

# **Pre-nominated Session FM21**

## **Solidification and crystal growth**

**Co-Chair(s): M. Glicksman (USA)  
M.G. Worster (UK)**

<b>Paper ID</b>	<b>Title</b>	<b>Authors</b>
FM21S_11058	Experimental Observations of Hydrate Formation in a Convection Tank	C. F. Chen, Cho Lik Chan
FM21S_11208	Morphological Stability of Directional Solidification under Temperature Modulations	C. A. Chung, K. H. Ho, W. Z. Chien
FM21L_11270	Nonlinear Oscillatory Convection in Mushy Layers	Peter Guba, M. Grae Worster
FM21L_11320	Magnetic Resonance Imaging of Structure and Convection in Solidifying Mushy Layers	P. Aussillous, A. J. Sederman, L. F. Gladden, H. E. Huppert, M. G. Worster
FM21L_11328	Solidification and Compositional Convection of a Ternary Alloy	Andrew F. Thompson, Herbert E. Huppert, M. Grae Worster, Anneli Aitta
FM21S_11331	AHP Setup for Low Laminar Melt Flow Study in Crystal Growth	Michael A. Gonik, Janusz A. Szymczyk, Tomasz A. Kowalewski
FM21S_11362	Optimization of the Growth Conditions of a Nd:YVO <sub>4</sub> Cylindrical Bar	Liliana Braescu, Robert Szabo, Agneta M. Balint, Stefan Balint
FM21S_11364	Front Tracking Technique on a Fixed Grid in Modelling of Binary Mixture Solidification with Natural Convection	Jerzy Banaszek, David J. Browne, Marek Rebow, Mariusz Proczek
FM21L_11926	Salt Precipitation in Geothermal Reservoirs	George G. Tsypkin, Andrew W. Woods
FM21S_12276	Boundary - Layer Analysis of Chimney Structures in Mushy Layers	Jacqueline Ashmore, M. Grae Worster
FM21S_12278	Travelling Magnetic Field Influence on Crystal Growth by Bridgman Method	Irina S. Fayzrakhmanova, Tatyana P. Lyubimova
FM21L_12312	A Semi-Sharp Phase Field Method for Quantitative Phase Change Simulations	Gustav Amberg

FM21L\_12365 Directional Solidification of Pb-Sn Alloys Affected by a Rotating Magnetic Field Sven Eckert, Bernd Willers, Ulf Michel, Gustav Zouhar, Petr A. Nikrityuk, Kerstin Eckert

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FM21L\_12543 Cell Shapes in Directional Solidification: a Global Study Marc Georgelin, Alain Pocheau

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FM21L\_12743 Convection Driven by Tidal Heating: Numerical Model and Parameterized Theory Leszek Czechowski

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FM21S\_12768 Ternary Alloy Convection in Mushy Layers: Extended Summary Daniel M. Anderson, T. P. Schulze

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FM21S\_13008 Convective Instabilities During Solidification of In a Mushy Layer G. Hwang, Chang K. Choi