### SUBMISSION OF PAPERS

All paper proposals must be submitted online. Please visit: www.ecic-icsti.com and go to the Call for Papers section. There you will find an easy to use online submission form.

Your abstract can be a maximum of 300 words. Please note that papers will only be accepted online.

#### Deadline

Please submit your abstracts by 28 September 2021 at the very latest. All abstracts will be refereed by the scientific international experts. In the case of too many submissions, abstracts of equal quality will be accepted on a first come, first serve basis.

#### Paper proposal submission

- To submit an abstract, please proceed as follows:
- 1) Write your abstract (max. 300 words).
- 2) Submit your abstract online at: www.ecic-icsti.com
   > Call for Papers section (please completely fill out all fields).
- 3) Papers must be submitted in English.
- 4) All papers must focus on best practices.

# Important Dates

28 September 2021	Abstract submission deadline.
November 2021	Scientific international experts will evaluate submitted abstracts.
December 2021	Paper proposers will be informed about decision of the Scientific international experts. Delivery of authors guidelines.
10 January 2022	Full paper submission deadline.
8 February 2022	PowerPoint presentation slides deadline.
7 – 11 March 2022	8th ECIC & 9th ICSTI

# ECIC and ICSTI 2022 For Exhibitors and Sponsors

In conjunction with the 8<sup>th</sup> European Coke and Ironmaking Congress and the 9<sup>th</sup> International Conference on Science and technology, the Steel Institute VDEh would like to invite you to actively participate in two events.

We estimate that between 500-700 experts in the cokemaking and in the ironmaking industry as well as in research and development will participate in the events. Your contribution and participation will help us make these a success.

All plant manufacturer and supplier companies should not miss this unique opportunity to promote new products, outline services and highlight key achievements to delegates. The exhibition area will be located directly to the events. Coffee and refreshments will be served during breaks in the exhibition hall to maximise delegate visits to stands.

## Sponsor and exhibitor packages

Attractive sponsorship and exhibitor packages will be available to attract interest in your company, products and services. Find all packages at www.ecic-icsti.com.

# LANGUAGE

The conference language is English.

## Compliance Rules

The Steel Institute VDEh and all cooperating organizations are committed to adhering strictly to all applicable antitrust laws. Within the context of 8<sup>th</sup> ECIC and 9<sup>th</sup> ICSTI it is strictly prohibited to discuss competitively sensitive subjects such as price-fixing agreements or agreements on quantities. Find more information at www.ecic-icsti.com.



# Contacts / Travel / Venue / Host

### Host

Steel Institute VDEh | Dr.-Ing. Hans Bodo Lüngen Sohnstr. 65 | 40237 Düsseldorf | Germany Phone: +49 211 6707-444 | Telefax: +49 211 6707-440 www.stahl-online.de

If you are interested in becoming a participant, an exhibitor, a sponsor or a speaker of the 8<sup>th</sup> ECIC & 9<sup>th</sup> ICSTI, please fill out the online form (keep me informed) at: www.ecic-icsti.com or contact directly the Congress secretariat.

### **Organization / Congress secretariat**

TEMA Technologie Marketing AG | Mr. Carsten Scheele Aachener-und-Münchener-Alle 9 | 52047 Aachen | Germany Phone: +49 241 88970-300 | Fax: +49 241 88970-999 Email: info@ecic-icsti.com | www.tema.de

9<sup>th</sup> ICSTI

2022

## Venue

Maritim Hotel & Congress Centrum Bremen | Hollerallee 99 | 28215 Bremen | Germany | www.maritim.de

8<sup>th</sup> ECIC

2022





# 2 Conferences - 1 Location



Call for Papers

March, 7 – 11, 2022 Bremen – Germany www.ECIC-ICSTI.com



Steel Institute VDEh

#### Background

Following the success of two independent Congresses the International Cokemaking Congress (ICMC) and the European Ironmaking Congress (EIC)- the European Coke and Ironmaking Congress (ECIC) will seamlessly combine both worlds of coke and ironmaking. After taking place in Aachen (1st EIC 1986), Essen (1st ICMC 1987), Glasgow (2<sup>nd</sup> EIC 1991), London (2<sup>nd</sup> ICMC 1992), Gent (3<sup>rd</sup> ECIC 1996), Paris (4th ECIC 2000), Stockholm (5th ECIC 2005), Düsseldorf (6<sup>th</sup> ECIC) and Linz (7<sup>th</sup> ECIC), Bremen will be the location of this outstanding event together with the International Conference on Science and Technology of Ironmaking (ICSTI) which takes place for the 9th time after Sendai 1994, Toronto 1998, Düsseldorf 2003, Osaka 2006, Shanghai 2009, Rio de Janeiro 2012, Cleveland 2015 and Vienna 2018. Both events will cover all fields of ironmaking including pre-product steps such as iron ore agglomeration and cokemaking.

