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**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:

ELECTRONIC, MAGNETIC, AND ENERGY MATERIALS

**ADVANCED SOFT MAGNETS AND  
MAGNETOCALORIC MATERIALS:  
AN FMD SYMPOSIUM HONORING  
VICTORINO FRANCO**



The need to develop a decarbonized economy to curb human-caused climate change has been reflected through several international agreements. Advanced magnetic materials are key components in many applications that are critical to the development of such an economy where environmentally benign supply chains and product lifecycles have high value. Soft magnets are widely used in efficient electrical power conversion devices and magnetocaloric materials promise to enable the next generation of refrigeration systems. This honorary symposium will cover several aspects of soft magnets and magnetocaloric materials, from novel material design to prototyping and validation. Fundamental aspects of these magnetic materials in single-crystal, bulk, thin film, and powdered forms will be discussed, as well as their applicability in multi-component power conversion devices from an engineering standpoint. Industrial and instrumental applications will also be discussed.

The symposium will be divided in the following sessions:

- Novel magnetocaloric materials with high performance
- Multicaloric materials and their functional properties
- Soft magnetic materials for electric machines
- Advances in soft magnetics
- Instrumental applications of magnetic materials

**ORGANIZERS**

**Daniel Salazar**, BCMaterials, Spain  
**Alex Leary**, NASA Glenn Research Center, USA

**SYMPOSIUM SPONSORS**

TMS Functional Materials Division  
TMS Magnetic Materials Committee

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**QUESTIONS?**  
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