

7th European Steel Technology and Application Days - ESTAD 2025

Monday, October 6, 2025 - Thursday, October 9, 2025

**Palaexpo Veronafiere
Program**

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Monday, October 6, 2025

Registration (4:00 PM - 6:30 PM)

Tuesday, October 7, 2025

Registration (8:00 AM - 9:00 AM)

Opening session - Auditorium Verdi (9:00 AM - 10:20 AM)

-Conveners: Bernhard, Christian (Montanuniversitaet Leoben); Mapelli, Carlo (Dipartimento di Meccanica - Politecnico di Milano)

time	[id] title	presenter
9:00 AM	Welcome addresses by AIM President and Conference chairpersons	
9:20 AM	[482] The Steel Industry in the Mediterranean Area: Challenges, Opportunities and Enabling Technologies	MARESCHI DANIELI, Giacomo (Danieli & C. Officine Meccaniche SpA)
9:40 AM	[478] Making Steel Great Again: U.S. Steel Production in the Trump Era	ASHBURN, Ronald (Association for Iron & Steel Technology)
10:00 AM	[469] The Production Mix of Chinese Steel Industry and the Technical Efforts Toward Carbon Neutral	TIAN, Zhiling

Coffee break (10:20 AM - 10:50 AM)**Alternative Reduction Methods & Waste Utilization - Vivaldi (10:50 AM - 12:50 PM)****1.4.1**

-Conveners: De Santis, Michele (Rina Consulting - Centro Sviluppo Materiali SpA); Cirilli, F (Rina Consulting Centro Sviluppo Materiali)

time	[id] title	presenter
10:50 AM	[154] Circored as a Pre-Reduction Step for Low-Grade Iron Ores	DIETZIG, Jonas
11:10 AM	[208] Decarbonization of industrial high-temperature processes with an innovative Electric Gas Heating	CASTELLI, Andrea (SMS group)
11:30 AM	[298] Clean iron production by self-reducing agglomerates made in biochar and mill scale: a comparison in reduction efficiency as a function of biochar quality and properties	DALL'OSTO, Gianluca (Politecnico di Milano - Dipartimento di Meccanica)
11:50 AM	[284] Enhancing Steelmaking Waste Utilization through Electric Smelting Furnace Technology	JOUBARANI, Kamal (Hatch Ltd.)
12:10 PM	[419] Comparative Analysis of CO and H ₂ Reduction Mechanisms in Electric Arc Furnace Dust	SHPILEVAIA, Eleonora
12:30 PM	[422] Electric Smelting Furnace Technology for Green Steelmaking	CHOMYN, Kyle (Hatch Ltd)

Circular Economy & Industrial Symbiosis - Respighi (10:50 AM - 12:10 PM)**5.3.1****-Conveners: Guzzon, Marta (Tenova SpA)**

time	[id] title	presenter
10:50 AM	[146] Hurricane – Sector coupling hub for circular use of thermal and industrial waste	ALBOORT, Philippe
11:10 AM	[377] Recent achievements of Industrial Symbiosis in the steel sector based on the Symbio-Steel project	COLLA, Valentina (Scuola Superiore Sant'Anna)
11:30 AM	[428] Upgrading of low-quality iron ores and mill scale with low carbon technologies	HUBRICH, Martin (VDEh-Betriebsforschungsinstitut GmbH)
11:50 AM	[406] Assessment of the natural absorption of CO2 performed by steelmaking slag	MAPELLI, Carlo (Dipartimento di Meccanica - Politecnico di Milano)

Continuous Casting Process Fundamentals & Defect Analysis - Salieri (10:50 AM - 12:50 PM)**2.3.1****-Conveners: Sprecher, Marten (German)**

time	[id] title	presenter
10:50 AM	[7] Analysis of Center Segregation Induced by Density Changes and Shrinkage Cavities Using a Moving-Slice Model in Continuous Casting	LEE, Joodong (Expresslab Inc.)
11:10 AM	[36] Predicting the risk of surface defects in continuous casting with advanced measurements and artificial intelligence	SUNDBERG, Jill (Swetim)
11:30 AM	[105] Influence of different C, Ti, B, Mn, and Al content on hot ductility behavior of two micro-alloyed steel at different strain rates	BAKHTIARI, Saeid (K1-MET GmbH, Stahlstrasse 14, 4020 Linz, Austria. Institute of Materials Science, Joining and Forming at the Graz University of Technology, Kopernikusgasse 24/I, 8010 Graz, Austria)
11:50 AM	[135] Influence of the cooling strategy on the intergranular crack formation during continuous casting of TRIP steels produced from low-grade scrap	LITTRINGER, Robert (Chair of Ferrous Metallurgy, Montanuniversitaet Leoben)
12:10 PM	[329] A novel approach to cracking criteria in continuous casting	RAMIREZ LOPEZ, Pavel E (SWERIM AB)
12:30 PM	[187] The effect of continuous casting conditions on the mechanical properties of low-carbon steel wire rods	BALDUSSI, Federico (Università degli studi di Brescia - Italy)

Hydrogen-Based Direct Reduction (H-DRI) - Margherita I (10:50 AM - 12:30 PM)**5.1.1****-Conveners: Krüger, Klaus (Ingenieurbüro Klaus Krüger)**

time	[id] title	presenter
10:50 AM	[124] Flexible direct reduction of iron ore with Natural Gas and Hydrogen - Potential and perspectives of the new SALCOS demonstration plant μ DRAL in Salzgitter	JUCHMANN, Peter (Salzgitter Flachstahl GmbH)
11:10 AM	[198] Carburization with methane of different iron-bearing oxide pellets reduced by hydrogen	KAR, Manish Kumar (Norwegian University of Science and Technology)
11:30 AM	[277] Models for simulating gas and energy management in the transition of integrated steelworks to high hydrogen direct reduction-based processes	MATINO, Ismael (Scuola Superiore Sant'Anna - TeCIP Institute - ICT-COISP)
11:50 AM	[359] Safe H-DRI: advancing the production, transport and storage of Hydrogen-based Direct Reduced Iron (H-DRI) for sustainable steelmaking	D'AMANZO, Edoardo (RINA Consulting - CSM)
12:10 PM	[400] Kinetics of Direct Reduction of iron ore pellets: understanding rate-limiting steps in hydrogen-based reduction of low- and high-grade pellets	CIRILLI, F (Rina Consulting Centro Sviluppo Materiali)

Raw Material Optimization & Scrap Management - Auditorium Verdi (10:50 AM - 12:30 PM)**2.2.1****-Conveners: Di Cecca, Cosmo (Feralpi Siderurgica)**

time	[id] title	presenter
10:50 AM	[25] The effect of hot heel condition on EAF operations with HBI bucket charging	LEE, JM (HYUNDAI STEEL)
11:10 AM	[60] Melt Shop Production Management with Comprehensive Raw Material Optimization	SCHLAUTMANN, Martin (PSI Software SE)
11:30 AM	[168] Study on the Effect of Direct Reduced Iron on the Nitrogen Content in Electric Arc Furnace Steelmaking	CHEN, Zhao-ping (Baoshan Iron & Steel Co., Ltd..)
11:50 AM	[346] Optimization of scrap mix in EAF steelmaking	FERRO, Sergio Pablo
12:10 PM	[381] Bucket Loading and Scrap Yard Logistics Simulation - Optimizing Material Flow and Enhancing Efficiency	UHL-HÄDICKE, Paul

Rolling Mill Technology & Process Optimization - Margherita II (10:50 AM - 12:50 PM)**3.1.1****-Conveners: Anelli, Ettore (Franchini Acciai SpA)**

time	[id] title	presenter
10:50 AM	[150] Work Roll Cooling Optimization	HNIZDIL, Milan (Brno University of Technology, Heat transfer and fluid flow laboratory, Faculty of Mechanical Engineering)
11:10 AM	[18] Optimisation of CSP hot rolled structured steels based on Nb micro-alloying to reduce costs and GWP	LALLEY, Paul (CBMM)
11:30 AM	[35] Real-Time Work Hardening Evaluation for Optimizing Hot Rolling Schedules and Power Demand in HSLA Steel Production	FERRAIUOLO, Alessandro (Marcegaglia Steel)
11:50 AM	[64] Advanced Load Sharing Control for Roller Straightening of Long Products	VAN PUTTEN, Koos (SMS group)
12:10 PM	[42] Optimisation of roll cooling and descaling processes at Erdemir HSM#2	WOLFF, Robert
12:30 PM	[66] X-Pact® Total Roll Gap Control (TRC®): Improvement of yield and reduction of non-productive time at CCM® Marcegaglia	KOCH, Markus (SMS group)

Surface Technologies - Mozart (10:50 AM - 12:50 PM)**4.3.1****-Conveners: Bonfanti, Francesca (FOMAS Group)**

time	[id] title	presenter
10:50 AM	[275] High temperature oxidation in steel processing under different process conditions, atmospheres and rising levels on tramp elements	PRESOLY, Peter (Montanuniversität Leoben)
11:10 AM	[156] ON-LINE STEEL SURFACE CONTAMINATION MONITORING WITH LIBS-BASED SENSOR	EGNER, David (SARCLAD)
11:30 AM	[88] Energy- and Space-Saving Electrolytic Cleaning with SMS group Pulse Nozzle Technology	WOLFF, Hanna (SMS group)
11:50 AM	[405] On-line laser cleaning of skin pass rolls	SYMENS, Gaétan (CRM Group)
12:10 PM	[62] Oiling of Steel Strip: A New, Intelligent Oiling Machine Combines Electrostatic Oiling With High-Precision Oil Film Measurement, Ensuring Higher Process Security and Lower Oil Consumption	FIEWEGER, Martin (AMEPA GmbH)
12:30 PM	[205] Plasma Nitriding of Vanadium-Alloyed Air-Hardening Ductile Steels	SCHMIDT, Rolf (VantageAlloys AG)

Waste Processing & Byproduct Utilization - Respighi (12:10 PM - 12:50 PM)

5.3.2

-Conveners: Guzzon, Marta (Tenova SpA)		
time	[id] title	presenter
12:10 PM	[261] Technical Considerations in the Design of Capture Systems to Control Fugitive Releases in Ironmaking and Steelmaking	JENNES, Ralf (Hatch Küttner)
12:30 PM	[177] Sensor solutions for online analysis of post-consumer scrap	PETERSSON, Jonas (Swerim AB)

Lunch (12:50 PM - 1:50 PM)**The Steel Industry – Setting the Standard for the Twin Transition - Auditorium Verdi (1:50 PM - 2:20 PM)**

- Presenter: FLEISCHANDERL, Alexander (Primetals Technologies)

Time to change rooms (2:20 PM - 2:30 PM)**Continuous Casting Process Fundamentals & Defect Analysis - Salieri (2:30 PM - 3:30 PM)****2.3.1**

-Conveners: Carli, Riccardo (Prosimet SpA)

time	[id] title	presenter
2:30 PM	[147] The Impact of Cu, Sn, and Ni on Surface Cracking in Continuous Casting	GAISER, Georg (Chair of Ferrous Metallurgy, Montanuniversität Leoben)
2:50 PM	[161] Reduction of emissions at casters cooling chamber.	WILHELMI, Arndt (Lechler GmbH)
3:10 PM	[128] Characteristics and Control of Oxide–Sulfide Complex Inclusions in D2 High-Speed Railway Wheel Steel	BAO, Daohua (State Key Laboratory of Advanced Metallurgy, University of Science and Technology)

