

LIST OF PUBLICATIONS

(A) Peer-reviewed scientific articles

Peer-reviewed journal articles

- 1) Pongrácz E, Niemistö J, García V, Hänninen N, Saavalainen P and Keiski RL (2015) Waste-based biofuel technologies in Finland – Current research and industrial activities. *Pollack Periodica*. Forthcoming in Vol.10, Issue 2.
- 2) Piippo S, Saavalainen P, Kaakinen J and Pongrácz E (2015) Strategic waste management planning – The organization of municipal solid waste collection in Oulu, Finland. *Pollack Periodica*. Forthcoming in Vol.10, Issue 2.
- 3) Ylä-Mella J, Keiski RL and Pongrácz E. (2015) Electronic waste recovery in Finland: Consumers' perceptions towards recycling and re-use of mobile phones. *Waste Management*. Accepted, in press.
- 4) Saavalainen P, Kabra S, Turpeinen E, Oravisjärvi K, Yadav GD, Keiski RL and Pongrácz E (2015) Sustainability assessment of chemical processes: Evaluation of three synthesis routes of DMC. *Journal of Chemistry*. Article ID 402315, 12 pages, <http://www.hindawi.com/journals/jchem/2015/402315/>
- 5) Louis J-N, Caló A, Leiviskä K and Pongrácz E (2014) A Methodology for Accounting the CO₂ Emissions of Electricity Generation in Finland. *International Journal on Advances in Intelligent Systems*. Vol 7 no 3&4. Open access: http://www.ariajournals.org/intelligent_systems/tocv7n34.html
- 6) Piippo S, Juntunen A, Kurppa S and Pongrácz E (2014) The use of bio-waste to revegetate eroded land in Ylläs, Northern Finland. Toward a zero waste perspective of tourism in the Finnish Lapland. *Resources Conservation and Recycling*. 93(2014): 9-22.
- 7) Ylä-Mella J, Poikela K, Lehtinen U, Tanskanen P, Keiski R.L. and Pongrácz E. (2014) Overview of the WEEE Directive and its implementation in the Nordic countries. National realisations and best practices. *Journal of Waste Management*. Article ID 457372, 18 pages. <http://www.hindawi.com/journals/jwm/2014/457372/>
- 8) Caló A and Pongrácz E (2014) The role of smart energy networks to support the application of waste-to-energy technologies. *Pollack Periodica*. An International Journal for Engineering and Information Sciences. 9(Supplement): 61-73.
- 9) Tomperi J, Luoma T, Pongrácz E and Leiviskä K (2014) Energy potential of biodegradable wastes in Kolari. *Pollack Periodica*. An International Journal for Engineering and Information Sciences. 9(Supplement):5-15.
- 10) Suopajarvi H, Pongrácz E and Fabritius T (2014) Bioreducer use in blast furnace ironmaking – Analysis of CO₂ emission reduction potential and mitigation cost. *Applied Energy*. 124(1 July 2014): 82-93.
- 11) Reinik J, Heinmaa I, Ritamäki J, Boström D, Pongrácz E, Huuhtanen M, Larsson W, Keiski R, Kordás K, Mikkola J-P (2014) Direct CO₂ sequestration onto alkaline modified oil shale fly ash. *Oil Shale*, 31(1): 79–90.
- 12) Ylä-Mella J, Poikela K, Lehtinen U, Keiski R and Pongrácz E (2014) Implementation of Waste Electrical and Electronic Equipment Directive in Finland: Evaluation of the collection network and challenges of the effective WEEE management. *Resources Conservation and Recycling*. 86(May2014) 38-46
- 13) Suopajarvi H, Pongrácz E and Fabritius T (2013) The potential of using biomass-based reducing agents in the blast furnace: A review of thermochemical conversion technologies and assessments related to sustainability. *Renewable and Sustainable Energy Reviews* 25(2013) 511-528.
- 14) Päkkilä J, Saavaalainen P, Pongrácz E and Keiski RL (2013) Biobutanol as a potential sustainable biofuel - Assessment of lignocellulosic and waste-based feedstocks. *Journal of Sustainable Development of Energy, Water and Environmental Systems*. 1(2): 58-77. On-line publication: <http://www.sdwes.org/jsdewes/index.php>
- 15) García V, Pongrácz E, Paul Phillips PS and Keiski RL. (2013) From waste treatment to resource efficiency in the chemical industry: Recovery of organic solvents from waters containing electrolytes by pervaporation. *Journal of Cleaner Production*. 39(2013) 146-153.
- 16) Pap N, Beszédes S, Pongrácz E, Myllykoski L, Gábor M, Gyimes E, Hodúr C and Keiski RL. (2013) Microwave-assisted extraction of anthocyanins from blackcurrant marc: Use of statistical experimental design. *Food and Bioprocess Technology*, 6(10): 2666-2674.
- 17) Häyrynen P, Landaburu-Aguirre J, Pongrácz E and Keiski RL. (2012) Study of permeate flux in micellar-enhanced ultrafiltration on a semi-pilot scale: Simultaneous removal of heavy metals from phosphorous rich real wastewaters. *Separation and Purification Technology* 93(2012)59-66.

