

Program | Tuesday, July 1st

From 12:00	Registration	Foyer
13:00 – 13:30	Welcome Prof. Dr. Andreas Altmann, Rector MCI Prof. Dr.-Ing. Martin Pillei, Head of Department Research & Development	024
13:30 – 16:20	Keynotes, Presentations and Rapid Oral Sessions (parallel sessions) Session Energy & Process Engineering Session Renewables	024 027

	Session Energy & Process Engineering Chair: Prof. Dr. Werner Stadlmayr	024
13:30 – 14:00	Keynote „KI-Energiemanagement in der Praxis“ <i>Dr. Benjamin Mörzinger (nista), DI Harald Tschenett (TRM)</i>	024
14:00 – 14:20	CFD development and testing of a self-priming vane pump for a flow rate of 2 m ³ /h at 300 rpm <i>Manuel Berger, MCI</i>	024
14:20 – 14:40	Development of a single-channel model of electrically heated monoliths for dry reforming of methane <i>Luca Nohel, MCI</i>	024
14:40 – 15:00	Multi-material textile waste as biomass feedstock: using fused filament fabrication to investigate optimal stirrer geometries in non-Newtonian media <i>Doris Ostner-Kaineder, FH OÖ Wels</i>	024
15:00 – 15:20	Coffee Break	Foyer
15:20 – 15:40	Evaluating pretreatment process impacts in a multi-product wheat straw biorefinery using prospective life cycle assessment <i>Safdar Abbas, TU Wien</i>	024
15:40 – 16:00	A continuous particle model for the simulation of direct reduction of iron ore in fluidized beds <i>Simon Schneiderbauer, JKU Linz</i>	024
16:00 – 16:05	Bubble-particle interactions: A study on film drainage and particle cutting <i>Enatri Enan, JKU Linz</i>	024
16:05 – 16:10	Photocatalyst Development for Water Reclamation: From TiO ₂ to Boron Nitride-Based Composites <i>Daniel Rattinger, MCI</i>	024
16:10 – 16:15	Biosynthesis of silver nanoparticles using <i>Penicillium ochrochloron</i> and <i>Saccharomyces cerevisiae</i> extracts <i>Lucia Colleselli, MCI</i>	024
16:15 – 16:20	Biosynthese von Silber- & Goldnanopartikeln basierend auf terrestrischen Mikroalgen <i>Lucia Colleselli, MCI</i>	024
16:20 – 16:30	Break	Foyer

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	Session Renewables Chair: Prof. Dr. Christoph Pfeifer	027
13:30 – 14:00	Keynote „From Green Carbon to Gold: A Rare Case of Modern Alchemy“ <i>Dr. rer.nat. Robert Salchner, Syncraft</i>	027
14:00 – 14:20	A novel two stage bubbling fluidized bed gasification process - Practical Insights from gasification of mixed waste wood fractions <i>Michael Kresta, MCI</i>	027
14:20 – 14:40	Evaluation of an electrically heated bubbling fluidized bed gasification reactor <i>Theresa Brunauer, BOKU</i>	027
14:40 – 15:00	Computational analysis of carbon-neutral biofuels pyrolysis and combustion <i>Sheekofeh Saberi, MU Leoben, K1-MET GmbH</i>	027
15:00 – 15:20	Coffee Break	Foyer
15:20 – 15:40	Simulation of a novel steam gasification process with in-situ char separation via an overflow pipe to generate negative emission syngas from biomass <i>Thomas Rasl, BOKU</i>	027
15:40 – 16:00	Techno-economic assessment of CO ₂ capture technologies in SNG upgrading from biomass steam gasification <i>Antonia Biebighäuser, BOKU</i>	027
16:00 – 16:05	Project "Reallabor Holzgas" - Biomass Syngas Methanation from a 10 kW Prototype to the planned 5 MW Pilot Plant <i>Marija Jeremić, MU Leoben</i>	027
16:05 – 16:10	A Multi-Component Learning Curve Framework for Estimating SAF Production Costs Using Solar-Assisted Fast Pyrolysis <i>Stavroula Zervopoulou, TU Wien</i>	027
16:10 – 16:15	Sustainable Aviation Fuels (SAF) <i>Enzo Komatz, MU Leoben</i>	027
16:15 – 16:30	Break	Foyer
16:30 – 18:00	Poster Session Lab Tour	Foyer
18:00 – 19:00	Time to commute and arrive at dinner location	
19:00 – 22:00	Dinner at Restaurant Villa Blanka www.villablanka.com	

Program | Wednesday, July 2nd

08:30 – 09:00	Welcome & Coffee	Foyer
09:00 – 10:30	Keynote, Presentation and Rapid Oral Session Hydrogen and its Applications	024
10:45 ~ 12:40	Presentations and Rapid Oral Sessions (parallel sessions) Session Circular Economy & Recycling Session Environmental	024 027

