

Curriculum Vitae

Mika Järvinen, 28.5.2021.

1. Full name

Surname, given names: Järvinen, Mika, Petteri
Gender: male

2. Date and place of birth, nationality, current residence

Date and Place of Birth: 24th July 1972, Lahti, Finland
Nationality: Finnish
Current residence: Takkavitsankuja 1A2, 02760 Espoo

3. Education and degrees awarded

D. Sc. (Tech.) 13.12.2002, Aalto University, former Helsinki University of Technology, Department of Energy technology, supervisors Esa Vakkilainen and Ron Zevenhoven, major Energy engineering and environmental protection, "Numerical Modeling of the Drying, Devolatilization and Char Conversion Processes of Black Liquor Droplets", ***Passed with Distinction***

M. Sc. (Tech.) 15.6.1997, Lappeenranta University of Technology, Department of Energy Technology, Combustion Engineering, Master's Thesis: "Modeling of black liquor combustion of recovery boiler furnaces".

Pedagogical studies, 28 cr.

Aalto Future Research Leader Program 2013-2014.

4. Linguistic skills

Mother tongue: Finnish
Other languages: English (fluent), Swedish (good)

5. Current position

1st December 2018... **Associate Professor**, Tenured, Department of Mechanical Engineering, Energy conversion research group.

6. Previous work experience

1.12.2013-31.11.2018 **Associate Professor**, fixed term, Department of Mechanical Engineering, Thermodynamics and Combustion research group.

1.9.2012-30.8.2017 **Academy Research Fellow**, Project "Environmental Protection by Crushing Numbers - Towards the Next Generation Process Simulators for Energy, Materials and Economy Efficient Processes".

1.5.2012-31.12.2013	Professor (fixed term), Aalto University, Department of Energy Technology, Energy Engineering and Environmental Protection.
2003-2012	Post-doctoral researchers, former Helsinki University of Technology.
1998-2003	Researcher, Post-graduate student, former Helsinki University of Technology.
1996-1997	Research Engineer, Ahlstrom Machinery Corporation, Helsinki/Varkaus Finland.

Extended research visits

KTH Royal Institute of Technology, Sweden. 1st March – 31st September 2019. Visiting Heat and Power Group led by Prof. Andrew Martin.

Åbo Akademi University, Turku, Finland. Continuous visit of 5 months from 1.2-30.6, 2016.

University of Oulu, Finland. Numerous extended research visits during 2012-2017 accumulating up to 5 months.

7. Research funding as well as leadership and supervision

Overall amount of external research funding achieved during 2012-2021 is ~3.5 M€. Most of these and earlier projects are listed below.

- Nordic council of Ministers, Development of the Nordic5Tech, Innovative Sustainable Energy Engineering Master's Program, 200 000 €, 2021-2024. PI.
- Renlund Foundation, Towards CO₂ neutral iron and steelmaking - Potential of Ca looping CO₂ capture technology with CaO sorbent made from iron and steelmaking slags, 30 000 € + (30 000 € for 2022). PI
- School of Engineering, Aalto University, Thermal Plastic recycling, 2020-2023, 120 000 €. PI.
- Renlund Foundation, Combined grinding and Ca extraction from steel slag, 2018-20, 20 000 € + 30000€+30000 €. PI.
- Wärtsilä, Dynamic simulation for the engine fuel system, 2019-21, 106 600 €, PI.
- International Paper (USA), Spray experiments in USA Prattville Recovery boiler, 2019-20, 105 000 €, PI.
- EIT Raw Materials, X2PCC project, KAVA6, fast track project, 2019, 50 000 €, PI.
- Andritz, Implementation of single droplet combustion model in CFD, 2019-21, 25 000 €, PI.
- Aalto Center for Entrepreneurship, Proof of concept project, 2018, 40 000 €. PI.
- Aalto Seed Funding, SCI-BIO Project: Sub/super critical water industrial applications for future lignocellulose bio-refineries, 2018, 30 000 €. PI.
- Vantaan Energia, Combustion of wood mixtures, 2018, 23 000 €. PI.
- Aalto Center for Entrepreneurship, Proof of concept project, 2018, 25 000 €. PI.
- Caligo Industries, CFB Wet wood combustion experiments, 2018, 8000 €. PI.
- Andritz Experimental Nozzle study A, 2018, 15 000 €. PI.
- Renlund Foundation, Combined grinding and Ca extraction from steel slag, 2018, 20 000 €. PI.
- Aalto Seed Funding, SCI-BIO Project: Sub/super critical water industrial applications for future lignocellulose bio-refineries, 2018, 30 000 €. PI.

