

The Conference organisers are kindly inviting experts and scientists, as well as buyers and suppliers of foundries from Slovenia and abroad to attend jubilee 50th International Foundry Conference 2010 taking place jointly with a corresponding foundry exhibition in Portorož

from 8th to 10th September, 2010.

This year Conference motto shall be:

**“QUALITY, LOWER COSTS –
THE BASIS OF COMPETITION
IN FOUNDRIES”.**

PROGRAMME COMMITTEE

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ORGANISATION

SLOVENIAN FOUNDRYMEN SOCIETY
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CONFERENCE LOCATION

Kongresni center Porturs (Congress Centre Porturs),
 Hotel Slovenija,
 Obala 33, 6320 Portorož, SLOVENIA
 Telephone: +386 5 692 90 01,
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HOTEL ACCOMMODATION

Hotel: Grand Hotel Portorož (ex GH Palace)
 Hotel Slovenija, Hotel Riviera, Hotel Marko,
 Hotel Barbara, Hotel Lucija

All information may be obtained at
www.drustvo-livarjev.si
 under 50th International Foundry Conference Portorož 2010.



ESCORTS PROGRAMME

- Thursday, 09.09.2010 at 9:30 a.m. in front of Hotel Slovenija
- Cultural monument sightseeing – visit to Romanesque church of the Holy Trinity in Hrastovlje
 - Visit to natural sights of Slovenia – Škocjan caves regional park

co-financed
 by the Slovenian Research Agency

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**50th INTERNATIONAL
 FOUNDRY
 CONFERENCE
 PORTOROŽ 2010**

WITH CORRESPONDING
 FOUNDRY EXHIBITION

8th – 10th September, 2010

PROGRAMME OF LECTURES

Wednesday, 8th September, 2010

- 4:00 p.m. - Registration of Conference Participants and Access to the
 6:00 p.m. Exhibition Area
 5:40 p.m. Transfer to Piran (from Hotel Slovenija)
 6:00 p.m. Reception at the Municipality of Piran

Thursday, 9th September, 2010

- 8:00 a.m. - Registration of Conference and Exhibition Participants
 9:30 a.m.

Hall Cristoforo Colombo: Opening and Plenary Lectures

- 9:30 a.m. - MIRJAM JAN-BLAŽIČ
 9:45 a.m. President of the Slovenian Foundrymen Society
 The Opening Address

Hall Cristoforo Colombo: Plenary Lectures

- 9.45-10.15: L. KNIEWALLNER, M. DZINIC, I. PAPADIMITRIOU, Georg Fisher Automotive AG, Schaffhausen, (CH): **Influence of hybrid and electro mobility to the foundry industry - changes and challenges**
- 10.15-10.45: R. MEIER, Technical consultant casting- and Forging Technologies, Bergisch-Gladbach, (D): **Position of the European die cast industry at global comparison**
- 10.45-11.15: M. DEBELAK*, M. JAN-BLAŽIČ**, VILJEM PIRIH*, *Gospodarska zbornica Slovenije, (SI), ** Društvo livarjev Slovenije, (SI): **Impact of global crisis and recession to the Foundry Slovenia**
- 11.15-11.30: Break
- 11.30-12.00: P. SCHUMACHER, Chair of Casting Research, University of Leoben and Austrian Foundry Research Institute, Leoben, (A): **Development of high performance Al alloys**
- 12.00-12.30: A. KRIŽMAN*, PMRVAR**, J. MEDVED**, *Univerza v Mariboru, (SI) **Univerza v Ljubljani, Naravoslovnotehniška fakulteta, (SI): **Development of foundry alloys and casting technologies**
- 12.30-13.00: P. MRVAR, M. PETRIČ, J. MEDVED, Univerza v Ljubljani, Naravoslovnotehniška fakulteta, (SI): **Complete master of complex casting production with high pressure die casting process**
- 13.00-15.00 Lunch

