

Session Program

Oct 6 - 9, 2025



7th European Steel Technology and Application Days - ESTAD 2025

Hydrogen-Based Steelmaking Technologies

Palaexpo Veronafiere
Veronafiere, Viale del Lavoro 8, 37135 Verona

Tue, October 7

4:40 PM

Hydrogen-Based Steelmaking Technologies

Session | **Location:** Palaexpo Veronafiere, Margherita I, Veronafiere, Viale del Lavoro 8, 37135 Verona |
Convener: Enrico Malfa

4:40 – 5:00 PM

Hydrogen Reduction of Manganese and Iron Oxides in a Commercial Manganese Ore: Thermochemistry and Kinetics

Speaker

Alok Sarkar

5:00 – 5:20 PM

Ammonia as a Cost-Effective Energy Carrier for Decarbonization in the European Steelmaking Industry

Speaker

Mr Jihong Ji

5:20 – 5:40 PM

Electrification of heating in steelmaking - an enabler of fossil-free steel

Speaker

Dr Dilip Chandrasekaran

5:40 – 6:00 PM

Hydrogen plasma smelting reduction of Cr₂O₃/Chromite: the first step to direct and sustainable production of stainless steel

Speaker

Mohammad Jafarzadeh

6:00 – 6:20 PM

Development and Testing of a Hydrogen-Fueled Burner-Injector System for EAF Applications: A Clusters4Future Initiative

Speaker

Dr Fabian Krause

6:20 – 6:40 PM

Replacing natural gas with Hydrogen in heat treatment furnaces: impact on scale formation, surface quality and pickling kinetics of stainless steel

Speaker

Niccolo Massarelli

6:40 – 7:00 PM

Advancing hydrogen plasma smelting reduction: Experimental insights from a pilot plant

Speaker

Bernhard Adami

7:00 PM

Wed, October 8

9:00 AM

Hydrogen-Based Steelmaking Technologies

Session | **Location:** Palaexpo Veronafiere, Margherita I, Veronafiere, Viale del Lavoro 8, 37135 Verona |
Convener: Ismael Matino

9:00 - 9:20 AM

Innovative Approaches To Sustainable FeCr Production Through Biocarbon and H2 Utilization

Speaker

Elsayed Mousa

9:20 - 9:40 AM

Challenges and solutions for process characterisation of hydrogen plasma smelting reduction (HPSR) at pilot scale and beyond.

Speaker

Cameron Quick

9:40 - 10:00 AM

SMS ZERO2Flame HY2 burner for reheating furnaces

Speaker

Mr Umberto Zanusso

10:00 AM