

THE WORLD COMES HERE.  
**TMS 2023**  
152<sup>nd</sup> Annual Meeting & Exhibition

MARCH 19–23, 2023  
SAN DIEGO CONVENTION CENTER &  
HILTON SAN DIEGO BAYFRONT  
SAN DIEGO, CALIFORNIA, USA  
#TMSANNUALMEETING



**SUBMIT AN ABSTRACT BY JULY 1 FOR THE FOLLOWING TMS2023 SYMPOSIUM:**

**MATERIALS PROCESSING**

**Advanced Joining Technologies for Automotive Lightweight Structures**

The symposium aims to bring about an intensive exchange of fundamental understanding and technological advances of automotive lightweight structure joining solutions, among worldwide academics, research scientists, and expert automotive engineers, with focus on aluminum alloys and their joints with steel and polymers. Papers that describe physical experiments, joint design, characterization and assessment, and process simulation and optimization on the following key joining technologies are welcome:

- Solid state joining methods
  - Self-piercing riveting (SPR)
  - Laser brazing
  - Ultrasonic spot welding
  - Magnetic pulse welding (MPW)
  - Etc.
- Fusion welding and resistance welding
  - Laser beam welding (LBW)
  - Electron beam welding (EBW)
  - Cold metal transfer (CMT) welding
  - Resistance spot welding
  - Etc.
- Hybrid joining methods and adhesive bonding

Also welcome are all aspects of research, development, and applications relating to the joining of automotive lightweight structures will be covered.

**ORGANIZERS**

**Yan Huang**, Brunel University London  
**Carla Barbatti**, Constellium

**SYMPOSIUM SPONSORS**

TMS Materials Processing & Manufacturing Division  
TMS Shaping and Forming Committee

[www.tms.org/TMS2023](http://www.tms.org/TMS2023)

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