- Andritz Experimental Nozzle study B, 2017-2018, 78 000 €. PI.
- TEKES FlexMetProd, 2017-2018, 50 000 €. PI.
- TOR Biogas, John Nurminen Foundation, 2017, 10 800 €. PI.
- TEKES TUTL Project, X2PCC, 2016-2017, 457 000 €. PI.
- Fimecc SHOK, SIMP, Showcases 2.1 and 4, TEKES, 2014-2017, 265 362 €. PI.
- Academy of Finland, New Energy, Defend project, 2015-2018, 347 065 €. PI.
- **Academy Research Fellow** (2012-2017) with the topic “Environmental Protection by Crushing Numbers - Towards the Next Generation Process Simulators for Energy, Materials and Economy Efficient Processes”, 907 000 €. PI.
- BioSCWG - Biomass Supercritical Water Gasification Integration with CHP units -Definition of novel social and political constraints for enlarged multi-objective optimisation, Academy of Finland, AKA-CNPq, 2013-2015, 465 000 €. PI.
- TEKES-CLEEN-Carbon Capture and Storage, Slag2PCC, 2011-2016, 500 415 €. PI.
- TEKES-CLIFF, Black liquor sprays, 2014-2017, 260 993 €. PI.
- Renlund Foundation, Extraction of minerals from industrial waste materials, 2015-2017, 80 000 €. PI.
- TEKES-CLEEN-EFEU, Energy Efficiency, 2011-2015, 178 790 €. PI.
- TEKES-BEST, Bioenergy, 2013-2016, 58 090 €. PI.
- Innovative Green Suspension Technology/Innovis, TEKES/Andritz/Metso, 2010-2012, 205 000 €. PI.
- Advanced Melt Metallurgy/AMMe, Fimecc-SHOK, TEKES, 2009-2013, 280 000 €. PI.
- Modelling interfacial partitioning in multi-phase systems/INTER, TEKES/Andritz/Metso, 2008-2009, 91 000 €. PI.
- Multiphase Chemistry in Process simulations/VISTA, TEKES, Andritz, Fortum Nuclear Services, Luvata, Outotec, Outokumpu Stainless, Ovako Bar, Rautaruukki, UPM, 2005-2007, 80 000 €. PI.
- Effective and cost-efficiency for production of ferritic stainless steels/FEMA, TEKES, Outokumpu Stainless Oyj, 2007-2009, 105 000 €. PI.
- Validation and Implementation of Initial Data for Furnace Modelling, Akademy of Finland, 2003-2004, 120 000 €. PI.
- Modelling of belt sintering process, Outotec/TEKES, 2003-2005, 84 000 €. PI.

Supervision of Master's Theses

1. A study and modeling of thermal reactions of tall oil, Henna Korjonen, 2021.
2. Modelling of a lime kiln using renewable fuels and study of oxyfuel combustion, Olli Vainikainen, 2021.
3. Complex Modeling and Analysis of the Energy System of Afghanistan, Sabrina Sabella, 2021.
4. Improving a high-pressure steam network in a chemical industry company, Risto Sonni, 2021.
5. Refrigeration system of ice rinks using CO₂ as the refrigerant, Atte Harrikari, 2021.
6. Automation of precipitation step in a Slag2PCC mineral carbonation process, Miikka Martikainen, 2020.
7. Comparison between safety classification and risk importance measures of nuclear power plant systems and components, Timo Virtanen, 2020.
8. Production of synthetic natural gas from different biomass. Alekski Pirvola, 2020.
9. Process analysis of chemical looping gasification (CLG) of biomass for liquid fuel production with net-negative CO₂ emissions, Tharun Roshan Kumar, 2019.

