2012 Andersson, J.-O. Improving energy use in sawmills: from drying kilns to national impact
33. 2013 Andersson, J. Techno-economic analysis of integrated biomass gasification for green chemical production
34. 2013 Jonsson, C. Deposit formation in the grate-kiln process
35. 2014 Ma, C. Slag Formation During Pilot-Scale Pressurised Entrained-Flow Gasification of Woody Biomass
36. 2014 Xie, Y. CO<sub>2</sub> Separation with Ionic Liquids -Property, Gas solubility and Energy consumption
37. 2014 Mesfun, S. Design of integrated industrial sites based on Kraft pulp and paper mills
38. 2014 Vesterlund, M. District heating system analysis within the urban transformation of Kiruna

39. 2014 Lingebrant, P. Application of Process Integration for Electric Arc Steelmaking
40. 2015 Risberg, D. CFD simulation of indoor climate in low energy buildings
41. 2015 He, H. Layer formation on quartz particles during fluidized bed combustion/gasification of woody biomass
42. 2016 Bach Oller, A. Co-gasification of black liquor and pyrolysis oil: Fuel conversion and activity of alkali
43. 2016 Jafri, Y. Entrained-Flow Gasification of Black Liquor and Pyrolysis Oil: Experimental and Equilibrium Modelling Studies of Catalytic Co-gasification
44. 2018 Sefidari, H. Mechanisms of Deposit Formation in the Grate-kiln Process
45. 2018 Zetterholm, J. Forest Based Biorefinery Supply Chains – Identification and Evaluation of Economic, CO<sub>2</sub> and Resource Efficiency
46. 2018 Jafari, P. H. Numerical Modeling of Cyclone Gasification
47. 2018 Phounglamcheik, A. Biocarbon for fossil coal replacement
48. 2018 Falk, J. Effect of fuel composition and combustion conditions on phosphorus behavior during combustion of biomass
49. 2019 Ma, C. Development of low-cost ionic liquids based technology for CO<sub>2</sub> separation
50. 2019 Llamas, A, D. G. Fast devolatilization of biomass: An experimental study using high-speed imaging, relevant for suspension firing technologies
51. 2020 Sandberg, E. Capturing Swedish industry transition towards carbon neutrality in a national energy system model
52. 2020 Jayawickrama, T., R. Particle-fluid interactions under heterogeneous reactions
53. 2020 Fischer, R. Investigation into sustainable energy systems in Nordic municipalities
54. 2020 Sun, Y. Modeling ionic liquids with ePC-SAFT – properties and gas solubilities
55. 2020 Hedayati, A. Ash transformation in single-pellet combustion and gasification of biomass with special focus on phosphorus
56. 2020 Häggström, G. Experimental studies of ash transformation processes in thermochemical conversion of P-rich biomass and sludge
57. 2020 Lundqvist, P. The indoor thermal climate in residential buildings after energy efficiency measures in a subarctic climate
58. 2020 Hannl, T. K. Phosphorus recovery from sewage sludge fluidized bed gasification processes