Direct Reduction Process Optimization - Vivaldi (2:30 PM - 4:10 PM)

1.4.2

-Conveners: Fleischanderl, Alexander (Primetals Technologies)		
time	[id] title	presenter
2:30 PM	[33] Improving Direct Reduction Operation efficiency through Roller Screen technology	GONÇALVES ANDRADE, Alexandre (Metal7 Inc.)
2:50 PM	[37] Pellet reducibility index management range for direct reduction plant	LEE, Dong Soo
3:10 PM	[111] Hot DRI Material Gate – A smart product for green steelmaking in a digitalized future	DE MATTEIS, Jérôme (SMS group)
3:30 PM	[372] Key measurement technologies for direct reduction ironmaking	RODRIGUES, Filipe (TMT Luxembourg)
3:50 PM	[312] Carbothermic reduction of hot rolling sludge by rice husk char with microwave heating	TOKUNAGA, Tshubasa (Kyushu University, school of engineering)

EAF Design & Power Supply Optimization - Auditorium Verdi (2:30 PM - 4:10 PM)**2.2.2****-Conveners: Mapelli, Carlo (Dipartimento di Meccanica - Politecnico di Milano)**

time	[id] title	presenter
2:30 PM	[6] Improved EAF performance by optimized high current system design	RIEDINGER, Dirk (Badische Stahl-Engineering GmbH)
2:50 PM	[32] Direct Feed Power Supply to enhance power quality and EAF KPI	SANCHEZ, Mathieu
3:10 PM	[271] Next Generation Power Supply Options for Electric Arc Furnaces and Electric Smelting Furnaces	CHOMYN, Kyle
3:30 PM	[94] Latest SMS EAF technologies for safety and green steel production	BERNARDIS, Luca (SMS group)
3:50 PM	[122] NEW GENERATION IN PRE-HEATING TECHNOLOGY FOR ELECTRIC STEEL MAKING HIGHER PRODUCTIVITY WITH REDUCED POWER	ERTAS, dogan

Hydrogen-Based Direct Reduction (H-DRI) - Margherita I (2:30 PM - 4:10 PM)**5.1.1****-Conveners: Malfa, Enrico (Tenova SpA)**

time	[id] title	presenter
2:30 PM	[313] Flexible operation of DRI plants integrated with high-temperature electrolysis for cost-effective decarbonization of iron production	FICILI, Marco (Politecnico di Milano)
2:50 PM	[357] Real laboratory 'H2Stahl' for hydrogen-based direct reduction	WOLTERS, Ralf (VDEh-Betrieb sforschungsinstitut GmbH)
3:10 PM	[214] An integrated approach to steelmaking decarbonization: HYDRA project. Description of the innovative open platform and first results	CIRILLI, filippo (Rina Consulting Centro Sviluppo Materiali)
3:30 PM	[421] Results from the HySteel project: integration of solid oxide electrolysis into direct reduction iron systems	SCACCABAROZZI, Roberto (Laboratorio Energia & Ambiente Piacenza)
3:50 PM	[473] Calix's Zero Emissions Steel Technology (ZESTY): Breakthrough pilot testing results for the Hydrogen Direct Reduced Iron (H-DRI) process	VAN DORP, Sebastiaan (Calix)

Rolling Mill Technology & Process Optimization - Margherita II (2:30 PM - 4:10 PM)**3.1.1****-Conveners: ferraiuolo, alessandro (Marcegaglia Ravenna)**

time	[id] title	presenter
2:30 PM	[98] Danieli Quali-HSM®: the next gen HSM process	DI BLAS, Matteo (Danieli & C. Officine Meccaniche S.p.A.)
2:50 PM	[115] Latest developments in MIDA technology	PONTONI, Nicola (Danieli & C. Officine Meccaniche S.p.A.)
3:10 PM	[113] Multi-functional Simulation System for Continuous Hot Bar Rolling: Development and Industrial Application	GUO, SHUO (Yanshan University)
3:30 PM	[83] Transforming Steel Manufacturing: Innovations and Achievements in Direct Casting and Rolling	KINTSCHER, Björn (SMS group)
3:50 PM	[84] The art of keeping up with latest hot strip mill technology – upgrade success stories	GUMBINGER, Hartmut (SMS Group)

Surface Technologies - Mozart (2:30 PM - 4:10 PM)**4.3.1****-Conveners: Bolelli, Giovanni (Dipartimento di Ingegneria "Enzo Ferrari", Università di Modena e Reggio Emilia)**

time	[id] title	presenter
2:30 PM	[24] Modification of Diamond Like Carbon (DLC) to improve specific tribological characteristics for automotive steel components	ROMAGNOLI, Denis (STS srl)
2:50 PM	[86] Advancements and future prospects of zero emission galvanizing technologies	KRETSCHMER, Matthias (SMS group)
3:10 PM	[34] Investigation on the use of organic acids to pickle the oxide scale of carbon steel hot rolled strips	FLAMENT, Sebastien (CRM Group)
3:30 PM	[375] Innovative "Scale Free" Furnace for section rolling mill	TIMOSSI, Pietro (Danieli & Officine Meccaniche S.p.A.)
3:50 PM	[197] Advanced Coating Thickness Measurement in Electrical Steel Manufacturing with EMG SOLID® DFT	KRESO, Mark

Waste Processing & Byproduct Utilization - Respighi (2:30 PM - 4:10 PM)

5.3.2

-Conveners: Giordano Stregli Montauti		
time	[id] title	presenter
2:30 PM	[444] EAF waste gas cleaning through iRecovery® system and CataFlex™	ZECCHINATO, Luca (Tenova SpA)
2:50 PM	[327] Predicting the Reduction Kinetics of the Electric Arc Furnace Dust - A Machine Learning Approach	KEUSCHNIG, Aaron (Montanuniversität Leoben)
3:10 PM	[302] Smart robotic system for scrap sorting	RUSU, ION (POLYTEC SPA)
3:30 PM	[461] Technological solutions for pollutants abatement in Steel Meltshop fumes	MILOCCO, Alessio (Danieli & C. Officine Meccaniche S.p.A.)

Mold Technology & Nozzle Performance - Salieri (3:30 PM - 4:10 PM)

2.3.2

-Conveners: Carli, Riccardo (Prosimet SpA)

time	[id] title	presenter
3:30 PM	[193] Concepts for the development of carbon free mold powders for the continuous casting of steels	GRUBER, Nathalie (Montanuniversitaet Leoben - Chair of Ceramics)
3:50 PM	[159] Continuous Casting Mold Flow with Original and Used Nozzle Geometries: Numerical Flow Simulations and Water Model Measurements	JAVUREK, Mirko (Johannes Kepler Universität Linz, Institut für Strömungslehre und Wärmeübertragung)

Coffee break (4:10 PM - 4:40 PM)**Blast Furnace Process Optimization & Control - Vivaldi (4:40 PM - 7:00 PM)****1.3.1****-Conveners: Nilson, Gert (Jernkontoret)**

time	[id] title	presenter
4:40 PM	[112] Implementation of EASyMelt with Ammonia and HBI Charging to Achieve Ultra Low Carbon Ironmaking	MAURET, Florent (SMS group)
5:00 PM	[216] AI-Powered Cohesive Zone Optimization: Enhancing Efficiency and Stability in Blast Furnaces	WACHLMAYR, Johann (Austria)
5:20 PM	[232] Breaking boundaries: Tata Steel's H Blast Furnace sets new standards	CASTAGNOLA, Cristiano (SMS group)
5:40 PM	[195] Reducing blast furnace CO2 emissions	LONG, Edward (Primetals Technologies)
6:00 PM	[322] Monitoring of blast furnace wall pressure profiles and their relation to process efficiency	BARTUSCH, Hauke (VDEh-Betriebsforschungsinstitut GmbH)
6:20 PM	[8] Campaign Life Extension of Hot Stoves in Blast Furnace Ironmaking	SAMUEL, Steven (Hatch)
6:40 PM	[109] Deep Learning Model to Predict the Remaining Time to Close Tap-holes for Blast Furnaces	LEE, Seungmoon (POSCO Technical Research Laboratories)

Green Steel Technologies - Respighi (4:40 PM - 7:00 PM)**5.3.3****-Conveners: Kempken, Jens (SMS group)**

time	[id] title	presenter
4:40 PM	[10] Globalization cancelled?	VOIGT, Nicole
5:00 PM	[53] Thick Slab Casting Technology for renewable energy produced by windmills	WANS, Jochen (SMS group)
5:20 PM	[376] Sustainable biogenic carbon for metallurgical use	NYLUND, Erland (Swetim AB)
5:40 PM	[201] Transitioning to Green Steelmaking: Environmental Considerations of Electric Arc Furnaces	STEINPARZER, Thomas (Primetals Technologies Austria)
6:00 PM	[443] Production of hydrogen-rich synthesis gas for blast furnace injection by exploiting coke breeze combustion to reform coke oven gas.	GILI, MATTEO (RINA-CSM)
6:20 PM	[78] Yield increase by hot strand coating in continuous casting of long product	HAUENSTEIN, Gian (SMS group)
6:40 PM	[398] Application of a novel biowaste-derived biocoal as coal substitute in Electric Arc Furnace	SALIMBENI, Andrea (Re-Cord)

Hydrogen-Based Steelmaking Technologies - Margherita I (4:40 PM - 7:00 PM)**5.2.1****-Conveners: Malfa, Enrico (Tenova SpA)**

time	[id] title	presenter
4:40 PM	[203] Hydrogen Reduction of Manganese and Iron Oxides in a Commercial Manganese Ore: Thermochemistry and Kinetics	SARKAR, Alok (Norwegian University of Science and Technology (NTNU), Norway)
5:00 PM	[96] Ammonia as a Cost-Effective Energy Carrier for Decarbonization in the European Steelmaking Industry	JI, Jihong (SMS group)
5:20 PM	[194] Electrification of heating in steelmaking – an enabler of fossil-free steel	CHANDRASEKARAN, Dilip (Kanthal)
5:40 PM	[67] Hydrogen plasma smelting reduction of Cr ₂ O ₃ /Chromite: the first step to direct and sustainable production of stainless steel	JAFARZADEH, Mohammad (K1-MET)
6:00 PM	[50] Development and Testing of a Hydrogen-Fueled Burner-Injector System for EAF Applications: A Clusters4Future Initiative	KRAUSE, Fabian (SMS group)
6:20 PM	[229] Replacing natural gas with Hydrogen in heat treatment furnaces: impact on scale formation, surface quality and pickling kinetics of stainless steel	MASSARELLI, Niccolo
6:40 PM	[484] Advancing hydrogen plasma smelting reduction: Experimental insights from a pilot plant	ADAMI, Bernhard (K1-MET GmbH)