- 18) Landaburu-Aguirre J, Pongrácz E, Sarpola A, Keiski RL. (2012) Simultaneous removal of heavy metals from phosphorous rich real wastewaters by micellar enhanced ultrafiltration. *Separation and Purification Technology* 88(2012): 130-137.
- 19) Pap N, Mahosenaho M, Pongrácz E, Mikkonen H, Jaakola M, Virtanen V, Myllykoski L, Horváth-Hovorka Zs, Hodúr C, Vatai Gy and Keiski R.L. (2012) Effect of ultrafiltration on anthocyanin and flavonol content of black currant juice (*Ribes nigrum*). *Food and Bioprocess Technology: An International Journal*. 5(3): 921-928.
- 20) Reinik J, Heinmaa I, Kirso U, Kallaste T, Ritamäki J, Boström D, Pongrácz E, Huuhtanen M, Larsson W, Keiski R, Kordás K, Mikkola J-P. (2011) Alkaline modified oil shale fly ash: optimal synthesis conditions and preliminary tests on CO₂ adsorption. *Journal of Hazardous Materials*. 196(2011): 180-186.
- 21) Kvist S., Pongrácz E, and Keiski R.L. (2011) Drivers of solid waste minimization in Finnish metal engineering SMEs: The role of environmental management systems. *International Journal of Environment and Waste Management*, Special issue on solid waste management: Part Four. 7(3-4): 356-369.
- 22) Landaburu-Aguirre J, Pongrácz E and Keiski RL (2011) Separation of cadmium and copper from phosphorous rich synthetic waters by micellar-enhanced ultrafiltration *Separation and Purification Technology*, 81(1): 41-48
- 23) Landaburu-Aguirre J, Pongrácz E, Perämäki P, Keiski R L (2010) Micellar-enhanced ultrafiltration for the removal of cadmium and zinc; use of response surface methodology to improve understanding of process performance and optimisation. *Journal of Hazardous Materials*. 280(1-3): 524-534.
- 24) Pap N, Pongrácz E, Jaakkola M, Tolonen T, Virtanen V, Turkki A, Horváth-Hovorka Zs, Vatai Gy, Keiski R L. (2010) The effect of pre-treatment on the anthocyanin and flavonols content of black currant juice (*Ribes nigrum* L.) in concentration by reverse osmosis. *Journal of Food Engineering* 98(4): 429-436.
- 25) García V, Landaburu-Aguirre J, Pongrácz E, Perämäki P, Keiski R.L. (2009) Dehydration of water/dichloromethane/n-butanol mixtures by pervaporation: optimisation and modelling by response surface methodology. *Journal of Membrane Science*, 338(1-2): 111-118.
- 26) García V, Pongrácz E, Muurinen E and Keiski RL. (2009) Pervaporation of dichloromethane from multicomponent aqueous systems containing n-butanol and sodium chloride. *Journal of Membrane Science*. 326(1): 92-102.
- 27) García V, Pongrácz E, Muurinen E and Keiski RL. (2009) Recovery of n-butanol from high salt containing solutions by pervaporation. *Desalination*, 241(1-3): 201-211.
- 28) Häyrynen K, Pongrácz E, Väisänen V, Pap N, Mänttäri M, Langwaldt J and Keiski RL. (2009) Concentration of ammonium and nitrate from mine water by reverse osmosis and nanofiltration. *Desalination*, 240(1-3): 280-289.
- 29) Kertész Sz, Landaburu-Aguirre J, García V, Pongrácz E, Hodúr C, Keiski RL. (2009) A statistical design for separation of pollutants from synthetic wastewaters by MEUF. *Desalination and Water Purification* 9(1-3): 221-228.
- 30) Kertész Sz, Landaburu-Aguirre J, García V, Hodúr C, Pongrácz E & Keiski RL (2009) Statistical experimental design for the removal of different compounds from synthetic wastewaters by Micellar-Enhanced Ultrafiltration. *Annals of the Faculty of Engineering Hunedoara – Journal of Engineering* (Romania) 7(4): 185-188
- 31) Landaburu-Aguirre J, García V, Pongrácz E and Keiski RL. (2009) The removal of Zinc from synthetic wastewaters by Micellar-Enhanced Ultrafiltration; Statistical design of experiments. *Desalination*, 240(1-3): 262-269.
- 32) Pap N, Kertész Sz, Pongrácz E, Myllykoski L, Keiski RL, Vatai Gy, László Zs, Beszédes S, Hodúr C. (2009) Concentration of blackcurrant juice by reverse osmosis. *Desalination*, 241(1-3): 256-264.
- 33) Pongrácz E (2009) Through waste prevention towards corporate sustainability: Analysis of the concept of waste and a review of attitudes towards waste prevention. *Sustainable Development*, Special issue: Paradigms of corporate sustainability. 17(2): 92-101.
- 34) Pongrácz E, Turpeinen E, Raudaskoski R, Ballivet-Tkatchenko D and Keiski RL. (2009) From waste to resource for methanol-based processes. *Waste and Resource Management, Proceedings of the Institution of Civil Engineers*. 162(4): 215-220.
- 35) Raudaskoski R, Turpeinen E, Lenkeri R, Pongrácz E and Keiski RL. (2009) Catalytic activation of CO₂: Use of secondary CO₂ for the production of synthesis gas and for methanol synthesis over zirconia containing catalysts. *Catalysis Today*, 144(3-4): 318-323.
- 36) García V., Pongrácz E., Phillips P.S., Keiski R. (2008) Factors Affecting Resource Use Optimisation of the Chemical Industry in the Northern Ostrobothnia Region of Finland. *Journal of Cleaner Production* 16(18): 1987-1994.

