

Session Program

17-21 Jun 2019



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)

Solidification processing

IMLAUER HOTEL PITTER SALZBURG
Rainerstraße 6, 5020 Salzburg, Austria

Tuesday 18 June

16:10

Solidification processing

Session | **Location:** IMLAUER HOTEL PITTER SALZBURG, Auersperg 2, Rainerstraße 6, 5020 Salzburg, Austria

16:10–16:30

ADVANCED SOLIDIFICATION MODELS FOR THE SIMULATION OF MECHANICAL BONDING IN HYBRID LIGHT METAL STRUCTURES PRODUCED BY HIGH PRESSURE DIE CASTING

Speaker

Juergen Jakumeit

16:30–16:50

EXPERIMENTAL AND NUMERICAL INVESTIGATION OF THE EFFECTS OF FILLING DYNAMICS IN LOW PRESSURE SAND CASTING

Speaker

Marie Bedel

16:50–17:10

OPTIMIZATION OF ULTRASONIC CAVITATION PROCESSING IN THE LIQUID MELT FLOW

Speaker

Tungky Subroto

17:10–17:30

MICROSTRUCTURE EVOLUTION IN AN Al-Si PISTON ALLOY UNDER ULTRASONIC MELT PROCESSING

Speaker

Suwaree Chankitmunkong

17:30–17:50

FORMATION OF MICRO-PLUMES AT A PLANAR SOLID/LIQUID INTERFACE IN A TEMPERATURE GRADIENT

Speaker

Johann Peter Mogeritsch

17:50

Thursday 20 June

16:10

Solidification processing: Defects

Session | **Location:** IMLAUER HOTEL PITTER SALZBURG, Auersperg 2, Rainerstraße 6, 5020 Salzburg, Austria

16:10–16:30

A MODEL FOR COUPLING PREDICTION OF INVERSE SEGREGATION AND POROSITY FOR UP-VERTICAL UNIDIRECTIONAL SOLIDIFICATION OF Al-Cu ALLOYS

Speaker

Wanqi Jie

16:30–16:50

EFFECTS OF STRAIN RATE ON HOT TEAR FORMATION IN Al-Si-Cu ALLOYS

Speaker

Shishira Bhagavath

16:50–17:10

EFFECT OF COOLING RATE ON THE POROSITY DEFECT IN THE THICK ALUMINUM CASTING BY 3D COMPUTED TOMOGRAPHY ANALYSIS

Speaker

In-Sung Cho

17:10–17:30

ANALYSIS OF COLUMNAR-TO-EQUIAXED TRANSITION EXPERIMENT IN LAB SCALE STEEL CASTING BY A MULTIPHASE MODEL

Speaker

Savya Sachi

17:30–17:50

THE EFFECT OF Cu AND Si CONTENTS ON THE HOT-TEARING SENSITIVITY OF 3xxx HEAT-EXCHANGER ALLOYS

Speaker

Kjerstin Ellingsen

17:50

Friday 21 June

10:30

Solidification processing: Simulation and optimization

Session | **Location:** IMLAUER HOTEL PITTER SALZBURG, Auersperg 2, Rainerstraße 6, 5020 Salzburg, Austria

10:30–10:50

PREDICTION SOLIDIFICATION MICROSTRUCTURE IN HIGH PRESSURE DIE CASTING OF ALUMINIUM ALLOYS USING AN INTEGRATED COMPUTATIONAL MATERIAL ENGINEERING (ICME) APPROACH

Speaker

Alan A. Luo

10:50–11:10

ONLINE MODELLING OF HEAT TRANSFER, SOLIDIFICATION AND MICROSTRUCTURE IN CONTINUOUS CASTING OF STEEL

Speaker

Ville-Valtteri Visuri

11:10–11:30

SINGLE-PIECE SIMULATION AND QUALITY CONTROL METHODS FOR THE COMPLEX SHAPE CASTING

Speaker

Jianxin Zhou

11:30–11:50

ON ANALYTICAL CONCEPTS OF NOVEL MULTI-RESOLUTION CASTING SIMULATIONS

Speaker

Amir Horr

11:50–12:10

SIMULATION OF CASTING FILLING PROCESS USING THE LATTICE BOLTZMANN METHOD

Speaker

Yongjia Zhang

12:10–12:30

A NOVEL TECHNOLOGY TO PRODUCE HOMOGENIZED STEEL BY FORGING SOLIDIFYING METAL

Speaker

Yun Chen

12:30