The 8th ECIC sets the focus more on practical, plant operational results and plant construction and the 9th ICSTI more on fundamental research work and evaluation.

### Scope and topics

The 8<sup>th</sup> ECIC and 9<sup>th</sup> ICSTI will bring together a wide range of experts, coming from plant operation, plant suppliers, universities and research institutes, who share expertise in

- Cokemaking
- Industry 4.0 in ironmaking
- Sintering and Pelletising
- Direct reduction and Smelting reduction
- Blast furnace ironmaking

Both events will provide a forum for best practise and state of the art technology, new developments, new ideas and research results.

## TECHNICAL PROGRAM The technical program includes five general types of main topics for sessions which will take place in parallel:

Торіс	Subtopic	Торіс	SUE	
Cokemaking	Fundamentals in cokemaking	Sintering and	• Fı	
	Coal blending practise			
	Latest developments in slot oven plant technology and design		la • Si	
	<ul> <li>Latest developments in heat recovery oven plant technology and design</li> </ul>		• Si at	
	New cokemaking technologies		• U	
	Coke oven repair techniques and life prolongation			
	Measures for improving coke quality		• S	
	Measurement of wall displacement     and pressure of coke oven chamber		• S	
<u> </u>	Coke plant operation, instrumentation     and automation		• Ei pl	
	Improving productivity and safety		• Pe	
	Stamp charging technology		• Pe	
	<ul> <li>Coke oven gas cleaning and utilization of by-products</li> </ul>		• Pi	
	Graphite formation at coke ovens     Coke quenching technologies		• U	
			p	
	Coke oven refractories		• Pe	
Industry 4.0	Cyber Physical Systems		• R	
in ironmaking	Horizontal Integration	Direct	• Ft	
	Vertical Integration	reduction	ar	
	End-to-end engineering	and smelting	• Pi	
	Big Data	reduction	• G	
	Self organisation		• H	
	Material tracking, material genealogy		• C	
	Through Process Quality Control		• Tr	
	Predictive Maintenance		el	
	IT- Aspects (Cyber Security, IT-		• S	
	Network, Standardisation, etc.)		p	
	Application examples in steel industry		• S <sup>1</sup>	
			• 0	

S	UBTOPIC		Topic
•	Fundamentals in sintering	-	Blast
•	Sinter plant construction and layout		furnace ironmak
•	Sinter process optimisation		
•	Sinter plant operation and automation		
•	Use of concentrates in sinter mix		
•	Sinter quality		
•	Sinter cooling		
•	Sinter plant waste gas cleaning		
•	Energy recovery and use in sinter plants		
•	Pellet plant construction and layout		
•	Pellet plant operation and automation		
•	Production of acid and fluxed pellets		
•	Use of hematite and/or magnetite pellet feed for pellet production		
•	Pellet qualities		
•	Reduction of pellets under different conditions		
•	Fundamentals in direct reduction and smelting reduction		
•	Production and use of DRI and HBI		
•	Gas-based DRI processes and new developments		
•	Hydrogen based DRI processes		
•	Coal-based DRI processes and new developments		
•	Transport and charge of hot DRI to electric arc furnaces		
•	Shipment of DRI and HBI	-	
•	Current status of Corex and Finex processes		
•	Status of HIsarna process		
•	Other smelting reduction processes		

	Subtopic
	<ul> <li>Fundamentals in blast furnace ironmaking</li> </ul>
, king	<ul> <li>Blast furnace construction and design</li> </ul>
	<ul> <li>Blast furnace process optimization and automation</li> </ul>
	<ul> <li>Modern process control techniques</li> </ul>
	<ul> <li>Blast furnace relinings</li> </ul>
	<ul> <li>Blast furnace campaign life extension</li> </ul>
	<ul> <li>Blast furnace refractories and cooling</li> </ul>
	<ul> <li>Blast furnace charging</li> </ul>
	Blast furnace productivity
	<ul> <li>Blast furnace hearth management</li> </ul>
	<ul> <li>Hot metal and slag quality</li> </ul>
	<ul> <li>Coke quality requirements and reduced coke rates</li> </ul>
	<ul> <li>Injection of auxiliary reductants (coal, oil, gas, plastics) and oxygen</li> </ul>
	<ul> <li>Hot blast stoves</li> </ul>
	New blast furnaces
	<ul> <li>Blast furnace liquid management and casting practice</li> </ul>
	<ul> <li>Gas cleaning devices</li> </ul>
	<ul> <li>Top gas expansion and recovery turbines</li> </ul>
	<ul> <li>Oxygen and top gas recycling blast furnace</li> </ul>
	<ul> <li>Alternative blast furnace processes</li> </ul>