- 37) Häyrynen K, Langwaldt J, Pongrácz E, Väisänen V, Mänttäri M, and Keiski RL. (2008) Separation of nutrients from mine water by reverse osmosis for subsequent biological treatment. *Minerals Engineering*. 21(1): 2-9.
- 38) Turpeinen E, Raudaskoski R, Pongrácz E and Keiski RL. (2008) Thermodynamic analysis of conversion of alternative hydrocarbon-based feedstocks to hydrogen. *International Journal of Hydrogen Energy*. 33(22): 6635-6643.
- 39) Pap N, Beszédes S, Kertész Sz, László Zs, Pongrácz E, Keiski RL, Szabó G and Hodúr C (2008) Pectin extraction from blackcurrant press cake. *Review of Faculty of Engineering, Analecta Technica Szegedinensia*. University of Szeged, Faculty of Engineering. pp.71-78.
- 40) García V., Landaburu-Aguirre J, Pongrácz E, Phillips P.S. and Keiski R.L. (2006) Recycling of organic solvents by pervaporation and micellar-enhanced ultrafiltration. *Desalination* 200(1-3): 272-273.
- 41) Landaburu-Aguirre J, García V., Pongrácz E and Keiski R.L. (2006) Applicability of membrane technologies for the removal of heavy metals from chemical industry effluents. *Desalination* 200(1-3): 383-384.
- 42) Pongrácz E. (2006) Industrial Ecology and Waste Management: From Theories to Applications. *Progress in Industrial Ecology, An International Journal*. Special issue: Industrial Ecology - Philosophical and Epistemological Framework. 3(1-2): 59-74.
- 43) Mikkonen H, Myllykoski L, Pongrácz E & Keiski R. (2005) Resources use optimization in small- and medium-sized juice plants in Northern Finland: A novel, waste-free utilization of annual shoots of Norway spruce. *Journal of Solid Waste Technology and Management*. 31(2): 59-68.
- 44) Pongrácz E, Ylä-Mella J, Phillips PS, Tanskanen P and Keiski RL. (2005) The impact of the European Waste Electrical and Electronic Equipment Directive (WEEE): Development of waste management strategies in Oulu, Finland. *Journal of Solid Waste Technology and Management*. 31(2): 102-111.
- 45) Pongrácz E & Pohjola VJ. (2004) Re-defining waste, the concept of ownership and the roles of waste management. *Resources Conservation & Recycling*. 40(2): 141-153.
- 46) Pohjola VJ & Pongrácz E. (2002) Approach to the formal theory of waste management. *Resources Conservation & Recycling* 35(1-2): 17-29.

Peer-reviewed conference papers

- 47) Louis JN, Leiviskä K and Pongrácz E (2015) Environmental Impacts and Benefits of Smart Home Automation: Life Cycle Assessment of Home Energy Management System. **Mathmod** 2015, 8th Vienna Conference on Mathematical Modelling., Vienna, February 18-20, 2015.
- 48) Caló A, Louis JN, Pongrácz E (2015) The role and the impact of electric vehicles on the local power grid within the Northern Finland climatic conditions. **Mathmod** 2015, 8th Vienna Conference on Mathematical Modelling., Vienna, February 18-20, 2015.
- 49) Caló A, Louis JN, Pongrácz E (2014) Concerning the Sustainability of Smart Grids: A critical analysis of the sustainability of current Smart Grid models and on indicators of Smart Grid sustainability assessment. **InfoSys2014**, April 20 - 24, 2014 - Chamonix, France.
- 50) Louis JN, Caló A, Pongrácz E (2014) Smart Houses for Energy Efficiency and Carbon Dioxide Emission Reduction. **InfoSys2014**, April 20 - 24, 2014 - Chamonix, France.
- 51) Louis JN, Caló A, Leiviskä K and Pongrácz E (2013) Home Automation for a sustainable living – Modelling a detached house in Northern Finland. Proc. 7th **International Conference on Energy Efficiency in Domestic Appliances and Lighting** EEDAL'13, 11 p.
- 52) Caló A, Juuso E, Svento R, Pongrácz E (2012) Smart Energy Networks in the Northern Periphery: Development of an End-User Oriented Profiled Hybrid Micro-Grid Simulator. Proceedings **Mathmod** 2012 Vienna, February 14-17, 2012, Vienna University of Technology. Full Papers. F. Breitenecker; I. Troch. Argesim report S38. Vienna, Argesim. 1-6. On-line publication: http://seth.asc.tuwien.ac.at/proc12/full_paper/Contribution412.pdf
- 53) Lehtinen U, Poikela K, Ylä-Mella J and Pongrácz E (2009) Examining the WEEE recovery supply chain: Empirical evidence from Sweden and Finland. Proc. of the 21st **Annual Nofoma Conference**. June, 11-12, 2009, Jönköping, Sweden. Herzt, S (ed.). Jönköping International Business School, Jönköping University. p. 517-531.

