



**EASES 2021**

# **4<sup>th</sup> European Academic Symposium on EAF Steelmaking**

Programme for the Zoom online event  
on 16-18 June 2021



## Wednesday, June 16, 2021

Welcome and session I, session chair Dr. Thomas Echterhof

All times CEST/UTC +2

Time	Speaker	Presentation
14:00	T. Echterhof	Welcome to EASES 2021
14:20	V.-V. Visuri	Development of a modular mathematical model for the EAF process
14:40	J. D. Hernández	On the importance of the heat exchange modeling assumptions in electric arc furnace process models
15:00	T. Hay	EAF Process Model and Simulator
15:20		Discussion and coffee break

## Session II, session chair Dr. Matti Aula

15:40	H. Beile	The adaptable and efficient EAF for the future
16:00	M. Manazzone	ISMELT – Inteco Scrap MELting Technology evolution
16:20	P. Fritella	New plant developments integrated with Industry 4.0 solutions to the EAF of Acciaierie di Calvisano
16:40		Discussion
17:00		End of day 1

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## Thursday, June 17, 2021

Session III, session chair Dr. Thomas Echterhof

Time	Speaker	Presentation
14:00	T. Echterhof	Welcome back
14:10	M. Al-Nasser	Exploring the Physics of the Electric Arc Furnaces
14:30	A. Chudnovsky	The stirring of melts in EAF
14:50	Y. Chen	Experimental Study and CFD Modeling of Scrap Melting Behavior in AC EAF
15:10		Discussion and coffee break



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## Thursday, June 17, 2021

### Workshop on the “(Re)use of primary and secondary raw material fines in the EAF”

15:45	T. Echterhof	Introduction to the Fines2EAF project
16:00	M. Aula	Laboratory experiments to test the performance of the cement-free bricks utilized in EAF
16:15	T. Willms	Pilot-scale brick production and trials at the steel plants
16:30	C. Sorger	Trials at Marienhütte
16:45	D. Mombelli	Influence of raw-material fines recirculation in EAF on slag quality
17:00		Discussion
17:30		End of day 2

This workshop is part of the project “Cement-free brick production technology for the use of primary and secondary raw material fines in EAF steelmaking – Fines2EAF”. The project receives funding from the Research Fund for Coal and Steel under grant agreement No 754197. The presentations reflect only the authors’ views. The European Commission is not responsible for any use that may be made of the information they contain.



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## Friday, June 18, 2021

Session IV, session chair Dr. Davide Mombelli

Time	Speaker	Presentation
14:00	T. Echterhof	Welcome back
14:10	G. Dall'Osto	An evaluation of the pneumatic lime injection benefits for the production of C82D2 steel by electric arc furnace
14:30	S. Scheiber	Static dissolution evaluation of dolomite-based materials in EAF-type slag
14:50	A. Schlemminger	Achieving a new level of process efficiency in EAF steelmaking with sample preparation free slag analysis based on Laser OES
15:10	H. Pauna	Optical emission spectroscopy in electric arc furnaces and ladle furnaces – from laboratory to industrial applications
15:30		Discussion and coffee break

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## Friday, June 18, 2021

Session V, session chair Dr. Ville-Valtteri Visuri

Time	Speaker	Presentation
15:50	V. Logar	Digital transformation of the steelmaking industry: An EAF case study
16:10	G. Dall'Osto	Study of the influence of the charging materials on the metallic loss of a continuous charging electric arc furnace by multiple linear regression
16:30	Z. Voss	IDEAS: Intelligent Dynamic EAF Advisory System for Improving Operating Efficiency
16:50	V.-V. Visuri	Preliminary experiences from the application of model predictive control for the EAF process in stainless steelmaking
17:10		Discussion and closing words
17:30	End of the symposium	



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