Day 1

Tuesday 20 October 2026

ArcelorMittal Ghent and RodeBol Events

08:30 – 09:00	**Registration for the plant visit** ArcelorMittal Ghent
09:00 – 12:45	**Plant visit ArcelorMittal Ghent - optional** Guided visit of the steel plant
13:00 – 13:15	**Frederik Engels - COO ArcelorMittal Belgium** Welcome address
12:45 – 14:00	**Lunch – ArcelorMittal Ghent**
14:00 – 14:30	**Transfer to RodeBol Events** *CommunicationCampus, Sint-Denijslaan 485, 9000 Ghent*
14:30 – 15:00	**Registration – RodeBol Events**
	Opening session · Welcome and high-level addresses
15:00 – 15:10	**Opening and welcome day 1** Conference Chairs Inge Bellemans – Ghent University & Nuria Sanchez – ArcelorMittal Wim Van der Stricht – ESTEP
15:10 – 15:35	**Applied steel research as the bridge from European challenges to industrial solutions** Sven Vandeputte – Managing Director, OCAS
15:35 – 16:00	**Integrated steel research at Ghent University: Bridging theory, experiments, and applications** Karen Hemelsoet – Ghent University
16:00 – 16:25	**From research priorities to European collaboration: the role of ESTEP** Wim Van der Stricht – European Steel Technology Platform
16:25 – 16:50	**European steel policies and programmes – How the Commission supports future Research and Innovation for the steel sector** Cyril Robin-Champigneul – DG Research and Innovation (RTD), European Commission
16:50 – 17:15	**Research Fund for Coal and Steel: State of play and future funding opportunities for the steel sector** Sebastiano Fumero – European Research Executive Agency (REA), European Commission
17:15 – 17:20	**Closing of day 1** Conference Chairs Inge Bellemans – Ghent University & Nuria Sanchez – ArcelorMittal
17:20 – 18:30	**Poster session**
18:30 – 21:30	**Walking dinner – RodeBol Events**

Day 2

Wednesday 21 October 2026

RodeBol Events – morning

08:30 – 09:00	**Registration and coffee**
09:00 – 09:10	**Opening and welcome day 2** Nuria Sanchez, Conference Chair, ArcelorMittal Wim Van der Stricht, Secretary General, ESTEP
	Decarbonisation and clean steel processes · Session chair: Nuria Sanchez
09:10 – 09:40	**KEYNOTE : Beyond the metal: How slag properties drive the future of clean steel production** Kim Verbeken – Ghent University
09:40 – 10:00	**Decarbonisation of BF-BOF steelmaking: TRL7 pilot-scale demonstration of STEPWISE technology for H_2 production and CO_2 capture using steel gases** Eric Van Dijk – TNO
10:00 – 10:20	**From a self-sufficient site to a flexible electrified producer: energy integration across the BF-BOF to DRI-EAF transition at Tata Steel IJmuiden** Seyed Jamali – Tata Steel
10:20 – 10:40	**TRANSinter – Sintering process role in the (partial) transition to the direct reduction route** Hubert Fouarge – CRM Group
10:40 – 11:00	**Pressure swing adsorption as a key enabler for steelmaking decarbonisation** Martin Raventos – Air Liquide & Jean-Luc Reboul – ArcelorMittal
11:00 – 11:20	**Coffee break**
	Decarbonisation and clean steel processes · Session chair: Ismael Matino
11:20 – 11:40	**Reduction kinetics and metallurgical performance of cold-agglomerated magnetite-based pellets for hydrogen direct reduction** Matthew Bennett – Binding Solutions
11:40 – 12:00	**Hydrogen-based steel reheating in a pilot-scale walking beam furnace: decarbonisation potential and environmental trade-offs** Xingqiang Song – Swerim
12:00 – 12:20	**Experimental validation of coke breeze oxy-combustion for H_2-rich syngas production in integrated steelmaking** Eros Faraci – RINA CSM
12:20 – 12:40	**EASyMelt deployment in Europe: a solution to decarbonize blast furnaces while preserving industrial competitiveness** Jihong Ji – SMS Group
12:40 – 13:00	**Pulsed hydrogen shaft injection for the blast furnace: first results from the H2II test rig trials** Hauke Bartusch – BFI
13:00 – 14:15	**Lunch**

