

**5th International
Conference on Advances in
Solidification Processes
(ICASP-5) 5th International
Symposium on Cutting Edge
of Computer Simulation of
Solidification, Casting and
Refining (CSSCR-5)**

17 June 2019 - 21 June 2019

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Scientific Programme

Key features of the joint event

- Solidification processes and solidification science
- Limited attendance (round 200 participants) to provide an optimal atmosphere for exchanges
- To the utmost extent bring together expertise from both modeling and experimental researches in the field of solidification
- 3 parallel sessions, international attendance, duration of 4 days, and UNESCO World Heritage city of Salzburg

Solidification fundamentals

(thermodynamics, nucleation, crystal growth kinetics, coarsening, mushy zone, fragmentation, etc.)

Modeling and simulation

(analytical and numerical models, numerical methods, verification and validation of models)

Solidification observations

(advanced microscopy, electron beam analysis, transparent organic analogues, X-ray tomography, confocal scanning laser microscope, imaging and analysis)

Solidification processing

(continuous casting, shape casting, ingot, directional solidification, rapid solidification, semi-solid processing, welding, additive manufacturing, solidification/remelting under imposed electromagnetic or high magnetic fields, etc.)

Structural/compositional heterogeneity and other solidification accompanying phenomena

(columnar-to-equiaxed transition, micro- and macrosegregation, cavity and porosity, hot tearing, non-metallic inclusions, stress-strain and deformation, etc.)