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