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**MARCH 14-18, 2021 • ORLANDO WORLD CENTER MARRIOTT  
ORLANDO, FLORIDA, USA**  
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**SUBMIT AN ABSTRACT TO:**

## **LIGHT METALS**

# **TMS-DGM SYMPOSIUM: A JOINT US-EUROPEAN SYMPOSIUM ON LINKING BASIC SCIENCE TO ADVANCES IN MANUFACTURING OF LIGHTWEIGHT METALS**

Lightweight metals such as aluminum and magnesium continue to find increasing application in engineering systems for transportation, energy, human welfare, and infrastructure. Driving towards ever increasing benefits will require that we leverage advances in the fundamental metallurgy of these alloys towards improvements in manufacturing. This joint symposium between TMS and DGM (the German Materials Society) is a forum for exchange and discussion of state-of-the-art results that provide insight into previously unknown characteristics and mechanisms in Al and Mg alloys and their connections with manufacturing technology. Examples include new details and understanding of deformation mechanisms, reports of novel metallurgical and microstructural features and kinetics, and discovery of unique process-structure-property relationships. This symposium will emphasize:

- Advanced characterization results, particularly three dimensional and/or time varying measurements
- Unique theory and modeling results, including process and manufacturing models
- New directions in manufacturing, excluding additive manufacturing, such as metamorphic manufacturing, high strain processing, and unique industrial processes moving towards implementation

All abstracts and presentations must include discussion of new advances in the basic science of lightweight alloys as well as implications for improved manufacturing capabilities.

## **ORGANIZERS**

**William Joost**, Pratt & Whitney, USA

**Norbert Hort**, Helmholtz-Zentrum Geesthacht, Germany

## **SYMPOSIUM SPONSORS**

TMS Materials Processing & Manufacturing Division

TMS Shaping and Forming Committee

**Abstract Deadline is July 1, 2020. Submit online at**  
[www.programmaster.org/TMS2021](http://www.programmaster.org/TMS2021).

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