(B) Non-refereed scientific articles

Book chapters

- 54) Pap N, Pongrácz E, Myllykoski L and Keiski RL. (2014) Waste minimization and utilization in the food industry: Valorization of food industry wastes and by-products. Chapter 19 in: JK Sahu (ed.) **Introduction to Advanced Food Processing Engineering**. CRC Press, Taylor & Francis Group. pp. 595-630.
- 55) Keiski RL, Kolli T, Huuhtanen M, Ojala S and Pongrácz E (2010) Challenges in Catalysis for Sustainability In: Cybulski, Andrzej / Moulijn, Jacob A. / Stankiewicz, Andrzej (eds.) **Novel Concepts in Catalysis and Chemical Reactors. Improving the Efficiency for the Future**. Wiley-VCH, Weinheim, pp. 143-162.
- 56) Pongrácz E (2007) Environmental impacts of packaging. In: Myer Kutz (ed.) **Handbook of Environmentally Conscious Material and Chemical Processing**. Wiley Series in Environmentally Conscious Engineering. Hoboken, NJ – John Wiley & Sons. pp. 237-278.

Articles in international scientific compilations

- 57) Piippo S and Pongrácz E (2015) Sustainable bio-waste management in Finland through cascade use of biomass. Proc.: The Thirtieth International Conference on Solid Waste Technology and Management, Philadelphia, PA, USA, 15.-18.3.2015
- 58) Piippo S and Pongrácz E (2015) Hidden wastes of Finnish food consumption: Global impact of imports. Proc.: The Thirtieth International Conference on Solid Waste Technology and Management, Philadelphia, PA, USA, 15.-18.3.2015
- 59) Fedorova E and Pongrácz E (2014) Horizon scanning for social sustainability in the bioenergy value chain. Proc. 7th International Scientific Conference on Energy and Climate Change: Towards Green Economy. 8.-10.10.2014, Athens, Greece. Proceedings edited by Dimitrios Mavrakis, pp. 129-136.
- 60) Pongrácz E (2014) Critical minerals: recycling vs. dissipative losses – The case of Indium. SUM 2014, Second Symposium on Urban Mining, May 19-21, Bergamo, Italy. <http://urbanmining.it/search-app/pdf/123.pdf>
- 61) Piippo S and Pongrácz E (2014) Sustainable bio-waste strategy in Finland: Case study of Oulu in Northern Finland. SUM 2014, Second Symposium on Urban Mining, May 19-21, Bergamo, Italy. <http://urbanmining.it/search-app/pdf/090.pdf>
- 62) Ylä-Mella J, Keiski RL and Pongrácz E (2014) WEEE recovery in the Oulu Region, Finland: A local recovery network and consumers' attitudes toward recycling (2014) SUM 2014, Second Symposium on Urban Mining, May 19-21, Bergamo, Italy. <http://urbanmining.it/search-app/pdf/068.pdf>.
- 63) Saavalainen P, Pongrácz E, Ballivet-Tkatchenko D, Keiski RL (2011) Sustainability of chemical processes: Evaluation of a novel CO₂-based synthesis routes of DMC. In: Proc. Sustainable development of energy, water and environmental systems, University of Zagreb, Croatia, 10 p.
- 64) Beszédes S, Pap N, Pongrácz E, Hodúr C and Keiski RL (2010) Concentration of meat processing industry wastewater by reverse osmosis and anaerobic digestion of the concentrate. Venice 2010 Symposium. Third International Symposium on energy from biomass and waste, Venice, Italy 8-11 November 2010. CD-ROM of Proceedings, ISBN 978-88-6265-008-3. 13 p.
- 65) Landaburu-Aguirre J, Pongrácz E, Keiski RL. (2008) Response surface methodology (RSM) in the removal of zinc and cadmium by MEUF. Presented at the Membranes in Drinking Water Production and Wastewater Treatment 2008 conference, 20 – 22.10.2008, Toulouse, France. CD-ROM, 7p.
- 66) Kertész Sz, Landaburu-Aguirre J, García V, Pongrácz E, Hodúr C, Keiski RL. (2008) A statistical design for separation of pollutants from synthetic wastewaters by MEUF. Proc. Membranes in Drinking Water Production and Wastewater Treatment, 20 – 22.10.2008, Toulouse, France, CD-ROM, 7 p.
- 67) Román E, Ylä-Mella J, Pongrácz E, Solvang WD and Keiski RL. (2008) WEEE management system – Cases in Norway and Finland. Proc. Electronics Goes Green 2008+ Conference. September 8-10, 2008, Berlin, Germany. 6 p.
- 68) Pongrácz E, Ylä-Mella J, Tanskanen P, Keiski RL. (2008) Conceptual analysis of electronic waste: Revisiting the definition of waste and the classes of waste. Proc. 23rd International Conference on Solid Waste Technology and Management, Philadelphia, PA, USA, March 30 – April 2, 2008. pp 359-365.
- 69) Ylä-Mella J, Pongrácz E and Keiski RL. (2008) Liquid Crystal Displays: Material Content and Recycling Practices. Proc. 23rd International Conference on Solid Waste Technology and Management, Philadelphia, PA, USA, March 30 – April 2, 2008. pp. 1082-1089.
- 70) Pongrácz E (2007) Eco-efficiency as a paradigm of corporate sustainability: Analysis of the concept of waste and a review of attitudes towards waste prevention. In: Ketola, T. (ed.) **Paradigms of Corporate**

