



INSTITUT FÜR
BAUSTOFF
FORSCHUNG

FEHS

5 & 6
MARCH
2025

*ESTEP Focus Group
Circular Economy & FEhS*

*are pleased
to announce*

2 days workshop

The role of slags and other by-products within circular economy in the steel industry

RFCS InSGeP project workshop

**Wyndham
Duisburger Hof,
Opernplatz 2,
47051 Duisburg,
Germany**

PROGRAMME

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DAY 1
5 March

- 09:00 – 09:45 Registration
09:45 Welcome Thomas Reiche (FEhS)
- 09:50 - 11:15 1st session: Situation of slags in different regions – Thomas Reiche**
- 09:50 Ferrous slags in France: a short overview on figures, main uses and existing regulatory framework over last decade - *Jérémie Domas (CTPL)*
10:05 Ferrous slags in Germany: Regulatory Framework and Its Impact on Utilization - *Anna Sokol (FEhS)*
10:20 Ferrous slags in Poland - *Przemysław Korczak (TMS International)*
10:35 EAF and SMS slag in Italy - *Alfredo Schweiger (Federacciai)*
10:50 Current status of slag recycling and activities related to environmental regulation in South Korea - *Rick Lim (POSCO)*
11:05 Questions
- 11:15 – 11:30 Coffee break
- 11:30 - 13:00 InSGeP workshop – Agnieszka Morillon**
- 11:30 Introduction to the InSGeP project – *David Algermissen (FEhS)*
11:40 Simulation of effects on slag and process of DRI or HBI charge in electric arc furnace – *Valentina Colla (SSSA)*
11:55 Collection and laboratory development of slag samples using DRI and HBI in industrial and pilot scales – *Mattia de Colle (ArcelorMittal Maizieres Research)*
12:10 Valorization of EAF slags from DRI melting with dry granulation process – *Marta Guzzon (Tenova) and Loredana Di Sante (RINA-CSM)*
12:25 Market analysis and stakeholder consultation – *Parinaz Seifollahzadeh (K1-MET)*
12:40 Questions and discussions
- 13:00 – 14:00 Lunch buffet
- 14:00 – 15:40 2nd session: Valorisation of industrial by-products: dust, sludge... – Enrico Malfa**
- 14:00 Welcome – *Klaus Peters (ESTEP)*
14:05 Focus Group Circular Economy – *Enrico Malfa (Tenova)*
14:20 Circular valorization of steelmaking by-products: the Italian case study in the HEPHAESTUS project – *Vincenzo Pepe (RINA-CSM)*
14:40 Current results on upgrading iron- and steelmaking by-products: the TransZeroWaste project – *Gerald Stubbe (BFI)*
15:00 Treatment for valorization of Zn containing residues in dust and sludge: Hydrocyclone treatment – *Damiano Capobianco (RINA-CSM)*
15:20 ZHyRON project: Valorization of iron-rich & Zinc-containing steelmaking by-products via hydrogen-based reduction – *Benoit Mignon (CRM)*
- 15:20 – 16:00 Coffee break
- 16:00 – 19:00 Visit of FEhS (in 2 groups)**
At the same time 30 min presentation of steel history of North Rhine-Westphalia for the participants waiting for the FEhS visit by Andreas Ehrenberg (FEhS)
- 19:00 Dinner at the Wyndham hotel

PROGRAMME

DAY 2
6 March

08:45 – 09:00 Registration

09:00 - 10:40 3rd session: Valorization of industrial by-products: slag – Marta Guzzon

- 09:00 In the age of decarbonization: smelter-slag as a substitute for granulated blast furnace slag – *Falco Lischke (tkSE)*
- 09:20 Steel slags utilization as multipurpose and low-cost catalysts – *Giuseppe Guglielmo (Acciaierie d'Italia)*
- 09:40 Investigating the high-temperature properties in oxidic slags through a combined molecular dynamics: experimental approach – *Inge Bellemans (Ghent University)*
- 10:00 Sequestration potential of EAF C and ladle slags – *Mojca Loncnar (SIJ Acroï)*
- 10:20 Harmonisation of GHG accounting methodologies to assist in the decarbonisation of the steel industry – a focus on by-products – *Clare Broadbent (WorldSteel)*

10:40 – 11:00 Coffee break

11:00 – 12:50 4th session: Industrial Symbiosis – Valentina Colla

- 11:00 Assessing the progress of the impact of Industrial Symbiosis on the steel sector in recent initiatives based on the Symbio-Steel project: workshop – *Valentina Colla (SSSA) & Teresa A. Branca (SSSA)*
- 11:30 Pittini Group experience in valorisation and recovery of waste from the production process as new products: the Zero Waste Initiative – *Matteo Chini (Pittini)*
- 11:50 Carbon footprint calculation for slag from a reducing electric furnace – *Julian Suer (tkSE)*
- 12:10 Investigation of electric arc furnace slag for sustainable wheat and lettuce production – *Rifat Buğra Bildiri (Gebze Technical University)*
- 12:30 Upcycling methods of Electric Arc Furnace steelmaking slags: phosphorus removal from wastewater and fillers for polymers – *Giulia Bragaglia (University of Padova)*
- 12:50 Closing – *David Algermissen (FEhS)*
- 13:00 Lunch buffet/networking – end of workshop

POSTERS

Metakaolin – Blast furnace slag geopolymers as support for catalytic process in water remediation - *Stefano Savino (Università degli Studi di Bari "Aldo Moro")*

ESTEP MEMBERS ONLY

- 13:30 – 17:00 ESTEP Steering Committee meeting
- 15:00 Coffee break