10. Optimization of Crude Tall Oil Evaporation, Nina Halme, 2019.
11. Magnetic slippery surfaces as effective anti-icing coatings on supercooling heat exchangers, Aleksii Barsk, 2019.
12. PET recycling via gasification - Influence of operating conditions on product distribution, Shouzhuang Li, 2019.
13. Carbon dioxide emissions modelling in a power system model: A case study of Germany and Poland, Marcelina Choli, 2019.
14. Kierrätyspuun polttoparametrien vaikutus kattilatuhkien, hyötykäyttömahdollisuuksiin, Tommi Sahlberg, 2019.
15. Pyörresuuttimen suihkun ominaisuudet korkean viskositeetin nesteellä, Santeri Koivisto, 2019.
16. The Electricity Model for China – Insights and Implications of Energy Policies, Oluwatofunmi Caulcrick, 2019.
17. Towards Flexible Cogeneration - Techno-economic Optimization of Advanced Combined Cycle Combined Heat and Power Plants Integrated with Heat Pumps and Thermal Energy Storage, Giovanni Graziano, 2018.
18. Towards Flexible Cogeneration - Techno-economic Optimization of Advanced Combined Cycle Combined Heat and Power Plants Integrated with Heat Pumps and Thermal Energy Storage, Antti Nuutinen, 2018.
19. Techno-economic evaluation of heat-driven cooling solutions for utilization of district heat in Aalesund, Norway, Bjørnar Vattøy, 2018.
20. Techno-economic feasibility study of a methanol plant using carbon dioxide and hydrogen. Judit Nyári, 2018.
21. Polton ja höyrynkäytön optimointi teollisuusvoimalaitoksella, Arto Latvala, 2018.
22. Modelling of the chemical recovery cycle of black liquor in a pulp mill using Aspen Plus, Victor Bravo Munos, 2018.
23. Process modeling of a thermal utilization method for sewage sludge, Tony Meski, 2018.
24. Puun palamisolosuhteiden vaikutus hiukkaspäästöjen määrään ja kokojakaumaan, Arttu Aalto, 2018.
25. Modelling of Biomass Pyrolysis with Ex-situ Catalytic Upgrading for Bio-crude Production, Febryana Nugrahany, 2018.
26. Sähkön kysyntäjousto Porvoon jalostamolla, Antti Niemelä, 2018.
27. Testing and developing optimization tools for nuclear power plant simulation. Atte Kattainen, 2018.
28. Opportunities for small scale anaerobic digesters for hotels and restaurants in Kathmandu, Nepal, Dhital, Avinash, 2018.
29. Liikenteen biopolttoainelvelvoitemallien vertailu ja niiden ohjausvaikutukset eri markkinatilanteissa, Hanhinen, Heini, 2018.
30. Online regime switching vector auto-regression incorporating spatio-temporal aspects for short term wind power forecasting, Gilleran, Sean, 2018.
31. Measuring fuel particle velocities in a pilot-scale circulating fluidized bed riser, Wikholm, Felix, 2017.
32. Hydrothermal treatment of vinasse, Costa, Maria, 2017.
33. Integration of existing energy production-related and circular economy services, Hietaranta, Aku, 2017.
34. Kostean puuhakkeen käytön vaikutukset CHP-laitoksen toimintaan ja energiatehokkuuteen, Hassi, Toivo, 2017.
35. Puupelletin optimaalinen osuus Salmisaaren B-voimalaitoksen seospoltossa, Kallio, Antti, 2017.

36. Projektien ja niihin liittyvän päätöksenteon ohjaus edistymäraportoinnin kautta – case ydinvoimalaitoksen automaatiuusintaprojekti, Rätty, Sanna 2017.
37. A feasibility study of running a small-scale water purification unit with base station waste heat, Ekqvist, Caroline Elisabeth, 2017.
38. Trans-boundary flow of solid biomass waste streams in Europe and its effect on the country's energy system, Dadhich, Pranav, 2017.
39. Energianhallintajärjestelmien vertailu ja käyttöönotto, Kaukonen, Hanna, 2017.
40. Comparison of partial power and full power wind turbine converters' effect on levelized cost of electricity, Eriksson, Anna, 2017.
41. Life cycle assessment of torrefied biomass intended for co-firing in an existing coal-fired power plant, Grundström, Joachim, 2017.
42. Comparison of partial power and full power wind turbine converters' effect on levelized cost of electricity, Eriksson, Anna, 2017.
43. The open source energy model base for the European Union (OSEMBE), Henke, Hauke, 2017.
44. Assessment of small-scale waste to energy solutions for bubbling fluidized bed boilers, Itävuori, Timo, 2017.
45. Laboratory Scale Experiments on the Production of Precipitated Calcium Carbonate from Steelmaking Slag via Spray Carbonation, Bartel, Angela, 2017.
46. Feasibility of Fabric Filters in Reducing Dust Emissions from Kraft Recovery Boilers, Sjögård, Pauliina, 2017.
47. Techno-economic study on biomass-based small-scale combined heat and power production by gasification, Seppä, Elina, 2017.
48. Experimental work for enhanced Ca-extraction efficiency from steel converter slag with ammonium chloride for production of PCC, Owais, Muhammad, 2017.
49. Production of Calcium Carbonate from Steelmaking Slag and Captured CO₂- Optimisation of the Carbonation Process and Product Quality, Sundermann, Carla Maria, 2016.
50. Technical and economic study on mercury emission control technologies for combustion power plants, Kalita, Saurav, 2016.
51. Technical and economic study on mercury emission control technologies for combustion power plants, Laurén, Ville, 2016.
52. Kvalitetssäkring av mätningar i ång-kondensatsystem, Jägerskiöld, Kid, 2016.
53. Pilot-scale experimental work on sustainable process method of production of precipitated calcium carbonate from steel slag and carbon dioxide, Martínez Miras, Obdulia Natalia, 2016
54. Optimization of a small-scale poly-generation system for a household in Turkey, Sizmaz, Sezgi, 2016.
55. The potential of nudging and gamification for reducing energy demand in the residential sector, Kaczmarek, Haiko, 2016.
56. Kiinteän kierrätyspolttoaineen ja kierrätyspuumurskeen teknis-taloudellinen soveltuvuus lämpökeskuksen polttoaineeksi, Kiuru, Heidi, 2016.
57. Measurement and optimization of insulation materials for spherical LNG fuel tank, Nybo, Rasmus, 2016.
58. Multilevel sampling system for gas analyser in circulating fluidized bed gasification, García Hernández, Raúl, 2016.
59. Investigation of small scale power generation and briquette production from biomass, involving cases from Bolivia, Kalita, Saurav, 2016.

