

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)

Thermomechanics & properties

IMLAUER HOTEL PITTER SALZBURG
Rainerstraße 6, 5020 Salzburg, Austria

Wednesday 19 June

10:30

Thermomechanics & properties: Thermomechanics & properties #1

Session | **Location:** IMLAUER HOTEL PITTER SALZBURG, Auersperg 2

10:30–10:50 **STUDY OF ELASTO-PLASTIC DEFORMATION IN CAST AlCu7 ALLOY**

Speaker

Michael Schöbel

10:50–11:10

A PARTITIONED SOLUTION ALGORITHM FOR FLUID FLOW AND STRESS-STRAIN COMPUTATIONS APPLIED TO CONTINUOUS CASTING

Speaker

SHAOJIE ZHANG

11:10–11:30

SOLID-LIQUID INTERFACIAL ENERGY OF SOLID Al α SOLUTION IN EQUILIBRIUM WITH AlZn LIQUID

Speaker

Elif Yilmaz

11:30–11:50

SHAPE OF THE IN-SITU (Al,Zn)-Ti REINFORCING PARTICLES AND THEIR INFLUENCE ON STRUCTURE AND STRUCTURAL STABILITY OF SELECTED Zn-Al AND Al-Zn CAST ALLOYS

Speaker

Witold K. Krajewski

11:50–12:10

EFFECT OF PORES ON TENSILE FRACTURE OF DIE-CAST AlSiMgMn ALLOYS WITH 3D X-RAY μ -CT AND FE SIMULATION

Speaker

Haidong Zhao

12:10

13:30

Thermomechanics & properties: Thermomechanics & properties #2

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

13:30–14:00

MICROSTRUCTURE DEPENDENT ELASTIC PROPERTIES AND THERMO-ELASTO-VISCOPLASTIC CONSTITUTIVE LAWS OF METALLIC ALLOYS DURING THEIR SOLIDIFICATION

Speaker

Gottfried Laschet

14:00–14:20

AN INVESTIGATION OF THE CHILL-CASTING INTERFACE DYNAMICS IN PRODUCTION OF SAND-CAST A319 ENGINE BLOCKS

Speaker

Farzaneh Farhang Mehr

14:20–14:40

ON MODELLING VISCOPLASTIC BEHAVIOUR OF THE SOLIDIFYING SHELL IN THE FUNNEL-TYPE CONTINUOUS CASTING MOLD

Speaker

Alexander Vakhrushev

14:40–15:00

DETERMINATION OF PATTERN ALLOWANCES FOR A STEEL CASTING USING AN INVERSE ELASTOPLASTIC DEFORMATION ANALYSIS

Speaker

Prof. Christoph Beckermann

15:00–15:20

ON THE USE OF HETEROGENEOUS THERMOMECHANICAL AND THERMOPHYSICAL MATERIAL PROPERTIES IN FINITE ELEMENT ANALYSES OF CAST COMPONENTS

Speaker

Johan Jansson

15:20–15:40

INTERFACES AT INTERNAL CHILLS IN SOLIDIFYING STEEL SECTIONS

Speaker

Charles Monroe

15:40