Aalto University
School of Chemical
Engineering

Tuesday, November 5th, 2019, Morning

Time	Keynote Session
	Vice President for Innovation **Janne Laine**, Aalto University, Finland Opening Speech
	N.N. European Commission (tbc) EU Battery Presentation
	CEO **Joni Lukkaroinen**, Terrafame Why battery metals, why Finland?
	Prof. **Andy Abbott**, University of Leicester Ionometallurgy: Metal processing using ionic liquids
	L U N C H

Tuesday, November 5th, 2019, Afternoon

Time	Session 1 Battery Materials	Session 2 Carbon Footprint
	Session Keynote Dr **Emma Nehrenheim**, Northvolt, Sweden Northvolt story	Session Keynote **Jarmo Lilja**, SSAB, Finland
	CEO, PhD, Prof. **Pertti Lamberg**, Keliber, Finland Production of battery grade lithium chemicals from spodumene ore – Case Keliber	Prof. **Timo Fabritius**, Oulu University, Finland Biomass based reductants in ironmaking and steelmaking
	Prof. **Zhihong Liu**, Central South University, China Recycling status of spent lithium ion power batteries in China	Prof. **Paul Beukes**, North West University, South Africa Reduced CO_2 emissions in Cr-ferroalloy production.
	CEO **Joni Hautojärvi**, Nornickel Sustainable integrated battery chemicals production from nickel mattes	Dr. **Eli Ringdalen**, SINTEF Industry Pretreatment of manganese ore as a mean to reduce CO_2 emissions
	Post Doctoral Researcher **Fupeng Liu**, Aalto University, Finland Synergistic recycling of spent NiMH and Li-ion batteries based on green chemistry principles	Prof. **Merete Tangstad**, Norwegian University of Science and Technology, Norway Reduced CO_2 emissions in Mn-ferroalloy and Si/Fe-production
	Jaakko Savolainen, Fortum, Finland Battery Life Cycle services - How Add value to batteries in all life cycle stages.	Outokumpu tbc
	Dr. **Alejandro Datas**, Technical University of Madrid, Spain Energy storage in molten silicon: AMADEUS project overal concept and context	N.N. (tbc)
	Prof. **Tuomo Sainio**, Lappeenranta University of Technology Continuous ion exchange in purification of battery metals – case Co.	Prof. **Ari Jokilaakso**, Aalto University, Finland Non-fossile reductants in non-ferrous metals refining
	Prof. **Mari Lundström**, Aalto University, Finland BATCircle – Recycling and Industrial Integration	Doctoral student **Samant Nagraj**, KU Leuven, Belgium Plasma-driven metal extraction from industrial process residues.
	Shichao He, Central South University, China Recovery of spent $LiCoO_2$ cathod material with the reduction calcination-leach-precipitation process	Prof. **Hürman Eriç**, University of the Witwatersrand, South Africa Quo Vadis Metal Processing? Carbon Footprint, Sustainability and Circular Economy

Wednesday, November 6th, 2019, Morning

Time	Session 1 Gold/Precious metals	Session 2 Process Simulation
	Session Keynote **Petri Latostenmaa**, Boliden Harjavalta Precious metals production in Boliden Harjavalta	Session Keynote Dr. **Jiliang Xia**, Outotec, Finland CFD modeling as a powerful tool in development of Outotec products and processes
	Violeta Barranco, Cenim, Spain Electrochemical recovery of trace Pt from Cu-ER electrolyte – and functional surfaces created.	Doctoral student **Alejandro Llamas**, Freiberg University, Germany Development of a comprehensive product-centric sustainability indicator framework.
	Doctoral student **Stylianos Sphathariotis**, University of Leicester, UK Electrowinning of metals in deep-eutectic solvents.	Doctoral student **Jani-Petteri Jylhä**, Aalto University, Finland Coupled CFD-DEM modelling of flash smelting furnace
	Doctoral student **Pelin Altinkaya**, Aalto University, Finland Cyanide free leaching of gold.	N.N. (tbc)
	Prof. **Herman Potgieter**, University of Witwatersrand, South Africa How successful is ionic liquids to extract gold from low grade refractory tailings?	Doctoral student **Roberto Macchieraldo**, University of Bonn, Germany Study of solvent miscibility by computational methods.
	Dr. **Fabrice Stassin**, Umicore, Belgium tbc	Doctoral student **Gwydyon Marchelli**, University of Bonn, Germany In-silico design of selective metal extractants
	Doctoral student **Ivan Korolev**, Aalto University, Finland Electrochemical process for selective recovery of gold.	Dr. **Sirpa Kallio**, VTT CFD modeling of reactive gas-solid flows with examples from combustion processes
	N.N. (tbc)	Post-doc **Min-Kyu Paek**, Aalto University, Finland Development of Simulation Model for Vacuum Tank Degasser Process
	Doctoral student **Joonas Heikkinen**, Aalto University, Finland Pyrolysed carbon for platinum recovery by electrodeposition-redox replacement	Prof. **Daniel Lindberg**, Aalto University, Finland Elemental recovery and valorization of biomass and waste incinerator ashes

Wednesday, November 6th, 2019, Afternoon

Time	Session 1 Valorisation	Session 2 Resource efficiency
	Session Keynote Dr. **Leona Wunderlich**, Boliden Odda, Norway Research case of Ag-thiosulfate leaching of neutral residue	Session Keynote N.N. (tbc)
	Dr. **Mari Lindgren**, Outotec Technologies enabling circular economy and opportunities that lie within	Prof. **Dimitrios Panias**, National Technical University of Athens, Greece Resource Efficiency in Primary Alumina/Aluminum Industry
	Doctoral student **Ionna Maria Pateli**, University of Leicester, UK Ionometallurgical leaching of industrial process residues using deep-eutectic solvents.	
	Doctoral student **Thupten Palden**, KU Leuven, Belgium Biocompatible solvometallurgical leaching methods for low-grade industrial process residues.	Doctoral student **Giacomo Damilano**, KU Leuven, Belgium Synthesis of extractants and ionic liquids from renewable chemicals
	Dr. **Joost Helsen**, Flemish Institute for Technological Research, Belgium Electroflex network of infrastructure: Connecting Europe's infrastructure and expertise on (bio)electrochemical metal recovery	Prof**. Zhiyong Liu,** Central South University, China Mobility and speciation of arsenic species from the lead-zinc smelter
	Doctoral student **Jennifer Astoveza**, Imerys Aluminates, France Residual matrix valorisation as supplementary cementitious materials in calcium aluminate blended cements	Prof. Emeritus **Pekka Taskinen**, Aalto University, Finland tbc
	Doctoral student **Christina Siakati**, KU Leuven, Belgium Iron-rich inorganic polymers derived from residual matrices.	Dr. **Justin Salminen**, Boliden Kokkola, Finland By-product metals recovery from complex streams'
	Dr Oluf Bøckman – Glencore Nikkelverk High lights from 11 years R&D and expected benefits for the new Cu-EW demoplant at Glencore Nikkelverk AS	Prof**. Tianzu Yang,** Central South University, China Oxygen pressure dissolution of antimony trioxide in potassium hydroxide solution
	Prof. **Yongxiang Yang**, TU Delft, The Netherlands Recycling e-waste and REE	Doctoral student **Nikos Nikolopoulos**, KU Leuven, Belgium Advanced characterisation of metal-containing low-grade metallurgical residues.
	Prof. **Bart Blanpain,** KU Leuven Zero waste processing of metallurgical slags: dream or reality	Prof. **Longgong Xia**, Central South University, China The Strengthening of Copper Recovery from the Smelting Slag