

# Aluminium Electrolysis Short Course

# **ICSOBA 2023**



## 1 - 3 November 2023

### Dubai, United Arab Emirates

#### www.icsoba.org

#### **INVITATION**

The International Committee for Study of Bauxite, Alumina & Aluminium (ICSOBA) has the honour to announce the **Aluminium Electrolysis Short Course** to be held in Dubai before the **41**<sup>st</sup> **International Conference and Exhibition of ICSOBA.** 

The course will be held from **1 to 3 November 2023** at the conference hotel **Hyatt Regency Dubai Creek Heights**.

The 3-day course will provide a comprehensive understanding of the electrolysis process and an overview of the state-of-the-art aluminium production.

Lectures will highlight latest development in the context of decarbonisation and digitalisation challenges of our industry.

#### **WHO ATTENDS?**

Process engineers, technical and project managers, supervisors, operators of Hall-Héroult cells, developers of technology and anyone with an interest in aluminum production.

#### THE COURSE

The course offers a theoretical overview of the electrolysis process, the state-of-the-art technology and equipment to produce aluminium, as well as practical aspects of aluminium production.

Attendees will learn to solve technical problems at aluminum smelters, such as: diagnosis and treatment of problem pots; heat and mass balance applied to potline operations.

#### **COURSE TOPICS**

- Introduction to the Aluminium Electrolysis Process
- Importance of Current Density
- Pot Control
- Heat and Mass Balance Fundamentals
- Materials Characterization
- Busbars in Reduction Cells
- Anode Assemblies
- MHD for Reduction Cells
- Cathode Lining Modelling and Design
- Cathode Lining Failure and Autopsies
- KPI of the most recent cell technologies
- Hall-Héroult Numerical Models Development
- Amperage Increase Strategies
- Power Modulation
- Electrical Safety in Potrooms
- Preheating of Cells
- Startup of Cells Bath-up and Normalization
- Anode Change and Cover
- Anode Effects and PFC Emissions
- Measurements in Cells
- Pot Operation
- Operational Diagnostics of Problem Pots

#### **PRESENTERS**

Marc Dupuis	GeniSim Inc.
Frank Feret	Feret Analytical Cons.
Vanderlei Gusberti	CAETE Engenharia Ltda
Jeff Keniry	Alumination Cons. Pty. Ltd
Pablo Navarro	EGA PJSC
Vinko Potocnik	Vinko Potocnik Cons. Inc.
Dagoberto Severo	CAETE Engenharia Ltda

#### LANGUAGE

The language of the course and notes is English.

#### **COURSE FEE**

The course fee is:

• ICSOBA corporate members USD 1 500

USD 1 700

• Non-members

The course fee includes:

- 3-day course
- Course printed notes
- Daily lunches
- Refreshment breaks
- Closing dinner

#### Deadline to register is 20 October 2023.

A cancellation received before 15 October 2023 will be fully refunded minus a 50\$ processing fee. No refunds will be processed after 15 October 2023.

Register soon – there are a limited number of seats available!!!

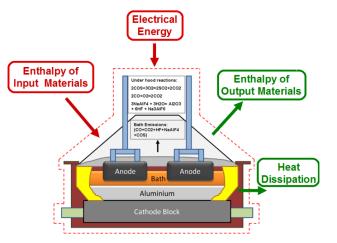
#### **HOW TO REGISTER**

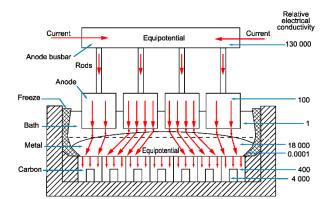
To register please contact Dagoberto Severo dagoberto.severo@icsoba.org.

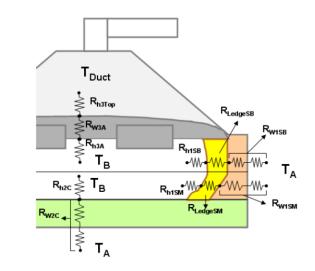
#### **ACCOMODATIONS**

Special rates are available to course participants who stay at the **Hyatt Regency Dubai Creek Heights** Hotel. Please contact us to receive the instructions of how to book the room.

We are monitoring the Covid-19 pandemic situation in UAE and globally as well as the geopolitical context and may adjust the event format accordingly.







#### **ABOUT THE ORGANISER**



The Aluminium Industry Forum

The International Committee for Study of Bauxite, Alumina and Aluminium (ICSOBA) is an independent non-profit association that unites industry individual and corporate members representing major bauxite, alumina and aluminium producing companies, technology suppliers, researchers, and consultants from around the world. The main objective of ICSOBA is to promote the exchange of ideas and results of the work from different fields of research and current practice from bauxite mine to primary aluminium.

Since 1963, now for 60 years, ICSOBA annual technology conference is organized in different parts of the world and proceedings are published as TRAVAUX volumes.

The vision of ICSOBA to become the "Technology Conference of the Aluminium Industry, for the Aluminium Industry" has received support of 45+ major companies who are participating in the yearly ICSOBA Corporate Member Council to voice their view and influence ICSOBA strategy.

As a company active in the aluminium industry, you are most welcome to join the Council <u>https://icsoba.org/corporate/</u>.

#### **CONTACT US**

For more information, please contact us at dagoberto.severo@icsoba.org.