- Sustainability. Proceedings of Track 16, International Sustainable Development Research Conference 2007. Publications of the University of Vaasa, Reports 146, Vaasa, Finland. pp. 216-231.
- 71) Garcia V, Pongrácz E, Muurinen E and Keiski R (2007) Recovery of n-BuOH and DCM from high salt containing wastewaters by pervaporation. Proc. PERMEA 2007, Membrane Science and Technology Conference of Visegrad Countries, 2.-6.9.2007, Siófok, Hungary. CD-ROM, 4p.
- 72) Landaburu-Aguirre J, García V, Pongrácz E and Keiski R (2007) The use of statistical design and analysis of the removal of Zinc from synthetic wastewater by micellar-enhanced ultrafiltration. Proc. PERMEA 2007, Membrane Science and Technology Conference of Visegrad Countries, 2.-6.9.2007, Siófok, Hungary. CD-ROM, 4p.
- 73) Kertész Sz, Pap N, Pongrácz E, Myllykoski L, Keiski RL, Vatai Gy, László Zs, Beszédes S and Hodúr C (2007) Concentration of blackcurrant juice by reverse osmosis. Proc. PERMEA 2007, Membrane Science and Technology Conference of Visegrad Countries, 2.-6.9.2007, Siófok, Hungary. CD-ROM, 4p.
- 74) Häyrynen K, Pap N, Väisänen V, Pongrácz E, Mänttäri M, Langwaldt J, and Keiski RL (2007) Concentration of ammonium and nitrate from mine water by membrane technology. Proc. PERMEA 2007, Membrane Science and Technology Conference of Visegrad Countries, 2.-6.9.2007, Siófok, Hungary. CD-ROM, 4p.
- 75) Ylä-Mella J, Poikela K, Pongrácz E, Lehtinen U, Phillips P, Keiski RL. (2007) WEEE Recovery Infrastructure in the Oulu Region of Finland: Challenges to Resource Use Optimization. Proc. 22nd International Conference on Solid Waste Technology and Management, Philadelphia, PA, U.S.A. March 18-21, 2007, pp. 447-454.
- 76) Ylä-Mella J, Pongrácz E, Tanskanen P, Keiski RL. (2007) Environmental impact of mobile phones: material content. Proc. 22nd International Conference on Solid Waste Technology and Management, Philadelphia, PA, U.S.A. March 18-21, 2007, pp. 1612-1617.
- 77) Nurmesniemi H, Pöykiö R, Kuokkanen T, Pongrácz E and Keiski RL. (2007) Solid waste sorting and utilization at Stora Enso Oyj Veitsiluoto Mills in Kemi, Northern Finland. Proc. 22nd International Conference on Solid Waste Technology and Management, Philadelphia, PA, U.S.A. March 18-21, 2007, pp. 1581-1585.
- 78) Lehtinen U, Poikela K and Pongrácz, E. (2006) Drivers and Constraints of SMEs in Finnish Environmental Industry – A study of an environmental cluster in Oulu region. 14th Nordic Conference on Small Business Research, May 11-13, 2006 Stockholm, Sweden. Full papers available on Internet, URL: <http://www.ncsb2006.se/>
- 79) Kvist S, Pongrácz E and Keiski R. (2006) The effect of Environmental Management Systems on waste awareness in Finnish metal engineering SMEs. Proc. 12th Annual International Sustainable Development Research Conference. April 6-8, 2006, Hong Kong. CD-ROM, University of Hong Kong.
- 80) Pongrácz E (2005) Industrial Ecology and waste management: From theories to applications. Proc. 11th Annual International Sustainable Development Research Conference. June 6-8, 2005, Helsinki, Finland. CD-ROM, University of Tampere, Tampere.

Articles in domestic scientific compilations

- 81) Pongrácz E, Juntunen A, Louis J-N and Caló A (2013) Decarbonization of Europe by 2050: Motivation for Smart Energy Network development. Clean air research at the University of Oulu, Proceedings of the 2nd SkyPro Conference, November 12 2013, Juvenes Print, pp. 53-56.
- 82) Saavalainen P, Pongrácz E, Ballivet-Tkatchenko D and Keiski RL (2013) Sustainability assessment of commercial and CO₂-based synthesis routes of Dymethyl carbonate. In: Pitkäaho S, Pruukkonen H, Pongrácz E and Keiski RL (eds). Clean air research at the University of Oulu. Proceedings of the 2nd SkyPro Conference, pp. 67-71
- 83) Omodara L, Saavalainen P, Pongrácz E, Turpeinen E and Keiski RL (2013) Sustainability assessment of formic acid production: Comparison of conventional and CO₂-based processes. In: Pitkäaho S, Pruukkonen H, Pongrácz E and Keiski RL (eds). Clean air research at the University of Oulu. Proceedings of the 2nd SkyPro Conference, pp. 72-77
- 84) Caló A, Louis JN and Pongrácz E (2013) The influence of electric vehicles on CO₂ emissions: Challenges on infrastructure in cold climates. In: Pitkäaho S, Pruukkonen H, Pongrácz E and Keiski RL (eds). Clean air research at the University of Oulu. Proceedings of the 2nd SkyPro Conference, pp. 81-84.
- 85) Louis JN, Caló A and Pongrácz E (2013) Home automation to reduce CO₂ emissions associated with energy consumption of buildings. In: Pitkäaho S, Pruukkonen H, Pongrácz E and Keiski RL (eds). Clean air research at the University of Oulu. Proceedings of the 2nd SkyPro Conference, pp. 85-88
- 86) Mikkonen L, Rämö J, Keiski RL and Pongrácz E (2013) CO₂ reduction potential of renewable energy generation at water utilities. In: Pitkäaho S, Pruukkonen H, Pongrácz E and Keiski RL (eds). Clean air research at the University of Oulu. Proceedings of the 2nd SkyPro Conference, pp. 89-91

