

PROGRAMME
58TH IFC Portoroz 2018

WEDNESDAY, 12.09.2018

- 16:30-19:00** **Registration of participants at the Conference reception desk**
- 17:30** **Bus transfer from Hotel Slovenija to Piran**
- 18:00** **Reception at the Municipality of Piran**

THURSDAY, 13.09. 2018, Hall: Cristofa Colombo

- 9:30 -9:45** **MIRJAM JAN-BLAŽIČ,**
President, *Slovenian Foundrymen Society*
The Opening Address

PLENARY LECTURES, Hall: Cristofa Colombo

- 9:45-10:15** **H. LICKFETT, *BDG Düsseldorf (D): The German Foundry Industry - Current Status and Some Serious Issues Regarding Perspectives***
- 10:15-10:45** **P. SCHUMACHER¹, E. SOBOTKA², B. STAUDER³, J. LI², H. HARMUTH², ¹*ÖG/Leoben, ²Montanuniversität Leoben, Nemak Linz (AT): Novel aspects during processing of lightmetal castings***
- 10:45-11:15** **A. KRIŽMAN¹, P. MRVAR², M. JAN-BLAŽIČ³, M. DEBELAK⁴, ¹*University of Maribor, ²University of Ljubljana, ³Slovenian Foundrymen Society, ⁴Chamber of Commerce and Industry of Slovenia, (SI): Guidelines for the development of Slovenian Foundry***
- 11:15-11:30** **Break**
- 11:30-12:00** **J. CAMPBELL, *University of Birmingham (GB): The production of Quality Castings***
- 12:00-12:30** **K. WEIß, *RWP GmbH (D): Cores-not just sand! Production, Usage, Impact to the Casting – Simulation and real results***
- 12:30-13:00** **P. MRVAR¹, A. KRIŽMAN², S. KASTELIČ¹, M. TERČELJ¹, M. PETRIČ¹, D. MITROVIĆ¹, ¹*University of Ljubljana, ²University of Maribor (SI): New cast Iron Alloy for a transport of Molten Al-alloys***
- 13:00 -15:00** **Lunch break**
- 15:00-15:30** **I. STAN, S. STAN, M. CHISAMERA, I. RIPOSAN, *Politehnica University of Bucharest (RO): Structure characteristics of silicon alloyed ductile cast irons***
- 15:30-16:00** **D. MOLNAR, A. KISS, C. MAJOROS, D. HALAPI, *University of Miskolc (H): Calculation and Simulation of Pre-filling at High Pressure Die Casting***
- 16:00-16:15** **Break**

- 16.15-16.45 P. LARSEN, K. PAW MADSEN, J. TROJAN, *Noricangroup DISA, Taastrup (DK): Digital foundry for tomorrow*
- 16.45-17.15 R. RUDOLF^{1,2}, M. SHARIQ¹, P. MAJERIČ^{1,2}, V. ŠTAGER², A. KRIŽMAN¹, L. ROZMAN ZORKO^{1,2}, I. ANŽEL¹, ¹*University of Maribor*, ²*Zlatarna Celje (SI): Nanotechnology as future technology*

THURSDAY EVENING, 14.09.2018

- 18:00 **Dinner on boats and a boat ride alongside Slovenian coastline with an ending on the terrace of Riviera Hotel**

FRIDAY, 14.09.2018

Section A: Hall: Robert Scott, Cast iron and casting technology

- 9:00-9:20 J. FRIEB¹, U. SONNTAG², I. STELLER³, A. BÜHRIG-POLACZEK¹, ¹*Gießerei-Institut der RWTH Aachen*, ²*GFal Berlin*, ³*BDG Düsseldorf (D): Development of a uniform analytic procedure for the system-independent evaluation of graphite morphology and nodularity of spheroidal cast iron*
- 9:20-9:40 M. KOMPREJ, A. BRANISELJ, *Livar d.d. (SI): Impact of additives and different types of sand in the core on veining defects inside casting*
- 9:40-10:00 F. J. HÖHN, *Heinrich Wagner Sinto Maschinenfabrik GmbH (D): Advanced technologies with a future for foundries – moulding & perfection in every single mould*
- 10:00-10:15 **Break**
- 10:15-10:35 C. DELGADO¹, E. GARITAONANDIA¹, L. UNAMUNZAGA¹, A. MARTÍNEZ PUCHE², I. GARCÍA³, J. RÍOS⁴, J. L. RODRÍGUEZ⁵, ¹*IK4-Azterlan*, ²*Acciona Construcción S.A.*, ³*Fundiciones del estanda, S.A.*, ⁴*Gaiker-IK4*, ⁵*Ondarlan, S.L. (E): Integration of a novel mechanical sand reclamation technology in a steel foundry to maximise SFS valorisation in foundry and construction applications*
- 10:35-10:55 S. AL-JASIM, D. ŽVEGLIČ, A. TEKAVČIČ, S. FEKONJA, *Kovis-Livarna d.o.o. (SI): The importance of synchronizing foundry parameters in process management*
- 10:55-11:15 H. GERGELY, *Alu-Onto Ltd. (HU): Mould filling proportions and mechanical properties of gravity sand castings of large geometry and thin wall /1-3mm/-by a new casting process*
- 11:15-11:30 **Break**
- 11:30-11:50 A. KUMP, R. ANDERSSON, P. E. PERSSON, *NovaCast Systems AB (SE): Comparison of solidification properties in plain sand cup versus test castings with different modules using thermal analysis*
- 11:50-12:10 M. ŽBONTAR¹, M. PETRIČ², M. VONČINA², J. MEDVED², J. ČEVKA¹, R. CERC KOROŠEČ², ¹*Exoterm-IT d.o.o.*, ²*University of Ljubljana (SI): Sol-gel technology in foundry coatings*

