

Session Program

22-25 Sept 2024



Liquid Metal Processing & Casting Conference - LMPC 2024

Session 1

ASIA Hotel & Spa Leoben
In der Au 1/3, A-8700 Leoben, Austria

Monday 23 September

09:10

Session 1: ESR

Session | **Location:** ASIA Hotel & Spa Leoben, In der Au 1/3, A-8700 Leoben, Austria | **Convener:** Alec Mitchell

09:10–09:30

Effect of Si Content in Electrode and SiO₂ Additions to the Slag during Electroslag Remelting

Speaker

Martin Detrois

09:30–09:50

Simulation of Remelting Processes: Challenges and Emerging Perspectives

Speaker

Abdellah Kharicha

09:50–10:10

THE DEVELOPMENT OF SIMULATORS FOR THE ESR AND VAR REMELT PROCESSES

Speaker

A. Stewart Ballantyne

10:10

10:30

Session 1: ESR 2

Session | **Location:** ASIA Hotel & Spa Leoben, In der Au 1/3, A-8700 Leoben, Austria | **Convener:** Dr Harald Holzgruber

10:30–10:50

Effects of Size on Characteristics of Electroslag Remelted (ESR) HAYNES® 282® alloy ingots

Speaker

Dr Ramanathan Krishnamurthy

10:50–11:10

On the Generation Mechanism of Large-size CaO•Al₂O₃ Inclusions in Die Steel during the Electroslag Remelting Process: at Atomic Scale

Speaker

Dr Jialong Tian

11:10–11:30

Monitoring the internal processes of electroslag remelting through an external array of magnetic field sensors

Speaker

Dr Paul King

11:30–11:50

Effect of double circuits electroslag remelting process on the ingot quality and corrosion resistance of S136 steel

Speaker

Prof. Yanwu Dong

11:50

13:30

Session 1: ESR 3**Session** | **Location:** ASIA Hotel & Spa Leoben, In der Au 1/3, A-8700 Leoben, Austria | **Convener:** Martin Detrois

13:30–13:50

Validation of electroslag remelting process simulation of an industrial scale martensitic stainless tool steel ingot**Speaker**

Mr Daniel Haster Olsson

13:50–14:10

Development of an optimized SEM-EDS testing method for non-metallic inclusions and its application to evaluate the cleaning effect of different ESR-slugs**Speaker**

Reinhold Schneider

14:10–14:30

Segregation sensitivity study of Ni-based superalloys for turbine discs application**Speaker**

Dr Mathieu Garrigue

14:30–14:50

A Metamodel for VAR Processing of Alloy 718**Speaker**

Dr Michael Hilbinger

14:50

15:10

Session 1: ESR 4**Session** | **Location:** ASIA Hotel & Spa Leoben, In der Au 1/3, A-8700 Leoben, Austria | **Convener:** Paul King

15:10–15:30

Influence mechanism of feeding on the removal of inclusions and shrinkage cavity defect during electroslag remelting process**Speaker**

Zhouhua Jiang

15:30–15:50

The Role of Solidification Irregularities in Freckle Formation**Speaker**

Dr Alec Mitchell

15:50–16:10

Statistical Evaluation of Arc Dynamics Measured During an Industrial VAR Melt of IN718 Under Various Arc Gaps**Speaker**

Mr Joshua Motley

16:10