Mold Technology & Nozzle Performance - Salieri (4:40 PM - 6:40 PM)**2.3.2****-Conveners: Bonfanti, Francesca (FOMAS Group)**

time	[id] title	presenter
4:40 PM	[365] The interplay of SEN design and flow dynamics in thin and mid slab casting	HACKL, Gernot (RHI Magnesita GmbH)
5:00 PM	[129] Characteristics of Nozzle Clogging and Evolution of Oxide Inclusion for Al-Killed Super304H Stainless Steel	QIAO, Tong (State Key Laboratory of Advanced Metallurgy, University of Science and Technology Beijing)
5:20 PM	[250] BORON IN CASTING POWDER: INSIGHTS FROM PROSIMET STUDIES	ALLONI, Marco (Prosimet S.p.A.)
5:40 PM	[68] Advancing Mold Monitoring by Integrating Thermal Analysis and Material Insights with respect to the hot crack susceptibility	KRASILNIKOV, Artemy (SMS group)
6:00 PM	[465] Cu+: A New Standard in Slab Mould Plate Design for Cost-Effective Steel Production	BEEL, Alexander (cunova GmbH)
6:20 PM	[211] Case study on the improved reliability and efficiency of the HD moldFO+ fiber optic mold monitoring system	SIX, Stephan (SMS group)

Refractories & Sustainability - Auditorium Verdi (4:40 PM - 7:00 PM)**2.2.3****-Conveners: Roberto Peri**

time	[id] title	presenter
4:40 PM	[297] Highly efficient technologies for increased yields in steelmaking processes and reduced environmental impact	GLASER, Björn (KTH)
5:00 PM	[283] Enhancement of tramp elements removal from liquid iron by molten oxysulfide electrolysis	AMBIRU, Masahiro (Tohoku University)
5:20 PM	[222] Low Carbon Footprint EAF Refractories to support Scope 3 emissions reduction and the overall European green steel transformation	DIEGUEZ SALGADO, Uxia
5:40 PM	[471] Recent Advances in Refractory-Maintenance and Safety for Steel Plants with the help of 3D-Laser-Scanning, Digitalization and Gunning-Robot-Systems	WELLING, Martin (Minteq International GmbH)
6:00 PM	[356] Life Cycle Assessment for the electric steelmaking route in the ALCHIMIA project	ROSSI, Federico (Sant'Anna School of Advanced Studies)
6:20 PM	[348] INNOVATIVE APPROACH IN STEELMAKING REFRACTORY APPLICATIONS	BUCHBERGER, Bernd
6:40 PM	[292] Metallic Elements Dissipation Avoided by Life cycle design for Steel – MEDALS project	GLASER, Björn (KTH)

Rolling Mill Technology & Process Optimization - Margherita II (4:40 PM - 7:00 PM)**3.1.1****-Conveners: Barella, Silvia (Politecnico di Milano)**

time	[id] title	presenter
4:40 PM	[125] SBQ Sizing - Free of charge	SCHNELL, Guenther (Friedrich Kocks GmbH & Co KG)
5:00 PM	[181] Wave Control Using Machine Vision in the Finishin Mill	JUNG, jinwoo (hyundai-steel)
5:20 PM	[311] The best knows no limits! It's time to challenge the ESP sequence lengths	BAUMGARTNER, Kerstin (Primetals Technologies)
5:40 PM	[191] The application of bar cooling technology to plate mills for throughput and utilization improvements	ROBINSON, Ian (Primetals Technologies)
6:00 PM	[244] Smart controlled actuator to homogenize the temperature of the transfer bar	ADRIAEN, Pepijn (CRM Group)
6:20 PM	[182] A Study on enhancing accuracy of AI-based RDT automatic control in hot rolling process	YUN, Daeho (Hyundai Steel Company)
6:40 PM	[16] Revolutionizing Triple Slitting Technology for Rebar 16mm in the rolling and groove process design: QATAR Steel & POMINI Long Rolling Mills technologies	NARDINI, Alberto

Surface Technologies - Mozart (4:40 PM - 6:40 PM)**4.3.1****-Conveners: Bolelli, Giovanni (Dipartimento di Ingegneria "Enzo Ferrari", Università di Modena e Reggio Emilia)**

time	[id] title	presenter
4:40 PM	[389] Improving sustainability of Cold Rolling of Low-Carbon Steels via Oil Free Lubricants	COLLA, Valentina (Scuola Superiore Sant'Anna)
5:00 PM	[167] High Turbulence Pickling	FLAMENT, Sebastien (CRM)
5:20 PM	[458] Optimization of Stainless Steel Cold Rolling Lubrication Through Thermal Modeling	ELHAJJ, Cynthia
5:40 PM	[470] Design and advantages of a hybrid furnace combining gas burners and induction heating	MAPELLI, Carlo (Dipartimento di Meccanica - Politecnico di Milano)
6:00 PM	[153] Hot strip surface quality improvements by: Work roll lubrication and cooling package for hot strip mills with a new special feature for a continuous lubrication	MITTLBÖCK, Simon (Primetals Technologies)
6:20 PM	[81] X-Pact® Solid Control – process optimization, quality control and root cause analysis in case of abnormalities in the cast product	WILMES, Ronald (SMS group)

Poster Session - _Foyer (7:00 PM - 8:30 PM)

[id] title	presenter	board
[49] Optimizing Biomass Gasification-Driven Carburization for Carbon-Neutral Hydrogen-Based Steelmaking	LEE, YUBIN	
[133] The Effect of Crystallization Temperature on the Properties of Silicon Manganese Slag Cast Stone	HUANG, Yi (University of Science and Technology Beijing)	
[155] Advancing Sustainability in Continuous Casting of Steel Strategies for Productivity, Traceability, and Waste Reduction	NACLERIO, Angelo	
[212] Prediction and controlling of strip buckling during industrial continuous annealing process	LI, Ruowei (Department of Mechanical Engineering, Politecnico di Milano, Milano, 20156, Italy)	
[224] Effect of Magnesium Deoxidation on Non-Metallic Inclusions in Austenitic Stainless Steel	CHANG, Min Kwan	
[240] Development of an AI model to optimize cooling conditions for hot-rolled coils from the down coiler to the storage yard to minimize material properties deviations in high-strength steel	KANG, Youn-Hee (POSCO)	
[287] Technical Overview of Unique Non-Woven Process Rolls	ALMQUIST, Eric (StarTool)	
[316] INNOVATION IN FREQUENCY CONVERTERS TO REDUCE DOWNTIME AND IMPROVE PRODUCTIVITY IN STEEL PLANT	BASU, Suvro (Danfoss)	
[320] Green steel production through the Endless Bar Production process	TERCELLI, Cristiano (Primetals Technologies)	
[369] Improvement on energy efficiency systems under volatile production scenarios	OSWALD, Jonas (Dürr Systems AG)	
[380] Multi-alloy production via chips compaction and hot rolling	CETTO, Pietro (Politecnico di Milano)	
[392] AI-BASED SURFACE INSPECTION AND 3D PROFILING FOR QUALITY ASSURANCE IN STEEL PRODUCT GRINDING	SHARP, Richard (Evertz Europe S.A.)	
[404] Green Hydrogen in Cogne	MORREALE, Vincenzo	
[439] Effect of slag conditions on the wetting behavior between blast furnace slag and cokes	SHIN, Hyeonwoo (Dong-A University)	
[450] Decarbonization of Steel: Challenges and Opportunities for Modern Steelmakers and Carmakers	BUCCI, Stefano (Università degli Studi di Torino)	
[137] Production conditions of porous iron whisker for the gas reforming in CRIP-D ironmaking process	SATO, Haruka (Tohoku University)	
[231] Optimization of Fe-Mn-Al-C low-density steels for forging application	CALLIARI, Irene (university of Padova)	
[324] Investigation of the reoxidation behaviour of HBI samples produced on a laboratory scale	NESTEROV, Sergej	
[338] Determining of iron oxide pellet porosity using image analysis	BORGES MATOS, Eduardo (University of Oulu)	
[43] Advanced fluid flow simulation for the RH process	ODENTHAL, Hans-Jürgen (SMS group)	
[225] Local Area Production System	THIEL, Jan (PSI SE Process Industries and Metals)	

[425] AI-Based Optimization of Compressed Air Networks in Hard-to-Abate Industrial Sectors	ORLIETTI, Lorenzo (Alperia Green Future Srl)	
[9] Different Options of Stove Modernization using Innovative Top Combustion Stove of Kalugin Design	KALUGINA, Marina (KALUGIN JSC)	
[173] Green Manganese steel from remelting of hydrogen based Direct Reduced Iron (DRI) and green Ferroalloy: a CO2 free approach	KUMAR, Pankaj (PhD candidate)	
[185] Next generation of sustainable HICON/H2® bell-type furnace systems	SEEMANN, PETER (Ebner Group)	
[342] Development of a 1D Numeric model for axial pebble bed Thermal Energy Storage (TES) as a design decision tool for waste heat recovery in steel plants	MOUSSALEM, antoine	
[417] Advancing Hydrogen Plasma Smelting Reduction: Process Simulation and technical and environmental assessment	HASSANPOUR, Hamideh (postdoc)	
[104] FUME TREATMENT PLANT FOR A STEELMAKING FACILITY: OVERVIEW OF THE MAIN FACTORS THAT AFFECT THE FINAL CHOICE	TOMBA, MATTEO (PERT SRL)	
[202] Smarter Galvanizing through Zinc Coating Optimization with EMG iCASS®: A Modular AI-Driven Platform	KRESO, Mark	
[280] Mitigating Worker Skills Gaps using Digital Workflows & Mixed Reality	ALMQUIST, Eric (StarTool)	
[303] Safer Electric Melting: How robotics is transforming the EAF steel production	RUSU, ION (POLYTEC SPA)	
[101] PERT BS STAND APPLICATION IN A UPGRADE OF SECTION MILL – CASE HISTORY-	TOMBA, NICOLA (PERT SRL)	
[71] Advancements in Genius CM® Chatter: Enhancing Chatter root cause detection and vibration management at BRS PLTCM	RICHARD, Sebastian (SMS group)	
[57] Improvement of Breakout Prevention for startup stability enhancement in high productivity thin slab casters	PURSCHE, Thomas (SMS group)	
[477] Experiences and lessons learned from Metso's Outotec pilot DRI smelting tests	HAIMI, Timo (Mr.)	
[479] Novel production route of fully processed high-Si NGO steels for e-mobility at Marcegaglia Ravenna plant	BARBERINI, Francesco (University of Bologna)	
[314] Effects on steel oxidation kinetics and oxide scale features of hydrogen combustion	CIRILLI, F (Rina Consulting Centro Sviluppo Materiali)	
[119] DynReAct – An open-source production planning software	NÖLLE, Christoph (BFI)	
[388] Demonstration of XR experience via Hands-On Session	BORASIO, Emanuele (weAR Srl)	

Get-together - Meet&Greet (7:00 PM - 8:30 PM)

Wednesday, October 8, 2025

Alloy Design & Microstructure Control - Mozart (9:00 AM - 10:40 AM)