- 12:10-12:30 A. TEKAVČIČ¹, S. AL-JASIM¹, S. FEKONJA¹, P. MRVAR², B. MARKOLI²,
¹Kovis-Livarna d.o.o., ²University of Ljubljana (SI): **Flake Graphite Formation under Exothermic Riser Sleeves in Ductile Iron Castings – Causes and Remedies**
- 12:30-12:45 **Break**
- 12:45-13:05 D. ŽIVUKŠIĆ, *Trokutttest d.o.o. (SI)*: **Optical 3D measurement of roughness and geometry on aluminum castings**
- 13:05-13:25 U. KLANČNIK, A. STERGAR, J. BOJANOVIČ, M. DROBNE, *Valji d.o.o. (SI)*: **Impact of mold rotation velocity on distribution of microstructural constituents in cast iron**
- 13:25-13:45 S. FEKONJA¹, A. TEKAVČIČ¹, B. KOSEC², B. MARKOLI², B. KARPE², ¹Kovis-Livarna, ²University of Ljubljana (SI): **Thermal Properties Measurements of Different Types of Cast Iron**

Section B: Hall: Roald Amundsen, Non-ferrous alloys

- 9:00-9:20 J. MEDVED¹, S. KORES², T. BALAŠKO¹, M. VONČINA¹, ¹University of Ljubljana, ²Talum d.d. (SI): **Influence of minor alloying element addition on aluminium casting alloys**
- 9:20-9:40 Z. ZOVKO BRODARAC¹, D. STANIĆ², F. KOZINA¹, ¹University of Zagreb, ²CIMOS-P.P.C. Buzet d.o.o. (HR): **Influence of Cu on the microstructure development of AlSi7MgCu alloys**
- 9:40-10:00 F. ZUPANIČ¹, M. STEINACHER², T. BONČINA¹, ¹University of Maribor (SI), ²Impol 2000 d.d. (SI): **As-cast microstructure of a novel Al-Mg-Si alloy**
- 10:00-10:15 **Break**
- 10:15-10:35 M. SZUCKI, *AGH University of Science and Technology in Krakow (PL)*: **Lattice Boltzmann approach to numerical modelling of Al alloys solidification**
- 10:35-10:55 M. POTOČNIK, B. TRILAR, R. PETERNELJ, V. POCEK, *LTH Castings d.o.o. (SI)*: **Analysis of influencing parameters of HPDC on deformations of electronics housing**
- 10:55-11:15 S. MÜLLER, S. KRISCHKE, T. SCHUCHARDT, K. DILGER, *Technische Universität Braunschweig, IFS (D)*: **Multi-criteria based optimization of cooling systems for high pressure die casting dies**
- 11:15-11:30 **Break**
- 11:30-11:50 J. PAPIĆ, D. GOGIĆ, *MLM d.d. Maribor (SI)*: **Example of thermography in HPDC of Al-alloys**
- 11:50-12:10 J. HAGENAUER, *HAGI GmbH (A)*: **Low pressure process for automotive casting**
- 12:10-12:30 V. KOLDA, *Mecas ESI (CZ)*: **Prediction of deformation, stress and fatigue life of HPDC**
- 12:30-12:45 **Break**

- 12:45-13:05** D. ARNŠEK¹, B. PODGORŠEK², F. ZUPANIČ¹, T. BONČINA¹, ¹*University of Maribor*, ²*OMCO METALS SLOVENIA d.o.o. (SI)*: **Determination of microstructural constituents in advanced aluminium bronze**
- 13:05-13:25** G. GYARMATI, G. FEGYVERNEKI, D. MOLNAR, M. TOKAR, *University of Miskolc (H)*: **Melt cleaning efficiency of different fluxes and their effect on the eutectic modification level of AlSi7MgCu alloy**

Poster presentations

1. S. KASTELIC¹, M. PETRIČ², P. MRVAR², ¹*TC Livarstvo*, ²*University of Ljubljana (SI)*: **Quality control of Al cast alloys by thermal analysis**
2. M. PETRIČ¹, A. MAHMUTOVIĆ², S. KASTELIC¹, P. MRVAR¹, ¹*University of Ljubljana*, ²*TC Livarstvo (SI)*: **Filling and solidification calculation at semi solid casting technology**