- 87) Landaburu-Aguirre J, Häyrynen P, Pongrácz E and Keiski RL (2013) Micellar-enhanced ultrafiltration for the simultaneous removal of heavy metals from phosphorous-rich real wastewaters. In: Pongrácz E and Pruijkkonen H (eds). Water research at the University of Oulu. Proceedings of the WaRes Conference, August 15th 2013, University of Oulu. Erweko Oy, pp. 88-92.
- 88) Saavalainen P, Charan K, Pirilä M, Häyrynen P, Domingues-Ramos A, Marathe KV, Yadav GD, Irabien A, Pongrácz E and Keiski RL (2013) Sustainability assessment of arsenic removal from natural waters by adsorption. In: Pongrácz E and Pruijkkonen H (eds). Water research at the University of Oulu. Proceedings of the WaRes Conference, August 15th 2013, University of Oulu. Erweko Oy, pp. 152-156.
- 89) Pongrácz E, Mikkonen L, Miilumäki N and Hänninen N (2013) Water vs.energy – Finding hidden energy potential to provide clean water. In: Pongrácz E and Pruijkkonen H (eds). Water research at the University of Oulu. Proceedings of the WaRes Conference, August 15th 2013, University of Oulu. Erweko Oy, pp. 157-160.
- 90) Mikkonen L, Rämö J, Keiski RL and Pongrácz E (2013) Heat recovery from wastewater: Assessing the potential in Northern areas. In: Pongrácz E and Pruijkkonen H (eds). Water research at the University of Oulu. Proceedings of the WaRes Conference, August 15th 2013, University of Oulu. Erweko Oy, pp. 161-164.
- 91) Fedorova E, Hänninen N and Pongrácz E (2013) Finnish experience in oil spill prevention and response in the Baltic Sea. In: Pongrácz E and Pruijkkonen H (eds). Water research at the University of Oulu. Proceedings of the WaRes Conference, August 15th 2013, University of Oulu. Erweko Oy, pp. 174-179.
- 92) Dedkov N, Ripachova R, Gorshenina E, Mikhailova O and Pongrácz E (2013) Developing an oil spill response system for the Barents Sea: Laboratory study of oil slick behavior in sea water in different weather conditions and the effect of dispersants. In: Pongrácz E and Pruijkkonen H (eds). Water research at the University of Oulu. Proceedings of the WaRes Conference, August 15th 2013, University of Oulu. Erweko Oy, pp. 180-186.
- 93) Pongrácz E, Saavalainen P, Ballivet-Tkatchenko D and Keiski RL (2010) Chemical utilization of CO₂, sustainability assessment. In: Pongrácz E, Hyvärinen M, Pitkäaho S and Keiski RL (eds.) Clean air research at the University of Oulu. Proceedings of the SkyPro conference, June 3rd, 2010, University of Oulu, Finland. Kalevaprint, Oulu, ISBN 978-951-42-6199-2. pp. 93-96.
- 94) Pongrácz E, Lyth N, Bond D, Ylä-Mella J, Turkki A, Hänninen N, Keiski R and Kuittinen V (2009) Micro Waste to Energy Solutions for Rural Enterprise in the Northern Periphery. In: Paukkeri, A.; Ylä-Mella, J. and Pongrácz, E. (eds.) Energy research at the University of Oulu. Proceedings of the EnePro conference, June 3rd, 2009, University of Oulu, Finland. Kalevaprint, Oulu, ISBN 978-951-42-9154-8. pp. 60-62.
- 95) Pongrácz E, Turpeinen E, Mäyrä O, Leiviskä K and Keiski R (2009) Chemical utilization of CO₂ in dry reforming and methanol synthesis. In: Paukkeri, A.; Ylä-Mella, J. and Pongrácz, E. (eds.) Energy research at the University of Oulu. Proceedings of the EnePro conference, June 3rd, 2009, University of Oulu, Finland. Kalevaprint, Oulu, ISBN 978-951-42-9154-8. pp. 79-82.
- 96) Pongrácz E (2009) CO₂ – To waste or not to waste? In: Paukkeri, A.; Ylä-Mella, J. and Pongrácz, E. (eds.) Energy research at the University of Oulu. Proceedings of the EnePro conference, June 3rd, 2009, University of Oulu, Finland. Kalevaprint, Oulu, ISBN 978-951-42-9154-8. pp. 98-102.
- 97) Pongrácz E (2008) Sustainability, sustainable production and Sustainable Energy. In: Keiski R, Huuhtanen M and Kangasharju L (eds.) Sustainable Production and Energy: Catalysis by Nanomaterials, Catalytic Microreactors. COST Action 543 Training School. pp. 27.-34.
- 98) Majala A, Pongrácz E, Kärkkäinen J, Lajunen M and Keiski RL (2007) Environmental impacts of ionic liquids. Proc. 8th Finnish Conference of Environmental Sciences. Mikkeli, May 10-11, 2007. pp. 127-130.
- 99) Ylä-Mella J, Miklósi P, Pongrácz E, István Zs, Csöke B and Keiski RL (2007) Recycling of Liquid Crystal Displays. Proc. Eight Finnish Conference of Environmental Sciences. Mikkeli, May 10-11, 2007. pp. 265-268.
- 100) Miklósi P, Ylä-Mella J, Pongrácz E, Garamvölgyi E, István Zs, Csöke B and Keiski RL (2007) The effect of the WEEE Directive on electronic waste recovery in Hungary and Finland. Proc. Eight Finnish Conference of Environmental Sciences. Mikkeli, May 10-11, 2007. pp. 269-272.
- 101) Pongrácz E (2005) Preface. Proc. RESOPT closing seminar. June 17th 2005, University of Oulu. Oulu University Press, Oulu. pp. 5-6.
- 102) Pongrácz E (2005) RESOPT – A Multidisciplinary Consortium for Resources Use Optimization. In: Pongrácz E (ed.) (2005) Waste minimization and utilization in Oulu region: Drivers and constraints. Proc. RESOPT closing seminar. June 17th 2005, University of Oulu. Oulu University Press, Oulu. pp. 11-24.
- 103) García V, Pongrácz E, Phillips PS & Keiski RL (2005) Drivers and constraints of chemical waste minimization: Surveys in Oulu region of Finland and East Midlands of U.K. In: Pongrácz E (ed.) (2005) Waste minimization and utilization in Oulu region: Drivers and constraints. Proc. RESOPT closing seminar. June 17th 2005, University of Oulu. Oulu University Press, Oulu. pp. 43-59.

