

7th European Steel Technology and Application Days - ESTAD 2025

Tuesday 7 October 2025

Hydrogen-Based Steelmaking Technologies - Margherita I (16:40 - 19:00)

time	[id] title	presenter
16:40	[203] Hydrogen Reduction of Manganese and Iron Oxides in a Commercial Manganese Ore: Thermochemistry and Kinetics	SARKAR, Alok
17:00	[96] Ammonia as a Cost-Effective Energy Carrier for Decarbonization in the European Steelmaking Industry	Mr JI, Jihong
17:20	[194] Electrification of heating in steelmaking – an enabler of fossil-free steel	Dr CHANDRASEKARAN, Dilip
17:40	[67] Hydrogen plasma smelting reduction of Cr ₂ O ₃ /Chromite: the first step to direct and sustainable production of stainless steel	JAFARZADEH, Mohammad
18:00	[50] Development and Testing of a Hydrogen-Fueled Burner-Injector System for EAF Applications: A Clusters4Future Initiative	Dr KRAUSE, Fabian
18:20	[229] Replacing natural gas with Hydrogen in heat treatment furnaces: impact on scale formation, surface quality and pickling kinetics of stainless steel	SAINSUS, Eugenia CATINI, Lorenza
18:40	[186] Advancing hydrogen plasma smelting reduction: Experimental insights from a demonstration plant	ADAMI, Bernhard

Wednesday 8 October 2025

Hydrogen-Based Steelmaking Technologies - Margherita I (09:00 - 09:40)

-Conveners: Ismael Matino

time	[id] title	presenter
09:00	[386] Innovative Approaches To Sustainable FeCr Production Through Biocarbon and H2 Utilization	MOUSA, Elsayed
09:20	[174] Challenges and solutions for process characterisation of hydrogen plasma smelting reduction (HPSR) at pilot scale and beyond.	QUICK, Cameron