Hall Robert Scott / Section A: Cast Iron and Casting Technology

- 15.00-15.20: K. WEISS*, W. MENK**, S. TUNZINI**, T. RIECK***, C. HONSEL**, RWP GmbH, (D), **Georg Fischer Automotive AG, (D), ***Georg Fischer GmbH & Co, (D): **Development of ductile iron material, simulation and production technology to locally strengthen castings**
- 15.20-15.40: V. KRUTIŠ*, M. KOVAČ*, Z. BRAZDA**, *MECAS ESI s.r.o., **JMA s.r.o. Brno, (CZ): **Numerical simulation of core blowing**
- 15.40-16.00: F. JEZERŠEK, SIAPRO d.o.o., Cerklje, (SI): **Savings on regeneration of sand mixtures**
- 16.00-16.20: Break
- 16.20-16.40: R. DOEPP, University of Technology, Clausthal, (D): **Contribution to fight against hot tearing**
- 16.40-17.00: D. PIHURA, DŽ. NOVIĆ, »LJEVARI BIH«, (BIH): **Research of influencing factors on characteristics of thick-walled vermicular cast iron castings**

Hall Roald Amundsen / Section B: Non-Ferrous Alloys

- 15.00-15.20: A. SHARMA, L. RATKE, D. KOHLI, Malaviya National Institute of Technologie Jaipur, Depatement of Metallurgical and Materials Engineering B-9, (IND): **Influence of rotation speed and holding time on Al-7Si alloy cast through rapid slurry formation (RSF) technique**
- 15.20-15.40: J.W. KACZMAR*, K. GRANAT*, K. PIETRZAK**, K. NAPLOCHA*, E. GROZDKA*, J. MORGIEL***, M. WOJTKOWIAK*, *Institute of Production Engineering and Automation, Technical University of Wroclaw, (PL), **Institute of Electronic Materials Technology Warsaw and Institute of Fundamental Technological Research, Polish Academy of Sciences, Warsaw, (PL), ***Institute of Metallurgy and Materials Science, Polish Academy of Sciences (PL): **The effect of strengthening ceramic elements on the mechanical properties of Cu-base composite materials**
- 15.40-16.00: P. HAFNER, Lotrič d.o.o., (SI): **ISO 9001 and calibration of measuring equipment**
- 16.00-16.20: Break
- 16.20-16.40: D. STAMENKOVIĆ*, M. ČOLIĆ**, A. ČAIROVIĆ*, I. ANŽEL***, L. ZORKO***, R. RUDOLF****, *Univerza v Beogradu, Fakulteta za stomatologijo, Klinika za Protetiko, (SRB), ** Medicinska vojaška akademija v Beogradu, Institut za medicinske raziskave, (SRB), *** Univerza v Mariboru, Fakulteta za strojništvo, (SI), **** Zlatarna Celje d.d., oddelek za raziskave in razvoj, (SI): **Study of the influence of repeated casting on the biocompatibility of a dental gold alloy**
- 16.40-17.00: R. TANNEBERGER, Dr. Tanneberger GMBH, (D): **Pad. Conr manage energy consumption - reduce costs**

Thursday night, 9th September, 2010

- 18.00-21.30: Dinner on board and cruise along the Slovenian coast
 22.00: Social event with programme on the "Mistika" terrace of Hotel Riviera

Friday, 10th September, 2010

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

- 9.00-9.20: A. LIKHTE, D.R. PESHWE, S.U. PATHANK, Visvesvaraya National Institute of Technologie(VNIT), Nagpur, (IND): **Microstructural characterization of austempered inoculated low carbon equivalent cast iron**
- 9.20-9.40: M. COLDITZ, DISA Industries A/S, (DK): **Overview and latest developments in the flaskless moulding technology**
- 9.40-10.00: M. GNAMUŠ, A. MIKUŽ, Litostroj jeklo d.o.o., (SI): **Progressive molding technology - ECOFORM**
- 10.00-10.20: Break
- 10.20-10.40: A. KOWALSKI, J. TURZYNSKI, M. KUDER, Foundry Research Institut Krakow, (PL): **Computer - added analysis of the structure of ductile iron and ADI**
- 10.40-11.00: L. TOMEK, V. KOSOUR, Brno University of Technologie, (CZ): **Prediction of burn on and mould penetration defects**
- 11.00-11.20: B. ČUK, ETA d.o.o. Cerklje, (SI): **Identification of under surface defects on thin-walled grey iron castings**
- 11.20-11.40: Break
- 11.40-12.00: R. MANOJLOVIĆ, Ss. Cyril and Methodius University, Faculty of Technologie and Metallurgy, (MK): **Mathematical modelling of solidification process of continuous casting steel slabs**
- 12.00-12.20: K. BURIANOVA, K. RUSIN, Brno University of Technologie, (CZ): **Integrated measuring system for plasticity and calorimetry analysis of self hardening sand mixtures**
- 12.20-12.40: D. ALIPIEV, Technical University of Sofia, (BG): **V-process: Foundries in internet and some Bulgarian developments**