- 104) Kvist S, Pongrácz E & Keiski RL (2005) ISO 14001 and waste minimization in metallurgy industry. In: Pongrácz E (ed.) (2005) Waste minimization and utilization in Oulu region: Drivers and constraints. Proc. RESOPT closing seminar. June 17th 2005, University of Oulu. Oulu University Press, Oulu. pp. 61-70.
- 105) Pap N, Pongrácz E, Myllykoski L & Keiski RL (2005) Waste minimization in berry processing – use of membrane technologies for cranberry and blackcurrant juice concentration. In: Pongrácz E (ed.) (2005) Waste minimization and utilization in Oulu region: Drivers and constraints. Proc. RESOPT closing seminar. June 17th 2005, University of Oulu. Oulu University Press, Oulu. pp. 71-83.
- 106) Olgayiová K, Pongrácz E, Mikkola T, Škapa R & Keiski RL (2005) Attitudes towards waste minimization in Finland and Czech Republic – Barriers and drivers. In: Pongrácz E (ed.) (2005) Waste minimization and utilization in Oulu region: Drivers and constraints. Proc. RESOPT closing seminar. June 17th 2005, University of Oulu. Oulu University Press, Oulu. pp. 85-109.
- 107) Ylä-Mella J, Pongrácz E & Keiski RL (2005) Industrial wastes in Oulu region, Finland. In: Pongrácz E (ed.) (2005) Waste minimization and utilization in Oulu region: Drivers and constraints. Proc. RESOPT closing seminar. June 17th 2005, University of Oulu. Oulu University Press, Oulu. pp. 125-134.
- 108) Poikela K, Pongrácz E & Lehtinen U (2005) Business potential from waste in the Oulu environmental cluster. In: Pongrácz E (ed.) (2005) Waste minimization and utilization in Oulu region: Drivers and constraints. Proc. RESOPT closing seminar. June 17th 2005, University of Oulu. Oulu University Press, Oulu. pp. 135-144.
- 109) García V, Pongrácz E, Phillips P and Keiski R (2005) Promoting Chemical Waste Minimisation in Northern Ostrobothnia Region of Finland. Seventh Finnish Conference on Environmental Science and Technology. Jyväskylä, 12-13.5.2005.
- 110) Kvist, S, Pongrácz E and Keiski RL (2005) Research into the Effects of Environmental Management Systems on Waste Management Practices in Finnish Metallurgy Companies. Proc. Seventh Finnish Conference on Environmental Science and Technology. Jyväskylä, 12-13.5.2005

(C) Scientific books

- 111) Pitkäaho S, Pruukonen H, Pongrácz E and Keiski RL (eds.) (2013) Clean air research at the University of Oulu. Proceedings of the 2nd SkyPro conference, November 12th 2013, University of Oulu, Finland, Juvenes Print Oulu. 129 p.
- 112) Pongrácz E and Pruukonen H (eds.) (2013) Water research at the University of Oulu. Proceedings of the WaRes Conference, August 15th 2013, University of Oulu. Erweko Oy. 190 p.
- 113) Pongrácz E, Hyvärinen M, Pitkäaho S and Keiski RL (eds.) (2010) Clean air research at the University of Oulu. Proceedings of the SkyPro conference, June 3rd 2010, University of Oulu, Finland, Kalevaprint, Oulu. (Available on-line at: <http://nortech.oulu.fi/SkyPro/skyproproc.html>) 133 p.
- 114) Paukkeri A, Ylä-Mella J and Pongrácz E (eds.) (2009) Energy research at the University of Oulu. Proceedings of the EnePro conference. June 3rd 2009, University of Oulu, Finland. Kalevaprint, Oulu. (Available on-line at: <http://nortech.oulu.fi/eneproc.html>) 143 p.
- 115) Pongrácz E (ed.) (2005) Waste minimization and utilization in Oulu region: Drivers and constraints. Proc. RESOPT closing seminar. June 17th 2005, University of Oulu. Oulu University Press, Oulu. 172 p.
- 116) Pongrácz E (ed.) (2004) Proceedings of the Waste Minimization and Resources Use Optimization Conference. June 10th 2004, University of Oulu, Finland. Oulu University Press, Oulu. 177 p.
- 117) Pohjola V, Alha K, Pongrácz E and Keiski R (eds.) (1996) Creativity and chemical process R & D. Proceedings of the GSCE Seminar. University of Oulu, Hailuoto, Oct. 17.-18.,1996. 70 p.

