



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

Wyndham
Duisburger Hof,
Opernplatz 2,
47051 Duisburg,
Germany

RFCS InSGeP project workshop

PROGRAMME

PROGRAMME

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 Acroij)*

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 Bıldıřı (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

5 & 6
MARCH
2025

ESTEP Focus Group Circular Economy & FEHS Workshop
The role of slags and other by-products within
circular economy in the steel industry



Attendance list

	First name	Last Name	Company	Country
1	Daniel	Adolphy	VDEh-Betriebsforschungsinstitut GmbH	DEU
2	David	Algermissen	FEHS - Institut für Baustoff-Forschung e.V.	DEU
3	Dimitrios	Angeloudis	AEIFOROS METAL PROCESSING S.A.	GRC
4	Raquel	Arias Pérez	Sidenor Investigación y Desarrollo	ESP
5	Nicholas	Avery	EUROFER, The European Steel Association	BEL
6	Giovanni	Bairo	Ferriere Nord SpA	ITA
7	Angélique	Barneoud-Chapelier	ArcelorMittal Maizières Research	FRA
8	Inge	Bellemans	Ghent University	BEL
9	Rifat Bugra	Bildiri	Gebze Technical University	TUR
10	Ludwig	Birklbauer	voestalpine Stahl GmbH	AUT
11	Simon	Blotevogel	Ecocem Materials	FRA
12	Jan	Bollen	ArcelorMittal	BEL
13	Roger	Bosman	Paul Wurth S.A.	LUX
14	Giulia	Bragaglia	University of Padova	ITA
15	Teresa Annunziata	Branca	Scuola Superiore Sant'Anna, TeCIP Institute	ITA
16	Paolo	Brazzo	Resilco srl sb	ITA
17	Clare	Broadbent	World Steel Association	BEL
18	Maura	Camerin	Luxembourg Institute of Science and Technology	LUX
19	Damiano	Capobianco	RINA Consulting - Centro Sviluppo Materiali	ITA
20	Sandro	Cella	Duferco Travi e Profilati S.P.A.	ITA
21	Matteo	Chini	Gruppo Pittini	ITA
22	Renner	Christian	thyssenkrupp Steel Europe AG	DEU
23	Frank	Cleve	thyssenkrupp Steel Europe AG	DEU
24	Valentina	Colla	Scuola Superiore Sant'Anna, TeCIP Institute	ITA
25	Mattia	De Colle	ArcelorMittal	FRA
26	Araceli	de Pablos Martín	Dyckerhoff GmbH	DEU
27	Jacques	De Vos	NLMK Belgium Holdings	BEL
28	Loredana	Di Sante	RINA Consulting - Centro Sviluppo Materiali	ITA
29	Jérémie	Domas	C.T.P.L. - Centre Technique et de Promotion des Laitiers sidérurgiques	FRA
30	Mateusz	Dudek	Sieć Badawcza Łukasiewicz - Górnośląski Instytut Technologiczny	POL
31	Andreas	Ehrenberg	FEHS - Institut für Baustoff-Forschung e.V.	DEU
32	Sander	Everstein	Tata Steel Netherlands	NLD
33	Cyril	Florentin	HARSCO Environmental	FRA
34	Jean Theo	Ghenda	EUROFER, The European Steel Association	BEL

5 & 6
MARCH
2025

ESTEP Focus Group Circular Economy & FEHS Workshop
The role of slags and other by-products within
circular economy in the steel industry

