

## **APPLICATIONS OF SOLIDIFICATION FUNDAMENTALS**

This symposium is focused on providing a forum for emerging developments in experimental, analytical, and computational solidification science and engineering. Some of the areas to be explored include:

- Fundamentals of solidification (grain nucleation and interface kinetics)
- Microstructure development
- Mushy zone dynamics
- Multi-scale phenomena
- In-situ observation
- Thermo-physical-mechanical properties of semi-solids

Abstracts are requested that demonstrate the application of fundamental transient phenomena (phase transformation, fluid flow, and semi-solid deformation, both experimental and modelling) and novel characterization methods. Each speaker will be asked to, within their talk, highlight the industrial or societal importance of their research findings with a slide that explicitly highlights these aspects of their work. The topic of "defects" is excluded as it is covered in the Defects and Properties of Cast Metals symposium.

## **ORGANIZERS**

Andre Phillion, University of British Columbia, Canada Amber Genau, University of Alabama at Birmingham, USA

## **SYMPOSIUM SPONSOR**

TMS Solidification Committee

ABSTRACT DEADLINE IS JULY 1, 2016. SUBMIT ONLINE AT WWW.PROGRAMMASTER.ORG/TMS2017. QUESTIONS? CONTACT PROGRAMMING@TMS.ORG