	Session Hydrogen and its Applications Chair: Prof. Dr. techn. Angela Hofmann	024
09:00 – 09:30	Keynote "P2X Jenbach – best practice in renewable Hydrogen production" <i>Dr. Andreas Burger (TiNext)</i>	024
09:30 – 09:50	Direct-Fired Furnace for Steel Strip Reheating: High-Fidelity CFD Analysis of Pure H ₂ versus Austrian Pipeline Natural Gas Firing <i>Abdolreza Aghajanjpour, MU Leoben</i>	024
09:50 – 10:10	Methanation of Biogenic CO ₂ vs. Fossil CO ₂ from Industrial Point Sources: A Techno-Economic and Feedstock Comparison <i>Severin Sendlhofer, MU Leoben</i>	024
10:10 – 10:15	BIOcubed: Biosynthesis of Green Hydrogen Using a Newly Discovered Microorganism <i>Selina Haller, MCI</i>	024
10:15 – 10:20	Hydrogen Storage in Magnesium-Based Metal Powders: Influence of Production and Activation Methods <i>Elias Vigl, MU Leoben</i>	024
10:20 – 10:25	Platinum-cobalt ORR Catalyst Degradation in LT-PEFCs: Effects of Anode-Cathode Humidity Gradients <i>Joel Edjokola, TU Graz</i>	024
10:25 – 10:30	Lifecycle Greenhouse Gas Emissions and Energy Efficiency of Fuel Cell Electric Trucks in Alpine Applications <i>Lucas Schuchter, MCI</i>	024
10:30 – 10:45	Coffee Break	Foyer

	Session Circular Economy & Recycling Chair: Prof. Dr. Lukas Möltner	024
10:45 – 11:05	Producing Packaging Paper from Post-Consumer Textile Waste <i>Ulrich Hirn, TU Graz</i>	024
11:05 – 11:25	Numerical development of thermal pre-treatment for Li-ion battery recycling <i>Emerson Barros de Souza, K1-MET GmbH</i>	024
11:25 – 11:45	QualiCheese – Haltbarkeitsoptimierung von Schnittkäse in ökologisch nachhaltigen Verpackungen <i>Anton Rudolph, HS Kempten</i>	024
11:45 – 12:05	Shelf Life Optimization of Cheese Considering Ecologically Sustainable Packaging <i>Johanna Müller, MCI</i>	024
12:05 – 12:25	Recovery of polyolefins from mixed waste in Tyrol: Status, qualities and critical parameters for recycling <i>Anna-Maria Lipp, TU Wien</i>	024

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12:25 – 12:30	Glass recovery from fluidized bed bottom ashes from municipal solid waste incineration <i>Julia Mühl, TU Wien</i>	024
12:35 – 12:40	Aufwertung von Bierhefe-Abfällen zur Biosynthese von Silbernanopartikel <i>Lydia Challandes, MCI</i>	024

	Session Environmental Chair: Dr. Jan Back	027
10:45 – 11:05	Activated Carbon from Gasified Waste Wood: Potential and Challenges <i>David Gurtner, MCI</i>	027
11:05 – 11:25	Adsorptive Removal of PFAS Using a Fluorinated Ion Exchange Polymer <i>Judith Schobel, MCI</i>	027
11:25 – 11:45	On the formation of a galvanic element in blast furnaces and its use for process diagnostics <i>Simon Moll, MU Leoben</i>	027
11:45 – 12:05	Carbonation behavior of Ca-rich steel slags: Influence of process parameters and mineralogical composition <i>Sarah Reiter, MU Leoben</i>	027
12:05 – 12:25	Mechanistical approach for the electrical conductivity calculation of oxidic melts with focus on steelmaking slags <i>Nina Schlemmer, K1-MET GmbH</i>	027
12:25 – 12:30	Towards Robust Fuel Cell Systems: Mitigating the Risks of Over-Humidification <i>Maximilian Käfer, TU Graz</i>	027
12:30 – 12:35	Calibration of a Concrete Pump for Automated Shotcrete Application in Tunneling <i>Igor Schweiggl, MCI</i>	027
12:35 – 12:40	Decolourisation of Starch Hydrolysates Using Activated Carbon and Ultrafiltration <i>Alexander Trischack, TU Wien</i>	027
12:40 – 12:45	Upscaling of the Removal of Pharmaceuticals from Wastewater with Multi-channel Mixed-matrix membranes into pilot scale <i>Jana Marx, MCI</i>	027
12:45 – 12:50	Desorption of Micropollutants from Bio-based Gasification Chars in Wastewater Treatment <i>Christian Margreiter, MCI</i>	027

12:40 – 14:30	Lunch Closing Handover Marini Best Presentation Award Best Poster Award	Foyer
14:30 – 17:00	Excursion to Glockengießerei Grassmayr www.grassmayr.at	
17:00 – 20:00	Get together & Good bye	City