Attendance list

	First name	Last Name	Company	Country
35	Barbara	Götl	voestalpine Stahl Donawitz GmbH	AUT
36	Giuseppe	Guglielmo	Acciaierie d'Italia SPA	ITA
37	Marta	Guzzon	Tenova Spa	ITA
38	Björn	Haase	Höganäs Sweden AB	SWE
39	Holger	Iffland	Hüttenwerke Krupp Mannesmann GmbH	DEU
40	Pavel	Ivashechkin	VDEh-Betriebsforschungsinstitut GmbH	DEU
41	Tova	Jarnerud Örell	Swerim AB	SWE
42	Michael	Joost	Stahl-Holding-Saar GmbH & Co. KGaA	DEU
43	Sebastian	Juda	GVA Krefeld GmbH	DEU
44	Elke	Kaindl	Max Aicher Umwelt GmbH	DEU
45	Alexander	Kehrmann	Ferro Duo GmbH	DEU
46	Gerrit	Koch	AG der Dillinger Hüttenwerke	DEU
47	Przemyslaw	Korczak	TMS International	POL
48	Patrick	Lafontaine	ESTEP	BEL
49	Lamm	Laurence	EIT RawMaterials	DEU
50	Rick	Lim	POSCO Holdings Inc.	DEU
51	Falco	Lischke	thyssenkrupp Steel Europe AG	DEU
52	Mojca	Loncnar	SIJ Acroni	SVN
53	Ludovica	Luise	RINA Consulting - Centro Sviluppo Materiali	ITA
54	Enrico	Malfa	Tenova Spa	ITA
55	Thibaut	Marcon	CRM Group	BEL
56	Michael	Marz	BSW Stahl-Nebenprodukte GmbH	DEU
57	Mario	Mauhart	voestalpine Stahl GmbH	AUT
58	Benoit	Mignon	CRM Group	BEL
59	Agnieszka	Morillon	FEHS - Institut für Baustoff-Forschung e.V.	DEU
60	Nina	Neuwirth	voestalpine Stahl GmbH	AUT
61	Erland	Nylund	Swerim AB	SWE
62	Simona	Oliverio	Tenova Spa	ITA
63	Annelie	Papadopoulos	Vargön Alloys AB	SWE
64	Vincenzo	Pepe	RINA Consulting - Centro Sviluppo Materiali	ITA
65	Leonel	Pereira Coelho	Paul Wurth S.A.	LUX
66	Klaus	Peters	ESTEP	BEL
67	Christoph	Prietl	Primetals Technologies	AUT
68	Alessandra	Primavera	Danieli Officine Meccaniche SpA	ITA
69	Dirk	Radermacher	Elektrowerk Weisweiler GmbH	DEU
70	Staffan	Rahmn	Vargön Alloys AB	SWE
71	Biber	Ralf	Stahl-Holding-Saar GmbH & Co. KGaA	DEU

5 & 6
MARCH
2025

ESTEP Focus Group Circular Economy & FEhS Workshop
The role of slags and other by-products within
circular economy in the steel industry



Attendance list

	First name	Last Name	Company	Country
72	Hans-Joachim	Rauen	Hermann Rauen GmbH & Co vorm. Steinhandel Rauen	DEU
73	Thomas	Reiche	FEhS - Institut für Baustoff-Forschung e.V.	DEU
74	Markus	Reifferscheid	SMS group GmbH	DEU
75	Selina	Riedler	voestalpine Stahl Donawitz GmbH	AUT
76	Christer	Ryman	Jernkontoret	SWE
77	Valdet	Sadiku	VDEh-Betriebsforschungsinstitut GmbH	DEU
78	Astrid	Salomon	Hüttenwerke Krupp Mannesmann	DEU
79	Stefano	Savino	Università degli studi di Bari Aldo Moro	ITA
80	Frank	Schaub	ArcelorMittal Bremen GmbH	DEU
81	Joachim	Schneider	Bundesanstalt für Materialforschung und –prüfung (BAM)	DEU
82	Angela	Schöning-Schröck	GVA Krefeld GmbH	DEU
83	Lisa	Schulz	thyssenkrupp Steel Europe AG	DEU
84	Alfredo	Schweiger	FEDERACCIAI	ITA
85	Parinaz	Seifollahzadeh	K1-met	AUT
86	Daniele	Sguigna	Acciai Speciali Terni S.p.A.	ITA
87	Delphine	Snaet	ESTEP	BEL
88	Anna	Sokol	FEhS - Institut für Baustoff-Forschung e.V.	DEU
89	Clemens	Staudinger	voestalpine Stahl GmbH	AUT
90	Gerald	Stubbe	VDEh-Betriebsforschungsinstitut GmbH	DEU
91	Julian	Suer	thyssenkrupp Steel Europe AG	DEU
92	Akhilesh	Swarnakar	ESTEP	BEL
93	Alicja	Szemaalikowska	Sieć Badawcza Łukasiewicz - Górnośląski Instytut Technologiczny	POL
94	Pascal	Thelen	Hüttenwerke Krupp Mannesmann GmbH	DEU
95	Rosario	Tornello	Travi E Profilati Di Pallanzeno S.P.A.	ITA
96	Taina	Varela	Innvel 2 Consulting SL	ESP
97	Philipp	Vetter	BSW Stahl-Nebenprodukte GmbH	DEU
98	Bernhard	Voraberger	Primetals Technologies	AUT
99	Thomas	Warchol	Primetals Technologies	AUT
100	Sabine	Witte	Hüttenwerke Krupp Mannesmann GmbH	DEU