4.1.1

-Conveners: Anelli, Ettore (Franchini Acciai SpA)

time	[id] title	presenter
9:00 AM	[30] Boron alloyed free cutting steel: a new candidate for Pb steel substitution	UNIFANTOWICZ, Paulina (Steeltec AG)
9:20 AM	[242] Effect of carbon content (0.61 to 0.99 wt.%) on bainite transformation kinetics, structure and tempering resistance in low alloy steel	STÅHLKRANTZ, Adam (Swerim AB)
9:40 AM	[407] Microstructural optimization and mechanical behavior of SS-QP treated 30CrNiMo8 steel	BELFI, Marco (Politecnico di Milano)
10:00 AM	[175] Role of Vanadium in welding of flat products in High-Strength Low-Alloy Steel: microstructure and mechanical properties	DI SCHINO, Andrea (University of Perugia)
10:20 AM	[442] Designing thermomechanical processing schedules for Mo- and Cu-containing quenching and partitioning medium-Mn steels for multiphase forgings	SKOWRONEK, Adam (Silesian University of Technology)

Blast Furnace Process Optimization & Control - Vivaldi (9:00 AM - 10:20 AM)**1.3.1****-Conveners: Mombelli, Davide (Politecnico di Milano - Dipartimento di Meccanica)**

time	[id] title	presenter
9:00 AM	[353] Solid as Iron: Integrated Blast Furnace Control, Optimization, Condition Monitoring, and Simulation	BETTINGER, Dieter (Primetals Technologies)
9:20 AM	[429] A blast furnace tapping simulator to better understand dead man flotation scenarios	PUCHER, Samuel (K1Met GmbH)
9:40 AM	[424] Burden distribution modeling to diagnose blast furnace operations	GE, Sa (Hatch Ltd.)
10:00 AM	[256] Industrial Implementation of PyroLIBS for Continuous Hot Metal Chemistry Measurement	SHAHRIARI, Bijan (Hatch)

Cooling & Solidification Control - Salieri (9:00 AM - 10:40 AM)**2.3.3****-Conveners: Alloni, Marco (Prosimet S.p.A.)**

time	[id] title	presenter
9:00 AM	[117] Hybrid solution for local heat transfer coefficients in a transient solidification model for continuous casting	SEIDL, Monika (K1-MET GmbH and Montanuniversitaet Leoben)
9:20 AM	[427] Simulation of transient temperature and solidification evolution in a continuously cast slab using multiple transverse sections	IVANOVA, Anna (Continuous Casting Centre, Colorado School of Mines)
9:40 AM	[23] Bending Control With Cooling Bed Technology for Typical Alloy Cold Heading Steel Billet.	CHEN, Zhiping (Central Research Institute, Baosteel Iron & Steel CO., LTD)
10:00 AM	[114] Finite Element Thermo-Mechanical Modeling of Continuous Casting: Simultaneous In-Mould Solidification and Mould Condition Analysis for High-Speed Billet Casting with Danieli's Power Mould™	GOTTI, Arianna (Trasnvalor SA)
10:20 AM	[160] Secondary Cooling Heat Transfer Measurements on a New Test Rig	JAVUREK, Mirko (Johannes Kepler Universität Linz, Institut für Strömungslehre und Wärmeübertragung)

Energy Efficiency & Decarbonization - Auditorium Verdi (9:00 AM - 10:40 AM)**2.2.4****-Conveners: Bianchi Ferri, Mauro (Acciarium)**

time	[id] title	presenter
9:00 AM	[434] Influence of Hydrogen-DRI on the EAF process	HEINL, Leon (Primetals Technologies)
9:20 AM	[252] Effects of H ₂ as energy source and biocarbon injection in EAF	ORRE, Joel (Swерim AB)
9:40 AM	[38] Experimental evaluation of a flexible natural gas and hydrogen burner in the electric arc furnace	SCHULTE, Lilly
10:00 AM	[257] Efficiency of bio-carbon as slag reduction and slag foaming agent in EAF	ORRE, Joel (Swерim AB)
10:20 AM	[385] Simulating the use of renewable and alternative Carbon-bearing materials and hydrogen in the Electric Arc Furnace through a flowsheet model	COLLA, Valentina (Scuola Superiore Sant'Anna)

Energy Efficiency & Recovery - Respighi (9:00 AM - 10:40 AM)**5.3.4****-Conveners: Marten-Perolino, Matteo (Cogne Acciai Speciali)**

time	[id] title	presenter
9:00 AM	[74] Energy recovery in long product casting	HAUENSTEIN, Gian (SMS group)
9:20 AM	[99] Optimizing Energy Media Consumption and Reducing Greenhouse Gas Emissions in Coil Coating Lines	CHIAPPA, Michele (Danieli & C. Officine Meccaniche S.p.A.)
9:40 AM	[132] Volteron - Technology for Green Steel	MICHEL, David
10:00 AM	[200] Optimized Control of an EAF off-gas system by Video Analysis	STEINPARZER, Thomas (Primetals Technologies Austria)
10:20 AM	[248] Optimizing Process Gas Utilization through AI: A Sustainable Energy Solution	YU, Han (Metallurgy department, Swerim AB)

Hydrogen-Based Steelmaking Technologies - Margherita I (9:00 AM - 10:00 AM)

5.2.1

-Conveners: Matino, Ismael (Scuola Superiore Sant'Anna - TeCIP Institute - ICT-COISP)		
time	[id] title	presenter
9:00 AM	[386] Innovative Approaches To Sustainable FeCr Production Through Biocarbon and H2 Utilization	MOUSA, Elsayed (Swetim AB)
9:20 AM	[174] Challenges and solutions for process characterisation of hydrogen plasma smelting reduction (HPSR) at pilot scale and beyond.	QUICK, Cameron (K1-MET GmbH)
9:40 AM	[51] SMS ZERO2Flame HY2 burner for reheating furnaces	ZANUSSO, Umberto (SMS group)

Rolling Mill Technology & Process Optimization - Margherita II (9:00 AM - 10:00 AM)**3.1.1****-Conveners: Liu, Caiyi (Yanshan university)**

time	[id] title	presenter
9:00 AM	[330] Innovative Rolling Mill for Seamless Structural Hollow Sections - The legacy of MSH profiles continues	SURMUND, Jörg (Friedrich KOCKS GmbH CO. KG)
9:20 AM	[373] Low-emission, multiline, quality bar quenching and tempering lines: Danieli Olivotto Ferré multiline solution maximizes production capacity and final product quality	BARBERIS, Andrea (Danieli & Officine Meccaniche S.p.A.)
9:40 AM	[436] A New Technology for Bar and Wire Rod Mills	COCKRAM, Paul (Primetals Technologies Austria GmbH)

Blast Furnace Decarbonization - Margherita I (10:00 AM - 10:40 AM)

5.2.2

-Conveners: Matino, Ismael (Scuola Superiore Sant'Anna - TeCIP Institute - ICT-COISP)		
time	[id] title	presenter
10:00 AM	[323] Hydrogen Pulse Injection into the Blast Furnace Shaft	BARTUSCH, Hauke (VDEh-Betriebsforschungsinstitut GmbH)
10:20 AM	[226] Beyond Carbon Neutral with Ultra-low Coke-rate Blast Furnace	SEKIGUCHI, Takeshi

Coffee break (10:40 AM - 11:10 AM)

Alloy Design & Microstructure Control - Mozart (11:10 AM - 11:50 AM)

4.1.1

-Conveners: CHINAGLIA, LUIGI (FOMAS S.p.a.)

time	[id] title	presenter
11:10 AM	[106] Predicting recrystallization phenomena with DIGIMU□ during hot-rolling of grade AISI 304L	SOURISSEAU, Thomas (UGITECH)
11:30 AM	[274] Effect of short-time annealing on recrystallization and texture evolution in an electrical steel	CAROSI, Daniele (Alma Mater Studiorum - Università di Bologna)

Blast Furnace Decarbonization - Margherita I (11:10 AM - 12:50 PM)**5.2.2****-Conveners: Nilson, Gert (Jernkontoret)**

time	[id] title	presenter
11:10 AM	[249] The SMART project : recycling of plastics and waste materials in TORERO to substitute more coal injection in the blast furnace	GAROT, Damien (CRM Group)
11:30 AM	[308] 150 tons revert-based briquettes produced and processed in a blast furnace	DEN HOLLANDER, Joyce
11:50 AM	[326] Blast Furnace CO2 Emissions: A Techno-Economic Assessment	VAN LAAR, Reinoud (Danieli Corus BV)
12:10 PM	[364] Blast Furnaces CO2 mitigation: Ekofer technology (E.S.C.H. gmbh) for BLUAIR injection (Secondary Raw Material - recycled polymers)	GOSPARINI, Elia
12:30 PM	[476] Decarbonization by Process Optimization - Off-Gas Results Using Deep View Infra-Red Technology	GRAF, Alexandra (PROMECON process measurement control GmbH)

Burden Materials & Quality - Vivaldi (11:10 AM - 12:30 PM)**1.3.2****-Conveners: Mombelli, Davide (Politecnico di Milano - Dipartimento di Meccanica)**

time	[id] title	presenter
11:10 AM	[345] Sodium silicate impacts on blast furnace operation.	PEREIRA DE SÁ, AUGUSTO (VALE SA)
11:30 AM	[241] Comparison of laboratory tests and HKM blast furnaces on the reduction and carburisation behaviour of burden materials under coke gas injection	PERRET, Fabian (Hüttenwerke Krupp Mannesmann GmbH)
11:50 AM	[63] Development of Degradation Model for Sinter Ore Considering Particle Size Distribution	NISHIHIRO, Kazuto
12:10 PM	[199] Influence of the mineral gangue on pellets softening melting properties in Blast Furnace. Experimental study of phase equilibria during the melting of pre-reduced pellets	GRAZ, Yann (ArcelorMittal research)

Caster Design & Process Optimization - Salieri (11:10 AM - 12:50 PM)

2.3.4

-Conveners: Alloni, Marco (Prosimet S.p.A.)		
time	[id] title	presenter
11:10 AM	[236] Development of optimized continuous casting process for zero-defect round blooms production in high silicon 54SiCr6 automotive spring steel. Production trials in Acciaierie Bertoli Safau S.p.A.	BUSOLINI, Sara (Acciaierie Bertoli Safau)
11:30 AM	[221] Development of an Optimized Strand-EMS for Improved Microstructure and Reduced Segregation in Continuous Casting	LEE, Soonho
11:50 AM	[228] Improved Internal Quality of High-Grade Steel Plate Using PosHARP Technology	CHO, You Beom (POSCO)
12:10 PM	[77] The new MSR bloom caster at Saarloha Advance Materials, Pune	RIVETTI, Pierpaolo (SMS Concast)
12:30 PM	[466] Machine learning model for mould powder consumption in continuous steel casting	DA SILVA CRUZ, Pedro Paulo (K1-MET)

Energy Efficiency & Decarbonization - Auditorium Verdi (11:10 AM - 11:30 AM)

2.2.4

-Conveners: Krüger, Klaus (Ingenieurbüro Klaus Krüger)		
time	[id] title	presenter
11:10 AM	[448] Pneumatic injection of carbon neutral sources in the EAF melting process: a comprehensive overview of the use of new materials	MARCUZZI, Simone (MORE srl)

Energy Efficiency & Recovery - Respighi (11:10 AM - 12:10 PM)

5.3.4

-Conveners: Marten-Perolino, Matteo (Cogne Acciai Speciali)		
time	[id] title	presenter
11:10 AM	[296] REUSE OF RECOVERY THERMAL ENERGY FOR WATER TREATMENT IN STEEL INDUSTRY	FERRANTI, Angelo (Contec Industry srl)
11:30 AM	[403] EAF Waste Heat Recovery: Turning Industrial Waste into Sustainable Energy	DIANI, Matteo (Cogne Acciai Speciali)
11:50 AM	[460] Waste Heat Recovery systems for EAF primary fumes	FERUGLIO, Alberto (Danieli & C. Officine Meccaniche S.p.A.)

