

# ELFM IV Programme

Monday 5 February 2018	
08:30	Registration & welcome coffee
09:00	Welcome and introduction; overview agenda
09:15	Opening speeches
<b>Session 1</b>	<b>Geophysics, remediation and preprocessing technologies for Enhanced Landfill Mining</b>
09:30	<b>Keynote Lecture</b> Fred Nguyen (ULG) & Ranajit Ghose (TU Delft) <i>Geophysical methods for landfill exploration: a critical review</i>
10:00	<b>Keynote Lecture</b> Thomas Pretz (RWTH Aachen) <i>The state-of-the-art in sensor based sorting technologies</i>
10:30	<b>Break</b>
11:00	<b>Keynote Lecture</b> Patrick Laevers & Werner Annaert (Go4Circle) <i>Waste Management in the 21st Century: challenges and opportunities</i>
11:20	Christin Bobe (UGent) <i>Exploring the potential of electromagnetic surface measurements for the characterisation of industrial landfills</i>
11:35	Juan Carlos Hernandez Parrodi (Shanks - RENEWI) <i>Characterisation of fine fractions from Landfill Mining: a review of previous landfill mining investigations</i>
11:50	Roeland Geurts & Anja Maul (VITO) <i>But, is it all dirt!? Advanced characterisation of ELFM material by the Characterise-to-Sort technology</i>
12:05	<b>Poster Pitches:</b> Bart Nevejans (Aertssen) <i>Redevelopment of Landfill site Eysels, Turnhout, Belgium;</i> Frederic Coulon (Cranfield University) <i>SMART GROUND: SMART data collection and inteGRation platform to enhance availability and accessibility of data and infOrmation in the EU territory on SecoNDary Raw Materials;</i> Jeroen Spooren (VITO) <i>In-situ recovery of Cr and Ni from landfilled neutralisation sludge;</i> Ulrich Sigmund (Stadler) <i>Sorting with ballistic separators;</i> Nerea Rodriguez (KU Leuven) <i>Towards zero-waste mining industry through novel solvometallurgical processes based on deep eutectic solvents: valorisation of fresh and old tailings</i>
12:30	<b>Break – Lunch</b>
<b>Session 2</b>	<b>Thermal valorisation technologies for Enhanced Landfill Mining</b>
14:00	<b>Keynote Lecture</b> Zoran Jovanovic & Aldo Steinfeld (ETH Zürich) <i>Solar gasification of waste: a critical review</i>
14:30	<b>Keynote Lecture</b> Lieve Helsen & Nicholas Agon (KU Leuven) <i>Advanced waste-to-resources by plasma gasification</i>
15:00	<b>Poster Pitches:</b> Marco Gigantino (ETH Zürich) <i>Thermochemical heat storage development for 24/7 solar-driven gasification of refuse-derived fuel;</i> Nuran Ilman Zaini (KTH Royal Institute of Technology) <i>Pyrolysis of solid recovered fuel derived from landfill waste: Gas yield composition</i>
15:20	<b>Break</b>
15:50	<b>Keynote Lecture</b> Roland Pomberger, Renato Sarc, Daniel Höllen (Montanuniversität Leoben) <i>Development, Challenges and Requirements of RDF in co-incineration plants</i>
16:20	<b>Keynote Lecture</b> Rolf Stein, Richard Taylor, Andy Cornell (APP) <i>The techno-economic viability of upcycling residual waste into advanced biofuels: A commercial demonstration plant case study using Gasplasma® technology to convert to bioSNG</i>
16:40	Luisa Canopoli, Stuart Wagland & Beatriz Fidalgo (Cranfield University) <i>Characterisation of excavated plastics for thermochemical upcycling to platform chemicals and liquid fuels</i>
16:55	<b>Poster Pitches</b> Guilherme Ascensão (Italcementi) <i>Influence of microstructure on mechanical strength of alkali activated slags;</i> Alain Pieters (Envisan) <i>Valorisation of (contaminated) sediments in concrete;</i> Patricia Rabelo Monich (Padua University) <i>Development and characterisation of dense waste-derived glass-ceramics</i>

