

THE WORLD COMES HERE.  
**TMS2024**  
153<sup>rd</sup> Annual Meeting & Exhibition

MARCH 3–7, 2024  
HYATT REGENCY ORLANDO  
ORLANDO, FLORIDA, USA  
#TMSAnnualMeeting



SUBMIT AN ABSTRACT FOR THE FOLLOWING TMS2024 SYMPOSIUM:

## LIGHT METALS Programming

### LIGHT METALS

## ELECTRODE TECHNOLOGY FOR ALUMINUM PRODUCTION

The Electrode Technology for Aluminum Production Symposium is part of the Light Metals program. This is an excellent opportunity to interact with experts from the Light Metals industry and academia from all over the world and get the latest updates on key issues in the industry. The importance of changes in anode coke supply, increased cell size with larger anodes and cathodes, and cathode wear issues are just some of the issues facing the industry. You are invited to submit papers of fundamental and applied research in the following subject areas:

- Upstream production of anode and cathode carbon materials
- Production and properties of anode and cathode raw materials, anode cover materials
- Pitch and coke mixing, anode forming, and anode baking
- Anode characterization
- Paste plant design and operation
- Baking furnace design and operation
- Mathematical modelling
- Application of Industry 4.0 and big data analysis
- Effects of sulfur and impurities in anodes
- Rodding room design and operation
- Anode quality and performance
- Solutions for carbon plant environmental issues and safety
- Cathode materials and cathode production
- Cell preheating and startup (as related to electrode life)
- Cathode wear and wear mechanisms
- Spent potlining, first and second cut (joint session with Aluminum Reduction)
- Anode butts, handling and properties
- Inert anode and cathode materials, fabrication, and performance

One of the outcomes from the honorary symposium for Professor Barry Welch held during the TMS Annual Meeting in 2023 was recognition that there is currently a gap between current typical anode characteristics and customer requirements. The organizers are planning a special workshop session to address the need for step change improvements in carbon anodes, what options are available, and potential actions to help deliver the changes. The workshop format will be presentations followed by facilitated discussion. For more information or to suggest a talk, contact Dr. Alan Tomsett ([alan.tomsett@riotinto.com](mailto:alan.tomsett@riotinto.com)) and Dr. Barry Sadler ([barry.sadler@bigpond.com.au](mailto:barry.sadler@bigpond.com.au)).

#### A NOTE REGARDING PUBLICATION:

Authors seeking an oral presentation opportunity must submit a manuscript for the *Light Metals 2024* proceedings or be accepted for publication in a TMS journal.

#### ORGANIZERS

**Julien Lauzon-Gauthier**, Alcoa Corporation, Canada  
**Samuel Wagstaff**, Oculatus Consulting, USA

#### SYMPOSIUM SPONSORS

TMS Light Metals Division  
TMS Aluminum Committee

[www.tms.org/TMS2024](http://www.tms.org/TMS2024)

**QUESTIONS?**  
Contact [programming@tms.org](mailto:programming@tms.org)