Roll Technology & Maintenance - Margherita II (11:10 AM - 12:50 PM)**3.1.2****-Conveners: Barella, Silvia (Politecnico di Milano)**

time	[id] title	presenter
11:10 AM	[61] Wear and oxidation behavior of cast high-speed steels used for work rolls in hot rolling mills	REITER, Maximilian (Eisenwerk Sulzau-Werfen R. & E. Weinberger AG, Tenneck, Austria)
11:30 AM	[100] PERT GRINDING BALL ROLLING MILL	TOMBA, NICOLA (PERT SRL)
11:50 AM	[72] Sustainable repairs of machine parts in rolling mills by advanced coating technologies	IGEL, Jens (SMS Group)
12:10 PM	[172] Advanced manufacturing and improved performances of hot rolling mill edger rolls (EdgerRolls)	MALBRANCKE, Jurgén (CRM Group)
12:30 PM	[15] On The Performance of Implementing Pre-conditioned Oxide Film of HSS Rolls in A Hot Strip Mill	ZHANG, ZHI (BAOSHAN IRON&STEEL CO. LTD)

Slag Optimization & Process Control - Auditorium Verdi (11:30 AM - 12:50 PM)**2.2.5****-Conveners: Krüger, Klaus (Ingenieurbüro Klaus Krüger)**

time	[id] title	presenter
11:30 AM	[397] Physicochemical properties of electric steelmaking slags for the mitigation of CO ₂ emissions: Active use of HBI with various intrinsic carbon	PARK, JOO HYUN (Hanyang University)
11:50 AM	[237] Electrical conductivity modelling of molten slag based on viscosity data - A mechanistic approach	SCHLEMMER, Nina (K1-MET GmbH)
12:10 PM	[246] Fast process slag analysis with laser spectroscopy, opening new opportunities for active optimization during melting and refining process.	AHSAN, amit (SECOPTA analytics GmbH)

Special Applications & Performance - Mozart (11:50 AM - 12:50 PM)**4.1.2****-Conveners: CHINAGLIA, LUIGI (FOMAS S.p.a.)**

time	[id] title	presenter
11:50 AM	[467] Laser Cutting of Key Metals in the Construction Industry	KANYILMAZ, Alper (Politecnico di Milano)
12:10 PM	[344] Performance of a HSLA steel produced via EAF and ESP® process route for the service in gaseous hydrogen	ZANABONI, Lorenzo (Acciaieria Arvedi S.p.A.)
12:30 PM	[188] Hydrogen Embrittlement in Pipeline and Cast Steels for Gas Transport Infrastructure	JIRKOVA, Hana (Research and Testing Institute Pilsen)

Water Management & Treatment - Respighi (12:10 PM - 12:50 PM)

5.3.5

-Conveners: Marten-Perolino, Matteo (Cogne Acciai Speciali)		
time	[id] title	presenter
12:10 PM	[178] Dry granulation process and technology for LF slag treatment	OLIVERIO, Simona (Tenova SpA)
12:30 PM	[103] ZERO IMPACT FOR WATER RESOURCES FOR A STEEL INDUSTRY COMPLEX	TOMBA, MATTEO (PERT SRL)

Lunch (12:50 PM - 2:00 PM)**Advanced High-Strength Steels (AHSS) & High-Strength Steels (HSS) Development - Mozart (2:00 PM - 3:20 PM)****4.1.3****-Conveners: Di Schino, Andrea (University of Perugia)**

time	[id] title	presenter
2:00 PM	[449] Advances in Steels for Stronger Body-in-White and Enhanced Safety	DEARDO, Anthony (University of Pittsburgh)
2:20 PM	[121] On the influence of EAF based steelmaking on AHSS	BERNHARDT, Jonny (Mercedes-Benz AG)
2:40 PM	[164] Development of High-Strength Dual Phase (DP) Steels with Enhanced Ductility	OH, SEONGTAK (Hyundai Steel R&D Center)
3:00 PM	[22] Continuous Annealing and Galvanizing Line electrification: decarbonation as a new opportunity to produce HSS and AHSS by flash annealing	BARBIER, David (Fives KEOGS)

Automation & Digitalization - Margherita II (2:00 PM - 3:40 PM)**3.1.3****-Conveners: ferraiuolo, alessandro (Marcegaglia Ravenna)**

time	[id] title	presenter
2:00 PM	[166] SMART Grease selection for Roller Bearings of Continuous Casters and Rolling Mills to reduce maintenance cost and extend bearing life.	MATTERN, Tim-Oliver (Carl Bechem GmbH)
2:20 PM	[370] Relaxation and creep in hot coiled steel strip	LINDWALL, Johan (Swetim AB)
2:40 PM	[295] Finite Element modelling of skid marks on steel slabs in a walking beam reheating furnace	LINDWALL, Johan (Swetim AB)
3:00 PM	[46] Construction of heat treatment analysis model considering transformation plasticity and accuracy verification	FUJISAWA, Takuya
3:20 PM	[408] Unbeatable product properties and performance of Danieli's K-Spooler	CIMOLINO, Maicol

Caster Design & Process Optimization - Salieri (2:00 PM - 4:00 PM)**2.3.4****-Conveners: Barella, Silvia (Politecnico di Milano)**

time	[id] title	presenter
2:00 PM	[151] CFD and FEM study on redesigning the mould geometry of the thin slab caster of Tata Steel in IJmuiden for enhanced casting performance	SENGE, Stefan
2:20 PM	[213] Enhancing the Quality of Continuously Cast Products: Optimized Caster Design and Process Tuning for High-Quality Blooms	BAF, Stefano (INTECO melting & casting technologies GmbH, Austria)
2:40 PM	[351] A LOOK AT DANIELI DCM'S STRATEGIC PLANT UPGRADES ACROSS ITALY	CECHET, Simone (Danieli & C. Officine Meccaniche S.p.A.)
3:00 PM	[294] Bow-Type Continuous Casting: A New Era in Ultra-Thick Slab and Heavy Plate Manufacturing	BAUMGARTNER, Kerstin (Primetals Technologies)
3:20 PM	[55] Conseal for slabs: Patented solution for optimizing start of cast	DRÜEN, Alexander (SMS group)
3:40 PM	[76] High Speed Billet Casting: Introduction of a new Billet CCM at Tosyalı Demir Çelik	MARCUZZI, Roberto (SMS Concast AG)

Direct Reduction & Alternative Ironmaking - Margherita I (2:00 PM - 4:00 PM)**5.2.3****-Conveners: Sprecher, Marten (German)**

time	[id] title	presenter
2:00 PM	[92] The impact of DRI ratio and quality on EAF operational and metallurgical performances	BROSSE, Guillaume (SMS group)
2:20 PM	[267] Techno-Economic Assessment of H ₂ -DRI and NG-DRI-CCS Processes for Low-Emission Iron Production	GUAZZI, Sara (Department of Energy, Politecnico di Milano)
2:40 PM	[363] Flexible pathways for green iron production	ZAMPA, Massimiliano (Danieli & C. Officine Meccaniche S.p.A.)
3:00 PM	[468] Design of a sustainable iron ore smelting system using biochar-based direct reduction and CO ₂ sequestration to lower steel's carbon footprint in Marcegaglia site at Ravenna port	DALL'OSTO, Gianluca (Dipartimento di Meccanica - Politecnico di Milano)
3:20 PM	[163] Simulation-driven comparison and investment prioritization of gas-fired and electric radiant tubes in galvanizing furnaces.	BERTOLI, Marco (Astarte Strategies Srl)
3:40 PM	[383] Replacement of Conventional Gas Burners with Electrical Resistive Heating for Tundish processes: A Sustainable Approach within the CITADEL Project	ROSÉN, Rebecca (KTH)

Hydrogen-Based Reduction - Vivaldi (2:00 PM - 4:00 PM)**1.4.3****-Conveners: Juchmann, Peter (Salzgitter Flachstahl GmbH)**

time	[id] title	presenter
2:00 PM	[169] Important aspects to optimise hydrogen enrichment in direct reduction	HAUCK, Thorsten (VDEh-Betriebsforschungsinstitut GmbH)
2:20 PM	[144] Experimental and model-based investigations on the influence of iron ore properties on hydrogen-based direct reduction kinetics.	GALLWITZ, Michael
2:40 PM	[204] The Role of Pre-Oxidation Degree, Particle Size, and Ore Composition in Optimizing Hydrogen-Based Reduction Efficiency of Magnetite Ores	GARG, Pritesh (Luleå University of Technology)
3:00 PM	[349] HYBRIT PILOT PROJECT: NEW SPONGE IRON PRODUCT WITH UNIQUE PROPERTIES	RIESBECK, Johan
3:20 PM	[438] Study of the reduction of a hematite pellet by CO-H ₂ mixture gas	KANG, youngjo (Dong-A University)
3:40 PM	[136] Hydrogen direct reduction of iron ores: effect of agglomeration	BORGES MATOS, Eduardo (University of Oulu)

Slag Optimization & Process Control - Auditorium Verdi (2:00 PM - 3:20 PM)**2.2.5****-Conveners: Bianchi Ferri, Mauro (Acciarium)**

time	[id] title	presenter
2:00 PM	[328] On the benefits of switching from lime to dololime fines injection in electric arc furnace	MOMBELLI, Davide (Politecnico di Milano - Dipartimento di Meccanica)
2:20 PM	[426] New techniques for improvement of the monitoring and conditioning of slag in EAF steelmaking for the optimization of steel treatment and slag recovery	FRITTELLA, Piero (FERALPI SIDERURGICA)
2:40 PM	[391] Slag changes in future steelmaking scenarios: simulation investigations	MATINO, Ismael (Scuola Superiore Sant'Anna - TeCIP Institute - ICT-COISP)
3:00 PM	[433] Slag foaming due to CO generated at the slag/metal interface	CONEJO, Alberto (USTB)

Water Management & Treatment - Respighi (2:00 PM - 3:00 PM)**5.3.5****-Conveners: Colla, Valentina (Scuola Superiore Sant'Anna)**

time	[id] title	presenter
2:00 PM	[307] FerSol, the new three-in-one water treatment chemical	WILLEMSSEN, Richard (Danieli Corus)
2:20 PM	[440] Smart Automation for Efficient Water Management in Steelmaking: The Q-WATER System	FORNASIER, Marcellino (Danieli & C. Officine Meccaniche S.p.A.)
2:40 PM	[239] Ensured fresh water supply by waste and process water treatment	HUBRICH, Martin (VDEh-Betriebsforschungsinstitut GmbH)