Tuesday 6 February 2018	
09:00	Welcome and introduction; overview agenda
<b>Session 3</b>	<b>Upcycling technologies for Enhanced Landfill Mining</b>
09:15	<b>Keynote Lecture</b> Nele De Belie (UGent) <i>Residue valorisation in cementitious construction materials</i>
09:45	<b>Keynote Lecture</b> Yiannis Pontikes (KU Leuven) <i>ELFM residues and inorganic polymers: challenges and opportunities</i>
10:15	<b>Keynote Lecture</b> Patricia Rabelo Monich, Acacio Rincon Romero, Enrico Bernardo (Padua University) <i>Upcycling of inorganic waste in monolithic and cellular glass-ceramics</i>
10:35	<b>Break</b>

11:05	<b>Keynote Lecture Jonas Cautaerts</b> (Colruyt) <i>An industry perspective on syngas-to-hydrogen conversion – Building and operating fuel stations for hydrogen</i>
11:25	<b>Peter Van Den Bosche</b> (Witteveen Bos), Charlot Tanghe (DEC-DEME), Tom Behets (OVAM) <i>Pilot on innovative separation and valorisation techniques in case of ELFM</i>
11:40	<b>Hugo Lucas</b> (RWTH Aachen) <i>Recycling of bottom ashes from municipal waste incinerators: Evaluation of metal recovery and synthesis of amorphous precursor for geopolymers</i>
11:55	<b>Poster Pitches: Dirk Paulus</b> (Tauw) Principles of ELFM introduced in the Flemish multicriteria analysis (MCA) for soil remediation projects of landfills; <b>Lotta Juusti</b> (University of Eastern Finland) Regulatory Aspects of Enhanced Landfill Mining in EU and Finnish Environmental Law; <b>Andrea Di Maria</b> (KU Leuven) Approaching zero-waste metallurgy through plasma fuming and inorganic polymerisation of residues from zinc production: environmental evaluation based on Life Cycle Assessment; <b>Giovanna Sauve</b> (KU Leuven) To mine or not to mine: a review of the effects of waste composition, time and long term impacts of landfills in the decision making for ELFM; <b>John Laurence Esguerra</b> (Linköping University) Exploring the economic and environmental performance of a landfill mining project: A feasibility study from the viewpoint of an industrial landfill owner
12:30	<b>Break – Lunch</b>
Session 4	<b>Multi-criteria assessment for Enhanced Landfill Mining</b>
13:45	<b>Keynote Lecture Joakim Krook</b> (Linköping University) <i>LCA and Enhanced Landfill Mining: a critical review</i>
14:15	<b>Keynote Lecture Ilse Bilsen &amp; Patrick Berghmans</b> (VITO) <i>Development of an Early Warning System for the Closing the Circle project at the Remo landfill site</i>
14:45	<b>Keynote Lecture Andrea Winterstetter</b> (VITO), Eddy Wille (OVAM), Peter Nagels (OVAM), Johan Fellner (TU Wien) & Karl Vrancken (VITO) <i>Integrating Landfilled Material Stocks Into Modern Resource Classification Frameworks – The Case of Old Landfills in Flanders</i>
15:15	<b>Keynote Lecture Maurice Ballard</b> (DE LOCALS-CleanTechPunt) <i>A locals perspective on the Closing-the-Circle project in Houthalen-Helchteren</i>
15:35	<b>Break</b>
15:50	<b>Eddy Wille</b> (OVAM) <i>Flooding risks at old landfill sites. Linear economy meets Climate change</i>
16:05	<b>Paul Einhaupl</b> (Linköping University) <i>Enhanced landfill mining at the REMO site: Assessing stakeholders' perspectives on environmental impacts, societal consequences and institutional challenges for implementation</i>
16:20	<b>Closing Debate: Barriers and Opportunities for Enhanced Landfill Mining</b>
17:10	<b>Reception</b>