(D) Publications intended for professional communities and the general public

- 118) A roadmap to a smart Arctic specialisation. (2014) SMARCTIC Project final report. http://nortech.oulu.fi/SMARTIC_files/SMARTIC_final_report.pdf
- 119) Caló A and Pongrácz E (2014) Smart Energy Grids. SMARCTIC WP4 report. http://nortech.oulu.fi/SMARTIC_files/SMARTIC_WP4_SEG_Pub.pdf
- 120) Pavlov V, Hänninen N and Pongrácz E (2014) Overview of water services. WARES publication, University of Oulu, NorTech Oulu. http://nortech.oulu.fi/pdf/WARES_Report1_Water_services.pdf
- 121) Pavlov V, Hänninen N and Pongrácz E (2014) Financial support for renewable energy implementation. WARES publication, University of Oulu, NorTech Oulu. http://nortech.oulu.fi/pdf/WARES_Report2_Financial_instruments.pdf
- 122) Pavlov V, Hänninen N and Pongrácz E (2014) Use of Public-Private-Partnership instrument. WARES publication, University of Oulu, NorTech Oulu. http://nortech.oulu.fi/pdf/WARES_Report3_PPP.pdf

- 123) Pavlov V, Mikkonen L and Pongrácz E (2014) Best practices in water asset utilization for renewable energy generation. WARES project publication, University of Oulu, NorTech Oulu
http://nortech.oulu.fi/pdf/WARES_Report4_Renewable_energy.pdf
- 124) Pavlov V, Caló A, Louis JN, Piippo S, Ylä-Mella J, Juntunen A, Fedorova E, Mikkonen L, Petäjäjärvi J, Hänninen N and Pongrácz E (2014) Ekokaupunkipeli (Ecocity gamebook - in Finnish).
http://nortech.oulu.fi/GREENSETTLE_files/Ekokaupunkipeli.pdf
- 125) Mikkonen L, Juntunen A and Pongrácz E (2014) Best Practices of Energy Efficiency in SMEs. Project report. University of Oulu, NorTech Oulu. http://nortech.oulu.fi/pdf/K385_BestPractice_web.pdf
- 126) Louis JN, Caló A, Pongrácz E and Hänninen N (2012) Micro Energy to Rural Enterprise. Technology Development and Adaptation. Micro Waste to Energy (MicrE) project WP3 final report. University of Oulu, NorTech Oulu. http://nortech.oulu.fi/MicrE_files/WP3_Report.pdf
- 127) Pongrácz E (2012) Biomass and waste-to-energy technologies: Environmental Impacts Assessment. MicrE project report. University of Oulu, NorTech Oulu. http://nortech.oulu.fi/MicrE_files/W2E_EIA.pdf
- 128) Mikkonen L and Pongrácz E (2011) Installation, safety and troubleshooting of biomass and waste-to-energy technologies. MicrE project report. University of Oulu, NorTech Oulu.
http://nortech.oulu.fi/MicrE_files/MicrE_W2E_IST.pdf
- 129) Louis JN and Pongrácz E (2011) Pellet industry: A driving force for the Karelia region Greensettle project report, WP2, University of Oulu, NorTech Oulu.
http://nortech.oulu.fi/GREENSETTLE_files/Pellet4Karelia_JNLouis.pdf
- 130) Pongrácz E (2010) Keen and multidisciplinary energy research at the University of Oulu. *EcoInnovator* 2/2010, p.2.
- 131) Pyökiö R, Pongrácz E and Tanskanen P (2008) Jätehuollossa Philadelphiassa. *Uusioolutiset* 19(4): 22.
- 132) Pongrácz E, Raudaskoski R, Turpeinen E, Leiviskä K, Mikkola JP, Ballivet-Tkatchenko D and Keiski RL (2006) Ongelmasta hyödyke: hiilidioksiidi metanolin ja dimetyylikarbonaatin raaka-aineena. *Suomen Teollisen Ekologian Seuran Jäsenlehti*. 1(2006): 5-6.
- 133) Pongrácz E (2005) Jätteen käsite, jätelainsääädäntö ja ekotehokkuus. *Ympäristö ja terveys* 36(6-7): 20-26.

(G) Theses

- 134) Pongrácz E (2002) Re-defining the Concepts of Waste and Waste Management: Evolving the Theory of Waste Management. Doctoral dissertation. University of Oulu. Department of Process and Environmental Engineering, Oulu, Finland. 166p. URL: <http://herkules.oulu.fi/isbn9514268210/isbn9514268210.pdf>
- 135) Pongrácz E (1998) The Environmental Effects of Packaging. Licentiate thesis. Tampere University of Technology, Department of Environmental Technology, Institute of Environmental Engineering and Biotechnology, Tampere, Finland. 161p.
- 136) Pongrácz E (1996) Environmental Assessment of Packaging. (In Hungarian) *Doctor Universitatis* dissertation. Technical University of Budapest, Faculty of Natural and Social Sciences, Institute of Environmental Economics, Budapest, Hungary. 111p.
- 137) Pongrácz E (1991) The Role of Packaging in Marketing-Communication. (In Hungarian) Diploma thesis. Technical University of Budapest, Faculty of Mechanical Engineering, Department of Industrial Management and Business Economics, Budapest, Hungary. 89p.