AI & Machine Learning Applications - Respighi (3:00 PM - 4:00 PM)

6.1.1

-Conveners: Colla, Valentina (Scuola Superiore Sant'Anna)		
time	[id] title	presenter
3:00 PM	[350] From Data to benefit - application of AI technologies in steel production	HERZOG, Kurt (Primetals Technologies Austria)
3:20 PM	[45] Predictive-Prescriptive Quality Control in the Steel Industry: A Synergy of Human Knowledge, Machine Learning and Auto-mation Framework	STENICO, Alessandro (PSI Software SE)
3:40 PM	[120] Exploring capabilities of an auction-based multiagent system in real-time reactive scheduling	GUTIERREZ, Miguel (Universidad Politécnica de Madrid)

Digitalization, AI & Process Modeling - Auditorium Verdi (3:20 PM - 4:00 PM)

2.2.6

-Conveners: Bianchi Ferri, Mauro (Acciarium)		
time	[id] title	presenter
3:20 PM	[189] Application of Federated Learning to enhance model-based Decision Support for EAF online Monitoring and Control at multiple plants	KLEIMT, Bernd (VDEh-Betriebsforschungsinstitut GmbH)
3:40 PM	[486] Innovative Method for Scanning an Electric Arc Furnace and Digital Twin-Based Simulation of the Tapping Process	PLIETH, Adrian

Forging - Mozart (3:20 PM - 4:00 PM)

3.2.1

-Conveners: Di Schino, Andrea (University of Perugia)

time	[id] title	presenter
3:20 PM	[394] OEE improvement of TBB Forging mill	LONZI, Gabriele (Cogne Acciai Speciali)
3:40 PM	[362] ENERGY SAVING ON A 70 MN OPEN DIE FORGING PRESS	BALDASSI, Mauro (Danieli & C. Officine Meccaniche S.p.A.)

Coffee break (4:00 PM - 4:30 PM)

AI & Machine Learning Applications - Respighi (4:30 PM - 5:50 PM)

6.1.1

-Conveners: Gruber, Christine (K1-MET)

time	[id] title	presenter
4:30 PM	[59] AI-Powered Classification and Prediction of Process Defaults in Steel Manufacturing	GAIA, Luca (ICONCONSULTING SPA)
4:50 PM	[218] Performance of AI Oriented Contrastive Learning vs Convolutional Neural Networks (CNNs) in Quality Assessment of Zinc Coating Steel Coils	GUTIERREZ, Miguel (Universidad Politécnica de Madrid)
5:10 PM	[395] AI-Powered IT Infrastructure for Enhanced Safety in EAF Operations	COLLA, Valentina (Scuola Superiore Sant'Anna)
5:30 PM	[333] The Pathway to Autonomous Ironmaking	BETTINGER, Dieter (Primetals Technologies)

Alternative Fuels & Decarbonization - Vivaldi (4:30 PM - 5:30 PM)

1.3.3

-Conveners: Sari, Emine (Weerunlin Group)		
time	[id] title	presenter
4:30 PM	[93] Ecologic and Economic Evaluation of COG Injection and Comparison with other Fuel Gas Injection Systems	HAAG, Michel (SMS group)
4:50 PM	[410] Pathways for Sustainable Hot Metal Production from DRI to Support Green Steel Production	GE, Sa (Hatch Ltd.)
5:10 PM	[331] Dry Blast Furnace Gas Cleaning: Technology and Operational Experiences	ADMIRAAL, Bas (Danieli Corus)

Digitalization, AI & Modeling - Salieri (4:30 PM - 6:30 PM)**2.3.5****-Conveners: Dall'Osto, Gianluca (Politecnico di Milano)**

time	[id] title	presenter
4:30 PM	[310] Flow and solidification modeling in continuous casting of steel: an European expertise mapping at a glance and positioning at a global level	DE SANTIS, Michele (Rina Consulting - Centro Sviluppo Materiali SpA)
4:50 PM	[141] A comparative CFD study on tundish flow with particle tracking	BRUNIER, Philippe (Cogne Acciai Speciali)
5:10 PM	[374] CC Process optimization through combined digital twin and in-line measurement technology for a stainless-steel slab production	BANASZAK, Marc (mecorad GmbH)
5:30 PM	[412] ADVANCING CONTINUOUS CAST SEMI-PRODUCT QUALITY THROUGH A DIGITAL TWIN FRAMEWORK	KAUKONEN, Saku (Sapotech Oy)
5:50 PM	[418] An OpenFOAM Eulerian-Lagrangian Model of a Polydisperse Bubbly Flow in a Continuous Casting Mould	AMIRZADEH, Saeid
6:10 PM	[253] Inline intermix detection by laser spectroscopy, increasing the metallurgical output in continuous casting strand.	SPRUNK, Martin (SECOPTA analytics GmbH)

Digitalization, AI & Process Modeling - Auditorium Verdi (4:30 PM - 6:10 PM)**2.2.6****-Conveners: Di Cecca, Cosmo (Feralpi Siderurgica)**

time	[id] title	presenter
4:30 PM	[491] Enhancing Integration in the Metals Industry: A Convergence Strategy to Software Architecture	LIERSCH, David (SMS Group)
4:50 PM	[415] Continuous improvement on process modelling in EAF steelmaking as support to process prediction and management	FRITTELLA, Piero (Feralpi Siderurgica)
5:10 PM	[447] SmartKnB: Artificial Intelligence tools for EAF Optimization	PLACIER, Emmanuel (AMI)
5:30 PM	[423] CALPHAD-based Thermodynamic and Kinetic Simulation of Secondary Steelmaking with Focus on Inclusion Formation and Modification	GRUNDY, Anthony Nicholas (Thermo-Calc Software AB)
5:50 PM	[488] Estimating the amount of Hot Heel in an EAF: a novel, robust approach.	VAN INGELGEM, Yves (Zensor)

Direct Reduction & Alternative Ironmaking - Margherita I (4:30 PM - 5:30 PM)

5.2.3

-Conveners: Mombelli, Davide (Politecnico di Milano - Dipartimento di Meccanica)		
time	[id] title	presenter
4:30 PM	[343] Advancements in Electrification and Decarbonization Technologies for High-Temperature Process Heating in Steel Manufacturing: The Role of Coolbrook's Rotodynamic Technology	PAANANEN, Timo (Coolbrook)
4:50 PM	[230] Alternative Annealing Process for NGO Electrical Steels Using Hydrogen Combustion: A Comparative Study	MASSARELLI, Niccolo (RINA Consulting - CSM)
5:10 PM	[259] Bio-char production and usage for iron ore pelletization	CROCCO, Beatrice (ArcelorMittal Maizières Research)

Forging - Mozart (4:30 PM - 6:30 PM)**3.2.1****-Conveners: Hackl, Gerhard (ASMET)**

time	[id] title	presenter
4:30 PM	[149] Effect of Intermediate Intercritical Quenching on Low Temperature Toughness of Low-alloy Steel Forgings	ANELLI, Ettore (Franchini Acciai SpA)
4:50 PM	[48] Advanced Ring Rolling Simulations with Embedded Machine Control Systems	VAN PUTTEN, Koos (SMS group)
5:10 PM	[270] Optimization of Process Control and Energy Consumption in Hot Flat Ring Rolling Using Interactive Real-Time Software	MUNARI, Marco (Project Group s.r.l.)
5:30 PM	[263] A combined experimental–numerical approach to assess the effects of quenching transfer time on the microstructure and mechanical properties of a Ti-6Al-4V alloy	MAGHINI, Davide (Department of Engineering, University of Ferrara)

Quality Control & Inspection - Margherita II (4:30 PM - 6:30 PM)**3.1.4****-Conveners: Saleri, Alessandra (Forge Fedriga srl)**

time	[id] title	presenter
4:30 PM	[102] Online and Real-Time Recrystallized Fraction Estimation in Steel Rolling Processes by Laser Ultrasound	MALMSTRÖM, Mikael (Swerim AB)
4:50 PM	[41] Study on shape defects of thin steel sheets caused by steep longitudinal temperature gradient	YOSHIMOTO, SOSHI (JFE Steel Corporation)
5:10 PM	[483] Vision Technology-Based Surface Quality Optimization for Continuous Hot-Dip Galvanizing Process	PARK, TAE JUN (Hyundai-steel)
5:30 PM	[145] New insights from the online LUS grain size measurements	HOPPE, Dietmar (SMS group)
5:50 PM	[304] Advanced robotic system for automated plate processing: precision, efficiency, and seamless integration	RUSU, ION (POLYTEC SPA)
6:10 PM	[123] In-Situ Grain Size Measurement During Hot Rolling Simulations With Dynamic Recrystallization By Laser Ultrasonics	MALMSTRÖM, Mikael (Swerim AB)

Refractory & Equipment Maintenance - Vivaldi (5:30 PM - 6:30 PM)

1.3.4

-Conveners: Sari, Emine (Weerunlin Group)		
time	[id] title	presenter
5:30 PM	[183] Investigations on hearth refractory and skull	KIM, Jungil (POSCO)
5:50 PM	[453] Blast Furnace Hearth Relines From Concept to Construction	TOLKAMP, Rudy
6:10 PM	[206] Development of a Handheld Low-Frequency Ultrasonic System for Precise Stave Wear Measurement in Blast Furnaces	SADRI, Afshin (Hatch Global Director of Asset Performance Management (APM) Group)

Process Optimization & Control - Respighi (5:50 PM - 6:30 PM)

6.1.2

-Conveners: Gruber, Christine (K1-MET)		
time	[id] title	presenter
5:50 PM	[138] Enabling Batch Process Flexibility Through Electricity Market Interfaces in Steel Production	BÖCKER, Benjamin (HiScience GmbH)
6:10 PM	[52] Seamless Quality Management in the Transition to Energy-Efficient Steel Production	CLAFF, Thorsten (SMS group)

Conference dinner - Winter Garden (7:00 PM - 11:00 PM)

Thursday, October 9, 2025

Automation & Process Control - Salieri (8:30 AM - 10:10 AM)

2.3.6

-Conveners: De Santis, Michele (Rina Consulting - Centro Sviluppo Materiali SpA)

time	[id] title	presenter
8:30 AM	[217] Electromechanical servo drive for mold level control: performance and evolution	BAF, Stefano
8:50 AM	[223] Advanced Instrumentation and Holistic Process Improvement in Continuous Casting at Outokumpu Tornio	LANG, Oliver (Primetals Technologies Austria)
9:10 AM	[300] Human-free casting operation. Safety and efficiency increase thanks to robotization and artificial vision	GELMINI, Mario (POLYTEC SPA)
9:30 AM	[170] Improved EMLI Technology for Early Slag Detection and Enhanced Steel Yield and Quality	MITRA, Chayan (RHI Magnesita-Sensors)
9:50 AM	[176] Safe Tundish Drain with Residual Steel Detection (RSD) for Maximized Yield and Process Optimization	RUF, Benjamin

