Contribution ID: **257** Contribution code: **FROA01** Type: **Invited Oral Presentation**

Brazing as a Precision Joining Technique: Design, Process, and Case Studies from Sirius

Friday 19 September 2025 09:00 (40 minutes)

This presentation offers a comprehensive overview of brazing as a precision joining technique, drawing on the extensive in-house experience of the Sirius team. Aimed at design engineers and manufacturing professionals, the session will cover key aspects of brazing including materials selection, joint and fixturing design, process parameters, equipment operation, and quality control. Real-world case studies from Sirius projects will illustrate best practices and practical challenges encountered during brazing operations. Attendees will gain valuable insight into effective bonding strategies and learn how to integrate brazing considerations early in the design process to optimize performance and reliability. The talk will conclude with an open discussion to exchange ideas and address specific design or process questions from the audience.

Footnotes

Funding Agency

Author: DEFAVARI, Rafael (Brazilian Center for Research in Energy and Materials)

Presenter: DEFAVARI, Rafael (Brazilian Center for Research in Energy and Materials)

Session Classification: Core Technology Developments Session 1

Track Classification: CORE TECHNOLOGY: Others