Day 2

Wednesday 21 October 2026

RodeBol Events – afternoon

	Smart Steel Products and Applications · Session chair: Nuria Sanchez
14:15 – 14:45	**KEYNOTE : Experimental and numerical approaches to hydrogen compatibility testing of steel products and applications** Frank Schweizer – Fraunhofer IWM
14:45 – 15:05	**Rapid and cost-effective approach to determining forming limit curve via modified Erichsen testing for circular steels** Anil Kumar Murlidhar – Research Institute of Sweden
15:05 – 15:25	**Creep performance of a high-chromium ferritic-martensitic steel with novel composition and thermal treatment** Lorena Callejo – Tecnalia
15:25 – 15:45	**European project FEATHER: steel solution for next-generation H_2 cylinders** Simon Catteau – Acciaierie Bertoli Safau
15:45 – 16:05	**SafeH2Pipe – Behaviour of vintage and modern pipelines with external damage for H_2-NG pipeline transport: project overview and assessment through small-scale and full-scale testing** Dennis Van Hoecke – ArcelorMittal
16:05 – 16:25	**Coffee break**
	Decarbonisation and clean steel processes · Session chair: Ismael Matino
16:25 – 16:45	**Hy4Smelt – current research topics** Michael Schafelner – voestalpine & Gernot Polke – Primetals Technologies
16:45 – 17:05	**Green process gas heating: decarbonising auxiliary and heating processes in steel production with the Ultra-High Temperature Thermo Jet technology** Stefan Sieberer – Primetals Technologies
17:05 – 17:25	**Self-reducing briquettes – the use of various carbon sources for reduction** Hans Hage – Tata Steel
17:25 – 17:45	**Waste-derived reductants for blast furnace decarbonisation: a techno-economic and environmental assessment of SRF and torrefied waste wood utilisation** Mario Avila – Ghent University
17:45 – 17:55	**Conclusions of day 2** Nuria Sanchez, Conference Chair, ArcelorMittal Wim Van der Stricht, Secretary General, ESTEP
20:00	**Conference dinner – Ghent Marriott Hotel** *Address : Drabstraat 37, 9000 Gent*

Day 3

Thursday 22 October 2026

RodeBol Events – morning

08:30 – 08:45	**Registration and coffee**
08:45 – 08:50	**Opening and welcome day 3** Inge Bellemans, Conference Chair, Ghent University Wim Van der Stricht, Secretary General, ESTEP
	Predictive modelling and digital metallurgy · Session chair: Inge Bellemans
08:50 – 09:20	**KEYNOTE : Long-Horizon Forecasting of Microstructure Evolution in Multi-component Alloys: Phase-Field Simulations, Deep Learning, and Tensor Decomposition** Nele Moelans – KU Leuven
09:20 – 09:40	**A coupled decarburisation-dephosphorisation-denitrogenation model of the BOF emulsion zone: implications for low-carbon hot metal from H-DRI** Gaurav Verma – TU Delft / TNO
09:40 – 10:00	**PHASES Agent: an AI agent for physics-based digital metallurgy** Daniel Berglund – Aerobase
10:00 – 10:20	**A system approach to integrated resource control in the EAF: managing alternative carbon materials, hydrogen and heat recovery** Ismael Matino – Scuola Superiore Sant'Anna
10:20 – 10:40	**A hybrid physics-informed framework for near real-time quality prediction of direct reduced iron** Thomas Kristan – Pro2Future
10:40 – 11:00	**Coffee break**
	Circular economy, circularity by design and recovery-ready steel products · Chair: Enrico Malfa
11:00 – 11:20	**Mapping and prioritising waste heat recovery opportunities across electric and integrated steelmaking routes: the E-ECO Downstream project at Feralpi and Acciaierie d'Italia** Valentina Colla – Scuola Superiore Sant'Anna
11:20 – 11:40	**Integration of sensor solutions for online analysis of post-consumer scrap at the scrap recycling plant – progress within the PURESCRAP project** Jonas Petersson - SWERIM
11:40 – 12:00	**Hydraulic properties and alkali activation of artificial electric smelting furnace slag** Irmtraud Marschall – K1-MET
12:00 – 12:20	**Characterisation of high-quality steel scrap and use in integrated steelmaking plants – results of the REDERS project** Marten Lichte – BFI
12:20 – 12:40	**Steelanol: three years of industrial carbon recycling – where do we stand? Achievements, challenges and the path forward** Kristof Verbeeck – ArcelorMittal
12:40 – 13:00	**Steel industry zinc-containing residues valorisation – the ZincVal approach** Hans Hage – Tata Steel
13:00 – 14:15	**Lunch**