60. Development of an optimized conceptual plant design for supercritical water gasification of biomass, Mohamed Magdeldin Abdelwahed, Mohamed, 2015.
61. Overall process analysis for on-farm production of bioethanol and protein from leguminous crops, Sola Saura, Alaia, 2015.
62. Process modelling of supercritical water gasification equipment based on pure water for design of continuous feeding system, Saqlain, Muhammad, 2015.
63. Analysis of Solar Thermal Markets in Finland, Mårtenson, Fabian, 2014.
64. Energy efficiency and Greenhouse Gas Emissions in Digestate Utilization, Haverinen, Aleksi, 2014.
65. Combustion chamber heat rejection modelling, Kartavtseva, Anastasia, 2014.
66. Identifying opportunities, challenges and methodologies to introduce energy conservation measures in existing buildings, Sudorgina, Margarita, 2014.
67. Analysis of necessary subsidy levels for renewable energy projects in the Baltic countries, Kosk, Kristel, 2014.
68. Pilot-scale Experimental Work on the Production of Precipitated Calcium Carbonate (PCC) from Steel Slag for CO₂ Fixation, Zappa, William, 2014.
69. Black liquor spray model validation with particle image velocimetry measurements, Virtanen, Roy, 2014.
70. Multi-objective optimization of hybrid photovoltaic-thermal systems using evolutionary algorithms, Tamayo Vera, Simon Jose, 2014.
71. Simulation and analysis of a combined cycle gas turbine heat and power plant process, Pal, Sudip Kumar, 2014.
72. Estimation and modelling of black liquor heat content, Jafri, Yawer, 2014.
73. Simulation and analysis of an integrated steam pyrolysis system, Ji, Xiaoyun, 2013
74. System analysis of biogas fuelled solid oxide fuel cell, Tjaden, Bernhard, 2013.
75. Pressure drop characteristics of a splash plate nozzle, Vadivelu, Nandakumar, 2013.
76. Biomass based oxy-fuel combustion in CHP power plant with opportunity of oxygen storage system for carbon capture and storage, Hasan, Mohammad Mahmudul, 2012.

Instructor for Master's theses before becoming a professor

1. Aki Kärnä, Drying of Chromite Pellets, "Pro-Gradu" –work, University of Oulu, 2004.
2. Oskar Karlström, Determining fuel specific parameters for modeling of biomass particle combustion, Master's thesis, Åbo Akademi University, 2007.
3. Ville-Valtteri Visuri, Thermodynamics of slag formation in an AOD process model, Master's thesis, University of Oulu, 2011.
4. Kaisu Malinen, Controlled combustion of poor quality gas mixtures, Master's thesis, Aalto University, 2006.