Digital transformation - Steel materials and their application - Mozart (8:30 AM - 10:10 AM)**6.1.5****-Conveners: Viscardi, Cristian (ECOTRE Valente srl)**

time	[id] title	presenter
8:30 AM	[334] Transparent Online Calculation of Product Carbon Footprint in Steel Industry	SCHLAUTMANN, Martin (PSI Software SE)
8:50 AM	[278] Multi-agent-based approach for decreasing carbon footprint of future integrated steelworks: the AgiFlex overall concept	MATINO, Ismael (Scuola Superiore Sant'Anna - TeCIP Institute - ICT-COISP)
9:10 AM	[118] Fast and robust order-based scheduling to solve the Mid-Term planning problem	BRANDENBURGER, Jens (VD EH-Betriebsforschungsinstitut)
9:30 AM	[58] Optical Measurement of raw material particle size	DENGLER, Christian (SMS group)
9:50 AM	[127] Optimized availability of a mechanical drive system through holistic predictive maintenance approach	ÄIKÄS, Veikko (SEW-EURODRIVE)

Ironmaking Cokemaking - Vivaldi (8:30 AM - 10:10 AM)**1.1.1****-Conveners: Bartusch, Hauke (VDEh-Betriebsforschungsinstitut GmbH)**

time	[id] title	presenter
8:30 AM	[89] Innovative Decarbonization Strategies: Thermal dry reforming for enhanced blast furnace efficiency	CASTAGNOLA, Cristiano (SMS group)
8:50 AM	[108] Impact of iron source and binder type on the mechanical strength and microtexture of ferro-coke	LU, Guanghua
9:10 AM	[180] Control of Low Bulk Density Region around Briquette in Briquette Blending Carbonization Process	TAKAHASHI, Isao (Process Research Laboratories, Nippon Steel Corporation)
9:30 AM	[233] Adapting to age: Upgrading Coke Oven Machines for sustainable plant longevity	KORKMAZ, Gabriel (SMS group)
9:50 AM	[130] Influence of HDPE addition on microstructure transformation during coking of Australian coking coals	JO, Jangho (University of Newcastle)

Process Monitoring & Quality Control - Auditorium Verdi (8:30 AM - 9:30 AM)

2.2.7

-Conveners: Bianchi Ferri, Mauro (Acciarium)		
time	[id] title	presenter
8:30 AM	[437] Developments of monitoring of Billets quality through modelling and new sensors in the frame of Sunshine project	DI CECCA, Cosmo (FERALPI SIDERURGICA)
8:50 AM	[430] Effect of Bottom-Blowing on Nitrogen Removal Kinetics in Electric Arc Furnace (EAF) Conditions	BYUN, GeunWoo (Hanyang University)
9:10 AM	[336] Advanced EAF Optimization Strategies Using Intelligent Tenova Technologies	SCIPOLO, Vittorio (Tenova Goodfellow Inc.)

Process Optimization & Control - Respighi (8:30 AM - 10:10 AM)**6.1.2****-Conveners: Gotti, Arianna (Trasnvalor SA)**

time	[id] title	presenter
8:30 AM	[255] Energy-efficient production based on a comprehensive scheduling including an optimized temperature guidance and heat pacing	JANNASCH, Otmar (Smart Steel Technologies GmbH)
8:50 AM	[265] A continuous flow model for long-term production scheduling and reactive replanning.	WOLFF, Andreas (VDEh-Betriebsforschungsinstitut)
9:10 AM	[361] Case study on product quality management on a continuous galvanizing line thanks to digital solution	MONNOYER, Maxime (Fives KEO DS)
9:30 AM	[347] The use of image data in steelmaking – a short guide to promises and pitfalls	GRUBER, Christine (K1-MET)
9:50 AM	[279] Global-Local Order Dressing: How Steel Producers Can Use Product Configuration and Rule-Based Engines to Generate Production Orders	STENICO, Alessandro (PSI Software SE)

Quality Control & Inspection - Margherita II (8:30 AM - 10:10 AM)**3.1.4****-Conveners: Giordano Stregli Montauti**

time	[id] title	presenter
8:30 AM	[288] A Study on reducing the dispersion of the mechanical properties of hot coils through the dynamic adjustment of the coiling temperature	LEE, SangYoung
8:50 AM	[285] Advancing Online, Continuous Surface Cleanliness Monitoring with the TST.1 System	ALMQUIST, Eric (StarTool)
9:10 AM	[399] Laser ultrasonics for microstructure verification of heat treatments and thermal processes (LUMHEAT)	WIKMARK KREUGER, Hampus (Swerim AB)
9:30 AM	[358] New Optical Flatness Measurement by Magnetic Deflection	ROGGE, Marian (IMS Messsysteme GmbH)
9:50 AM	[305] Enhancing quality control for Long Products with robotics and computer vision	RUSU, ION (POLYTEC SPA)

Waste Utilization & Carbon Capture and Utilization - Margherita I (8:30 AM - 10:10 AM)

5.2.4

-Conveners: Gaiser, Georg (Montanuniversität Leoben)

time	[id] title	presenter
8:30 AM	[19] FILTRABIT-NEW INNOVATION TO INDUSTRIAL DUST EXTRACTION	TOLONEN, Jyri
8:50 AM	[317] Modular hybrid technology in the steel plant production	GILI, Matteo (RINA-CSM)
9:10 AM	[65] Sustainable Carbon Solutions for CO2 Mitigation in the Metallurgical Industry	RIGAS, Konstantinos
9:30 AM	[352] Integrating CO ₂ Reporting with Physically Consistent Material and Energy Flow Analysis to Improve Circularity of Steel Products	THOMÄ, Marco (Matplus GmbH)
9:50 AM	[162] Green Steel Initiatives Supported by Enhanced Slag Engineering Using High-Alumina Circular Metallurgical Additives	KEK, Florian (RHI Magnesita)

Conversion and refining process - Auditorium Verdi (9:30 AM - 10:10 AM)**2.1.3****-Conveners: Bianchi Ferri, Mauro (Acciarium)**

time	[id] title	presenter
9:30 AM	[262] Latest Startups and Technology Features for Stainless Steel Production via AOD in Europe	VORABERGER, Bernhard (Primetals Technologies)
9:50 AM	[335] Zinc flexible RecoDust process	REITER, Wolfgang (K1-MET GmbH)

coffee break (10:10 AM - 10:40 AM)**Advanced Materials & Special Applications - Margherita II (10:40 AM - 12:20 PM)****3.1.5****-Conveners: Kern, Andreas (thyssenkrupp Steel Europe)**

time	[id] title	presenter
10:40 AM	[455] Enhancing rail performances: the Danieli RH2 - Rail Head Hardening process	PALMA, Andrea (Danieli & C. Officine Meccaniche S.p.A.)
11:00 AM	[47] From Quantity to Quality: Evolving Wire Rod Production to Meet Modern Market Demands with SMS group	MIZZA, Patrick (SMS Group)
11:20 AM	[315] MetConZero: Metallurgical Consequences of Zero Carbon Steelmaking	JENNEN, Robrecht (CRM Group)
11:40 AM	[247] New, future ready production network for non grain oriented electrical steel	SCHONGEN, Fabian
12:00 PM	[97] Green DUE: Fossil-free casting and rolling technology for high quality automotive exposed panels	CONTE, Riccardo (Danieli & C. Officine Meccaniche S.p.A.)

Automation & Process Control - Salieri (10:40 AM - 12:00 PM)**2.3.6**

-Conveners: Cirilli, F (Rina Consulting Centro Sviluppo Materiali); De Santis, Michele (Rina Consulting - Centro Sviluppo Materiali SpA)

time	[id] title	presenter
10:40 AM	[301] A customizable robotic for maintaining the ladle sliding gate	GELMINI, Mario (POLYTEC SPA)
11:00 AM	[273] Fully automated antimixup solution with LIBS technology, ensuring 100% check of the bar and billet proven over years of process operation.	AHSAN, amit (SECOPTA analytics GmbH)
11:20 AM	[360] Ultrasonic steel level control: focus on performances and operability based on case study	CICUTTO, Simone (Ergolines Lab s.r.l. - Trieste)
11:40 AM	[75] On the application of FEMS and MSR technologies on the continuous casting of long products	ABRAM, Marco (SMS group)

Conversion and refining process - Auditorium Verdi (10:40 AM - 11:20 AM)**2.1.3****-Conveners: Bernhard, Christian (Montanuniversitaet Leoben)**

time	[id] title	presenter
10:40 AM	[325] Online Temperature and Deformation Measurement for Vessel Shell of Oxygen Steelmaking Converters	SZAMBURZKI, Piotr (Danieli Corus)
11:00 AM	[245] Problem solving with modeling support: evaluation with a numerical fluid dynamic model of the different configurations of the slag-cutting deflector for oxygen jet lance tips in the BOF	DELL'UOMO, Alessandro

Digital transformation - Steel materials and their application - Mozart (10:40 AM - 12:20 PM)**6.1.5****-Conveners: Frittella, Piero (Feralpi Siderurgica)**

time	[id] title	presenter
10:40 AM	[339] HyMAS: A Hybrid Multi-Agent Framework for Autonomous Steel Production Planning	IVANOV, Anton (PSI Software SE)
11:00 AM	[332] Artificial Intelligence-based decision support system for optimizing the ladle furnace process in the ALCHEMIA project	DETTORI, Stefano (Scuola Superiore Sant'Anna)
11:20 AM	[286] Exploring the Potential of Machine Vision (MV) and Artificial Intelligence (AI) in Steel Production	ALMQUIST, Eric (StarTool)
11:40 AM	[462] Transforming Steelmaking: Advanced Automation Solutions Powering the Twin Transition	RADNER, Stefan (Primetals Technologies Austria)
12:00 PM	[291] Technology Consulting Meets Operational Excellence to Improve Steelplants Operations	BORRMANN, Lukas (SMS group)

Ironmaking Sintering & Pelletizing - Vivaldi (10:40 AM - 12:00 PM)**1.2.1****-Conveners: Mapelli, Carlo (Politecnico di Milano); Bartusch, Hauke (VDEh-Betriebsforschungsinstitut GmbH)**

time	[id] title	presenter
10:40 AM	[235] Practical Sintering Guidance System: Integrating Data-Driven and Transient Models	YASUHARA, Satoki (JFE Steel Corporation)
11:00 AM	[140] TRANSinter – Sintering process role in the (partial) transition to the Direct Reduction Route	FOUARGE, Hubert (CRM group)
11:20 AM	[487] Advancing towards a competitive and sustainable steel's life cycle: the role of advanced process control in sustainable iron ore processing	WEI, Wenjing (ABB)
11:40 AM	[269] Cold Agglomerated Iron Ore Pellets Industrial Trial – High quality manufacturing and their performance in the Blast Furnace	WARREN, Peter (Binding Solutions Ltd)

Process Optimization & Control - Respighi (10:40 AM - 11:00 AM)

6.1.2

-Conveners: Viscardi, Cristian (ECOTRE Valente srl)		
time	[id] title	presenter
10:40 AM	[251] Towards zero-defect manufacturing for flat steel production - Introduction of the SurfConInspect Project	BRANDENBURGER, Jens (VD EH-Betriebsforschungsinstitut)