Day 3

Thursday 22 October 2026

RodeBol Events – afternoon

	Predictive modelling and digital metallurgy · Session chair: Inge Bellemans
14:15 – 14:35	**Influence of crucible material on the microstructure and electrical conductivity of CaO-SiO_2-MgO-$FeOx$ slags** Carl Debrouwere – Ghent University
14:35 – 14:55	**Model studies of liquid steel mixing in a steelmaking ladle** Mariola Saternus – Silesian University of Technology
14:55 – 15:15	**Towards networked digital twins for a green steel value chain: an integration concept from the DiGreeS project** Klemens Winkler – K1-MET
15:15 – 15:35	**Microstructure analysis in the age of foundation models** Michael Sluydts – Epotentia
15:35 – 15:45	**Conclusions of day 3 & closing** Inge Bellemans, Conference Chair, Ghent University Wim Van der Stricht, Secretary General, ESTEP
15:45	**End of ESTEP Annual Event 2026**

Poster session

Fifteen posters are presented during the poster session on Day 1 and remain on display throughout the event.

1 **Industrial validation of low-emission automotive steel sheets through mitigation of inevitable impurity effects**
Sunhwan Kwon – Hyundai Steel

2 **Environmental benefit of radiation curing systems – an industrial pre-painted steel case**
Neda Hashemi – CRM Group

3 **Low-temperature CO_2 electrolysis to mitigate hard-to-abate emissions in the steel industry in a closed carbon loop**
Nina Plankensteiner – K1-MET

4 **A system-level steel plant assessment tool (PAT) to support the green steel transition**
Maryam Baniasadi – SMS group

5 **Consolidating a steelmaking process modelling asset for sustainable scenario simulations and future outlooks**
Gabriele Franciosi – Scuola Superiore Sant'Anna

6 **Absorption, adsorption or cryogenics? Operation of CO_2 capture technologies in heavy-industry conditions**
Luis López – CRM Group

7 **Thermochemical analysis of the Midrex direct reduction product cooler: normal vs emergency operating conditions**
Taha Saghafi – ETM Consulting Engineers

8 **Evaluation of slag foaming behaviour in an electric arc furnace using numerical modelling**
Hadi Barati – K1-MET

9 **MaxH2DR : Hybrid demonstration of solid flow in a MIDREX-type direct reduction shaft furnace**
Thorsten Hauck – BFI

10 **Advanced steels for cost-effective high-pressure hydrogen storage and transport**
Tuhin Das – ArcelorMittal

11 **Expert-in-the-loop Bayesian optimisation across alloy discovery and process optimisation in steels**
Peter Raninger – Materials Center Leoben

12 **Conclusions of the CAESAR Horizon Europe project – circularity enhancements by low-quality scrap analysis and refinement**
Frédéric Van Loo – CRM Group

13 **Safe H-DRI projects – intermediate findings: from hydrogen reduction to reoxidation and the importance of reliable material characterisation**
Wolfgang Reiter – K1-MET

14 **Advancing industrial symbiosis in the steel industry: guidelines and roadmap for by-product valorisation from the RFCS Symbio-Steel project**
Agnieszka Morillon – FEhS