Supervision, co-supervision and instruction of doctoral theses

1. Laura Kainiemi, Finland in energy transition - The interplay between actors and institutions and the application of climate abatement technologies (12/2020). Supervisor from the start.
2. Mohamed Magdeldin, Hydrogen carriers from Industrial Biomass via Sub/supercritical water (9/2020). Supervisor from the start.
3. Mikko Savolahti, Climate and Health Impacts of Residential Wood Combustion in Finland (2/2020). Supervisor for the summary part.

4. Viljami Maakala, Computational Fluid Dynamics Modeling and Mathematical Optimization of Recovery Boilers (3/2019). Supervisor from the start.
5. Ari Kankkunen, The Effect of Flashing and Spraying Conditions on Black Liquor Droplet Formation (6/2018). Colleague, co-worker from the start and supervisor of the dissertation.
6. Salla Puupponen, Novel phase change material compositions for heat transfer and storage applications, May 2018. Supervisor for the summary part.
7. Arshe Said, CO₂ sequestration by steelmaking slags for the production of precipitated calcium carbonate - From laboratory to demonstration stage, 12 May, 2017. Instructor and supervisor from the start.
8. Thomas Kohl, Improving Municipal CHP Production Efficiency by Integrating Biomass Upgrading, 25 November, 2016. Instructor and supervisor from the start.
9. Antti Arasto, Techno-economic Evaluation of Significant CO₂ Emission Reductions in the Iron and Steel Industry with CCS, 27 November, 2015. Supervisor for summary part and completion.
10. Aki Kärnä, Modelling of Super-sonic lance and the heat-up stage of the CAS-OB process, University of Oulu, 2018. Co-supervisor and instructor from the start.
11. Ville-Valtteri Visuri, Mathematical modelling of rate phenomena in production of iron, steel and ferroalloys, University of Oulu, 2017. Co-supervisor and instructor from the start.
12. Petri Sulasalmi, Modelling of Slag Emulsification and Slag Reduction in CAS-OB Process, University of Oulu 2016. Co-supervisor and instructor from the start.
13. Pasi Miikkulainen, Spray Formation of High Dry Solids Black Liquor in Recovery Boiler Furnaces, Helsinki University of Technology, passed with distinction, Instructor, 2006.
14. Jaakko Savolahti, Behavior of mercury from coal, bio-fuels and wastes during pyrolysis and combustion, Licentiate thesis, Instructor, 2007.
15. Jose Tamayo, The economical feasibility of different applications of solar energy, Licentiate Thesis, Aalto University, Supervisor, 2012.

Acting as an examiner and an opponent in Doctoral thesis

1. **Opponent**, Alekski Mankonen, Fluidized bed combustion and humidified gas turbines as thermal energy conversion processes of the future, Lappeenranta University of technology, 12/2021.
2. **Opponent**, Chaudhary Awais Salman, Waste-integrated biorefineries, Mälardalen University Doctoral Dissertation 322 (10/2020).
3. **Pre-examiner**, Julija Grigonyté-Lopez Rodriquez a entitled "Reduction of fine particle emissions from small-scale wood combustion using a novel heat exchanger system", University of Eastern Finland, 8/2020.
4. **Pre-examiner**, Meheretu Jaleta Dirbeba, "Thermochemical conversion characteristics of vinasse", Åbo Akademi University, 3/2020.
5. **Opponent**, Hakan Berber, "Accelerated carbonation treatment of industrial wastes: Physicochemical, environmental and economic aspects", Tallin University of Techniology, 3/2020.
6. **Opponent**, Ilkka Pöllänen, The efficiency and damage control of a recovery boiler, Lappeenranta University of technology, 12/2019.

7. **Pre-examiner**, Tiina Keipi, Technology development and techno-economic analysis of hydrogen production by thermal decomposition of methane, Tampere University of Technology, 28 October, 2017.
8. **Pre-examiner**, Chengcong Chen, "Combustion Behavior of Black Liquors—Novel Mechanism for Swelling and Influence of Liquor Composition", University of Jyväskylä, 5 October, 2017
9. **Pre-examiner and opponent** to Ekaterina Sermyagina's Doctoral dissertation "Modelling of torrefaction and hydrothermal carbonization and heat integration of torrefaction and a CHP plant", Lappeenranta University of Technology, defended on 9 December 2016.
10. **Pre-examiner and opponent** to Kadriann Tamm's Doctoral dissertation "Leaching of the Water-Soluble Calcium Components of Oil Shale Waste Ash", Tallinn University of Technology, defended on 24 May 2016
11. **Pre-examiner and opponent** to Martin Fält's Doctoral dissertation "The utilization of participating gases and longwave thermal radiation in a passive cooling skylight", Åbo Akademi University, defended on 11 November 2016
12. **Pre-examination** of the Doctoral Thesis of Claudio Carletti "New Aspects in Limestone Dissolution for Wet Flue Gas Desulphurization, Åbo Akademi University, 27 October 2014.

