

SUBMIT AN ABSTRACT FOR THE FOLLOWING SYMPOSIUM

LIGHT METALS

Aluminum Reduction Technology

The Aluminum Reduction Technology Symposium is a vital component of the Light Metals program. Aluminum production has evolved significantly since the pioneering work of Paul Héroult and Carl Joseph Bayer. The Hall-Héroult process, developed in 1886, revolutionized the aluminum industry by introducing the electrolytic reduction of alumina to produce aluminum metal. This innovation laid the foundation for modern aluminum production, which continues to advance with new breakthroughs in cell technology and process control.

Today, as the aluminum industry faces increasing production capacity and rising cell amperage, there is an urgent need for a deeper understanding of the fundamental aspects of cell operation. This knowledge is essential to drive improvements in efficiency, sustainability, and overall performance. The Aluminum Reduction Technology Symposium provides a unique platform to explore these critical issues and engage with the latest research and technologies that are shaping the future of aluminum production.

This symposium is an exceptional opportunity to connect with global experts in the Light Metals industry and gain valuable insights into the most pressing challenges and innovations in the field.

You are invited to submit papers on both fundamental and applied research in the following areas:

- Cell Design and Cell Modeling
- Cell Start-Up and Early Operation
- Cell Operation (Performance and Operating Advances)
- Cell Modernization and Productivity Increase
- Process Control and Sensors
- Big Data and Industry 4.0 Applied to Reduction Cells
- Environmental Issues
- Bath Chemistry
- Alumina Dissolution
- Power Modulation and Power
- Supply Safety Issues in Reduction Lines
- Energy and Cost-Saving Initiatives in the Reduction Process
- Emerging Reduction Processes
- Aluminum Trends and Market Demand

Note regarding publication: Authors seeking an oral presentation must submit a manuscript for the Light Metals proceedings or have their work accepted for publication in a TMS journal.

QUESTIONS?

Contact programming@tms.org

SPONSORED BY:

TMS Light Metals Division; TMS Aluminum Committee

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