Waste Utilization & Carbon Capture and Utilization - Margherita I (10:40 AM - 11:00 AM)

5.2.4

-Conveners: Grasselli, Andrea (Tenova)		
time	[id] title	presenter
10:40 AM	[489] Reduction of CO ₂ Emissions in Steelmaking by Material and Process Innovations using Secondary Raw Materials from Recycled Waste Streams	VON GOELDEL, Stephan

Predictive Maintenance & Equipment Optimization - Respighi (11:00 AM - 12:20 PM)

6.1.3

-Conveners: Viscardi, Cristian (ECOTRE Valente srl)		
time	[id] title	presenter
11:00 AM	[190] Automation on thermal control of blast furnace	MASUDA, Ryosuke (JFE Steel Corporation)
11:20 AM	[371] DIGITAL TRASFORMATION IN REHEATING AND HEAT TREATMENT FURNACES: SHP	ZUNINO, Simone (Danieli & Officine Meccaniche S.p.A.)
11:40 AM	[126] Advantages of manufacturer expertise and machine self-learning for effective predictive maintenance of industrial gearboxes	SCARMI, Alberto (SEW-EURODRIVE)
12:00 PM	[318] Harnessing Data Lakes for Global Maintenance Service: Insights and Improvements through Advanced Data Analysis	WEINZINGER, Michael

Process Transformation & Strategy - Margherita I (11:00 AM - 12:20 PM)

5.2.5

-Conveners: Grasselli, Andrea (Tenova)		
time	[id] title	presenter
11:00 AM	[220] Logistics Simulation for the Green Steel Transition: Optimizing Production and Sustainability	MÜHLBÖCK, Stefan (Primetals Technologies GmbH)
11:20 AM	[281] Development of Oxygen-fuel Burner Design for Electric Arc Furnaces under Supersonic Flow Conditions	KIM, KYUNTAE (Hyundai-steel)
11:40 AM	[20] Secondary metallurgy challenges in the transformation from oxygen to electric steelmaking	PEZZA, Andrea (Badische Stahl-Engineering)
12:00 PM	[299] Towards Green Steel: Challenges, Opportunities, and Strategies for Decarbonization	BARELLA, Silvia (politecnico di milano)

Control and modification of the non metallic inclusions - Auditorium Verdi (11:20 AM - 12:20 PM)**2.1.2****-Conveners: Bernhard, Christian (Montanuniversitaet Leoben)**

time	[id] title	presenter
11:20 AM	[39] Comparison of methods for modification of oxidic non-metallic inclusions using alkali elements on a laboratory scale	PREISSER, Nikolaus (CDL-IMAS, Montanuniversität Leoben)
11:40 AM	[289] Evolution Behavior of Non-Metallic Inclusions in Al-killed Ti-bearing Ferritic Stainless Steel	JUNG, DONGYUL (Hanyang University)
12:00 PM	[80] Evolution of non-metallic inclusions in non-oriented electrical steel: Industrial observations and laboratory test results	SAMMER, Bernhard (Christian Doppler Laboratory for Inclusion Metallurgy in Advanced Steelmaking)

lunch (12:20 PM - 1:20 PM)**Additive Manufacturing - Mozart (1:20 PM - 2:40 PM)****4.2.1****-Conveners: Mapelli, Carlo (Politecnico di Milano)**

time	[id] title	presenter
1:20 PM	[368] Thermophysical property measurement of selected Nickel based superalloys by voestalpine BÖHLER Edelstahl GmbH & Co KG using a gas-tight Furnace Rheometer System and an Electromagnetic Levitation Apparatus	LEITNER, Thomas (voestalpine BÖHLER Edelstahl GmbH & Co KG)
1:40 PM	[179] Development and Additive Manufacturing of MoNiCr Nickel Alloy for Energy Industry Applications	NACHAZELOVA, Daniela (COMTES FHT a.s.)
2:00 PM	[401] Applicability of a Ni-9%P+(a:C-H)DLC multilayer coating to improve the tribological behaviour of AISI 316L screws with internal channels produced by Powder Bed Fusion-Laser Beam	DI EGIDIO, Gianluca (Università di Bologna)
2:20 PM	[196] Advanced Materials and Additive Manufacturing for Demanding Industrial Applications: Nickel-Based Alloys for High-Performance Forging Tools	KOUKOLÍKOVÁ, Martina (COMTES FHT a.s.)

Advanced Materials & Special Applications - Margherita II (1:20 PM - 3:20 PM)**3.1.5****-Conveners: Kern, Andreas (thyssenkrupp Steel Europe)**

time	[id] title	presenter
1:20 PM	[456] Upgrade a heavy section mill to produce high-strength beams with Danieli Thermo-Mechanical Control Process (TMCP)	URLI, Gabriele (Danieli & C. Officine Meccaniche S.p.A)
1:40 PM	[414] Advanced Long Rolling Solutions for Efficient Stainless-Steel Production	COCKRAM, Paul (Primetals Technologies Austria GmbH)
2:00 PM	[319] High End Steel Grade Production with Advanced Cooling Technologies - possibilities for AHSS	VIERNSTEIN, Bernhard (Primetals Technologies Austria GmbH)
2:20 PM	[441] Cutting-Edge Technologies To Produce Electrical Steel	MOUKARZEL, Camille (Fives Stein)
2:40 PM	[69] Superior product change control at cold rolling mills for enhanced productivity	SIEGHART, Jörn (SMS group)
3:00 PM	[87] Heavy plate applications ensure energy transition – Modern plant concepts for forward looking plate production	GUMBINGER, Hartmut (SMS Group)

Digital Transformation & Industry 4.0 - Respighi (1:20 PM - 3:00 PM)**6.1.4****-Conveners: Saleri, Alessandra (Forge Fedriga srl)**

time	[id] title	presenter
1:20 PM	[366] Development of Digital Tools at HYBRIT's Pilot Plant for H2 Direct Reduction	SCHÖLLMANN, Volker (Hybrit)
1:40 PM	[90] PCIXpert: boosting efficiency and resources utilization	ICIRIDDIR, Yasmine (SMS group)
2:00 PM	[355] Digitalization of Material Properties Across the Entire Process Chain	THOMÄ, Marco (Matplus GmbH)
2:20 PM	[238] Towards a Standardized Digital Product Pass for Green Steel: Developing Novel Framework with Real-Time CO ₂ Tracking and Secure Data Connectivity for ESPR Compliance	SAHINEL, Doruk (Spherity GmbH)
2:40 PM	[264] DIGITAL MANUFACTURING FOR THE DEVELOPMENT OF NEW ROLLING MILL FOR BEAMS	VISCARDI, Cristian (ECOTRE Valente srl)

Digital transformation - Steelmaking Continuous Casting - Salieri (1:20 PM - 3:00 PM)**6.1.6****-Conveners: Di Cecca, Cosmo (Feralpi Siderurgica)**

time	[id] title	presenter
1:20 PM	[309] Crafted Scrap: Scrap Yard Automation and Advanced Sensors	RADNER, Stefan (Primetals Technologies Austria)
1:40 PM	[413] Metallurgical Quality Assessment Of Continuous Casting Combining AI, Sensor Information and Machine Vision	BOERU, Elena-Briana (Sapotech Oy)
2:00 PM	[131] Explainable AI for Property Prediction in Scrap-Based Steel Production: A Public Data Implementation	MILLNER, Gerd (School of Material Science and Engineering, Nanyang Technological University)
2:20 PM	[254] THE PIVOT ROLE OF MODELLING IN PROBLEM-SOLVING ISSUES IN CONTINUOUS CASTING OF STEEL: A PROJECT CLUSTERING EXPERIENCE IN THE EUROPEAN PROGRAMMES FRAME	DE SANTIS, Michele (Rina Consulting - Centro Sviluppo Materiali SpA)
2:40 PM	[378] Application of Deep Learning technique to improve the scrap quality	PETRUCCIANI, Alice (Scuola Superiore Sant'Anna)

Primary process and preparation of the materials - Auditorium Verdi (1:20 PM - 3:20 PM)**2.1.1****-Conveners: Hauck, Thorsten (VDEh-Betriebsforschungsinstitut GmbH)**

time	[id] title	presenter
1:20 PM	[475] BOF Technology in the 21st century - Lives declared dead - or survival of the fittest!	KEMPKEN, Jens (SMS group)
1:40 PM	[276] CAESAR HEU project - Circularity Enhancements by low quality Scrap Analysis and Refinement	PIERRET, Jean-Christophe (CRM Group)
2:00 PM	[243] BOF operation with increased scrap rate for CO ₂ -reduction	LICHTE, Marten (VDEh-Betriebsforschungsinstitut GmbH)
2:20 PM	[44] Utilizing BOF/EAF Energy Recovery for Vacuum Generation in RH and VTD Type Degassers	WHITEHEAD, Mark (SMS group)
2:40 PM	[459] Additional scrap melting capacity with dual-flow post-combustion lance at ArcelorMittal Dunkerque	HUBER, Jean-Christophe (ArcelorMittal R&D)
3:00 PM	[492] Using of modelling tools driving the implementation of DiluJet® Swing Tundish Oxy-fuel burners at one tundish previously air-fuel fired.	DI MAURO, Antonio (Nippon Gases Industrial)

Process Transformation & Strategy - Margherita I (1:20 PM - 2:40 PM)

5.2.5

-Conveners: Grasselli, Andrea (Tenova)		
time	[id] title	presenter
1:20 PM	[110] Complexity of decision-making process through sensitivity analysis for decarbonization technologies	STAMATAKIS, Georges (SMS group)
1:40 PM	[192] How can Life Cycle Assessment support the definition of decarbonization strategies: lessons learnt from the GreenHeatEAF project	ALBANO, Francesca
2:00 PM	[341] Optimizing Decarbonization Processes: From Iron Ore to Steel	DAGHAGHELEH, Oday (Primetals Technologies Linz GmbH)
2:20 PM	[158] Modularization strategy for the construction of Direct Reduction Plants	GARCIA JIMENEZ, Juan

Smelting & Carburization Technologies - Vivaldi (1:20 PM - 3:00 PM)**1.4.4****-Conveners: Cirilli, F (Rina Consulting Centro Sviluppo Materiali)**

time	[id] title	presenter
1:20 PM	[260] Smelter technology to close the raw material gap in green steel production routes	VORABERGER, Bernhard (Primetals Technologies)
1:40 PM	[416] Slag Modelling and Design Optimisation for Enhanced Performance in Electric Smelting Furnaces	JOUBARANI, Kamal (Hatch Ltd.)
2:00 PM	[12] Investigation of the smelting and carburization behavior of DRI-Pellets under an inert atmosphere using various carburization agents.	KIPP, Daniel (Universität Duisburg-Essen)
2:20 PM	[31] Reaction behaviour of different carbon sources in FeO containing slags for electric smelting furnaces	WINKLER, Johann
2:40 PM	[290] Effect of Carbonaceous Material Graphitization Degree on Carburization Behavior in Fe-C Mixture Powder during Rapid Heating	ONO, Ayana (Kyushu University Graduate School of Engineering)

Closing session - Auditorium Verdi (3:20 PM - 3:30 PM)