8. Awards, prizes and honours

Caltech's RESONATE AWARD 2015. Resonate Award recipient for pioneering a CO₂ sequestration process that converts a low-value steel-manufacturing by-product into a valuable resource for industry, <http://resnick.caltech.edu/awards-winners2015.php>

Best Dissertation of the Department of Machine Technology, 2002, former Helsinki University of Technology, "Järvinen, M., P., Numerical Modeling of the Drying, Devolatilization and Char Conversion Processes of Black Liquor Droplets, Acta Polytechnica Scandinavica, Mechanical Engineering Series No. 163, Espoo 2002, 77 p."

9. Recent example publications

Please see the separate list of publications. H-Index: 15, number of publications 83, citations 819, co-authors 85 (Scopus).

10. Other academic merits

Reviewer in following journals: Journal of Ocean Engineering and Marine Energy (2), Waste management (2), FUEL (12), Applied pyrolysis (2), Biomass and Bioenergy (9), Energy and Fuels (9), Energy (5), Nordic Pulp and Paper Research Journal (4), Journal of CO₂ utilization (2), Chemical engineering research and design (2).

Assessments for academic posts

- Academy of Finland young doctor, 2003-2005

- Academy of Finland Research fellow, 2012-2017

Member of the Scientific Committees for Conferences

- Finnish-Swedish Flame Days 2002 Conference, Committee Secretary
- Finnish-Swedish Flame Days 2008 Conference, Committee member
- Swedish-Finnish Flame Days 2011 Conference, Committee member
- Finnish-Swedish Flame Days 2013 Conference, Committee member
- Tekniikan päivät 2010 - TULI. (Technology Days 2010 – FIRE), Energy sector organizer.
- INFUB 2014 Conference, scientific committee member.

International Flame Research Foundation

- Secretary of the Finnish National Committee, 2001-2004
- Represent of the Aalto University, 2001-

11. Scientific and societal impact of research

Presence in the media, newspapers, TV and radio

- "I study how black liquor burns", "Tutkin miten mustalipeä palaa", Helsingin sanomat, Main Finnish daily newspaper, 24 May 2011
- "Digitally products are made faster", "Digitaalisesti tuotteet syntyvät nopeammin", TEK-Lehti, 2 February 2011
- Materia journal, 1/2012, p. 34
- Materia journal, 3/2014, p. 54-55
- Fimecc SHOK, best result project of the year 2009 in ELEMET program
- "FIMECC revolutionizes steel developing: The strength of the steel converter is in simplicity", Video on the Steel Converter Simulator model, <http://www.fimecc.com/video/results>
- "Business and sustainability through steel production modelling and simulation" - Mika Järvinen Aalto University, Best result from the Fimecc-SHOK, ELEMET Program, Hyde Park presentation in SHOK summit 2014, <http://new.livestream.com/ITstriimIT/shoksummit2014/archives>
- Youtube, video on our Slag2PCC pilot plant, <https://www.youtube.com/watch?v=HqkeYyWGH08>
- "Finnish Researchers capture CO2 to effective use", Tiede-lehti, Finnish science magazine, 16 September, 2014 http://www.tiede.fi/artikkeli/uutiset/suomalaiset_nappaavat_hiilidioksidin_hyotykayttoon
- "Aalto University makes valuable product from a waste material for steel industry", "Aaltoyliopisto tekee terästeollisuuden kuonasta rahanarvoista raaka-ainetta", Helsingin sanomat, Main Finnish daily newspaper, 16 September 2014, <http://www.hs.fi/kotimaa/a1410837459709>
- Interview on the new Slag2PCC pilot plant, Finnish national radio, Yle 1, Science radio, 19 September 2014, <http://areena.yle.fi/radio/2341326>
- "CO2 gets to valuable powder", Huvudstadbladet, main Finnish daily newspaper in Swedish, 17 September 2014, <http://hbl.fi/nyheter/2014-09-17/657081/koldioxid-blir-dyrbart-pulver>
- "Marketing mineral carbonization", Project magazine, Issue 36, 2014, pp. 78-79
- "Success story on mineral carbonation of CO2", Adjacent government, August 2014, ISSN-2055-7612, p. 106.