

# SUBMIT AN ABSTRACT FOR THE FOLLOWING SYMPOSIUM

### MECHANICS OF MATERIALS

## Advancing the Frontier of Powder Materials Processing and Sintering: A MPMD/EPD Symposium in Honor of Eugene Olevsky

This symposium is to celebrate Professor Eugene Olevsky's remarkable contributions to the fields of materials science and the mechanics of powder and porous material processing. His pioneering work in sintering, particularly his continuum theory of sintering, has significantly advanced our ability to predict the shrinkage and deformation of porous materials during essential powder processing techniques. Professor Olevsky's innovative research and unwavering commitment to mentoring future scientists have made a lasting impact, inspiring both students and colleagues alike.

This symposium will cover powder material issues related to fundamental and applied sciences in synthesis, processing, properties, and characterization from experimental, computation, and data science approaches. It will consider all aspects of powder material processing and property studies, which includes powder synthesis, forming (including additive manufacturing), sintering, and property evaluation. Powder materials that can deliver outstanding harsh environment properties are especially of high interest. The symposium covers advances in theory, modeling, computation, data informatics while in parallel welcoming cutting-edge experimental techniques and approaches to understand and characterize powder materials in demanding conditions.

Key topics to be explored at the symposium include, but are not limited to:

- Densification of powders through sintering
- Powder material processing-structure-propertiesperformance relations
- Additive powder material manufacturing
- Advanced powder material analysis and characterization
- Powder materials under extreme conditions
- Computational modeling for powder materials
- Data science applications in powder materials
- Development of novel materials and microstructures via powder processing
- Advances in sintering technology
- Education and training in sintering and powder materials

### **SPONSORED BY:**

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