Hall Roald Amundsen / Section B: Non-ferrous alloys

- 9.00-9.20: F. ZUPANIČ, Univerza v Mariboru, Fakulteta za strojništvo, (SI): **Quantitative analysis of backscattered electron images as an aid by phase identification in cast alloys**
- 9.20-9.40: Z. ZOVKO BRODARAC, T. HOLJEVAC GRUČIĆ, F. UNKIĆ, K. TERZIĆ, University of Zagreb, Faculty of Metallurgy Sisak, (CRO): **Influence of the microstructural characteristics on mechanical properties of AlSi1Cu2(Fe) alloy**
- 9.40-10.00: J. MEDVED, S. KORES, M. VONČINA, P. MRVAR, Univerza v Ljubljani, Naravoslovnotehniška fakulteta, (SI): **Thermodynamic analyses of Al-Si-Ce alloys**
- 10.00-10.20: Break

- 10.20-10.40: E. SUBAŠIĆ, R. HUBERT, T. IVANOV, A. BÜHRIG-POLACZEK, Giesserei- Institut der RWTH Aachen, (D): **Numerical simulation of investment casting under counter pressure**
- 10.40-11.00: V. DREV, M. TURK, P. DRMOTA, LTH Castings d.o.o., (SI): **Robotic trimming and paletting of aluminium castings**
- 11.00-11.20: T. ELBEL, VSB-Technical University of Ostrava, (CZ): **The diagnostics and prevention of casting defects**
- 11.20-11.40: Break
- 11.40-12.00: M. BODENBURG, Magma Giessereitechnologie GmbH, (D): **Saving energy, cost and resources in foundries by casting process Simulation**
- 12.00-12.20: E. AMBOS*, W. BESSER**, *Ingenieurburo prof.Amboss, **Druckguss Heidenau, (D): **High pressure foundryman's response on automotive industry requirements for higher integration of assembly parts and bigger requirements for quality**
- 12.20-12.40: A. LOCATI, Italpresse S.p.a. Bagnatica, (I): **The innovative design of a 2-platen diecasting machine**

Posters

- A. SHARMA, S.K. GUPTA, M. SRIKANTH, Malaviya National Institute of Technologie Jaipur, Depatement of Metallurgical and Materials Engineering B-9, (IND): **Effect of process parametres in stress induced melt activated (sima) cast Al-7Si 0.45Mg alloy**
- M. PETRIČ, J. MEDVED, P. MRVAR, Univerza v Ljubljani, Naravoslovnotehniška fakulteta, (SI): **Effect of modification on shrinkage of Al-alloys, part II**
- S. KASTELIC, J. MEDVED, B. MARKOLI, P. MRVAR, Univerza v Ljubljani, Naravoslovnotehniška fakulteta, (SI): **Determination of microstructural phases in heat affected zone with numerical calculation of welding**
- S. KORES, M. VONČINA, P. MRVAR, B. KOSEC, J. MEDVED, Univerza v Ljubljani, Naravoslovnotehniška fakulteta, (SI): **Solidification of Al-Si alloys with additions of Ce, CeS and MgS**
- M. VONČINA, S. KORES, P. MRVAR, J. MEDVED, Univerza v Ljubljani, Naravoslovnotehniška fakulteta, (SI): **The solidification and mechanical properties of AlSi10Mg alloy with various Ce additions**
- M. STEINACHER, J. MEDVED, P. MRVAR, Univerza v Ljubljani, Naravoslovnotehniška fakulteta, (SI): **Fabrication, characterization and testing of innovative, cast, light and composed composite plates**
- A. MAHMUTOVIĆ*, A. MEGUŠAR**, M. PETRIČ***, P. MRVAR***, J. MEDVED***, *TC livarstvo(SI), **LTH Utiški, Škofja Loka (SI), *** Univerza v Ljubljani, Naravoslovnotehniška fakulteta, (SI): **Experimental and numerical analyses of stresses and deformations in casting at high pressure die casting technologies**
- G. KLAČNIK, J. MEDVED, P. MRVAR, Univerza v Ljubljani, Naravoslovnotehniška fakulteta, (SI): **Effect of homogenization treatment in the Zinc-Aluminum foundry alloys**